

Inequalities in health : report of a research working group.

Contributors

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INEQUALITIES IN HEALTH

REPORT OF A RESEARCH WORKING GROUP

DHSS

1980

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REPORT OF THE WORKING GROUP ON INEQUALITIES IN HEALTH: FOREWORD

The Working Group on Inequalities in Health was set up in 1977, on the initiative of my predecessor as Secretary of State, under the Chairmanship of Sir Douglas Black, to review information about differences in health status between the social classes; to consider possible causes and the implications for policy; and to suggest further research.

The Group was given a formidable task, and Sir Douglas and his colleagues deserve thanks for seeing the work through, and for the thoroughness with which they have surveyed the considerable literature on the subject. As they make clear, the influences at work in explaining the relative health experience of different parts of our society are many and inter-related; and, while it is disappointing that the Group were unable to make greater progress in disentangling the various causes of inequalities in health, the difficulties they experienced are perhaps no surprise given current measurement techniques.

It will come as a disappointment to many that over long periods since the inception of the NHS there is generally little sign of health inequalities in Britain actually diminishing and, in some cases, they may be increasing. It will be seen that the Group has reached the view that the causes of health inequalities are so deep rooted that only a major and wide-ranging programme of public expenditure is capable of altering the pattern. I must make it clear that additional expenditure on the scale which could result from the report's recommendations - the amount involved could be upwards of £2 billion a year - is quite unrealistic in present or any foreseeable economic circumstances, quite apart from any judgement that may be formed of the effectiveness of such expenditure in dealing with the problems identified. I cannot, therefore, endorse the Group's recommendations. I am making the report available for discussion, but without any commitment by the Government to its proposals.

August 1980

PATRICK JENKIN
Secretary of State for
Social Services

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IN HEALTH

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INTRODUCTION

INEQUALITIES AND HEALTH

1. In its published reports the Department of Health has frequently expressed concern with Britain's failure to match the improvement in health observed in some other countries and has acknowledged the relationship of this to persistent internal inequalities of health (for example, Prevention and Health: Everybody's Business, 1976, especially Chapters 1 and 4). In a speech on 27 March 1977 the then Secretary of State for Social Services stated:

"..... The crude differences in mortality rates between the various social classes are worrying. To take the extreme example, in 1971 the death rate for adult men in social class V (unskilled workers) was nearly twice that of adult men in social class I (professional workers), even when account has been taken of the different age structure of the 2 classes. When you look at death rates for specific diseases the gap is even wider. For example, for tuberculosis the death rate in social class V is 10 times that for social class I; for bronchitis it was 5 times as high and for lung cancer and stomach cancer 3 times as high. Social class differences in mortality begin at birth. In 1971 neo-natal death rates - deaths within the first month of life - were twice as high for the children of fathers in social class V as they were in social class I. Death rates for the post-neo-natal period - from one month up to one year - were nearly 5 times higher in social class V than in social class I ... The first step towards remedial action is to put together what is already known about the problem ... it is a major challenge for the next 10 or more years to try to narrow the gap in health standards between different social classes."

2. In his Galton lecture in 1975, Sir John Brotherston had voiced the concern felt by many of those working in the health services (Brotherston 1976):

"For the most part the evidence suggests that the gaps remain as wide apart as a generation ago and in some instances the gaps may be widening."

This was a source of perplexity and disappointment to those who "believe in the NHS as a means of bringing improved health and more equal opportunities for health within our communities".

3. In April 1977, at the then Secretary of State's request, the Department's Chief Scientist appointed a Working Group with the following broad objectives:

i. To assemble available information about the differences in health status among the social classes and about factors which might contribute to these, including relevant data from other industrial countries;

ii. To analyse this material in order to identify possible causal relationships, to examine the hypotheses that have been formulated and the testing of them, and to assess the implications for policy; and

iii. to suggest what further research should be initiated.

4. The membership of the Working Group was:*

Sir Douglas Black (Chairman) - Chief Scientist at the DESS (to April 1978) and President of the Royal College of Physicians;

Professor J N Morris, Professor of Community Health in the University of London at the London School of Hygiene and Tropical Medicine;

Dr Cyril Smith - Secretary of the Social Science Research Council;

Professor Peter Townsend - Professor of Sociology at the University of Essex.

Dr Stuart Blume was Scientific Secretary to the Group, and the Administrative Secretary was Mr A J Forsdick. Dr Nicky Hart was seconded by the University of Essex to act as Research Fellow to the Group.

5. The Working Group has sought assemble the national and international evidence and to draw some of the implications for policy within the health services and outside them. The problem of inequalities in health, it

* Sir Douglas Black and Dr Cyril Smith wish respectively to emphasize that the views expressed in the Report are not necessarily those of the Royal College of Physicians or of the Social Science Research Council.

believes, lies at the heart of the problem of better integrating British society. The latest evidence shows a markedly higher proportion of the poorer than the richer socio-economic groups among both males and females reporting chronic ill-health (General Household Survey for 1977, pp.90 and 94). The poorer health experience of the lower occupational groups applies at all stages of life. If the mortality rates of class I (professional workers and members of their families) had applied to classes IV and V (partly skilled and unskilled manual workers and members of their families) during 1970-72 (the dates of the latest review of mortality experience) 74,000 lives of people aged under 75 would not have been lost. This estimate includes nearly 10,000 children, and 32,000 men aged 15-64 (Appendix 4).

6. The following Report falls broadly into 3 parts. The first 5 chapters consider the problems of defining and measuring inequalities of health, and look in turn at the social structure of health, trends in inequalities of health, problems of utilisation of health services, and the international evidence. There follows a review of approaches to the explanation of social inequalities of health. Chapter 7 reviews the implications for future research and information. The recommendations for policy are developed in 2 chapters: Chapter 8 dealing with health and associated services, and Chapter 9 with some other key aspects of social policy.
7. In developing recommendations for the health services the Working Group benefitted from visits paid to 2 areas with the highest mortality in England and Wales. We wish to express our gratitude for information and the facilities furnished for study in the Area Health Authorities of the City and East London (which includes Tower Hamlets), and Gateshead. We would also wish to express our thanks to staff of the DHSS, and of the OPCS in particular, for providing information.
8. Achieving a high standard of health among all its people represents one of the highest of society's aspirations. Present social inequalities in health in a country with substantial resources like Britain are unacceptable, and deserve so to be declared by every section of public opinion. Socially and educationally we must encourage a broader understanding of the meaning of health and of the means of its achievement. This will include improvement in incomes as well as better housing and environmental and working conditions.

Health services represent only a part, though a significant part, of the task. Echoing the 19th century pioneers of social medicine Henry Sigerist, in his book Civilisation and Disease, pointed out the need in highly industrialised countries for a balance between social and economic policies, and health service policies, in achieving high health standards:

"Poverty remains the chief cause of disease, and it is a factor which is beyond the immediate control of medicine."

But he pointed out the simultaneous importance of making medical services more effective and added, "Medical science is wasted unless it can be applied without reservation. We need a system of health services that reaches everybody, healthy and sick, rich and poor, and there is no reason why we should not be able to establish such a system" (Sigerist, 1943, pp 239-40). That aim also lay behind the discussions during the Second World War of the reorganisation of health services and became the central motivation in the establishment of the National Health Service. More than 30 years later it is necessary to evaluate progress towards that aim and understand why the obstacles to achieving it still persist. This report is intended to make some contribution to such an understanding. We have no doubt that greater equality of health must remain one of our foremost national objectives and that in the last 2 decades of the twentieth century a new attack upon the forces of inequality has regrettably become necessary and now needs to be concerted.

CONCEPTS OF HEALTH AND INEQUALITY

- 1.1 Throughout history different meanings have been given to the idea of "health". One is freedom from clinically ascertainable disease, which has been central to the development of medicine. Thus, in ancient Greece the followers of Asclepius believed that the chief role of the physician was to "treat disease, to restore health by correcting any imperfections caused by the accidents of birth or life". (Dubos, 1960, p.109). Beginning with primitive surgical intervention and herbal treatment, a tradition was established which was to prove extraordinarily powerful, accelerating in the 18th century with the rise of science and again in the twentieth century as a consequence of the massive resources provided for research and innovation in medical technologies. The Cartesian philosophy of the body conceived as a machine and the body controlled as a machine provided an impetus for scientific experiment and a stream of practical outcomes which for an increasing proportion of the population seemed to validate a mechanistic perspective.
- 1.2 There could be no doubt about the success with which the engineering approach in medicine had been applied. Medical education became concerned with the structure and functions of the body and with disease processes; and medical service became represented predominantly by the acute hospital with its concentration of technological resources. (Abel-Smith, 1964). Some have argued that as a consequence this development in medicine distorted our understanding of the problems of human health and that there are alternative or complementary approaches which it is increasingly important to clarify and properly finance. (For example, McKeown, 1976.)
- 1.3 The relatively restricted and familiar use of the word "health" is therefore associated with the belief systems and the practice of medicine from which its origins can be traced. Health, which derives from a word meaning whole, is the object of the healing process. To heal is literally to make whole or to restore health. The structure of medicine and of the health services helps to sustain this meaning.

1.4 Much wider meanings have been given to "health" which hold major implications for the organisation of society and the pattern upon which personal life may be modelled. Thus to followers of the ideas symbolised in ancient Greece by the goddess Hygeia, rational social organisation and rational individual behaviour were all- important to the promotion of human health. It was an attribute to which men were entitled if they governed their lives wisely. According to them, "the most important function of medicine is to discover and teach the natural laws which will ensure a man a healthy mind in a healthy body." (Dubos, 1960, p109). Implicit are ideas of the good life: not just freedom from pain, discomfort, stress and boredom, which themselves extend beyond the competence of clinicians to diagnose or treat, but positive expression of vigour, well-being and engagement with one's environment or community. In some respects this more comprehensive approach reached its apogee in the definition of health adopted at the foundation of the World Health Organisation at the end of the Second World War as a "state of complete physical, mental and social well-being and not merely the absence of disease or infirmity". Adherents of this more comprehensive approach to the meaning of "health" which is usually called 'social' have sometimes worked within medicine but sometimes outside it. In most countries there are movements for physical fitness and dietary control. Immunisation is a standard public health practice. And through direct and indirect health education and counselling higher standards of health are encouraged. These practices illustrate the wider meanings that are given to "health". In the case of children this wider conception of health directs concern not only to the presence or absence of disease, but to development (physical, cognitive, and emotional). There is, moreover, abundant evidence for the interaction of disease and development in infants. Low birth weight babies show a higher mortality and also incidence of neurological and physical disorder (Birch and Gussow, 1970: 52) and, later in life, there is evidence for the aetiological significance of even mild undernutrition in inhibiting growth (Marshall, 1977: 118). It becomes relevant to look at evidence relating to acuity of hearing and vision in children, and at heights, weights and age at onset of puberty, even though none of these things are in any sense 'disease'.

1.5 We consider that the different meanings of "health" and hence of national objectives in maintaining and promoting health are not given as much attention as they might be, and we discuss the implications of this view further in Chapter 8.

1.6 For the task which we were given, the "social model" of health is clearly more relevant than the "medical model", and we have therefore mainly followed it. However, the two models are not either exclusive or exhaustive, and each has merits. (Discussions based essentially on the "medical model" are given by Black (1979) and by Dollery (1978).) Conceptions of health and illness vary among different groups within a single society and between societies, as well as in any single society over time (Morris, 1975). It is in part for this reason that, as Mechanic (1968) and others have shown, "illness behaviour" - the response to symptoms and the tendency or reluctance to define any symptom as a health problem and to seek medical care - varies between cultural and social groups. Conceptions are in constant process of adaptation or revision. There are considerable cultural differences between the developing, and market, or planned societies. Changes occur by virtue of scientific discovery and innovation, and developments in professional judgements of objective needs and the status of different diseases and treatments. They also occur in response to the pressure of established interests, and the extent of public anxiety about illness, or safety, as well as the current level of demand for health, environmental and social services. Thus one result of research on the elderly and disabled, and the heightening of public interest and concern about their problems, has been that pain, discomfort, debility and different forms of incapacity come to play a more prominent part in social and medical conceptions. If we consider mental illness or mental handicap, or the history of "fringe" medicine to take very diverse examples, we can see how conceptions of health and illness have changed. The priority that is to be given different conditions depends as much on popular interest and concern as upon the judgements reached within medicine. And just as conceptions themselves may gradually change, elements within those conceptions are accorded different weight or priority. We make this point for two reasons. One is that our understanding of "health" will always be evolving, and we must be prepared to absorb new knowledge about changes in health and social conditions. The other is to make better judgements about the strengths and weaknesses of the health care services.

1.7 Within any general approach to the meaning of "health" views are reached about the seriousness of certain states of health. The construction of the health care services and the priorities which are identified in their development reflect those views. To the extent that a mechanistic model of health holds sway, the health care services will give priority to such matters as surgery,

the immunological response to transplanted organs, chemo-therapy and the chemical basis of inheritance. Medicine comes to be structured according to a scale of values associated with such a model. The most sought after posts will be those at the heart of the model and medical education and medical careers are similarly influenced. Medicine is not, however, monolithic, as developments in paediatrics, obstetrics, psychiatry and rehabilitation, research in social aspects and in prevention indicate. However, once a conception of disease finds embodiment in a structure of service major changes become difficult to introduce. All professions tend to become over-committed to existing practice and their receptivity to the need for change is liable to become weak. The medical, nursing and other professions are like other professions in this respect. We are pointing out the uncomfortable fact that society cannot look to the professions working within the health services for an account of illness and health which is always as detached or as full as it might be. Indeed, particularised conceptions of illness and health (including their stages and severity) are already institutionalised in medical practice and the organisation, sub-divisions and administration of services.

- 1.8 Therefore, while the knowledge, experience and views of the health care professions are bound to play a predominant part in the debate, the extension of knowledge about the problems of human health and illness depends also on sources outside the health professions. Under the auspices of the medical and social sciences there needs to be a determined search for evidence of a wide variety of health conditions and their social, environmental and psychological as well as physiological significance.

APPROACHES WITHIN MEDICINE, EPIDEMIOLOGY AND SOCIOLOGY

- 1.9 In the last hundred and fifty years it could be said that the pursuit of health has increasingly been acknowledged to be a social and not merely a technical enterprise. In part this is due to the success of medical science in reducing mortality from infectious disease and thus directing attention towards chronic diseases of complex aetiology but also to the development of public health services, statistical studies of health, the work of epidemiologists in demonstrating the importance of living standards, protection from hazards and population limitation in improving health, and latterly the work of sociologists on the complex effects of the economy and different forms of social organisation, including the family, upon levels of health. (See for example Susser and Watson, 1971; McKeown, 1976; Morris, 1975; Tuckett, 1976.) Biomedical research

will continue to be necessary but 'there is need for a shift in the balance of effort, from laboratory to epidemiology in recognition that improvement in health is likely to come in future, as in the past, from modification of the conditions which led to disease rather than from intervention in the mechanism of disease after it has occurred'. (McKeown, 1976, p179). Thus the sociological contribution is recognised to be, in part, to increase understanding of the social and socio-economic factors which play a part in the causation of disease and, as in Brown's work, to take the natural next step and relate these factors themselves to broader sociological concerns with the social structure (see Brown, 1978).

- 1.10 Some working in medical sociology would emphasise a different perspective. They would argue that their contribution is not only like that of social medicine, to contribute to the understanding of the origins of health and disease in the way people live together in society. 'Disease', they would argue, is a medical, not a sociological concept. Sociology is concerned with the social production of understanding, meanings, knowledge; with social structure and process; and with the behaviour of people. Sociologists will try to understand the failure to seek medical attention for what to the physician is a serious disease episode not in terms of simple irrationality, but in terms of the individual's own (learned) coping mechanisms, social situation, and the meaning which he attaches to his symptoms. Hence there is a lot of interest in the social production of conceptions of health, in inconsistencies between lay and professional conceptions, and in conditions which are generated by different forms of social organisation.
- 1.11 While the perspectives adopted in the three - medicine, epidemiology and sociology - tend to be different they are subject to mutual influence and some of the most creative practitioners acknowledge the need to absorb or combine their strengths. Thus, nearly 40 years ago Sigerist (following Virchow long before) argued.

"The task of medicine is to promote health, to prevent disease, to treat the sick when prevention is broken down and to rehabilitate the people after they have been cured. These are highly social functions and we must look at medicine as basically a social science."
(Sigerist, 1943, p241).

THE CHOICE OF INDICATORS OF HEALTH AND ILL-HEALTH

- 1.12 We have argued that conceptions of health tend to vary in time and according to place, and that depending on their experiences and situation, societies, and groups within those societies, will tend to emphasise some things more than others. Science, however, demands precision, and different aspects of the meaning of health and ill-health have to be translated into operational terms, and applied systematically.
- 1.13 Measures of the "health" of populations can take many different forms. Among the most familiar are mortality rates, prevalence or incidence morbidity rates, sickness-absence rates, and restricted-activity rates. Each of these indicators poses problems of measurement and has its limitations. For example, overdue dependence on mortality rates can induce comparative indifference towards problems of chronic illness. Undue dependence on morbidity-rates can discourage interest in congenital and other permanently incapacitating conditions, as well as conditions affecting human well-being which fall outside the conventional classification of "morbidity". Examples of the use of indicators are given below.
- 1.14 Partly because of the problems of measurement, but also (in the kind of analysis we have been invited to make) because of the need for time-series statistics, we have given precedence to mortality rates. However, we wish to call attention to the need for different measures of health in combination, and therefore to the importance of experimenting with indicators which allow relevant experiences among the population to be captured and examined in relation to the allocation of resources for health and the organisation of the health care system. Thus a combined indicator of pain and restricted activity is being developed (Culyer et al, 1972) and in current Canadian work indicators reflecting social, emotional and physical functioning. (Sackett et al, 1977). Again, the need to relate rather complex indicators of depression to the measurement of life events was felt to apply to the community generally and not just those selected for psychiatric treatment (Brown and Harris, 1978).
- 1.15 A distinction is often made between acute and chronic sickness and attempts are made to relate the utilisation of health services to these conditions. Thus during the early 1970s acute sickness was defined in the General Household Survey as "restriction at any time during a two week reference period of the

level of activity normal to that person, caused by illness or injury", and chronic sickness as "a long-standing illness, disability or infirmity which limits a person's overall activity level" (GHS Introductory Report, 1973, p264). In the first case one question was asked, "During the two weeks ending last Sunday, did you have to cut down at all on the things you usually do because of illness or injury?" In the second case two questions were developed: "Do you suffer from any long-standing illness, disability or infirmity? (If yes) Does it limit your activities compared with most people of your own age?" In the 1977 Report a broader approach was adopted. Those designing the survey attempted to distinguish between short-term and chronic health problems. A number of questions were designed to identify persons who "had anything wrong with them" in the preceding 14 days which "was not connected with any permanent or recurring chronic health problems" and, secondly, "people who considered that they had a health problem all the time, or one that kept recurring." (GHS, 1979, pp 80-84). It is clear from GHS reports for these years that choice of terminology in "indicator" questions can considerably affect the percentage of the population identifying themselves as having "short-term" and "chronic" health problems. We are not sure that "omnibus" concepts of the kind developed in 1977-78 can be helpful in analysis unless they are broken down into the different kinds of meaning placed upon them by informants. Thus, the approach used in the GHS in the early 1970s stressed "limitation of activity" as a key criterion of ill-health - and this helped to produce a coherent and consistent set of data. After using a different approach in 1977 and 1978 the OPCS reverted to the previous approach in 1979. But whatever is the method adopted of distinguishing acute from chronic sickness we would also want to call attention to the dangers of treating any two sets of people so identified as distinct. Acute and chronic conditions in some patients are difficult to distinguish. Since the evidence suggests that the poorer groups are at greater risk of chronic sickness and disablement there are dangers of distorting conclusions reached about the characteristics of the "acute" sick if all those with chronic sickness are first excluded from any analysis.

- 1.16 Disablement is also an important related concept. In his work for the World Health Organisation Wood showed that disability "can be conceived of on at least two planes, functional limitation and activity restriction". (Wood, 1975, p13). Like other authorities he is concerned to distinguish between

impairment and disability. He defines impairment as "a generic term that embraces any disturbance of or interference with the normal structure and functioning of the body, including the systems of mental function" and disability as "the loss or reduction of functional ability and activity that is consequent upon impairment". (Ibid, p2). The distinction between impairment and disability in this WHO classification also follows the practice adopted in a special Government survey (Harris 1971). While interpretation of the concept of disability varies it has been identified increasingly in recent years (as in the GHS surveys) with restriction of activity - which would include self-care, household management, occupational and social activities. Parallel with this trend has been a greater emphasis on treating severity of disablement irrespective of cause or sex or age. Most local authorities have made returns since 1975 which have distinguished the numbers of the physically handicapped according to severity of handicap. Non-statutory bodies are pressing for even wider application of this principle. "All disabled people: the old, young adults and children; the mentally and physically handicapped, those disabled at home as well as at work or in war; and those disabled from birth, after an accident, or a long illness must be treated alike. It is not the origins or type of disablement or age which should count". This statement is made on behalf of a large number of organisations of and for disabled people (Disability Rights Handbook for 1980, Dec 1979, p48). Surveys of public opinion seem to endorse such statements (Louis Harris International, 1974).

CONCEPTS OF INEQUALITY AND SOCIAL CLASS

- 1.17 The distribution of health or ill-health among and between populations has for many years been expressed most forcefully in terms of ideas on 'inequality'. These ideas are not just 'differences'. There may be differences between species, races, the sexes and people of different age but the focus of interest is not so much natural physiological constitution or process as outcomes which have been socially or economically determined. This may seem to be straightforward but the lengthy literature, and widespread public interest in the subject of inequality, shows that factors which are recognisably or discernibly man-made are not so easy to disentangle from the complex physical and social structure in which man finds himself. Differences between people are accepted all too readily as eternal and unalterable. The institutions of society are very complex and exert their influence indirectly and subtly as well as

directly and self-evidently. For some the concept of inequality also carries a moral reinforcement - as a fact which is undesirable or avoidable. For others the moral issue is non-existent or is relatively inconsequential. For them differences in riches or work conditions are an inevitable and hence 'natural' outcome of the history of attempts by man to build society; and they conclude that the scope for modification is small and, besides other matters, of small importance.

- 1.18 Central to the development of work on inequality has been the development of concepts of 'social class'. Populations are not simply differentiated uniformly according to income, wealth, housing, and access to education. The differentiation on one distribution tends to correspond with the differentiation on another and the population can be divided into ranks or strata, one above the other. Of course, societies may differ according to the number of strata or the distance between them and the ease with which the boundaries can be identified. And although the boundaries or dividing lines between the classes may be difficult to discern this does not make class divisions any less real. Social classes, then, may be said to be segments of the population sharing broadly similar types and levels of resources, with broadly similar styles of living and (for some sociologists) some shared perception of their collective condition. There has been, and remains, considerable controversy within sociology about the origins and relative importance of class in relation to social inequalities and social change.

THE PROBLEMS OF CHOOSING INDICATORS OF INEQUALITY

- 1.19 Traditionally inequalities in health have been portrayed through a characterisation of class obtained by ranking occupations according to their social status or prestige. In addition to occupation, a variety of factors may be said to play a part in determining class - income, wealth, type of tenure of housing, education, style of consumption, mode of behaviour, social origins and family and local connections. They are inter-related, but none of them should be regarded as a sufficient indicator of class. Historically occupation was selected as the principal indicator, partly because it came to be regarded as more potent than some other alternatives, but partly because it was most convenient for statistical analysis. Thus, occupation designates not simply type of work but tends also to show broadly how strenuous or difficult for health it is, what are the likely working conditions (for example, whether it is indoors or

outdoors and whether there is exposure to noise, dust, or vibration) and working amenities and facilities, as well as level of remuneration and likely access to various fringe benefits. Pay will also determine family living standards, but while members of the family will not be exposed to some features of the working conditions experienced there are others which may affect them indirectly (like the risk of intermittent unemployment, or the stresses of disablement and of shift work).

- 1.20 As an indicator of social position a named occupation is convenient. Matters like income and wealth, style of living and family origins are difficult to explore and are less acceptable to the public as questions during a formal interview. On the other hand, the economic and industrial changes of recent years make it less likely that for any individual current occupation indicates his life-long occupational position. And in a society with increasing participation of women in the economy the occupation of an individual man is less likely to be a sufficient indicator of his family's social position.
- 1.21 It was in the middle and latter part of the 19th century that the use of occupation to analyse the health of the population took hold. For example, in the Registrar General's Office Farr and Ogle showed striking differences in mortality between workers in particular occupations as well as between occupations. (Annual Reports of the Registrar General in England, 1875 and 1885). By the turn of the century Seebohm Rowntree was able not only to trace in detail the sanitary defects of areas of York but he was able to compare the general mortality rates, infant mortality rates and heights and weights of children of different ages in three areas of York, distinguished according to the proportions living below his poverty line, and compared with the 'servant keeping classes'. (Rowntree, 1901, pp 182-221).
- 1.22 It was a natural next step for someone to attempt to construct a comprehensive classification for the purpose of analysing health experience. This was undertaken by Stevenson in 1911 mainly to analyse infant mortality. He divided the population into 8 social groups. Only the first 5 were ranked, and the other 3 groups, textile workers, miners and agricultural workers, were thought to be sufficiently important to deserve separate identification. With various changes the five-fold scale has survived until the present day. Since 1970 the classification used has been as follows:

- I. Professional (eg accountant, doctor, lawyer) (5%)*
- II. Intermediate (eg manager, schoolteacher, nurse) (18%)
- III_n. Skilled non-manual (eg clerical worker, secretary, shop assistant) (12%)
- III_m. Skilled manual (eg bus driver, butcher, coal face worker, carpenter) (38%)
- IV. Partly skilled (eg agricultural worker, bus conductor, postman) (18%)
- V. Unskilled (eg laborer, cleaner, dock worker) (9%).

1.23 In some authorities' view, it was easier to obtain consensus about the scaling of social class in 1910 than in the 1970s (Susser and Watson, 1971, p106). The system of classification proved to be a powerful epidemiological tool and has been widely used throughout this century (Leete and Fox, 1977). At each census, however, there have been changes in the detail of the classification. The most important of these was in 1960. Members of the armed forces were excluded, hence increasing the 'unclassified' groups. Aircraft pilots, navigators and engineers, for example, were changed from class III to II: draughtsmen from II to III: postmen and telephone operators from III to IV: and lorry drivers' mates from IV to V. (See Reid, 1977, for an outline of changes and of other classifications.)

1.24 The successive classifications are published in detail (most recently OPCS, 1970) and have been successful in displaying gradients in mortality experience and other conditions. However this occupational classification has met with strong reservations from sociologists, for whom class is a concept having important explanatory significance. The latest classification (OPCS, Classification of Occupations 1970, p x) aggregates 'Unit groups' of occupations again according to the 'general-standing of the occupations concerned'. But, as Goldthorpe (1978), p1 and others have pointed

*Percentages give distribution of economically active and retired males in each social class, (GB 1971).

out, the precise method of determining 'general standing' has never been disclosed and for that reason the adequacy of the classification cannot be assessed. After the Second World War, sociologists developed a classification more firmly based on social perception of occupational prestige. The Hall-Jones scale (consisting of 7 ranked categories) was adopted in a pioneering study of social mobility (Glass, 1954) and modified subsequently (identifying 8 ranked categories) (Townsend, 1979 Appendix 6). One of the chief merits of this scale was to distinguish different ranks of non-manual occupations.

1.25 It is however difficult to present really convincing alternatives. For example, even if a cross-section of the population is invited to rank occupations as the basis of a normative scale, they can hardly be asked to do so for the 20,000 or more distinguishable occupations of the employed population. Sociologists usually confine themselves to asking individuals about a small number of occupations, say 30, which are believed to be representative or at least common. Inferences are then made about the ranking of the remaining occupations. Quite how one moves to the remaining occupations, and identifies the numbers of ranks remains a problem. The procedure is more a mixture of presupposition with the partial representation of social perceptions. In the Oxford studies of social mobility Goldthorpe and Hope have shown how the ranking of 20 occupations can be related to the ranking of 860 by asking sub samples of informants to rank 2 groups of 20 occupations, one of them being the basic 20 and the other being a variable set of the same number (Goldthorpe and Hope, 1974, p 48-50). They asked people to rate occupations on 4 dimensions: (i) standard of living, (ii) prestige: (iii) power and influence over other people: (iv) value to society. (Ibid, pp 27-33). A scale with 124 categories, reduced for some users to 36, was produced.

1.26 At a later stage these 36 categories were divided into 7 classes, but were "not to be thought of as necessarily having an entirely hierarchical ordering". (Goldthorpe 1978 p4). (See also Goldthorpe et al, 1977, and 1978).

1.27 A comparison of the Hope-Goldthorpe and Registrar General's classifications brought out the fact that the latter "is far from meeting OPCSs claim of homogeneity". On the basis of the former's research "it turns out that we need to change the definition of social class for about 33 per cent of the

male population" (Bland, 1979, p286). However, many would be ranked only one class higher or lower in the 7 class scale and we are not aware of studies showing that in practice the results of applying the 2 (abbreviated) measures are markedly different.

- 1.28 Sociologists have tended to distinguish between a "distributional" and "relational" approach to the measurement of stratification. On the one hand the population may be ranked according to one attribute or a combination of attributes, such as prestige, income or educational qualifications. On the other hand, it may be divided according to the relationship of individuals to the means of production or the market. The problem is that work or market situation varies quite widely and distributional criteria apply more than is generally appreciated. When developed in detail the 2 approaches are not so distinct as they are often believed to be.
- 1.29 The possibilities of developing operational concepts of "class" rather than "status" have not been fully explored by sociologists, in part because of the practical difficulties. These difficulties are greater than in the United States, where the national census collects, for example, both income and educational as well as occupational data (Duncan, 1961; Blau and Duncan, 1967). We consider there are practical possibilities of measuring certain occupational as well as social aspects of class. Some attempt to measure career expectations in terms of remuneration, security, opportunities for advancement, working conditions and amenities and fringe benefits for different occupations, or at least the main occupations, would be involved.
- 1.30 One of the problems about any classification based on current occupation is the allocation of married women. As Leete and Fox say,

"The early social class analyses of women were based on the husband's occupation principally because women generally gave up employment on marriage, and because it was assumed that husbands and wives had similar life styles and were, by implication, of the same social class.

The assumption was that if men and their wives exhibited similar mortality differentials the whole socio-economic context of life was an important factor affecting mortality: but if not occupation exerted a direct influence on mortality. Since the 1930s, with the growth of the numbers

of married women entering the labour force, married women have been increasingly classified in census tabulations by their own occupations if they are or have been employed; single, widowed and divorced women have always been classified by their own occupation". (op cit p4).

- 1.31 In practice the occupational category in which most women are to be found is class III non-manual whereas men are to be found typically in class III manual. It may be wrong to build analyses on data where many of the married women are classified according to an occupation which may have been held only for a very short period or involve relatively few working hours, and the problem becomes more complicated if decisions are to be taken about which parent's occupation should be the right indicator for analysis of, say, infant mortality.
- 1.32 This helps to illustrate the qualifications which must be attached to any analysis of social class, using current occupation. The qualifications apply not just to the occupations held by married women but also to many of those held by men, who may have changed occupations during working life.
- 1.33 We consider it to be worthwhile for analyses of health to continue to be made on the basis of classifications using current occupations. But first, as suggested above, we believe that an effort should be made to make this classification as objective as possible, by taking account in the ranking of occupations of current and lifetime earnings, and also fringe benefits, security, working conditions and amenities. Our intention is to shift attention from the more elusive subjective rating of "prestige" or "general standing" of occupations to their material or environmental (and more measurable) properties. Second, it would be desirable for the term 'occupational class' to be used rather than 'social class' when the current occupation of the individual is used as the basis of the classification. Third, it will become increasingly important to use the married man's occupation in combination with the married woman's occupation in analysing various health conditions and experiences, for example infant and child mortality. Fourth, the need for a 'social class' measure for analysis of the health of the family unit as a whole or of individual members of the family unit will become increasingly important. One possibility is using the current occupations of both parents, together with information, where it can be obtained, about the main occupations of the husband's father and the wife's father. We return to these possibilities in Chapter 7.

1.34 For many significant social minorities current occupational class of the male is an inadequate indicator of resources of life-style, and we are obliged to consider more aggregated indicators. One attempt at dealing with the problem has been made in the context of the Bristol follow-up of the 1970 Birth Cohort Study (Child Health and Education in the 70s). Their social index compounds social class with the level of education, housing (tenure, crowding, availability of bathroom) and an assessment of the neighbourhood of residence. Each of these was scored and weighted to produce a one dimensional index. Preliminary indications, based on a sub-sample of the 16,000 families, are that social index score groupings are better able to discriminate on such variables as child developmental indicators and use of child health services than is the Registrar General's social class alone (Osborne and Morris, 1979). There are of course theoretical difficulties in using such methods (eg in the choice and weighting of components), and examination of different alternatives will be necessary before conclusions can be reached about the replacement or augmentation of the indices used nationally.

1.35 Finally, use of occupation as an indicator of social class has become so widespread in Britain in recent decades that the pre-occupations of some pioneer health statisticians have been forgotten. Farr, Stevenson and others were particularly concerned to relate health experience to riches or poverty (for example, Stevenson, 1928). Efforts should be made to restore this tradition, and not only because of the difficulties (discussed above) in taking occupation as a reliable indicator of a family's social class. The growth of absolute levels of resources, the spread of employer welfare benefits in kind and of social service benefits, and the increase of owner-occupation among the working classes makes a measure of 'resources' all the more important. The term 'resources' seem to be more appropriate than 'income' because of the present-day impact of wealth and both employer welfare and social service benefits-in-kind upon living standards. Considerable sums are spent each year on official annual surveys - including the Family Expenditure Survey (FES), the General Household Survey (GHS) and the National Food Survey. The FES provides the best measure of income, and although some information is collected about employer welfare and social service benefits it is incomplete and rather rough. Valuable data about the distribution of health are collected in the GHS, and although the information collected about income has, since 1979, been the same as in the FES, it is not supplemented by information on other resources. The development of a more adequate measure will not be easy, and the Royal Commission on the Distribution of Income and Wealth took a very cautious view in some of its

reports about the possibilities of linking income and wealth in surveys. (See especially Reports Nos 1, 4 and 5 (1975-77). However, its 7th Report took a more positive view about the need to develop joint distributions of income and wealth as a priority (p160) and about the desirability of sample surveys of personal wealth holdings (Report No 7, Cmnd 7595, 1979, p3). We recommend that in the General Household Survey steps should be taken (not necessarily in every year) to develop a more comprehensive measure of income, or command over resources, through either (a) estimates of total wealth or at least some of the most prevalent forms of wealth, such as housing and savings, or (b) the integration of income and wealth, employing a method of, for example, annuitization.

- 1.36 These questions of improving knowledge of health in relation to inequalities are further developed in Chapter 7.

CONCLUSION

- 1.37 In examining the state of health of a population it is necessary to remember there are different meanings of "health" which have different implications for action to improve health. On the one hand "health" can be conceived as the outcome of freeing man from disease or disorder, as identified throughout history by medicine. On the other hand, "health" can be conceived as man's vigorous, creative and even joyous involvement in environment and community, of which presence or absence of disease is only a part. While there are many indicators of health and ill-health, including mortality-rates, morbidity rates, sickness absence rates and restricted activity rates, we concentrate most attention in this report, partly for practical reasons, on mortality rates.
- 1.38 Different meanings are also given to the term "inequality". Interest tends to be concentrated on those (substantial) differences in condition or experience among populations which have been brought about by social or industrial organisation and which tend to be regarded as undesirable or of doubtful validity by groups in society. Inequality is difficult to measure and trends in inequalities in the distribution of income and wealth, for example, cannot be related to indicators of health, except indirectly. Partly for reasons of convenience, therefore, occupational status or class (which is correlated closely with various other measures of inequality), is used as the principal indicator of social inequality in this report.

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CHAPTER TWO

THE EVIDENCE OF INEQUALITIES IN HEALTH

THE PATTERN OF HEALTH INEQUALITY IN CONTEMPORARY BRITAIN

- 2.1 Inequalities in human health take a number of distinctive forms in Britain today. In this report, for the reasons set out in Chapter 1, most attention is given to differences in health as measured over the years between the social (or more strictly occupational) classes. These differences are highlighted in Table 2.1 by comparing rates of mortality among men and women in each of the Registrar General's 5 classes. Taking the 2 extremes as a point of comparison it can be seen that for both men and women the risk of death before retirement is two-and-a-half times as great in class V (unskilled manual workers and their wives), as it is in class I (professional men and their wives). If attention is confined to age-standardised deaths rather than all deaths of those aged 15-64 then the ratio for class V males becomes a little under twice (1.8) that of class I' (OPCS, 1978, p.37).
- 2.2 This great gap in the life chances of men and women at the 2 polar ends of the occupational spectrum is, however, not the only source of health inequality for, as Table 2.1 also indicates, the risk of death for men in each social class is almost twice that of their wives.

TABLE 2.1

Death rates by sex and social (occupational) class (15-64 years)

(rates per 1000 pop. England and Wales, 1971)

Social (occupational) class	Males (All)	Females (married, by husbands occ. (a))	Ratio M/F
I (Professional)	3.98	2.15	1.85
II (Intermediate)	5.54	2.85	1.94
IIIN (Skilled non-manual)	5.80	2.76	1.96
IIIM (Skilled manual)	6.08	3.41	1.78
IV (Partly Skilled)	7.96	4.27	1.87
V (Unskilled)	9.88	5.31	1.86
Ratio V/I	2.5	2.5	

Source: Occupational Mortality 1970-72. (Microfiches and 1978, p.37)

Note: The decennial supplement of Occupational Mortality for 1970-2 provides data on the class of married and widowed women classified by (1) their present or former husband's occupation, and (2) their own occupation where this is applicable. The difference between these 2 measures is only significant in the case of women in class I (ie professional workers). When classified by their own occupation such women have somewhat lower rates of mortality from most causes than those of women allocated to class I by their husband's occupation (see pp 153-156). In this table women with husbands have been classified by their husband's occupation, women of other marital statuses are attributed to their own occupational class.

Sex Differences in Health

2.3 One of the most distinctive features of human health in the advanced societies is the gap in life expectancy between men and women. This phenomenon carries important implications for all spheres of social policy but especially health, since old age is a time when demand for health care is at its greatest and the dominant pattern of premature male mortality has added the exacerbating problem of isolation to the situation of elderly women who frequently survive their partners by many years. The imbalance in the ratio of males to females in old age is the cumulative product of health inequalities between the sexes during the whole lifetime. These inequalities are found in every occupational class (Table 2.1), demonstrating that gender and class exert highly significant and different influences on the quality and duration of life in modern society.

Regional Differences in Health

2.4 Rates of age-specific mortality vary considerably between the regions which make up the United Kingdom. Using mortality as an indicator of health the healthiest part of Britain appears to be the southern belt (below a line drawn across the country from the Wash to the Bristol Channel). This part of the country has not always exhibited the low rates of mortality that are found there today. In the middle of the nineteenth century, the South East of England recorded comparatively high rates of death, while other regions like Wales and the far North had a rather healthier profile. The fluctuation in the distribution of mortality over the years suggests that social (including industrial and occupational) as much as "natural" factors must be at work in creating the pattern of regional health inequalities. Table 2.2 depicts regional variation in mortality standardised for age and for both age and occupational class. Once again it is clear that these variables exert, at least statistically, an independent influence on human health.

TABLE 2.2

Regional Variations in Mortality

Standard Region	SMR: standardised for	
	Age	Age and class
Northern, Yorkshire and Humberside	113	113
North West	106	105
East Midlands	116	116
West Midlands	96	94
East Anglia	105	104
South East	90	90
South West	93	93
Wales I	114	117
Wales II	110	113
England and Wales	100	100

Source: Occupational Mortality 1970-72, p.180

Race, Ethnicity and Health

- 2.5 One of the most important dimensions of inequality in contemporary Britain is race. Immigrants to this country from the so-called New Commonwealth, whose ethnic identity is clearly visible in the colour of their skin, are known to experience greater difficulty in finding work and adequate housing (Smith, 1976). Given, for example, these social and economic disabilities it is to be expected that they might also record rather higher than average rates of mortality and morbidity.
- 2.6 This hypothesis is difficult to test from official statistics, since "race" has rarely been assessed in official censuses and surveys. Moreover, it is far from clear what indicator should be utilized in any such assessment

(eg skin-colour, place of birth, nationality): that most significant may indeed depend upon the precise issue of interest.

2.7 The pattern of social and economic disadvantage experienced by black Britons is connected with occupational class and is reflected in the working of the labour market. But other factors may also be important and amongst adult males at least, the variables of occupational class and race do not compound one another in a linear fashion when place of birth is used as a means of measuring race. As Table 2.3 indicates, the age standardised mortality ratios of immigrant males compare favourably with their British born equivalents in occupational classes IV and V, but less so higher up the scale in classes I and II. The interpretation of these ratios is made difficult at the higher end of the occupational scale because they are based on small numbers.

TABLE 2.3

Mortality by Country of Birth and Occupational Class (SMR)
(Males 15-64)

Country of Birth	I	II	IIIN	IIIM	IV	V	All
India and Pakistan	122	127	114	105	93	73	98
West Indies	267	163	135	87	71	75	84
Europe (including UK & Eire)	121	109	98	83	81	82	89
UK & Eire (including England and Wales)	118	112	111	118	115	110	114
England and Wales	97	99	99	99	99	100	100
All birth places	100	100	100	100	100	100	100

Source: Occupational Mortality, 1970-72, pp 186-187

2.8 In the poorer occupational classes, where the SMR is based on larger numbers of deaths, men born in India, Pakistan or the West Indies seem to live longer than their British born counterparts. It should be remembered, however, that the percentage of workers in class V among the British born is less than 7 while the equivalent percentage of those born in, for

example, India and Pakistan is 16. In addition, of course, the average British born male classified as an unskilled manual worker is likely to be older than his foreign born counterpart and, is more likely to have acquired this low occupational status after a process of downward social mobility associated with failing health.

- 2.9 This rather favourable comparison between immigrant and British born males may also reflect the underlying tendency for migrants to select themselves on the grounds of health and fitness. Men and women prepared to cross oceans and continents in order to seek new occupational opportunities or a new way of life do not represent a random cross section of humanity. A better comparison for exploring health inequality would ideally involve second or third generation immigrants, but these are the very groups that are difficult to trace for statistical purposes. What little evidence that has been accumulated however does suggest that the children of immigrants do suffer from certain specific health disabilities related to cultural factors such as diet or to their lack of natural immunity to certain infectious diseases (Thomas: 1968; Oppé: Gans: 1966). Studies based on small samples of immigrant children have pointed to the possibility of higher than average morbidity associated with material deprivation but the evidence is scarce and somewhat inconclusive and needs to be augmented by further research (Hood, et al, 1970).

Social Class and Health

- 2.10 Social class is a further concept by means of which inequalities in industrial society may be examined. It reflects income, property, occupation and education, and much else. The data presented in the remainder of this chapter employ occupation as a means of approximating social class and for this reason, as Chapter One indicated, the variable will often be referred to (more accurately) as occupational class.
- 2.11 The measurement of "health" in official statistics and government publications is usually achieved by utilising data on rates of mortality and morbidity. In fact these measures are both indicators of ill-health but, since indicators of health in its "positive" sense are fewer, less available, and relevant principally to children (eg height, weight) they provide the most feasible and readily accessible substitute.

2.12 One alternative means of depicting the level of human health in a population is to take measures of bodily growth, development and decay. In Britain this kind of data is not routinely collected except in the first week of life. Some data on developmental processes in childhood have been accumulated as part of ad hoc and longitudinal surveys and this does indicate the existence of class differentials in height and weight and in patterns of dental health (Miller et al 1974; Todd, J E 1975; Goldstein, 1971). Table 2.4 gives a breakdown of class differentials in birth weight.

TABLE 2.4
Occupational Class and Birth Weight

Birth weight	class (mother's husband)			Fatherless
	(I and II)	III	(IV and V)	
% who were				
Less than 2500 grams	4.5	5.6	8.2	9.5
More than 3000 grams	81.0	76.3	72.7	66.7

Source: Chamberlain (1975)

MORTALITY AND MORBIDITY: THE SOURCES OF DATA⁽¹⁾

2.13 The persistence of class differentials in both mortality and morbidity is evidenced in regular reports provided by the OPCS. Since 1970 the investigation of occupational differences in self-reported sickness and medical consultation has been carried out as part of the General Household Survey (GHS). The GHS is carried out annually by the Office of Population Censuses and Surveys. Based upon a sample of 15,000 households in Great Britain, the survey provides data on a range of topics including health, education, employment, housing and migration. Since its inception in 1970, it has been possible to estimate the occurrence of morbidity as reported by sampled men and women but although this information has been updated every year from 1970 to 1977, detailed analyses of trends on an annual basis are

(1) The available sources of data are discussed specifically in Chapter 7.

difficult because of the restricted size of sample and there is no opportunity to examine a longer time series. In 1977 and 1978 the health questions were however redesigned.

- 2.14 Although it has been well known for over a hundred years that occupation and social class are implicated in the aetiology of many diseases, there are still no regular and reliable official statistics of provision of (let alone need for) medical treatment by the social or occupational class of the patient.⁽²⁾
- 2.15 The empirical evidence of class differences in morbidity is therefore partial. We know from the GHS that men, women and children from lower class households generally report higher rates of chronic and acute sickness and we also know, by their own account, that they tend, especially during adult working life, to consult more frequently with their general practitioners. These data are based on self recollections and as such do not provide a wholly satisfactory standard measure of morbidity.
- 2.16 The analysis of differences in rates of mortality has a considerably longer history. Since the mid-nineteenth century decennial reports of occupational mortality have been provided by the Registrar General. In the century or more that has elapsed since this practice began, the measurement of occupations has been complicated by the evolution in the occupational structure of the older industrial economies like Britain. Other changes in measurement conventions during the twentieth century, when added to the fact that many established occupations have disappeared while new ones have grown in significance, makes it difficult to analyse trends in mortality by occupational class over the whole time period for which data are available. Class differences in the risk of premature death have survived into the late twentieth century despite the dramatic decline in deaths from infectious disease. Class and occupational differences in rates of age-specific mortality offer the best alternative means of exploring the health gap in present day Britain. Every death in Britain is a registered and certificated

(2) The National Morbidity Survey carried out in 1955-56 collected data on a voluntary basis from general practitioners scattered all over Britain who provided some data on the occupational class characteristics of adult males and their children - but not women The Hospital In-patient Enquiry in England and Wales does not make use of occupational categories in the publication of data because the quality of the information is felt to be too poor. See Chapter 4 (p 103).

event in which both the cause and the occupation of the deceased or his or her next of kin are recorded. By treating the actual incidence of death among members of the Registrar General's "social" classes as a numerator and by taking the denominator from the Census it is possible to derive an estimate of class differentials in mortality.

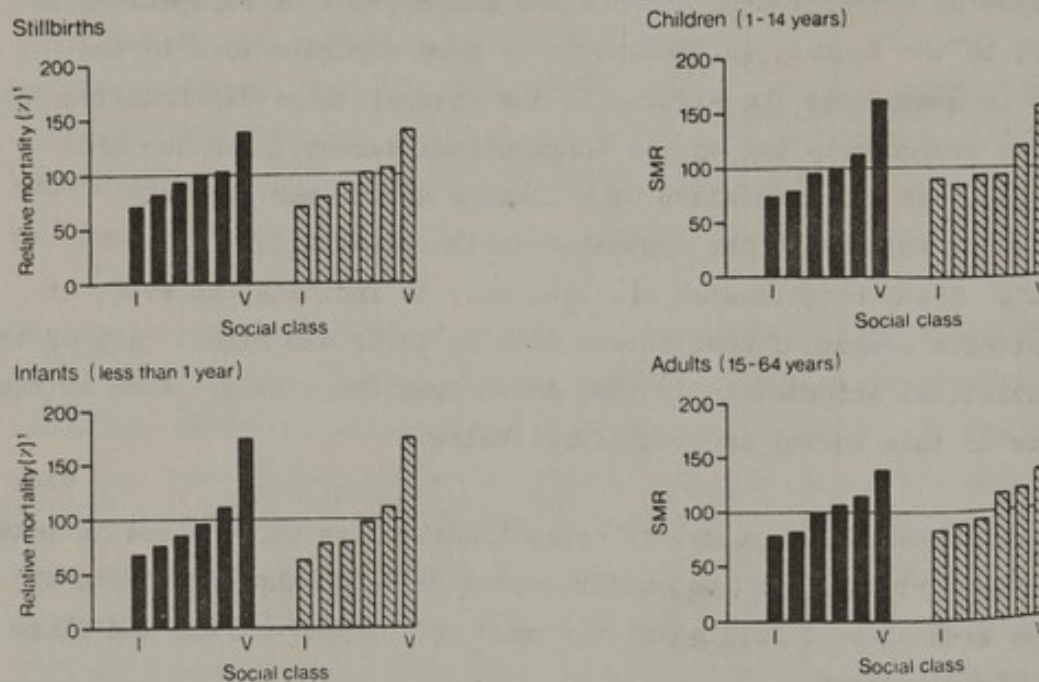
- 2.17 An analysis of the relationship between occupational class and mortality is carried out every decade and presented in the form of a decennial supplement. The data analysed in these successive supplements present certain problems of inference. The basic source of these problems is the method of estimating mortality in the different occupational classes. Because it is based on 2 different types of evidence and, because the measurement of occupations in one of these, ie the Census, is thought to be more accurate than in the other, there is some scope for error. In the future, these difficulties will partly be overcome by use of the longitudinal survey which the OPCS started in 1970, and which consists of a linkage of one per cent of individual census returns to the system of death registration, (Fox and Goldblatt). Death certificates are used only to indicate the event of death and not as a source of substantive data in their own right. All of the relevant statistical information is thus drawn from the census. Some of the early results of this survey are considered below.
- 2.18 In all previous decennial supplements occupational class differences in rates of age specific mortality for most major causes of death show gradients of varying slope with class I located at the most advantaged extreme and class V at the most disadvantaged.
- 2.19 Although the risk of early death is an obvious indicator of ill-health its precise relationship to sickness, disease or morbidity is not straightforward. In present day Britain accidents are the major cause of death during childhood and early adult life and there is no necessary relationship between an accident and an individual's state of health at least in these age ranges. In the first year of life and during old age the rate of mortality is a rather more efficient measure of morbidity. These age-specific differences in the relevance of mortality to the measurement of ill-health should be borne in mind in the interpretation of the evidence presented below.
- 2.20 Having noted some of the major problems of obtaining and interpreting the statistics of mortality and morbidity it is now necessary to examine them

in greater detail to see what they reveal about class based patterns of advantage and deprivation in health in Britain today.

Mortality

2.21 Contemporary trends in occupational mortality have been extensively reviewed in the most recent decennial supplement of occupational mortality (OPCS, 1978). A summary of some of the most relevant findings will be presented here.

FIGURE 2.1: Mortality by Occupational Class and Age.



Source: Occupational Mortality 1970-72, HMSO, 1978, p.196.

Note: (1) Relative mortality (%) = ratio of rates for the social class to the rate of all males (females)

2.22 Class differences in mortality are a constant feature of the entire human lifetime. They are found at birth, during the first year of life, in childhood, adolescence and in adult life. In general they are more marked at the start of life and in early adulthood. Average life expectancy provides a useful summary of the cumulative impact of these advantages and disadvantages throughout life. A child born to professional parents, if he or she is not socially mobile, can expect to spend over 5 years more as a living person than a child born to an unskilled manual household. Figure 2.1 illustrates the consistency of class gradients in mortality through the lifetime.

TABLE 2.5: Stillbirths and Infant Deaths by Sex, Age and Occupational Class

	Occupational class						All infants	Ratio V:I
	I	II	IIIN	IIIM	IV	V		
Stillbirths ⁽¹⁾								
Males	8.63	10.16	11.44	12.26	12.73	17.16	12.36	2.0
Females	8.92	10.01	11.54	12.81	13.41	17.67	12.67	2.0
Perinatal deaths ⁽¹⁾ (stillbirths & less than 1 week)								
Males	17.44	19.79	22.02	23.16	25.27	33.93	23.80	1.9
Females	15.17	17.36	19.05	20.98	22.42	30.24	21.14	2.0
Early neo-natal deaths ⁽²⁾ (less than 1 week)								
Males	8.89	9.73	10.70	11.04	12.70	17.06	11.59	1.9
Females	6.31	7.43	7.60	8.27	9.14	12.64	8.58	2.0
Late neo-natal deaths ⁽²⁾ (1-3 weeks)								
Males	1.23	1.39	1.64	1.81	2.02	3.06	1.84	2.5
Females	0.99	1.29	1.27	1.53	1.84	2.41	1.57	2.4
Post neo-natal deaths ⁽²⁾ (1-11 months)								
Males	3.47	4.09	4.57	6.20	7.31	14.61	6.48	4.2
Females	2.32	3.22	3.11	4.99	5.97	11.62	5.11	5.0
Total infant mortality (0-11 months)								
Males	13.60	15.21	16.91	19.06	22.03	34.73	19.91	2.5
Females	9.61	11.94	11.99	14.79	16.95	26.67	15.27	2.7

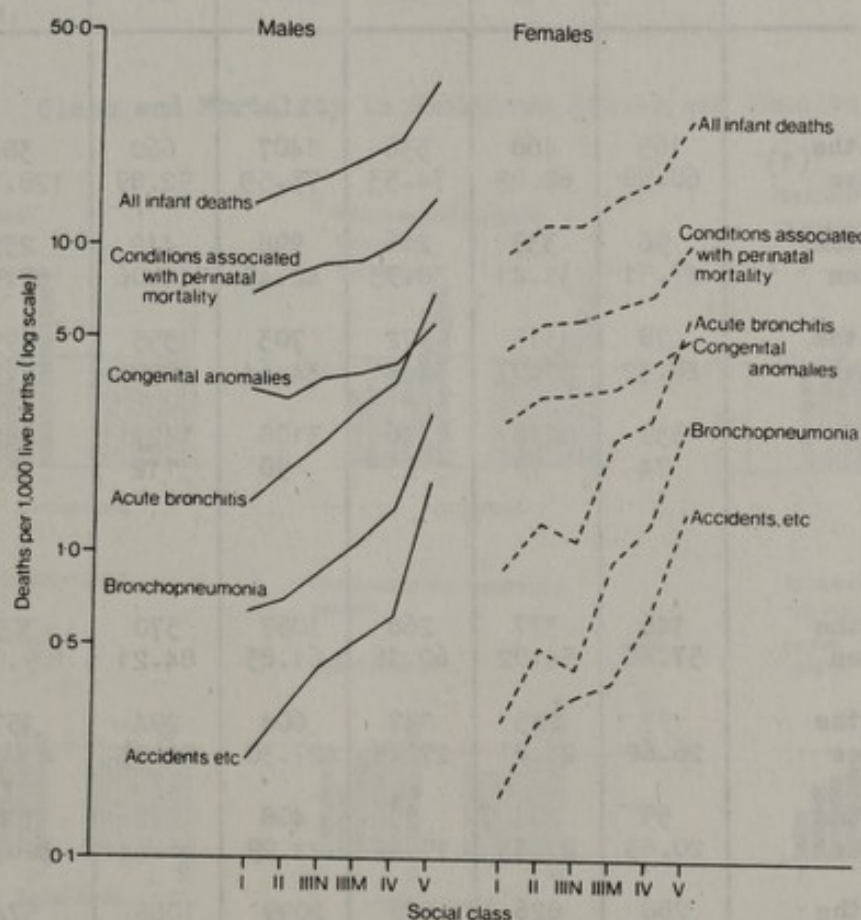
Source: Occupational Mortality 1970-72, p.157, HMSO, 1978.

Notes: (1) per 1,000 live and stillbirths

(2) per 1,000 live births.

2.23 At birth and during the first month of life the risk of death in class V (unskilled manual workers) is double the risk in class I (professional workers). When the fortunes of babies born to skilled manual fathers (class IIIM) are compared with those who enter the world as the offspring of professional workers (class I) the risk of mortality is one and half times as great. From the end of the first month to the end of the first year, class differentials in infant mortality reach a peak of disadvantage. For the death of every one male infant in class I, we can expect almost 2 deaths in class IIIM and 4 deaths in class V. Among female infants these ratios are even more disadvantageous to the offspring of manual workers.⁽²⁾

FIGURE 2.2 Infant Mortality by Sex, Occupational Class and Cause of Death



Source: Occupational Mortality 1970-72, HMSO (1978), p.158.

(2) The latest rates of infant mortality (1975-77) suggest that the position of classes IV and V may be improving. See Chapter 3 (p 80).

2.24 What causes these differentials in life chances amongst Britain's youngest citizens? Figure 2.2 compares class gradients for different causes of death, demonstrating that the steepest curves are found for accidents and respiratory disease, causes of death which are associated with the socio-economic environment (see Chapter 6). Other causes associated with birth itself and with congenital disabilities have less steep class gradients.

TABLE 2:6 Childhood Mortality

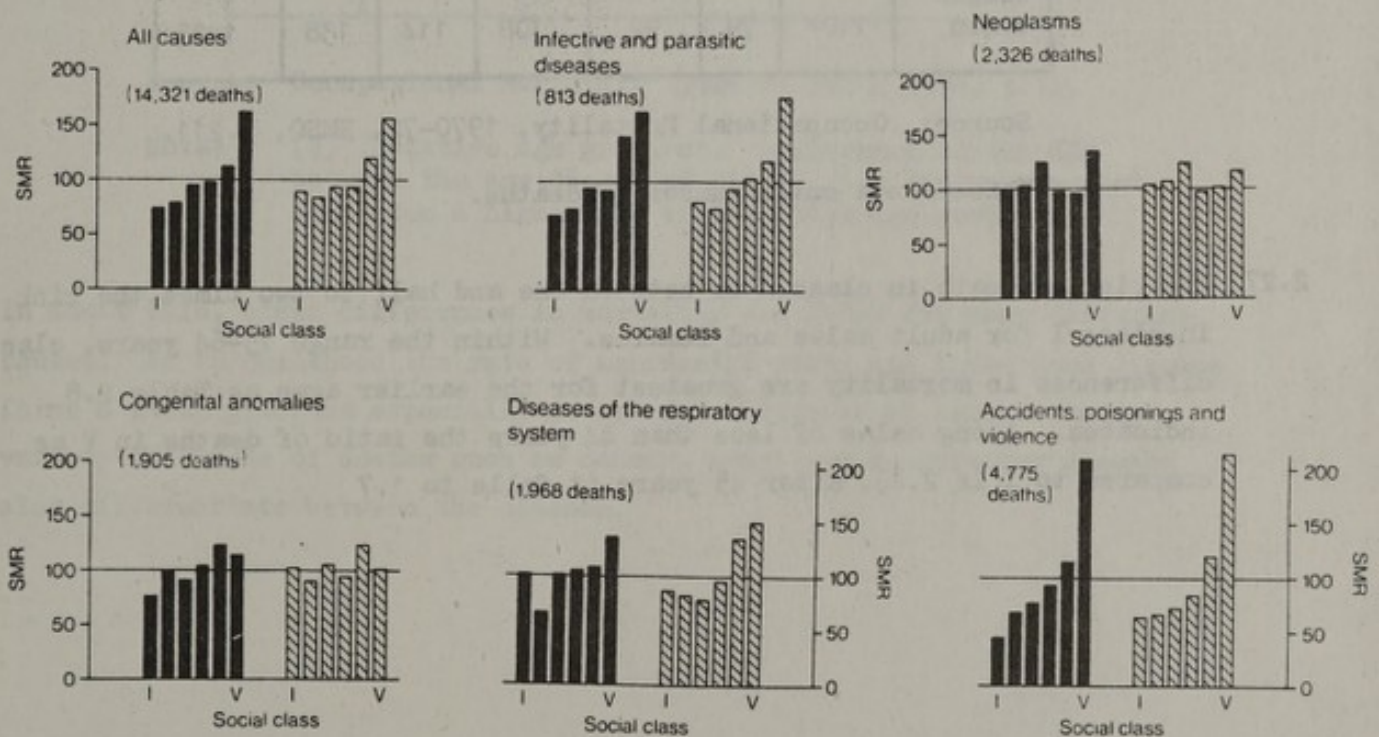
Sex	Age group	Occupational Class						All children	Ratio V:I	
		I	II	IIIN	IIIM	IV	V			
<u>Males</u>										
	aged 1-4	Deaths Rates ⁽¹⁾	165 60.58	468 62.02	338 74.53	1407 75.53	660 92.89	384 128.72	3778 78.60	2.12
	aged 5-9	Deaths Rates ⁽¹⁾	96 27.51	337 31.41	216 38.93	998 42.40	412 44.06	259 69.10	2579 41.57	2.5
	aged 10-14	Deaths Rates	78 28.32	313 31.07	172 34.81	703 34.64	355 40.06	199 56.57	2032 36.57	1.99
	aged 1-14	Deaths SMR	339 74	1118 79	726 95	3108 98	1427 112	842 162	8389 100	- 2.2
<u>Females</u>										
	aged 1-4	Deaths Rates	146 57.48	377 54.02	268 62.16	1087 61.85	570 84.21	309 109.09	3060 67.36	1.90
	aged 5-9	Deaths Rates	97 26.62	245 23.81	147 27.46	604 27.30	294 32.53	157 43.43	1685 28.58	1.63
	aged 10-14	Deaths Rates	55 20.83	204 21.33	95 19.89	408 21.29	222 26.44	108 32.76	1187 22.57	1.57
	aged 1-14	Deaths SMR	288 89	826 84	510 93	2099 93	1086 120	574 156	5932 100	- 1.75

Source: Occupational Mortality, 1970-72, Table 7.8, p.159.

Notes: (1) Deaths per 100,000 children per year.

2.25 Between the ages of one and fourteen, the risk of mortality continues to be closely correlated with class. Among boys the ratio of mortality in V as compared to I is of the order of 2:1, among the girls it varies between 1.5:-1 to 1.9:1. Once again the cause of this difference can be traced to environmental origins. The most steep gradients in childhood are found for accidents (33 per cent of total causes). For deaths caused by fire, falls and drowning the risk for boys in class V is 10 times the risk for their peers in class I. The corresponding ratio for deaths caused to youthful pedestrians by motor vehicles is more than 7:1. The other major causes of death showing steep class gradients in childhood are infective and parasitic diseases (5 per cent of total) and pneumonia (8 per cent of total). For most other causes, there is less clear evidence of class disadvantage.

FIGURE 2.3: Class and Mortality in Childhood (Males and Females 0-14)



Source: Occupational Mortality 1970-72, HMSO, 1978, p.160.

2.26 Class differences in mortality for all adults aged 15-64 are somewhat less marked than in childhood, but this conceals a large difference for those in their 20s and 30s, and a smaller difference for those approaching pension age, ie class disadvantage becomes less extreme as men and women grow older and the frequency of death increases.

TABLE 2.7: SMRs (15-64) by Sex and Class

Sex	class						Ratio V/I
	I	II	IIIN	IIIM	IV	V	
Men	77	81	99	106	114	137	1.8
Married women	82	87	92	115	119	135	1.6
Single women	110*	79	92	108	114	138	1.25

Source: Occupational Mortality, 1970-72, HMSO, p.211.

*based on a small number of deaths.

2.27 The risk of death in class V is between one and half to two times the risk in class I for adult males and females. Within the range 15-64 years, class differences in mortality are greatest for the earlier ages as Table 2.8 indicates. Among males of less than 44 years the ratio of deaths in V as compared to I is 2.45, after 45 years it falls to 1.7

TABLE 2.8: Class and the Relative Age Gradient for Males

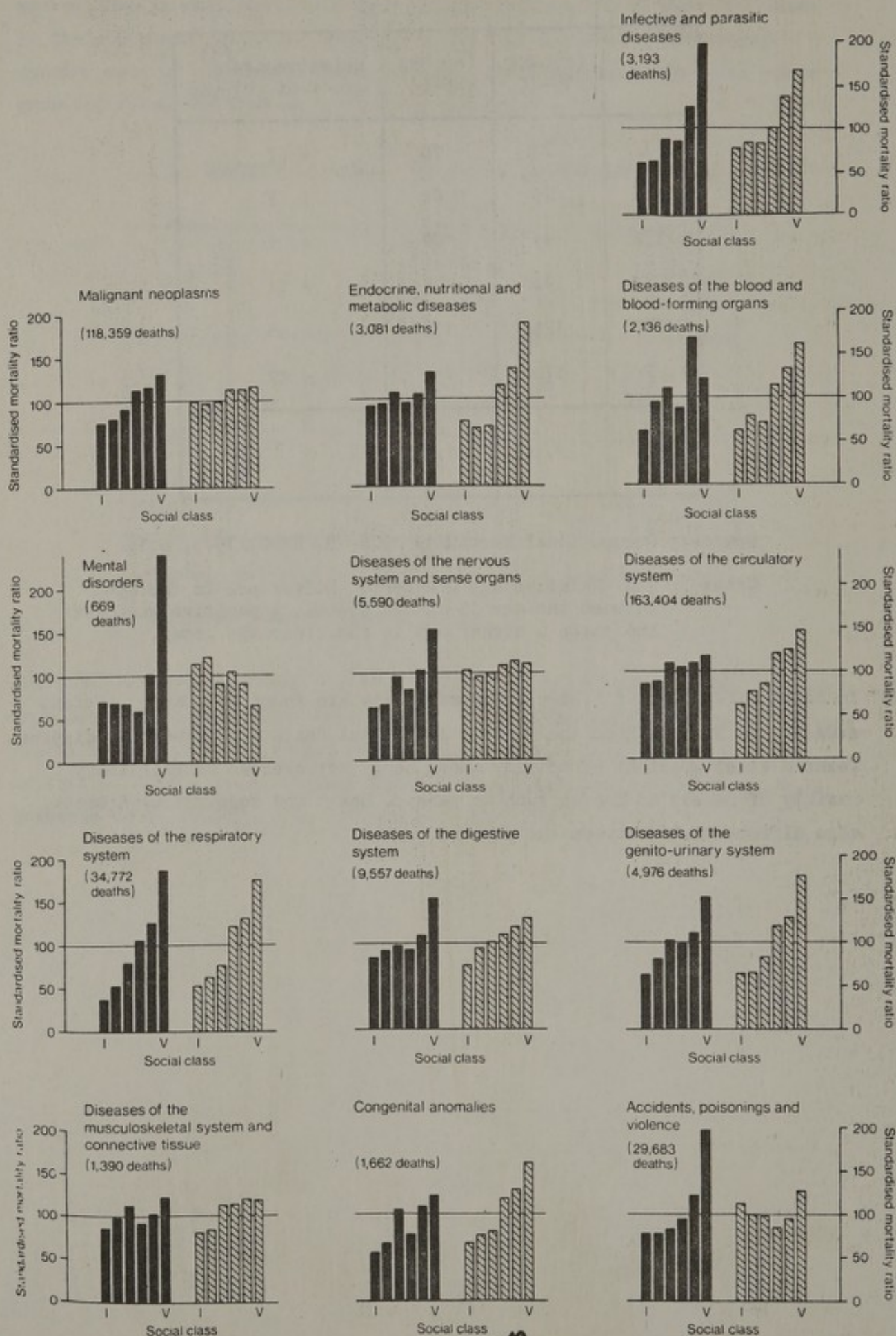
class	(a) SMR 15-44	(b) SMR 45-64	Relative age ⁽¹⁾ gradient (b)-(a)
I	71	78	+ 7
II	75	82	+ 7
IIIN	91	100	+ 9
IIIM	94	108	+ 14
IV	121	113	- 8
V	174	132	- 42
Ratio V/I	2.45	1.7	

Source: Occupational Mortality 1970-72, HMSO, 1978, p.14.

Note: (1) Relative age gradient. Difference in the SMR between the age 15-44 and 45-64. A positive gradient indicates a higher SMR in the older age group.

2.28 In adult life, class differences in mortality are found for many different causes. As in childhood the rate of accidental death and infectious disease forms a steep gradient especially among men; moreover an extraordinary variety of causes of deaths such as cancer, heart and respiratory disease, also differentiate between the classes.

FIGURE 2.4: Occupational class and mortality in adult life (Men and married Women) [by husband's occupation] (15-64)



- 2.29 Figure 2.4 graphically summarises the widespread influence of occupational class on the risk of premature death from the major causes. For some diseases, the variable of class is significant for only one sex. Causes which differentiate between the sexes in this way include circulatory disease, endocrine nutritional and metabolic diseases of the digestive system, all of which exhibit steeper class gradients among women. The opposite pattern is found for malignant neoplasms, accidents and diseases of the nervous system and sense organs. Diseases in which class is significant for both sexes include the infective and parasitic, those of the blood and blood forming organs; those of the genito-urinary systems and most important, diseases of the respiratory system.
- 2.30 The steep class gradient found in deaths attributable to accidents is only in part a reflection of the greater risks of manual work. Accidents at work account for only 20 per cent of the total of deaths recorded as accidents and as would be expected, most of these lost lives were male manual workers. The majority of accidental deaths were attributable to motor vehicle traffic accidents (54 per cent) which were not work related. For these deaths there was a steady class gradient. (See Occupational Mortality, pp.57-59).
- 2.31 The preceding analysis has relied on grouped occupations as an indicator of class. This form of indicator, which is the one conventionally adopted by the Registrar General, is of course no more than an artefact. There are several other ways in which social class might be represented for purposes of statistical presentation. Income, property, education and housing tenure are among the possible alternative variables which might be used to stratify the population. We have relied on occupation in this survey of evidence because this is the form in which OPCS provides a detailed analysis of mortality. Occupation is of course directly correlated with variables like income, education, and property, all of which can also be expected to differentiate between social groups within the population in terms of life expectancy. But of course in a **review** such as this we are constrained by the availability of data.
- 2.32 In future years, the OPCS will be able to produce more detailed analyses of the socio-economic variables associated with premature mortality on the basis of the new longitudinal survey. This survey has already produced some preliminary results which suggest some of the limitations of occupation as a uni-dimensional measure of social class. When the population is divided into

3 tenure groups: owner-occupiers, private tenants and local authority tenants, it has been found that class gradients, while maintaining their distinctive slope, vary considerably.

TABLE 2:9 Mortality by Tenure and Class (SMR: Males 15-64 years)

Class	TENURE		
	Owner occupied	Privately rented	Local authority tenancy
I	79	93	99
II	74	104	99
IIIN	79	112	121
IIIM	83	99	104
IV	83	100	106
V	98	126	123

Source: Unpublished data, Medical Statistics Division, OPCS, preliminary results of the LS 1970-75.

- 2.33 People who live in homes which they own themselves have lower rates of mortality than those who rent their homes from private landlords who in turn have lower rates than those who are the tenants of local authorities. Housing tenure is one possible measure of the accumulation by individuals or households of fixed property or assets. Here it can be seen that this variable shows a very close relationship with the risk of premature death.
- 2.34 The influence of social class on the variations in mortality after retirement has traditionally been difficult to estimate. This is because occupation, which is mainly used by the Registrar General to indicate class is less indicative of the lives of retired men and their wives and is often unspecific, or open to selection from more than one occupation in life, at death registration. In this survey of evidence, we are again able to draw on the preliminary results of the longitudinal survey to throw some light on the distribution of mortality among retired men in different classes.

TABLE 2:10 Occupational Class and Mortality amongst Retired Men aged 65-79, 1970-75

Retired men 65-79 years Class	Observed	Expected	SMR
I	101	110.5	91
II	629	729.4	86
IIIN	406	499	93
IIIM	1377	1329.5	104
IV	732	769.1	95
V	503	422.0	119
Armed forces	9	17.8	51
Inadequately described	762	701.6	109
All retired men	4597	4578.9	100

Sources, as Table 2:9

2.35 Table 2.10 demonstrates the influence of last recorded occupation on the mortality rate of retired men. Men who followed non-manual professional or managerial occupations during their working lives tend to have below average death rates, while those who followed manual occupations tend to have higher death rates. The differences between the Registrar General's 6 occupational classes do not form a linear class gradient, in these results, class IV manual (ie semi-skilled manual occupations) deviates from the trend of other manual workers. It remains to be seen whether this reflects a real divergence or whether it is due either to the vicissitudes of sampling or some problem arising from taking the "last recorded" as distinct from, say, "the longest occupation" in life.

2.36 The relationship between occupational class and the risk of death in old age present fewer problems of interpretation. During working life most active men and their wives and families live above a minimum or subsistence level of income, at least for most of the time. Retirement and old age, however, are characterised by widespread social and material deprivation, especially

among manual working class households, who are less well insured against the event of poverty at a time of life when the human body is in its declining phase and when the risk of death is proportionately so much greater; but also among some non-manual households, where an occupational pension may be a very small addition to the state's pension, or depreciate rapidly in value.

2.37 The duration of the human lifetime is one of the best means of approximating the lifelong pattern of health of individuals and whole populations. As we have seen, the risk of premature death in Britain today is systematically related to socio-economic variables. This association is not new or unusual. Death rates have always been relatively high among the underprivileged and materially deprived sections of communities. Why this should continue to be so in an era characterised by new patterns of disease, increased purchasing power, and state provision of free medical care is more perplexing. In infancy and childhood where the class gradients are steep, the major causes of death are in many ways directly linked to poverty and to environmental risk. In adulthood the relationship between health and class becomes more complex and in old age social and economic deprivation becomes a common experience. The problem of explanation will be discussed more fully in Chapter 6.

2.38 Mortality, it must be remembered, is an indirect measure or indicator of health and one which reflects many other aspects of material welfare, such as the risk of accidents, which are not normally associated with ill-health as such. Even so, the evidence surveyed in preceding pages suggests that occupational class is closely related to the likelihood of premature death.

Morbidity data

2.39 Morbidity data provide a second way of looking for, or at, class inequalities in health. Moreover there is a sense in which the extent of ill-health in a social group is a better indicator of its health vis-à-vis another social group than is relative mortality rate. Morbidity data are available from a variety of cohort studies and ad hoc surveys.

2.40 Such morbidity data are of 2 kinds, though both are scant at the national level. The first is based upon examination of, or symptom identification in, the social group as a whole or in a properly selected sample. An

approach of this kind has sometimes been used in the attempt to assess the prevalence of specific diseases within research studies. Social or occupational class is sometimes noted.

- 2.41 The second kind of data derives from analysis of medical consultation rates, hospital admission rates, etc. Not only do we have few data of this kind by occupational class, but there is the disadvantage that rates reflect not only the incidence of disease but also the processes by which an individual defines him(her) self as ill, seeks medical attention, and has his(her) definition confirmed/legitimated by medical authority. Since we know that there are class-related differences in the propensity of an individual with a given set of symptoms to refer himself for treatment or attention, as well as in the subsequent medical response, we recognise that data of this kind cannot be interpreted clearly.
- 2.42 Nevertheless illustration by reference to the sort of data available from these 2 kinds of source will confirm, broadly speaking, the picture which mortality data indicate. We shall not deal here with studies specifically of childhood morbidity (of which there are a number) since we shall be drawing on these elsewhere in our report.
- 2.43 An example of the first sort of morbidity data is provided by a survey of the prevalence of chronic bronchitis in Great Britain carried out by members of the (Royal) College of General Practitioners around 1960 (College of General Practitioners, 1961). Ninety-two GPs, distributed throughout the country, were asked to select similarly sized age/sex stratified random samples from their practice lists. All were to be aged between 40 and 64. Since bronchitis is diagnosed principally on the basis of symptoms, a questionnaire covering many possible symptoms was administered by each doctor, who was then asked to note whether he thought the patient suffered from chronic bronchitis or any other chest disease. The project's steering group subsequently identified those questions which appeared to discriminate most effectively between 'bronchitis' and 'non-bronchitis'. The total sample examined (787 men and 782 women) corresponded on social class distribution and marital status with expectation from the 1951 census. The wives of 442 men selected were also interviewed.

2.44 Overall, the GPs themselves diagnosed 17% of male patients and 8% of female patients as suffering from chronic bronchitis. In terms of the 3 criteria identified by the steering group ('standard diagnosis'), these figures fell to 8% and 3%. We consider here only the relationship between bronchitis - prevalence (defined in each of these 2 ways) and occupational class of male patients (the 785 who could be classified) and 442 wives. In terms of GPs diagnosis the percentage suffering from chronic bronchitis rose with descending class from 6% in class I (0% of wives) to 26% in class V (15% wives). The picture, broadly paralleling that obtained from mortality rates, was maintained if the more rigorous 'standard diagnosis' was used: 3% in classes I and II (4% of wives), 10% in class III (3% of wives) and 10% in classes IV and V (9% of wives). "In other words", the Report adds, "here is evidence that the social gradient in reported mortality from chronic bronchitis is unlikely to be due to differences in the diagnostic skills and habits of the doctors certifying death".

2.45 A different means of acquiring morbidity data from general practice has been through GPs recording details of consultations. In the analysis of consultations with 76 practices (120 practitioners) between May 1955 and April 1956 carried out under the auspices of the College of General Practitioners and the (then) General Register Officer (now OPCS), occupation was recorded.

2.46 Results from the study (Logan and Cushion 1960) showing consultation rates for each of a wide range (or group) of conditions for males, females, children by social class, are of considerable interest though not easy to interpret. The authors summarise their conclusions relating to working males as follows (p.21):

"The picture that emerges from this analysis of morbidity amongst working males is by no means a clear and obvious one. Nevertheless, some fairly definite correlations can be recognised. With a certain amount of simplification and ignoring numerous exceptions the position can be summarised approximately in the following scheme, where + indicates morbidity above, and - below average."

	agricultural occupations	non-manual occupations	manual occupations
psychoneurotic disorders	-	+	-
cardiovascular disorders	-	+	-
respiratory disorders	-	-	+
gastric disorders	-	-	+
arthritis/rheumatism	-	-	+
injuries	-	-	+

2.47 Another way of looking at the results suggested is by comparison of condition - specific SMRs with Standardised Patient Consultation Ratios (defined as actual number of men aged 15-64 consulting at least once with a given diagnosis per cent of the number 'expected' to have consulted on the basis of patient consultation rates at corresponding ages of men in all occupations). The results of this comparison, for selected diagnoses, is given in Table 2.11.

2.48 If we then compare the class gradients for SPCRs and SMRs respectively we find that in those cases where there is a clear association of consultation or sickness and mortality and working class status (notably pneumonia and bronchitis), then the gradient is steeper for SMR. This suggests more severe sickness or less adequate treatment with declining class.

TABLE 2.11

COMPARISON OF DISTRIBUTION OF STANDARDISED PATIENT CONSULTATION RATIOS (MALES 15-64, MAY 1955-APRIL 1956) AND STANDARDISED MORTALITY RATIOS (MALES 20-64, 1949-53) BY CLASS: SELECTED CONDITIONS

	SPCR class					SMR class				
	I	II	III	IV	V	I	II	III	IV	V
respiratory tuberculosis	102	85	105	102	91	58	63	102	95	143
malignant neoplasms	75	111	94	91	111	94	86	104	95	113
diabetes mellitus	89	123	100	108	74	134	100	99	85	105
coronary disease/angina	89	108	102	89	93	147	110	105	79	89
hypertension	120	127	99	70	89	123	106	103	83	101
influenza	83	82	103	113	107	58	70	97	102	139
pneumonia	70	87	90	121	132	53	64	92	105	150
bronchitis	49	70	99	118	146	34	53	98	101	171
gastric and duodenal ulcer	48	78	99	88	116	68	76	101	99	134

Source: Logan and Cushion, 1960 p.16.

- 2.49 Very approximately, however, and bearing in mind the complexities and ambiguities of direct estimate of disease prevalence or incidence in the community, it seems reasonable to conclude that the picture presented by mortality data is sustained.

OCCUPATIONAL CLASS AND MORBIDITY THROUGH THE LIFE CYCLE

- 2.50 Given the significance of class as a variable in the analysis of the length of the life-span in contemporary Britain, it is disappointing that there are no official statistics of the rate or outcome of medical therapy by the occupation or social class of the patient. Infective and parasitic disease with a steep class gradient amongst children accounts for 5 per cent of all deaths in the 1-4 age group. Between 15-64, such disease accounts for less than 1 per cent of all deaths. Since the advent of chemotherapy, the effectiveness of medical intervention in diseases caused through infection by microparasites has been exceptional and it seems likely that many of these childhood deaths ought, in theory, to be prevented. Why they are not, in the absence of reliable official statistics, remains a matter for conjecture. The same problem obstructs any attempt to examine the effectiveness of the National Health Service as an agent of equality in contemporary Britain. It is impossible, in fact, even to begin to evaluate what impact this great innovation in social policy has had on the relative life chances of men, women and children in the manual working class. If rates of mortality are used to evaluate its achievements, then recent experience would not appear to be particularly favourable.
- 2.51 For the analysis of social class and occupational differences in morbidity, the only regular source of information provided by central government is to be found in the General Household Survey (GHS). This annual sample survey has included substantial coverage of health topics and the report includes an analysis of socio-economic group of personal reports of sickness and medical consultation. An account of the use of the GHS for the analysis of inequalities in health is provided in Appendix 1.
- 2.52 There are problems in interpreting this type of morbidity data. The subjective experience of ill-health is framed by customary expectations and by the degree of inconvenience and cost attached to occupancy of the sick role. Even pain, which we might assume has a certain objective reality independent of culture, is influenced by the perceptions, the consciousness and the bodily reaction

of the sufferer. Indeed some would argue that a medicalised civilisation like our own has lowered the threshold of pain by heightening the fear of disease, by increasing the need for pain avoidance while at the same time providing chemical **potions** which anaesthetise bodily sensation. For these cultural reasons, and others, which must include individual physiology or psychology and the structure of social organisation there is a variability in the pattern of individual human response to sickness which complicates any attempt to examine the relationship between subjective and objective experiences of ill-health and understand the incidence of self-reported sickness by class or any socially defined status group.

2.53 The GHS data indicate that the personal experience of sickness tends to be greater amongst the socially and materially deprived especially during middle and old age. How are we to interpret the excess of self-reported sickness in the households of partly skilled and unskilled workers? Do the observed class differences reflect group comparisons of the same phenomenon? Are professional people more likely or less likely to respond to the symptoms of illness as a deviation from normal experience? Are they more likely to adopt the sick role and restrict normal social and economic activity? The answers to these questions are unclear, not least because there is no universally agreed definition of sickness outside of medically defined disease which allows controlled comparison to be made in the context of everyday life.

2.54 From 1971 to 1976 information on the distribution of 2 basic forms of ill-health was collected. These 2 were 'long-standing illness' and 'sickness causing a restriction of activity during a two-week reference period'. In everyday language these 2 forms might be referred to as chronic and acute sickness respectively. In addition there were data on the self-reported rate of consultation with general practitioners. The data show that rates of sickness and the use of medical services varies in relation to a number of variables including sex, age, **SEGs** and region. In what follows the GHS data for 1974, 1975 and 1976 are aggregated so as to raise the sample size and improve the significance of the results.

Childhood Morbidity

2.55 In childhood the rates of reported morbidity do not follow the linear relationship with occupational class or, strictly, the closely associated socio-economic grouping which is characteristic of the mortality rate. In

general the incidence of both long-standing sickness and restricted activity is greater among boys than girls and this is likewise reflected in a greater tendency to consult general practitioners. In Table 2.12 comparison of socio-economic group 6 with the average for all socio-economic groups tends to show higher rates for the former for girls but only in the case of long-standing illness for boys. At least in 1974-76 there were relatively low rates of restricted activity and consultation among boys in unskilled manual households.

TABLE 2:12 Sickness and Medical Consultation in Childhood (0-14 years)
(rates per 1,000 population)

Socio-economic group	Long-standing illness		Restricted activity		Consultation	
	Boys	Girls	Boys	Girls	Boys	Girls
1. Professional	91.5	74.7	105.4	73.2	104.0	83.8
2. Managerial	105.8	72.9	95.3	71.7	94.3	89.1
3. Intermediate	94.9	77.9	98.1	88.8	93.8	106.1
4. Skilled manual	101.4	81.4	88.2	77.5	86.6	87.2
5. Semi-skilled manual	108.0	70.6	87.0	75.0	98.5	76.9
6. Unskilled manual	123.3	105.8	58.3	83.3	76.2	92.3
All	102.5	78.1	90.5	77.8	91.7	88.5
Ratio 6/All	1.20	1.35	0.64	1.07	0.83	1.04

Source: GHS, 1974-76.

2.56 The results are clearly uneven, and the familiar gradients depicting correlations between health and class cannot be distinguished. Indeed reported sickness is in the case of boys more marked and in the case of girls nearly as marked in the homes of professional and non-manual workers than in the homes of unskilled workers. Part of the problem of interpreting rates of 'restricted activity' depends upon the interpretation of rates of 'long standing illness'. Among the working class more of those suffering from the latter probably also suffer bouts of restricted activity which may or may not be reported. Conclusions have to be carefully qualified.

The lack of any clear class relationship in the distribution of self-assessed sickness in childhood and with it the somewhat lower rates of consultation with doctors is somewhat surprising, in view of the pattern of inequality found in mortality rates. This is especially so in the case of acute sickness such as infective or parasitic disorders which one might reasonably expect to be more prevalent in the more crowded environment of the typical working-class home. (Douglas and Bloomfield, 1958). Chronic disorders do appear to be reported more frequently among the offspring of manual workers but even here there are exceptions and the higher incidence does not produce a concomitant rate of medical consultation. The problem of the 2 measures of morbidity is that they are expressed as rates per 1,000 population and not also in terms of severity or intensity, and similarly the crude consultation rate is not broken down in relation to the 2 measures of morbidity and further expressed in frequency.

Morbidity in Early Adult Life

- 2.58 Early adulthood is demarcated here as the phase of life between 15 and 44 years. For women this stage in the lifetime is one which brings them into close and frequent contact with the medical profession because of their biological role in human reproduction. This fact is reflected in the higher rate of consultation among women in all socio-economic groups. During this time of life females also exhibit higher rates of restricted activity. This pattern of female dependence on health care, accompanied as it is by the higher rate of acute sickness, does not seem to be related to class. If anything, the wives of professionals and of other categories of non-manual worker experience a greater restriction of normal activity through sickness as well as being more prone to consult with general practitioners. The pattern is not repeated among men although linear class gradients are not clearly in evidence for either acute sickness or medical consultations. Occupational class is nevertheless an important source of differentiation. Male manual workers are more prolific users of the general practitioner service and they tend to report a greater than average incidence of restricted activity on account of acute sickness. The difference in rates of consultation is no doubt partly a reflection of the degree of flexibility which workers in different classes have in making arrangements to withdraw from work. Manual work is more likely to require that absence on account of sickness be sanctioned by a medical practitioner and this expediency, if nothing else, must help to swell the ranks of male patients in surgery waiting rooms during the working week.

2.59 For both sexes, long-standing sickness varies systematically by class. In each case, the incidence in socio-economic group 6 is considerably higher than in group 1 and the occupational categories in between these extremes are also hierarchically arranged in a manner which accords with the expected gradient of disadvantage. This form of chronic sickness occurs with about the same frequency for both sexes in each group.¹

TABLE 2:13 Sickness and Medical Consultation in Early Adulthood
(rates per 1,000 population)

Socio-economic group	Long-standing illness		Restricted Activity		Consultation	
	Males	Females	Males	Females	Males	Females
1. Professional	145.4	138.2	84.0	106.4	75.5	140.4
2. Managerial	149.7	141.9	63.1	93.3	61.3	133.9
3. Intermediate	164.0	145.4	85.1	105.5	72.3	130.6
4. Skilled manual	161.9	167.2	89.7	95.2	85.1	142.5
5. Semi-skilled manual	173.8	170.3	81.5	99.3	80.5	146.0
6. Unskilled manual	197.4	202.3	110.4	95.3	93.5	145.9
All	163.2	157.8	84.5	99.0	78.7	138.6
Ratio 6/All	1.21	1.30	1.31	.96	1.19	1.04

Source: GHS, 1974-76

Morbidity in middle age, 45-64

2.60 In the 2 decades before retirement, occupational class exerts an important influence on all rates of morbidity and consultation among men and to a lesser extent among women also. On each of the 3 health indicators depicted in Table 2:14, class gradients are to be found. In general, rates of long-standing sickness are higher amongst men, excepting for those in professional or managerial occupations who report lower rates than their wives (who nevertheless exhibit considerably lower rates than other women in the population). At this phase of the lifetime, chronic sickness is quite

prevalent, affecting more than 3 out of 10 men and women on average and in unskilled manual households the percentage increases to 50 for males and to 40 for females. Chronic disorder of the kind which resists treatment and cure but instead persists as a routine discomfort to the individual must be one of the most unfavourable dimensions of middle age in the working class.

- 2.61 Restricted activity on account of sickness is less prevalent. It affects about 1 in 10 on average, a rate which compares quite favourably with early adulthood. Sex differences are small and the differentiating influence of occupational class is more evident among males. Much the same pattern is found for rates of consultation. Professional and managerial males have the lowest rates of all and the highest is found amongst the unskilled manual category of men. For all 3 health indicators in Table 2.14, **SEGs**. 1 and 2 tend to exhibit a markedly lower incidence than their counterparts lower down the socio-economic scale.

TABLE 2:14 Sickness and Medical Consultation in Middle Age (45-64)
(rates per 1,000 population)

Socio-economic group	Long-standing illness		Restricted Activity		Consultation	
	Males	Females	Males	Females	Males	Females
1. Professional	228.9	291.3	71.1	92.2	75.6	94.7
2. Managerial	257.0	265.7	75.4	77.0	74.8	99.8
3. Intermediate	368.0	329.7	98.4	94.6	122.1	122.4
4. Skilled manual	357.7	315.1	102.6	102.7	112.4	109.2
5. Semi-skilled manual	387.6	380.8	101.0	114.9	124.9	121.5
6. Unskilled manual	485.5	401.6	120.0	111.9	145.5	122.6
All	348.6	329.4	96.5	99.8	110.0	113.6
Ratio 6/All	1.39	1.22	1.24	1.12	1.32	1.08

Source: GHS, 1974-76

Morbidity in Old Age

- 2.62 As one might predict, rates of chronic sickness are extremely high for both sexes after 65, the customary age of male retirement. At least half the population in this age group report some form of long-standing sickness, although among retired professional workers and their wives, the percentage is lower. For the rest of the population, males and females alike, the effects of ageing, which seem to have become quite common among socio-economic groups 5 and 6 during middle age, become a routine feature of personal experience. At this stage in the lifetime females report the higher incidence of long-standing sickness and, not only is there a much lower rate in group 1, but there appears to be some class gradient. Much the same might be said of class differences amongst males, and males who have retired from manual occupations show a somewhat higher propensity to long-standing sickness than do their white-collar counterparts.
- 2.63 The remaining 2 health indicators taken from the GHS for 1974-76 which are presented in Table 2:15 show little, if any, evidence of distinctive class divisions. Restriction of activity amongst the aged population is more frequently reported by the higher classes, perhaps, in part, a reflection of their lower rates of chronic sickness and their higher expectations. Amongst the over-65s women report higher rates of restricted activity than men in every class. These sex and class differences are reflected in rates of consultation. Older women outnumber older men at the doctor's surgery and the most infrequent attenders are those with the highest age - specific risk of mortality, men retired from unskilled manual work.

TABLE 2:15 Self-reported Sickness and Medical Consultation in Old-Age (65+) (rates per 1,000 population)

Socio-economic group	Long-standing illness		Restricted Activity		Consultation	
	Males	Females	Males	Females	Males	Females
1. Professional	400.0	376.2	90.9	148.5	133.3	158.4
2. Managerial	476.6	525.6	93.6	109.3	157.3	164.6
3. Intermediate	503.2	553.4	94.2	121.5	121.2	142.7
4. Skilled manual	541.9	556.4	105.7	120.0	133.2	145.5
5. Semi-skilled manual	549.8	592.4	99.6	142.0	140.0	173.7
6. Unskilled manual	542.5	586.2	83.0	124.0	109.3	154.8
All	521.0	564.6	98.0	126.8	134.0	156.0
Ratio 6/All	1.04	1.04	0.85	0.98	0.81	0.99

Source: GHS, 1974-76

2.64 Up-to-date evidence relating to class differences in hospital treatment unfortunately cannot be added (see Chapter 4). Hospitals absorb much of the resources of the National Health Service in terms of both finance and skilled manpower. The occupational or other socio-economic characteristics of patients receiving treatment are not analysed in the Hospital In-Patient Enquiry. Past research, however, has suggested that there are substantial class differences in the benefit which accrues to individuals on account of hospital episodes. Ferguson and Macphail (1954) in a survey of 700 male patients completed during the first decade of the NHS found differences in the numbers of patients of different occupational status whose health condition improved following hospital treatment and discharge. Whilst extrapolation over a period of 30 years is of uncertain validity here, their study remains worth quoting.

2.65 It is not surprising that men doing different kinds of work and receiving varying levels of economic reward for their labour receive different levels of benefit from medical therapy. While it is possible for the health care

professionals to provide equality of treatment in hospital, what they cannot do is equalise the domestic and occupational circumstances of the patients they discharge. Non-manual work is, on average, less physically demanding, more secure and better rewarded than manual employment and therefore more compatible with the event of sickness and short or even long-term physical impairment. Ferguson and McPhail observed clear differences in the numbers of men in different occupational groups who were able, after discharge, to return to their old jobs or to find alternative "suitable" work.* Manual workers, especially the semi-skilled or unskilled, were much more likely to find themselves made redundant by the event of sickness, and the consequent loss of income and self-esteem can have only added extra burdens to the problems of recovery. As the authors of this study perceptively concluded,

"The transition from the sheltered atmosphere of the modern hospital ward to the icy chill of the workaday world is indeed a testing time and it is not surprising that many soon break down. The ex-patients who showed the heaviest mortality at early ages, the strongest tendency to relapse and the poorest record in point of early return to work were the group of unskilled labourers and it is significant that - apart from those suffering from such conditions such as advanced malignant disease - the proportion of men back in employment after leaving hospital was even more closely related to the nature of employment and home conditions than to the estimate made by the medical staff at the time of the men's discharge from hospital. In many cases early recurrence of breakdown came of bad social and environmental conditions rather than any inevitability on medical grounds."

Ferguson and MacPhail
(1954: pp. 137-8)

* TABLE 2:15 Occupation and failure to maintain improvement

Occupation group	% failing to maintain improvement
Non-manual	22
Manual skilled	29
Manual semi-skilled	41
Manual unskilled	49

Source: Ferguson and McPhail, (1954)

CONCLUSION

- 2.66 There are marked inequalities in health between the social classes in Britain. In this chapter mortality rates are taken as the best available indicator of the health of different social, or more strictly occupational classes and socio-economic groups. Mortality tends to rise inversely with falling occupational rank or status, for both sexes and at all ages. At birth and in the first month of life twice as many babies of unskilled manual parents as of professional parents die, and in the next 11 months of life 4 times as many girls and 5 times as many boys, respectively, die. In later years of childhood the ratio of deaths in the poorest class falls to between $1\frac{1}{2}$ and 2 times that of the wealthiest class, but increases again in early adulthood before falling again in middle and old age.
- 2.67 A class "gradient" can be observed for most causes of death and is particularly steep for both sexes in the case of diseases of the respiratory system and infective and parasitic diseases.
- 2.68 Other aspects of class than merely occupational category have an impact on health although few data relating mortality to education, income etc are available. This is however illustrated by evidence that in all classes owner occupiers have lighter mortality than those paying rent.
- 2.69 Available data on (self reported) morbidity tend to reflect those on mortality. Rates of "long standing illness" (as defined in the GHS) rise with falling socio-economic status and tend to be twice as high among unskilled manual males and about $2\frac{1}{2}$ times as high among unskilled manual females as males and females respectively in the professional classes. Inequalities are smaller in childhood and early adulthood and larger in middle age. If severe or "limiting" long-standing illness is isolated from long-standing illness then the poorer groups are found to be at a still greater disadvantage. Rates of sickness absence from work are also widely unequal.
- 2.70 On the other hand measures of "restricted activity" (regarded as a rough index of acute or short-term ill-health) are less unequal (or less unequally reported) between classes. For most years of the 1970s for which data were collected there was a class gradient but it was either less steep or uneven, and for children (particularly boys) there tended either to be no gradient

or (in some years) an inverse gradient. Part of the problem of measuring 'restricted activity' is of course whether some, or a large number, of those already categorized as having 'limiting long standing illness' and not saying that their 'normal' activities were further restricted in a preceding period of 14 days, should be included. There remain of course problems about interpreting self-reported sickness and especially in judging whether the same conditions are as likely to be reported by some occupational groups as others.

CHAPTER 2

LIST OF REFERENCES

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1. The first part of the document discusses the importance of maintaining accurate records of all transactions and activities. It emphasizes the need for transparency and accountability in financial reporting.

2. The second part of the document outlines the various methods and techniques used to collect and analyze data. It includes a detailed description of the experimental procedures and the statistical analysis performed.

3. The third part of the document presents the results of the study. It includes a series of tables and graphs that illustrate the findings and trends observed during the experiment.

4. The fourth part of the document discusses the implications of the results and the potential applications of the findings. It highlights the significance of the study and the need for further research in this area.

5. The fifth part of the document provides a conclusion and a summary of the key points discussed throughout the document. It reiterates the main findings and the overall objectives of the study.

6. The sixth part of the document includes a list of references and a bibliography. It provides a comprehensive list of the sources used in the study and the works cited in the document.

7. The seventh part of the document contains a list of appendices and supplementary materials. It includes additional data, charts, and documents that provide further detail and support for the findings presented in the main text.

8. The eighth part of the document includes a list of figures and tables. It provides a detailed description of each figure and table, including the data presented and the conclusions drawn from the analysis.

9. The ninth part of the document includes a list of equations and formulas. It provides a clear and concise definition of each equation and formula, along with the variables and units used in the calculations.

10. The tenth part of the document includes a list of definitions and abbreviations. It provides a clear and concise definition of each term and abbreviation used in the document, ensuring that the reader can understand the content without any confusion.

TRENDS IN INEQUALITY OF HEALTH

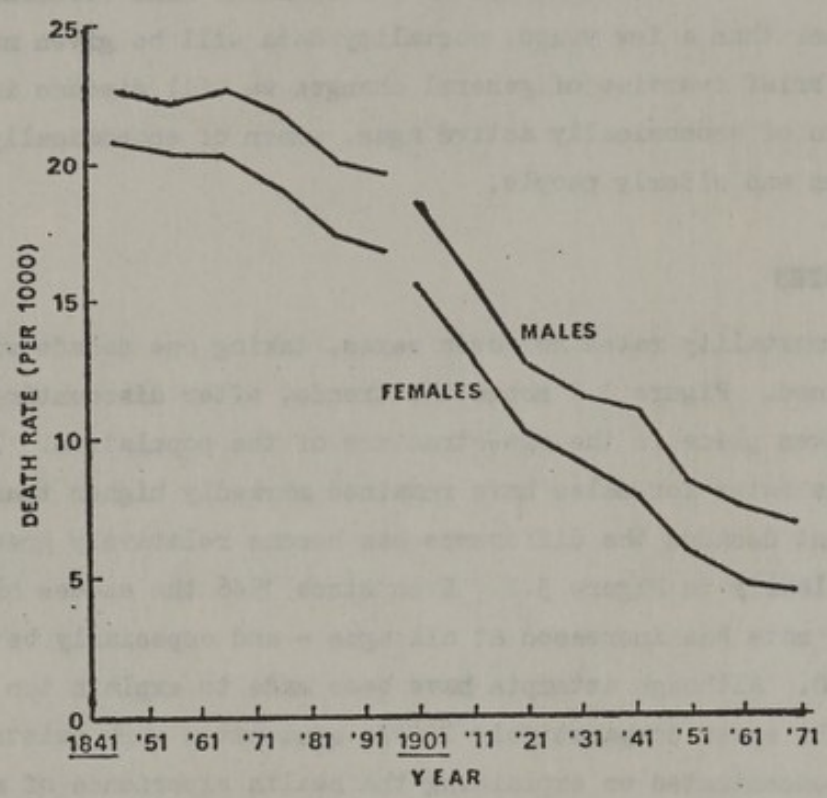
- 3.1. Previous chapters have set out the problems of defining and measuring inequalities of health and have described contemporary inequalities. In this chapter we will attempt to draw conclusions about trends, especially during the last 30 years. For want of other data of a comparable kind covering a span of decades rather than a few years, mortality data will be given most attention. After a brief overview of general changes we will discuss in turn the data for men of economically active ages, women of economically active ages, children and elderly people.

DECLINE IN DEATH RATES

- 3.2. For about 100 years mortality rates for both sexes, taking one decade with the next, have declined. Figure 3.1 shows the trends, after discounting for changes that have taken place in the age-structure of the population. It will be seen that the rates for males have remained markedly higher than for females, and in recent decades the difference has become relatively greater. This is shown more clearly in Figure 3.2. Even since 1946 the excess of the male over the female rate has increased at all ages - and especially between the ages of 10 and 30. Although attempts have been made to explain the difference between the sexes comparatively little systematic work exists. Research has often concentrated on explaining the health experience of a single sex. We consider that this is unsatisfactory whenever it would be relevant to study the experience of both sexes. We also consider that as a consequence some social inequalities may have been overlooked or minimised. Even when comparisons have been undertaken they have sometimes been made crudely, perhaps because of the shortage of well-grounded studies. For example, an MRC report took the view that mortality from bronchitis among men in the coal industry owed little to direct occupational effects, and more to general socio-economic or environmental factors, because a high correlation between the bronchitis SMRs for men and those for their wives had been observed (Medical Research Council, 1966, pp 101-102). But others pointed out that the exposure of some working wives to comparable occupational hazards as well as the exposure of families to some of the dust, and the effects of dust, picked up by the men, seemed likely to have been underestimated. (McLaughlin, 1966, and Higgins, 1959; as quoted by OPCS, 1978, p.32).

FIGURE 3.1

Death rates (standardised to 1901 population): England and Wales

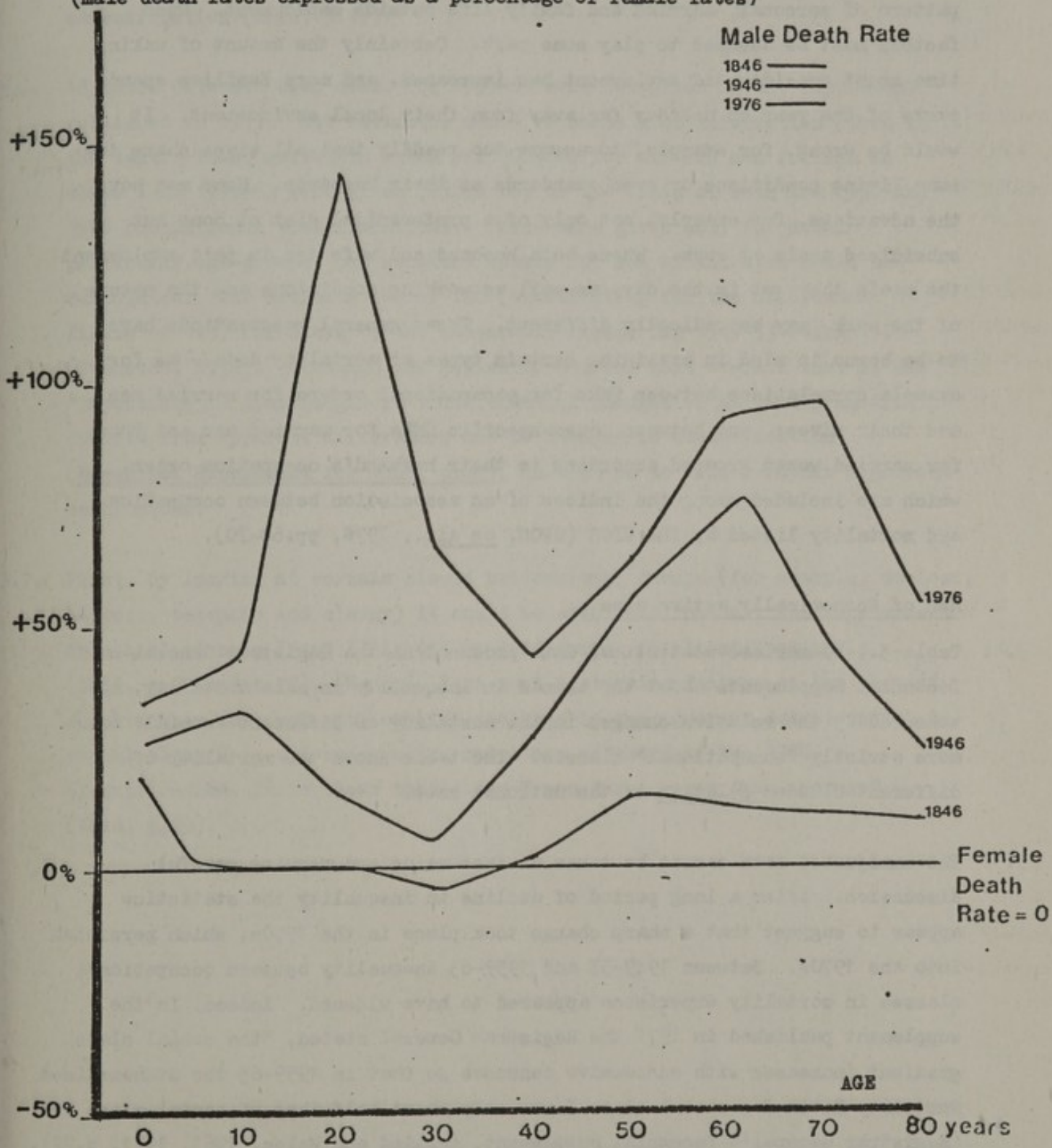


Source: McKeown, T., The Role of Medicine, London, Nuffield Provincial Hospitals Trust, 1976, p.30.

FIGURE 3.2

Historical Change in the risk of death for males and females throughout the lifetime

(male death rates expressed as a percentage of female rates)



Source:

OPCS, Trends in Mortality, 1978

- 3.3. The aetiology of the mortality and morbidity differences between men and women remains to be disentangled. Women suffer uniquely from some diseases: there have been major changes in the last 50 years in their experiences of childbearing and of paid employment, and there have been changes too in the pattern of personal, married and family life outside employment. Such factors must be assumed to play some part. Certainly the amount of waking time spent outside paid employment has increased, and more families spend parts of the year on holiday far away from their local environment. It would be wrong, for example, to assume too readily that all wives share the same living conditions or even standards as their husbands. Some men have the advantage, for example, not only of a preferential diet at home but subsidised meals at work. Where both husband and wife are in paid employment the meals they get in the day, as well as working conditions and the nature of the work, may be radically different. These general reservations have to be borne in mind in examining certain types of mortality data - as for example correlations between SMRs for occupational orders for married men and their wives; and between cause-specific SMRs for married men and those for married women grouped according to their husband's occupation order, which are included among the indices of an association between occupation and mortality listed by the OPCS (OPCS, op cit., 1978, pp.68-70).

Men of Economically active ages

- 3.4. Table 3.1 summarises statistical data produced in the Registrar General's Decennial Supplements about the trends in inequality in male mortality, as measured by the relative changes in the mortality of different "social" or more strictly "occupational" classes. The table shows the mortality of different classes relative to the national rate.
- 3.5. The unadjusted data cannot be taken at face value and require careful discussion. After a long period of decline in inequality the statistics appear to suggest that a sharp change took place in the 1950s, which persisted into the 1970s. Between 1949-53 and 1959-63 inequality between occupational classes in mortality experience appeared to have widened. Indeed, in the supplement published in 1971 the Registrar General stated, "the social class gradient increases with successive censuses so that in 1959-63 the Standardised Mortality Ratio for social class I was only about half that of social class V". (Registrar General's Decennial Supplement, England and Wales, 1961, 1971, p.22). However, changes were introduced in 1960 in the classification of occupations

and these account for most of the change in the relative mortality experience of classes I and V indicated by the unadjusted data in Table 3.1. In 1961 approximately 26 per cent of occupations were allocated to a class different from that to which they would have been allocated on the 1950 classification (Ibid, p.19).

- 3.6. Adjusted data for each class for 1959-63 were not given in the Supplement published in 1971. But estimates could be based upon information given in the text. Thus, mortality rates per 100,000 for all men and for men in class V in 1959-63 were given (Table D6) on the basis of both the 1950 and 1960 occupational classifications. These were given only for men in particular age-groups, but weighted totals for men of all ages could be calculated. One estimate was of 128 (substituting for the unadjusted figure of 143) for class V, the comparable figure for 1949-53 being 118 (Townsend, 1974). Although the Registrar General felt overall that it was "impossible to disentangle real differential changes in mortality in this context from apparent differences due to changes in classification" (Decennial Supplement for 1961, p.22), he went on to draw 2 rather important conclusions.
- 3.7. First, by looking at certain closed professional groups (for example, doctors, lawyers, teachers and clergy) it could be seen that "not all the improvement in social classes I and II is due to differences in classification". (Ibid, p.22 and p.27). Second, "the most disturbing feature of the present results when compared with earlier analyses is the apparent deterioration in social class V Even when the rates are adjusted to the 1950 classification, it is clear that class V men fared worse than average". (Ibid, p.29).

TABLE 3.1

Mortality of men by occupational class (1931-1971)
(Standardised mortality ratios)

Occupational class	Men aged 15-64					
	1930-32	1949-53 a	1959-63 unadjusted adjusted ^b		1970-72 unadjusted adjusted ^b	
I Professional	90	86	76	75	77	75
II Managerial	94	92	81	-	81	-
III Skilled manual and non-manual	97	101	100	-	104	-
IV Partly skilled	102	104	103	-	114	-
V Unskilled	111	118	143	127	137	121

Notes: a. Corrected figures as published in Registrar General's Decennial Supplement, England and Wales, 1961: Occupational Mortality Tables, London, HMSO, 1971, p.22

b. Occupations in 1959-63 and 1970-72 have been reclassified according to the 1950 classification.

3.8. The next decennial supplement, covering occupational mortality during 1970-72, shows little or no change in the mortality "advantage" of classes I and II, but though there was an improvement in the mortality of social class V, relative to other classes, this improvement fell short of restoring the position the class had reached in 1949-53, (OPCS, Occupational Mortality, Decennial Supplement, 1970-72, England and Wales, 1978, p.174). And, compared with 1959-63, the mortality of class IV relative to other classes had deteriorated. The report on the years 1970-72 went on to point out that the age-standardised death rate per 100,000 living at ages 15-64 (using all men in 1970-72 as the standard and after adjusting to the 1950 classification) had declined between the early 1960s and the early 1970s for class V men from 134 to 123, and therefore, according to this criterion, their health had improved "historically". But this attempt to distinguish changes relative

to a historical benchmark from those relative to class-structure also demands qualification. The age-standardised death rate for class IV actually increased between the early 1960s and the early 1970s and the rate for class III declined only marginally. Table 3.2 gives the figures for the 3 periods for each class.

TABLE 3.2

Recent trends in death rates by occupational class
men aged 15-64 (England and Wales)

Occupational class	age-standardised death rate per 100,000 living at ages 15-64		
	1951	1961	1971
I	103	82	79
II	108	87	83
III	116	106	103
IV	119	108	113
V	137	134	123

Note: Adjustments have been made by the OPCS to improve comparability between censuses.

Source: OPCS, Occupational Mortality, Decennial Supplement, 1970-72, England and Wales, London, HMSO, 1978, p.174 (supplemented by the OPCS).

3.9. The trend is clearly uneven, in terms of both historical decline in the absolute rates for each class and relativity between classes. Table 3.3 illustrates both these features for different age-groups. First, mortality rates for younger men declined during the whole period of more than 2 decades but the decline was arrested or even reversed for class III and classes IV and V combined for the 3 ten-year age-groups over 35. In the case of men aged 45-64 mortality rates in 1970-72 were either the same as or worse than those in 1949-53. During the 1960s a deterioration in the rates for men

aged 35-54 in classes III, IV and V (and little or no improvement for older men in these classes) took place.

- 3.10. Second, for each 10 year age-group the mortality rates of men in classes III, IV and V worsened during these 2 decades relative to men in classes I and II.

Age Group	1950-1959			1960-1969			Class
	1950	1955	1959	1960	1965	1969	
15-24	10	12	15	15	18	22	I
25-34	12	15	18	18	22	28	II
35-44	15	18	22	22	28	35	III
45-54	18	22	28	28	35	45	IV
55-64	22	28	35	35	45	60	V

TABLE 3.3

Mortality rates per 100,000 and as percentage of
 rates for occupational classes I and II (1951-71, England and Wales,
 men and married women)

Occupational class	Age	Men rates per 100,000			Married women rates per 100,000		
		1949-53	1959-63	1970-72	1949-53	1959-63	1970-72
I and II	25-34	124	81	72	85	51	42
III		148	100	90	114	64	51
IV and V		180	143	141	141	77	68
I and II	35-44	226	175	169	170	123	118
III		276	234	256	201	160	154
IV and V		331	300	305	226	186	193
I and II	45-54	712	544	554	427	323	337
III		812	708	733	480	402	431
IV and V		895	842	894	513	455	510
I and II	55-64	2097	1804	1710	1098	818	837
III		2396	2218	2213	1202	1001	1059
IV and V		2339	2433	2409	1226	1129	1131
		as per cent I and II			as per cent I and II		
I and II	25-34	100	100	100	100	100	100
III		119	123	125	134	125	121
IV and V		145	177	196	166	151	162
I and II	35-44	100	100	100	100	100	100
III		122	134	151	118	130	131
IV and V		146	171	180	133	151	164
I and II	45-54	100	100	100	100	100	100
III		114	130	132	112	124	128
IV and V		126	155	161	120	141	151
I and II	55-64	100	100	100	100	100	100
III		114	123	129	109	122	127
IV and V		112	135	141	112	138	135

Source: OPCS.

TABLE 3.4

Changes in death rates by occupation and age

(occupied and retired men)
(Source: OPCS)

Occupational Class	25-34			35-44			45-54			55-64		
	1951	1961	1971	1951	1961	1971	1951	1961	1971	1951	1961	1971
I	162	82	67	230	166	166	756	535	506	2347	1699	1676
II	114	81	74	225	177	170	704	545	565	2050	1820	1717
III	148	100	90	276	234	226	812	708	733	2396	2218	2213
IV	156	119	118	290	251	270	779	734	826	2103	2202	2301
V	214	202	199	386	436	391	1027	1119	1059	2567	2912	2635
All occ & ret men	153	108	98	280	237	230	816	704	728	2312	2174	2145
I clergymen	123	42	57	223	109	178	654	409	573	2007	1437	2545
dentists	95	74	64	155	133	159	824	460	583	2320	1393	1608
physicians	140	103	98	230	202	235	736	653	555	2119	1929	1579
accountants	120	87	77	180	186	172	644	512	629	1903	1715	1947
II Teachers	82	72	65	181	134	131	509	412	445	1667	1299	1290
Artists	153	77	55	278	203	238	773	704	795	2180	2009	1953
Journalists, authors, etc	147	126	102	252	226	237	944	561	644	2139	1658	1875
Inkeepers	162	165	109	422	398	322	1288	1010	1062	3395	3199	2842
III Commercial travellers	92	87	82	229	187	183	687	592	678	2058	1904	1816
Police	67	61	68	225	152	152	773	610	516	3496	4654	6144
Bricklayers	136	77	79	254	203	205	713	684	705	2363	2104	2377
Boot & Shoe repairers	199	136	127	314	334	356	973	834	952	2559	2734	3374
IV Paintsprayers	142	93	118	324	283	282	791	780	805	2440	2332	2222
Postmen	110	70	52	217	174	142	758	517	563	2255	2166	1762
Telephone operators	208	253	170	308	340	488	1167	770	1040	2646	2914	2452
Fishermen	109	119	85	332	327	329	1055	1063	1444	2958	3184	3423
V Railway porters	155	125	98	335	339	191	905	964	854	2404	2365	2323
Office cleaners	72	157	88	383	285	246	840	794	759	1936	1940	1687
dock labourers	178	110	151	328	265	243	994	947	904	2739	3053	3065

- 3.11. Classification of mortality by occupation serves only as an indicator of possible causes of inequalities. A large amount of work has concentrated on excess of particular causes of death within occupations or occupational orders, for example, textile workers and diseases of the blood, and miners and circulatory and respiratory diseases (the latest review is to be found in OPCS, 1978, op cit, chapter 5).
- 3.12. In 1959-63 more class V men died at every age than in 1949-53, from cancer of the lung, vascular lesions of the central nervous system, arteriosclerotic and degenerative heart disease, motor vehicle accidents, and other accidents. Some diseases, like lung cancer and duodenal ulcer, which showed no trend with social class, or, like coronary disease, an inverse trend 40 to 50 years ago, were by the 1960s producing higher mortality among social classes IV and V than I and II. In the report for 1959-63, there were 49 out of 85 separate causes of death applying to men (and 54 out of 87 applying to women) in which SMRs for classes IV and V were higher than for I and II. For only 4 causes of death among men (and 4 among married women) was the class gradient reversed. (See Table I1 in Registrar General's Decennial Supplement (1959-63), op cit).
- 3.13. Some comparison can be made with data for 1970-72. For 92 causes of death which were picked out for men aged 15-64 in the latest OPCS report the mortality ratios for both classes IV and V were higher than for I and II in as many as 68 - which represents a proportionate increase compared with 10 years earlier. For only 4 causes were mortality ratios for I and II higher than for IV and V:- accidents to motor vehicle drivers, malignant neoplasm of the skin, malignant neoplasm of the brain and polyarteritis nodosa and allied conditions (OPCS, 1978, op cit, Table 4A).
- 3.13. But it remains difficult to explain excess mortality in terms of occupation. This is not only because factors other than the effects of occupation contribute to premature illness and death. It is because both the lifetime and total effects of occupation have not been measured or are difficult to measure. There is mobility between occupations during life, which makes difficult proper evaluation of the specific effects upon health of particular occupations. Strictly, therefore, a better measure is required of length of exposure to the effects of an occupation. Secondly, the definition of an occupation and of its conditions, involves a variety of factors, each of

which are likely to be related to health. They include working indoors or outdoors, the proportion of time standing or walking about; the number of hours of work; working early or late hours of the day, or varying times of work from week to week; degree of mental and physical exertion; dexterity or agility involved; degree of warmth, light, quiet, isolation, vibration and humidity; availability of different facilities (Toilet, first aid, telephone, cloakroom or locker for outdoor clothing; coffee and tea; meals); job security; earnings and fringe benefits. We consider that delineation and measurement of such factors will help to explain differences in the health experience of people in different occupations. And changes in the nature of work itself and in the distribution of different types of work, working conditions, amenities, remuneration and fringe benefits, and not only changes in the degree of protection offered against specific risks of occupations, will explain trends in health experience. We recommend elsewhere that steps be taken in research and administrative statistics to improve our knowledge of both matters (Chapter 7).

3.15. This brief review of trends in mortality for men of economically active age shows:

- i. there was greater inequality of mortality between occupational classes I and V both in 1970-72 and 1959-63 than in 1949-53;
- ii. between 1959-63 and 1970-72 the mortality rates of different age-groups over 35 in occupational class III and classes IV and V combined, either deteriorated or showed little or no improvement; and relative to the mortality rates of occupational classes I and II they worsened.

Women of Economically Active Age

3.16. With reservations about occupational class I (numerically a very small category - less than 1 per cent of married women) the data set out in Table 3.5 show the same "spread" of mortality for married and single women as for men. For both married and single women in class IV, and for single women in class V mortality increased relative to women generally during the 1960s.

TABLE 3.5

Mortality of women by occupational class (1961-1971) (England and Wales)

	Women aged 15-64			
	Married		Single	
	1959-63	1970-72	1959-63	1970-72
I	77	82	83	110
II	83	87	88	79
III non-manual	) 103 (	92	) 90 (	92
III manual		115		108
IV	105	119	108	114
V	141	135	121	138

Source: Registrar General's Decennial Supplement: 1961, p.91, 503.
OPCS, Decennial Supplement, 1970-72, p.211.

- 3.17. Table 3.6 gives more detailed information for different age-groups. Except among the youngest age-groups the "spread" of inequality among married and single women is narrower than among men. But among some age-groups the inequalities between those in classes I and II and those in classes IV and V have grown. Between 1959-63 and 1970-72 it can be seen that SMRs for class IV deteriorated at all ages for men, married women and single women. For class V the experience in the period is mixed, with a tendency, at least for men, for SMRs to increase at earlier ages and steadily decrease at older ages. An increase in SMRs of single women at some ages is noteworthy, but the small numbers of deaths involved has to be borne in mind, (eg only 15 at ages 15-24, and only 83 and 175 at ages 45-54, and 55-64).

TABLE 3.6

Trends in Standardised Mortality Ratios according to occupational class and age

Men	Occupational class	15-19		20-24		25-34		35-44		45-54		55-64	
		1959-1963	1970-1972	1959-63	1970-72 ^a	1959-63	1970-72	1959-63	1970-72	1959-63	1970-72	1959-63	1970-72
Married Women	I	(38)	(76)	(79)	85	79	75	82	78	83	76	83	
	II	(41)	(82)	(64)	76	81	79	80	82	83	82	85	
	III ^m	97	85	97	99	92	102	93	102	91	102	92	
	IV	(88)	97	92	103	100	106	108	104	111	120	102	
	V	(159)	182	159	163	163	153	161	144	143	106	136	
Single Women	I	97	132	79	(57)	96	82	76	86	115	83	117	
	II	103	105	70	56	63	65	69	82	69	99	83	
	III ^m	78	91	72	74	72	73	76	86	86	104	102	
	IV	95	80	98	83	83	81	81	92	92	104	126	
	V	197	232	213	145	96	180	132	103	104	107	116	
												121	125

Source: Registrar General's Decennial Supplement (1959-63) op cit, Tables 3A(1), 3B(1) and 3C(1)

[Data from OPCS microfiches for 1970-72 to follow]

a = 15-24

3.18. When causes of death are divided into 13 broad groups for women aged 15-64 there is markedly higher mortality among the partly skilled and unskilled classes (whether defined by their own or a husband's occupation) in the case of:

- i. infective and parasitic diseases;
- ii. circulatory disease;
- iii. respiratory disease;
- iv. diseases of the genito-urinary system, and though less markedly;
- v. congenital anomalies;
- vi. diseases of the blood;
- vii. endocrine and nutritional diseases, and
- viii. diseases of the digestive system.

3.19. In the case of (ix) benign neoplasms there is no trend by class but in (x) mental disorders, (xi) diseases of the nervous system, (xii) malignant neoplasms and (xiii) accidents, poisoning and violence, there was higher mortality in 1970-72 among classes I and II.

Infant Mortality

3.20. Inequality in mortality among infants reflects that among adults, for both England and Wales and Scotland. Table 3.7 shows that although deaths per 1,000 live births in England and Wales have diminished among all classes the relative excess in combined classes IV and V over I and II increased between 1959-63 and 1970-72. Inequality remained marked in 1975 (Morris, 1979, p.87). As the Court Committee commented, between 1950 and 1973 the perinatal mortality rate declined by 45% for those of professional and 49% for those of managerial class but by only 34% for those of unskilled manual class (Court Report, p.71).

3.21. Scottish trends are similar. During the 1960s infant mortality rates of each occupational class continued to decline but the class gradient remained broadly the same (Scottish Home and Health Department 1973, p.9). The same had been true of earlier decades (Morris and Heady, 1955).

TABLE 3.7

Trends in infant mortality by occupational class
(England and Wales)

	Ratios of actual to expected deaths of infants			
	1930-32	1949-53	1959-63 ^a	1970-72 ^b
I	53	63	73	66
II	73	73	)	74 (77
III	94	97	98	94
IV	108	114		111
V	125	138	)	128 (175
	Infant deaths per 100 legitimate live births			
I	32	19	-	12
II	46	22	-	14
III	59	28	-	16
IV	63	35	-	20
V	80	42	-	31

Source: a. For 1959-63 estimates calculated from Spicer, C.C., and Lipworth, L., Regional and Social Factors in Infant Mortality, G.R.O., Studies on Medical and Population Subjects No 19, London, HMSO, 1966, by Tudor Hart, J., "Data on Occupational Mortality 1959-63", *The Lancet*, January 22, 1972, p.192.

b. For 1970-72 estimated from OPCS, Occupational Mortality, Decennial Supplement, 1970-72, England and Wales, pp.168, and 216.

3.22. Neonatal and post-neonatal mortality rates for Scotland are shown in Table 3.8. It can be seen that the neonatal rates for class V remained about twice as high, and the post-neonatal rates 6 times as high for class V as for class I in 1975, compared with 1946. In the period 1946-1960 there was some narrowing of the gap between I and V but a reversal of this trend for 1960-1975.

TABLE 3.8

Neonatal and Post Neonatal Mortality Rates (per 1,000 live births)
by occupational class (Scotland)

	Mortality per 1000 live births			% decrease	
	1946	1960	1975	1946-60	1960-75
Neonatal mortality					
class I	16.7	13.0	7.6	22	41
II	25.0	17.2	8.7	31	49
III	29.3	17.1	11.2	42	34
IV	31.1	20.7	10.8	33	38
V	36.9	21.0	14.6	43	30
Post-neonatal mortality					
class I	5.5	2.7	1.8	51	33
II	12.8	4.3	3.8	66	12
III	22.0	7.2	4.7	67	35
IV	29.3	10.2	5.1	65	50
V	36.1	12.8	10.8	64	16

Source:

- 3.33. Rates of infant mortality have maintained a steady pattern of decline in the post-war era. This pattern of decline has been recorded for all occupational classes. Table 3.9 summarises the trends for the different components of infant mortality for England. As elsewhere rates listed in Table 3.9 are not strictly comparable because the conventions of classification have changed. These changes mainly affect the figures for 1950 and 1964 but by grouping classes IV and V together the problems of changes of classification can be minimised and comparison enhanced.
- 3.34. The greatest improvements have been recorded in the rate of post-neo-natal mortality (death from the fifth week to the end of the first year of life) where in classes III to V as well as in the 'illegitimate' category rates have fallen by more than 60 per cent during the last quarter of a century. This decline represents a narrowing of the class differential between I plus II and the rest even though the rate for IV plus V and for illegitimate births in 1975-6 was still higher than the rate of I plus II in 1950. It should be noted that the data summarised in the table are collapsed into only 3 categories, compared with 6 in the decennial supplement for 1970-72.
- 3.35. For neo-natal mortality (death during the first month of life) the degree of improvement has been rather less. Occupational classes IV plus V have made the slowest progress.

TABLE 3.9

Trends in infant mortality 1950-76 (rates per 1000 live births)
England and Wales

	rates per 1000 live births			% improvement		
	1950	1964	1975/76	1950/64	1964/76	overall 1950/76
STILL BIRTHS						
class						
I + II	18.9	11.8	7.8	38	34	59
III	21.5	15.6	9.8	27	37	53
IV + V	24.6	17.2	12.0	30	30	51
Illegitimate	29.3	21.3	12.7	27	40	57
NEO-NATAL DEATHS (under 4 weeks)						
class						
I + II	13.7	9.2	7.9	33	14	42
III	15.9	11.8	9.3	26	21	42
IV + V	18.4	13.2	11.7	28	11	36
Illegitimate	28.4	19.3	15.0	32	22	47
POST NEO-NATAL DEATHS (1-11 months)						
class						
I + II	5.5	3.5	3.0	36	14	45
III	10.3	5.4	4.0	48	26	61
IV + V	15.1	7.6	6.1	50	20	60
Illegitimate	19.9	9.2	7.4	54	20	63
Illegitimate births as per cent of all live births	5.34	7.6	9.2	+42	+21	42

Sources: Heady, J.A., and Heasman, M.A., Social and Biological Factors in Infant Mortality, Studies on Medical and Population subjects, No 19, HMSO, 1959.

Spicer, C.C., and Lipworth, L., Regional and Social Factors in Infant Mortality, Studies on Medical and Population subjects, No 19, HMSO, 1966.

Medical Statistics Division, OPCS, Social and Biological Factors in Infant Mortality, 1975-76, occasional paper No 12, OPCS 1978.

and their failure to maintain parity with the result is particularly marked over the last decade.

3.36. The same conclusion emerges from the trends for stillbirths. The greatest progress over the 25 year period was made by class I plus II and the least progress for IV plus V. These trends, along with those for neo-natal deaths represent a gradual widening of the gap between the 2 classes at the top and the bottom of the scale. The most recent annual data given below in Table 3.10 do not follow this trend and suggest a catching up process on the part of classes IV and V.

3.37 Over the 25 year period the percentage of illegitimate births has almost doubled. This statistical trend reflects to some extent, real changes in the social meaning of illegitimacy with something of a lessening of the stigma attached to being born outside of wedlock. A growing (but still tiny) minority of women today actually choose to remain unmarried and yet have children and such women are often highly educated and employed in secure and well-paid occupations. For these women, and their children, illegitimacy carries few of the sanctions and hardships which are traditionally associated with it and this pattern of social and cultural change may well have contributed to the fall in the high rate of mortality associated with illegitimate birth.

Recent changes in Infant Mortality: 1975 and 1976

3.38. The most recent data published by OPCS on infant mortality is for the years 1975-76. (Occasional paper No 12, OPCS, 1978). These data are the first set to be published in a continuous series derived from a new linkage of birth and death registration. Table 3.10 presents the data for 1975 and for 1976. Occupational classes I and II and IV and V have been aggregated for purposes of comparison with the earlier ad hoc studies carried out during the fifties and sixties.

TABLE 3.10

Infant mortality by occupational class 1975 and 1976

	rates per 1000 live legitimate births					rate per 1000 Illegi- timate births
	occupational class				Other	
	I + II	III	IV + V	I - V		
<u>Stillbirths</u>						
1975	8.0	10.1	12.6	10.1	10.2	12.9
1976	7.7	9.6	11.3	9.4	8.3	12.6
% improvement	3.7%	4.9%	10.3%	6.9%	18.6%	2.3%
<u>Perinatal</u> (stillbirths and under 1 week)						
1975	15	18.3	22.8	18.4	21.2	26.4
1976	13.9	16.8	20.5	16.8	22.12	24.3
% improvement	7.3%	8.2%	10.1%	8.7%	4.8%	8%
<u>Neo-natal</u> (under 4 weeks)						
1975	8.4	9.8	12.3	9.9	12.9	16.1
1976	7.5	8.7	11.1	8.9	16.2	13.9
% improvement	10.7%	11.2%	9.8%	10.1%	25.6%	13.7%
<u>Post-neo-natal</u> (1-11 months)						
1975	3.2	4.2	6.5	4.4	7.5	7.6
1976	2.7	3.8	5.8	4.0	8.9	7.1
% improvement	15.7%	9.5%	10.8%	9.1%	-18.6%	6.6%
% fall in no of births 1975-76	-0.63%	-4.09%	-1.5%	-2.59%	-18.9%	-2.05%

Source: Social and Biological Factors in Infant Mortality, 1975-76.
Occasional paper No 12, Medical Statistics Division, OPCS.

"Other" includes the armed forces, inadequately described occupations, persons who were unoccupied and occupations not stated. Note also between 1975 and 1976 the rate of unemployment in the UK (excluding school-leavers) climbed from 3.9 to 5.4

- 3.39. During 1975-76 rates of infant mortality continued to decline in all occupational classes. Up to the end of the first week of life the percentage improvement was somewhat higher in classes IV and V than other classes. For neo-natal mortality (death during the first month of life), there was less variation between the 5 classes and, for post neo-natal mortality, combined classes I and II showed the most improvement. It is always hazardous to draw inferences on the basis of results for only 2 years, however, and despite the decline in stillbirths among classes IV and V the trends in general in infant mortality do not yet suggest much change in the pattern of relative inequality of the last 2 decades.
- 3.40. Attention needs to be called to illegitimate births and "other" legitimate births in Table 3.10. Neonatal and post-neonatal mortality rates for these 2 categories are high. The latter category includes the armed forces, the unemployed and others who could not be assigned to an occupational class. Mortality rates during the period from the end of the first week to the end of the first year of life have currently increased by over a fifth. However, in 1975-76 an improvement occurred in the rate of stillbirth. How can such variations be explained? The "other" category accounted for 727 deaths in 1975 and 644 in 1976. The variations in the rates may be an artefact of the measurement process induced by the problematic nature of classification. On the other hand the category includes some seriously deprived families. Between 1975 and 1976, unemployment in Britain jumped to a level unknown previously in the period following the second World War. The numbers unemployed have remained substantially in excess of one million throughout the late 1970s and the number unemployed for 6 months or more has steadily increased. Perhaps the increase in infant mortality recorded here only among the category which includes the unemployed is a reflection of the way in which the economic "health" of the nation imposes upon the physical welfare of the new born in the manner suggested by Brenner. Brenner found that infant mortality rates in the United States were related to economic recessions, with a lag of from one to two years of the peak average mortality behind the peak of unemployment (Brenner, 1973, p.155). The hypothesis specified that as a result of material deprivation or lack of medical care, in addition to psychological stress, economic decline would be associated with elevated infant mortality rates. More recent work is believed by Brenner to have confirmed "that undesirable changes such as unemployment and income loss are substantially more generative of pathology". (Brenner, 1979, p.22).

Maternal Mortality

- 3.41. The trends by occupational class of maternal mortality are shown in Table 3.11. During a period of less than a decade mortality fell by more than a third. Although that of class I fell less sharply than other classes inequality between the more numerous class II and classes IV and V remained about the same. The table shows that mortality among women in class V was nearly double that in classes I and II.

TABLE 3.11

Maternal mortality by occupational class:
married women 15 and over (England and Wales)

Occupational class	Rate per 100,000 births		
	1962-65	1970-72	% decline
I	16	13	-19
II	22	11	-50
III non-manual	) 23 (	13	-39
III manual		15	
IV	32	19	-41
V	44	23	-48
All married women	26	16	-38

Source: Registrar General's Decennial Supplement, England and Wales, 1961, Occupational Mortality Tables, London, HMSO, 1971, p.503.

Mortality of Children

- 3.42. The ratio of class V to class I deaths is higher in the first to the twelfth months of life than in later years of childhood. The OPCS report for 1970-72 shows that in infancy (after the first month) the ratio was 4.2 for males and 5.0 for females (OPCS, 1978, op cit, Table 7.7). As Table 3.12 shows, this ratio is lower at older ages. The trends by class among children of different age have varied. Between one and four years of age there has been a small reduction in the class differential (especially for girls), little

or no change between the ages of 5 and 9 and an increase in the differential between the ages of 10 and 14. Excepting stillbirths, fewer females than males in 1970-72 died in childhood in every age-group and class.

TABLE 3.12

Mortality of Children 1-14 by occupational class (England)

Occupational class	AGE								
	1-4			5-9			10-14		
	1959-63	1970-72 males females		1959-63	1970-72 males females		1959-63	1970-72 males females	
I	69	61	57	33	28	27	30	28	21
II	73	62	54	35	31	24	29	31	21
III non-manual		75	62		39	27		35	21
	) 89 (			) 41 (			) 31 (
III		76	62		42	27		35	21
IV	93	93	84	41	44	33	30	40	26
V	154	129	109	67	69	43	41	56	33
V as % of I	223	211	191	203	246	159	137	200	157

Source: For 1959-63, Adelstein, A., and White, G.C., "Causes of Children's Deaths Analysed by Social Class (1959-63)," in OPCS (1976); OPCS, Occupational Mortality, Decennial Supplement, 1970-72, England and Wales, op cit, p.159.

- 3.43. For boys aged 1-14, mortality ratios for classes IV and V in 1970-72 were both higher than for classes I and II for 23 of 38 causes of death, compared with only one cause (asthma) where the ratios were lower. For girls the corresponding figures were 22 and 0 respectively (OPCS, 1978, op cit, Table 7E).

The Elderly

- 3.44. The occupational class differential in mortality diminishes in the late 30s and 40s and further diminishes as the pensionable ages are approached. But classification by occupation becomes less meaningful for the elderly. Information about occupation and cause of death recorded on the death certificates of persons of 75 years and over is sometimes imprecise or inaccurate. In the case of widows, especially if dying in the late

seventies or afterwards, they may be classified according to the last occupation of husbands dying many years earlier. This may be a weak indicator of life chances and lifestyles over lengthy periods. Again, there is evidence that men who had worked for some years before retirement in unskilled occupations tend nonetheless to be listed at death as having worked in skilled occupations if in fact that had been the case previously in their lives (OPCS, 1978, op cit, p.7).

- 3.45. It is hoped that more reliable data for the elderly will emerge from the longitudinal survey being carried out by the OPCS. Some of the first results have been given above in Chapter 2 (Table 2.10). For men the class gradient corresponds quite closely with that based on less reliable information for 1959-63 and published in a previous Decennial Supplement (Registrar General's Decennial Supplement, 1959-63, op cit, Table 3A(i)). At that stage the data for 1949-53 and 1959-63, even taking account of changes of classification, indicated relative deterioration in the rates for class V men aged 65-74 (as for younger age groups). (Ibid, p.24).
- 3.46. Data about the mortality of men aged 65-74 in individual occupations in 1970-72 shows there were very large differences between some groups of manual workers and some groups of non-manual workers. For example, the mortality ratio for former miners and quarrymen was 149, gas, coke and chemicals makers 150, and furnace, forge, foundry and rolling mill workers 162, compared with administrators and managers with a ratio of 88 and professional, technical workers and artists with a ratio of 89. (OPCS, 1978, op ct, p.107). Compared with 1959-63 the mortality ratios of several manual occupations (including the 3 listed above) deteriorated, relative to the ratio for all men. (Registrar General's Decennial Supplement, 1971, op cit, Table 3A(i)).

Trends in Mortality by Age

- 3.47. The trends during the life-span have been shown for both sexes. Inequalities are largest during the first year of life, especially after the end of the first month. After some diminution in the differential between the classes during childhood it widens again and reaches a second, smaller, peak in early adulthood. The differential narrows in late middle age, for women and not only men (Table 3.4) and appears to remain small among the elderly. These trends with age apply whether we take the difference between

classes V and I or IV and I (Table 3.13). However, we must emphasise that although the relative difference between classes V and I and IV and I diminishes in middle and old age the absolute difference in numbers of deaths increases. For example, at 60-64 the additional numbers of deaths of men per million population in class V than in class I was 10,622, compared with 868 per million at 20-24 (OPCS, 1978, op cit, p.37).

TABLE 3.13

Male mortality rates at different ages in occupational class IV and V as a percentage of those in class I

	Class IV as per cent class I		Class V as per cent class I	
	1959-63	1970-72	1959-63	1970-72
Stillbirths		148		199
Perinatal (stillbirths, and less than one week)		145		195
Early neonatal (less than 1 week)		143		192
Late neonatal (1-3 weeks)		164		249
Post neonatal (1-11 months)		211		421
Total infant mortality (under 1 year)		162		255
1 - 4 years		153		212
5 - 9 years		160		246
10 - 14 years		141		200
Total 1 - 14		151		219
15 - 19		148	197	161
20 - 24		184	254	236
25 - 34	145	176	246	297
35 - 44	151	163	263	235
45 - 54	137	163	209	209
55 - 64	130	137	171	157

Source: Registrar General's Decennial Supplement, 1971, op cit, Table 3A(i) OPCS, 1978, op cit, pp.159, 159 and private communication.

3.48. The structure of inequality in mortality rates during the life-span does not appear to have changed much in recent decades. Table 3.13 shows that although the ratio of class V deaths to class I deaths diminished for some age-groups during the 1960s it increased for others, and the ratio of class IV deaths to class I deaths increased in all age-groups. If we combine classes IV and V then between 1959-63 and 1970-72 their mortality worsened, relative to classes I and II, for each ten-year age-group between 25 and 65. It should also be noted that class III also slipped back (Table 3.4). These trends for adults, as those quoted earlier for infants, are very serious, and need to be carefully analysed and explained.

MORBIDITY

3.49. As pointed out earlier it is difficult to trace morbidity data by class for any span of years. The General Household Survey has now been running since 1971 but it is still too early to distinguish reliable trends in health from that source. Two examples are given below. Table 3.14 shows that absence from work because of sickness or injury is sharply related to class but that the precise rates are liable to fluctuation from year to year. The average number of days lost through illness or accident among unskilled manual men was $4\frac{1}{2}$ times that among professional men in 1971 and 1972 (the data are not given for 1977).

TABLE 3.14

Working males absent from work due to illness or injury

(England and Wales 1971)

Socio-economic group	Absent from work due to illness or injury in a two week reference period - rate per 100			Average number of work days lost per person per year	
	1971	1972	1977 ^(a)	1971	1972
Professional	37	21	20	3.9	3.1
Employers and managers	37	39	20	7.2	6.2
Intermediate and junior non-manual	44	48	50	7.6	6.0
Skilled manual	57	56	60	9.3	9.4
Semi-skilled manual	56	68	70	11.5	10.5
Unskilled manual	88	99	60	18.4	17.6
All groups	52	54	40	9.1	8.4

Note: (a) rate given only to nearest 10.

Source: OPCS, The General Household Survey, Introductory Report, London, HMSO, 1973, p.304;

OPCS, The General Household Survey, 1972, London, HMSO, 1975, p.207.

OPCS, General Household Survey, 1977, London, HMSO, 1979, p.65.

- 3.50. Table 3.15 also shows a class gradient during the 1970s for restricted activity (acute sickness), long-standing (chronic) illness and GP consultations but the rates are even more uneven from year to year and in some years, for some age-groups, there is no perceptible gradient. The figures illustrate the problems of drawing conclusions about trends in self-reported sickness, for some major sex/age-groups if not for the population as a whole, during a short span of years.

TABLE 3.15

Rates of long-standing and acute illness and consultations per 1000 of occupational classes IV and V, as a per cent class I (1971-76)

Britain

Sex/class/health indicator	1971	1972	1973	1974	1975	1976
Males class IV						
long-standing illness	-	158	163	157	160	157
acute sickness+	126 (120)	133 (120)	110 (125)	134 (119)	102 (124)	80 (99)
GP consultations	133	132	125	146	129	91
Males class V						
long-standing illness	-	196	213	218	197	196
acute sickness+	155 (148)	181 (163)	129 (146)	150 (134)	85 (103)	102 (127)
GP consultations	143	175	164	147	121	125
Females class IV						
long-standing illness	-	274	214	182	197	176
acute sickness+	105 (111)	128 (134)	115 (110)	115 (123)	134 (128)	95 (130)
GP consultations	-	180	150	110	123	114
Females class V						
long-standing illness	-	320	276	204	253	246
acute sickness+	107 (114)	141 (146)	113 (109)	122 (131)	128 (122)	94 (129)
GP consultations	-	117	150	120	107	102

Note: + The figures in brackets represent sickness rates expressed as a percentage of class II.

Source: As for Tables A5.1, A5.2 and A5.3 in Appendix 5.

INEQUALITIES AND DISTRIBUTION

- 3.51. When examining indicators of health for different occupational or socio-economic classes for a span of years any changes that may be taking place in the relative size of particular classes may be as important as any changes in the inequality between classes in assessing trends in the overall health of the population. Some commentators have pointed out that while inequalities in health between the unskilled manual class and other classes may not have diminished, or may even have increased, that class has become smaller and therefore there has still been an "improvement" in the distribution of health. This change has been regarded as compensation for the lack of any losing of the gap between classes.
- 3.52. Two comments should be made. The first is that changes in occupational classification have caused commentators to believe that the reduction of class V since 1931 has been greater than it has. This is shown by the adjusted and unadjusted figures in Table 3.16. Since 1961, for example, the fall in proportion of men in class V has been small and in absolute numbers has not fallen at all.
- 3.53. The second is that relatively poor health experience applies to other manual classes and especially class IV and that though this class too has fallen in proportion to population it continues to make up, together with class V, more than a quarter of the economically active male population. Mortality indicators for class IV, relative to other classes, have shown some deterioration between the early 1960s and early 1970s and, as discussed above, it would be wrong to confine discussion of health inequalities to class V.

TABLE 3.16

Percentage of economically active men in different occupational social classes
1931, 1951, 1961, 1966, 1971 (England and Wales)

Occupational class (Registrar General)	1931 ⁽¹⁾		1951 ⁽¹⁾		1961 ⁽²⁾	1966 ⁽³⁾	1971
I	1.8	(2.2)	2.7	(3.2)	4.0	4.5	5.0
II	12.0	(12.8)	12.8	(14.3)	14.9	15.7	18.2
III	47.8	(48.9)	51.5	(53.4)	51.6	50.3	50.5
IV	25.5	(18.2)	23.3	(16.2)	20.5	20.6	18.0
V	12.9	(17.8)	9.7	(12.9)	8.9	8.8	8.4
TOTAL	100.0	(100.0)	100.0	(100.0)	100.0	100.0	100.0
NUMBER (thousands)	13,247		14,064		14,649	15,686	15,668

- (1) Percentages have been weighted to allow for changes in classification between the 1931 and 1961 censuses: The General Report, 1951 and The General Report, 1961 allow the percentage change for each class between censuses to be calculated and the figures to be adjusted accordingly to bring both the 1931 and 1951 figures into line with the 1960 classification. Figures in brackets are based on the classification at that time. The estimates for 1931 and 1951 are necessarily crude - the latter partly for the reasons carefully listed in The General Report 1961, p.193.
- (2) Substantial numbers who were unclassified in 1961 (518,000) have been excluded. (Only 84,034 unclassified in 1971 have been excluded).
- (3) Percentages given are for economically active and retired males. Substantial numbers who were unclassified in 1966 have been excluded.

Sources: Census 1951, General Report, Table 66, p.147.

Census 1961, General Report, Table 55, p.193.

Census 1966, Economic Activity Tables Part III, Table 30, p.416.

Census 1971, Economic Activity Tables Part IV, Table 29, p.96.
(ten per cent sample)

CONCLUSION .

- 3.54. Our review of trends in inequalities of health has produced some disturbing conclusions.
- 3.55. As explained earlier in the chapter, trends are not easy to trace, either because of inconsistencies in the categorization of data or changes in occupational classification. Our conclusions make allowance for these problems. We have also had the opportunity of comparing trends in infant mortality with trends in mortality of people at later ages. Analyses in the literature have tended to concentrate attention either on infant mortality or mortality of males of economically active age rather than on the population of both sexes of different age.
- 3.56. Perhaps the most important general finding in the chapter is the lack of improvement, and indeed in some respects deterioration, of the health experience not merely of occupational class V but also class IV in health, relative to occupational class I, as judged by mortality indicators, during the 1960s and early 1970s. The more specific conclusions, underlying this finding, are as follows. (These conclusions apply to England and Wales. Scottish experience has been rather similar, though certain differences are noted in the text).
- i. Mortality rates of males are higher at every age than of females and in recent decades the difference between the sexes has become relatively greater.
 - ii. For men of economically active age there was greater inequality of mortality between occupational classes I and V both in 1970-72 and 1959-63 than in 1949-53.
 - iii. For economically active men the mortality rates of occupational class III and combined classes IV and V for age-groups over 35 either deteriorated or showed little or no improvement between 1959-63 and 1970-72. Relative to the mortality rates of occupational classes I and II they worsened.

iv. For women aged 15-64 the standardised mortality ratios of combined classes IV and V deteriorated. For married and single women in class IV (the most numerous class) they deteriorated at all ages.

v. Although deaths per thousand live births in England and Wales have diminished among all classes the relative excess in combined classes IV and V over I and II increased between 1959-63 and 1970-72.

vi. During a period of less than a decade maternal mortality fell by more than a third. Although that of class I fell less sharply than other classes inequality between the more numerous class II and classes IV and V remained about the same.

vii. Among children between 1 and 4 years of age, there has been a small reduction in the class differential (especially for girls), for children aged 5 to 9 little or no change, but for children aged 10 to 14 an increase in the differential. For boys aged 1-14, mortality ratios for classes IV and V in 1970-72 were both higher than for classes I and II for 23 of 38 causes of death, compared with only one cause (asthma) where the ratios were lower. For girls the corresponding figures were 22 and 0 respectively. There is evidence that as rates of child death from a specific condition decline to very low levels class gradients do disappear. The gradual elimination of death from rheumatic heart disease over the post war period provides evidence of this (Morris, 1959)).

CHAPTER 3 - References

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CHAPTER 4

THE EVIDENCE FOR INEQUALITY IN HEALTH SERVICE AVAILABILITY AND USE

- 4.1 In this Chapter we review available evidence on class inequalities in health service use, both absolutely and in relation to need.
- 4.2 It is of course true that in seeking to explain class inequalities in health, which is our principal task, many factors other than health service usage prove relevant. As Martini, Allan, Davison and Backett (1977), amongst others, have shown, differences in health outcome measures between populations may be far more a function of "variations in the socio-demographic circumstances of the population than [to] the amount and type of medical care provided and/or available". Nevertheless, any inequality in the availability and use of health services in relation to need is in itself socially unjust and requires alleviation. This remains true whatever the proportional contribution which the health service makes to health, though its priority in social policy may well properly depend upon that proportionality.
- 4.3 Moreover since, as Cartwright and O'Brien (1976) point out, "One of the fundamental principles of the National Health Service was 'to divorce the care of health from questions of personal means or other factors irrelevant to it' (HMSO 1944)", the extent to which this object has been achieved has been a matter of considerable interest. Thus, in 1968 Titmuss argued, on the basis of then available evidence, that inequality in receipt of care remained, that: "higher income groups know how to make better use of the Service; they tend to receive more specialist attention; occupy more of the beds in better equipped and staffed hospitals" (Titmuss, 1968). In 1969 Rein (participating in the American debate about finance of health care) argued, on the basis of different evidence, that the British Health Service is in fact equitable in the treatment provided (Rein, 1969). But his assumption was that need for health care was uniform between classes, and he did not relate utilisation to need. A number of subsequent studies, many of which we refer to below, have sought to cast further light on the extent of social equality/inequality in availability and use of health services.

4.4 For our present purpose it is useful to look separately at GP consultation rates, hospital care, preventive services, and services for the disabled and infirm. This is partly because such a distinction reflects the availability of information and the foci of research, and also because (as we shall show) while some uncertainty remains as to the existence of inequalities in the first 2 cases, there are no grounds for doubt in the case of preventive services in particular.

GP CONSULTATIONS

4.5 The evidence linking class with rates of consultation with General Practitioners does not permit of simple interpretation. GHS data are available here, and are the best source of information. However, as Table 4.1 shows, the trend, while clear enough for the sample of males and females in general, does not apply to males aged 0-4 or females aged 0-14, and is uneven for some other age groups. The GHS results have fluctuated from year to year and the consulting rate has not generally shown as marked a class gradient as have the measures of morbidity discussed in earlier chapters (see also Tables 2.11-2.14 for aggregated 1974-76 data). The average number of consultations has shown still less of a class gradient.

TABLE 4.1

DOCTOR CONSULTATIONS: PERSONS CONSULTING A GP (NHS) IN A 2 WEEK
REFERENCE PERIOD. BY SEX, AGE AND SOCIO-ECONOMIC GROUP
RATES PER 1,000

G.B. 1977

Socio-economic group	MALES						FEMALES					
	Total	0-4	5-14	15-44	45-64	65+	Total	0-4	5-14	15-44	45-64	65+
Professional	69	[16]	74*	51	40*	[6]	120	[11]	111	134	107	[3]
Employees/managers	102	250	107	69	93	132	116	166	79	129	109	127
Intermediate	104	206	93	71	112	166	127	172	87	131	114	151
Skilled Manual	103	164	91	90	110	123	134	190	101	145	125	137
Semi-skilled mnl	112	154	81	79	159	134	143	161	98	144	148	155
Unskilled manual	138	[6]	124	92	172	170	157	[8]	36*	216	160	161
ALL PERSONS IN EACH SEX/AGE GROUP	104	181	91	79	115	137	133	173	92	138	128	150

Source: GHS 1977

i. bracketed figures are number of observations only where base figures less than 100

ii. *indicates less than 10 observations.

4.6 Picken and Ireland (1969) found that there was no significant relationship between class and level of consultation for adults in a study of Scottish general practice. However, "children from upper social class families and from smaller families tend to consult relatively more often than other children". This may be taken as implying a greater inequality in use of services by children. It is however, also consistent with the view that among adults inequalities in need are greater, since here these outweigh the factors producing relative under-utilisation by adults on behalf of their children.

4.7 It has been argued that the proper basis for comparing rates of consultation is not one of simple population but of the need for care. Estimates of class trends on this basis have been made using GHS data. Brotherston, for example, divided number of GP consultations by number of restricted activity days (each in a 2 week reference period) - as given by the GHS - for each

occupational group. His "use/need ratios" clearly declined in going from SEG 1 to SEG 6 (Brotherston 1976). Table 4.2 shows use-need ratios calculated on the basis of the GHS for 1974-76 (without the indexing convention used by Brotherston) which similarly show an overall pattern of decline from SEG 1 to SEG 6.

TABLE 4.2

"USE/NEED RATIOS" BY SOCIAL GROUP

GB 1974-1976

SEG	Males	Females
1	0.23	0.23
2	0.21	0.24
3	0.20	0.22
4	0.18	0.22
5	0.20	0.20
6	0.17	0.19
All	0.19	0.22

4.8 Forster (1976) used aggregated 1971 and 1972 GHS data and also found statistically significant trends in consultation rate/morbidity where the 'morbidity' measure was rate of chronic sickness or rate of sickness absence from work or school (but a non-significant trend in the case of acute sickness, ie restricted activity). He showed that in proportion to reported sickness and sickness absence from work, the semi-skilled and unskilled in fact made less use of GP services than other groups did. In a later review (1979) Forster found significant correlations between being unskilled and unemployed, on the one hand, and mortality and acute and chronic sickness on the other hand, but no significant correlation between environmental factors and health needs. Mainly negative but non-significant correlations were found between the need indicators and GP availability and between the proportion of unskilled persons and GP availability.

4.9 A weakness in this method of relating use to need derives from the fact that many of those with restricted activity may not visit a GP, whereas others may visit a GP for reasons other than restricted activity. In other words, comparison of these rates may not be purely indicative of differences in receipt of care when sick.

4.10 A different analysis of GHS data focusing upon those individuals reporting restricted activity or long-standing illness who went to a GP specifically

for that illness has been attempted. For this purpose data for 1973-1975 and the first quarter of 1976 were aggregated, as were SEGs (1 and 2) and (4 and 5) (as numbers were small). It then appeared that, for both males and females, the percentages of those reporting restricted activity during a 2 week reference period who also visited a GP because of that restricted activity during the same period rose with declining SEG (see Figs 4.1 and 4.2). However only about 13 per cent of those who reported a long-standing illness visited a GP during the 2 week reference period because of that illness. The small numbers do not permit any definite conclusion as to the trend by socio-economic group. Two other qualifications are necessary. First, more of the semi-skilled and unskilled are likely to have both acute and chronic sickness, and restricted activity may thus be under-estimated among these groups. Second, people in the manual groups are likely to under-report their sickness, though less likely to under-report visits to the GP, thus elevating the apparent ratio.

- 4.11 Of course, comparison of rates of consultation alone is not a wholly adequate conceptualization of inequality in care. Both Cartwright and O'Brien (1976) and Buchan and Richardson (1973) have studied GP consultations in depth. Both investigations showed that middle class patients tended to have longer consultations than did working class ones. More problems were discussed at consultations with middle class patients than with working class ones. Cartwright and O'Brien also found that middle class patients were, in a sense, able to make better use of the consultation time, as measured by the number of items of information communicated and the number of questions asked. Moreover, even though working class patients tended to have been with the same practice for longer, the doctors seemed to have more knowledge of the personal and domestic circumstances of their middle class patients. In an earlier study Cartwright had found that middle class patients were more likely to be visited by their GP when in hospital than were working class patients (Cartwright, 1964). For cultural reasons then, and also (as discussed below) because there is a tendency for the 'better' doctors to work in middle class areas, the suggestion is that middle class patients receive a better service when they do present themselves than do working class patients.
- 4.12 Although the data are limited and further analyses remain to be carried out to bring out the full meaning of the 1971-1976 GHS data (like those of Forster and Brotherston), the Survey remains the best national source of information about the relationship between GP consultations and need for

FIGURE 4.1 MALES SEEING A GP FOR THEIR RESTRICTED ACTIVITY

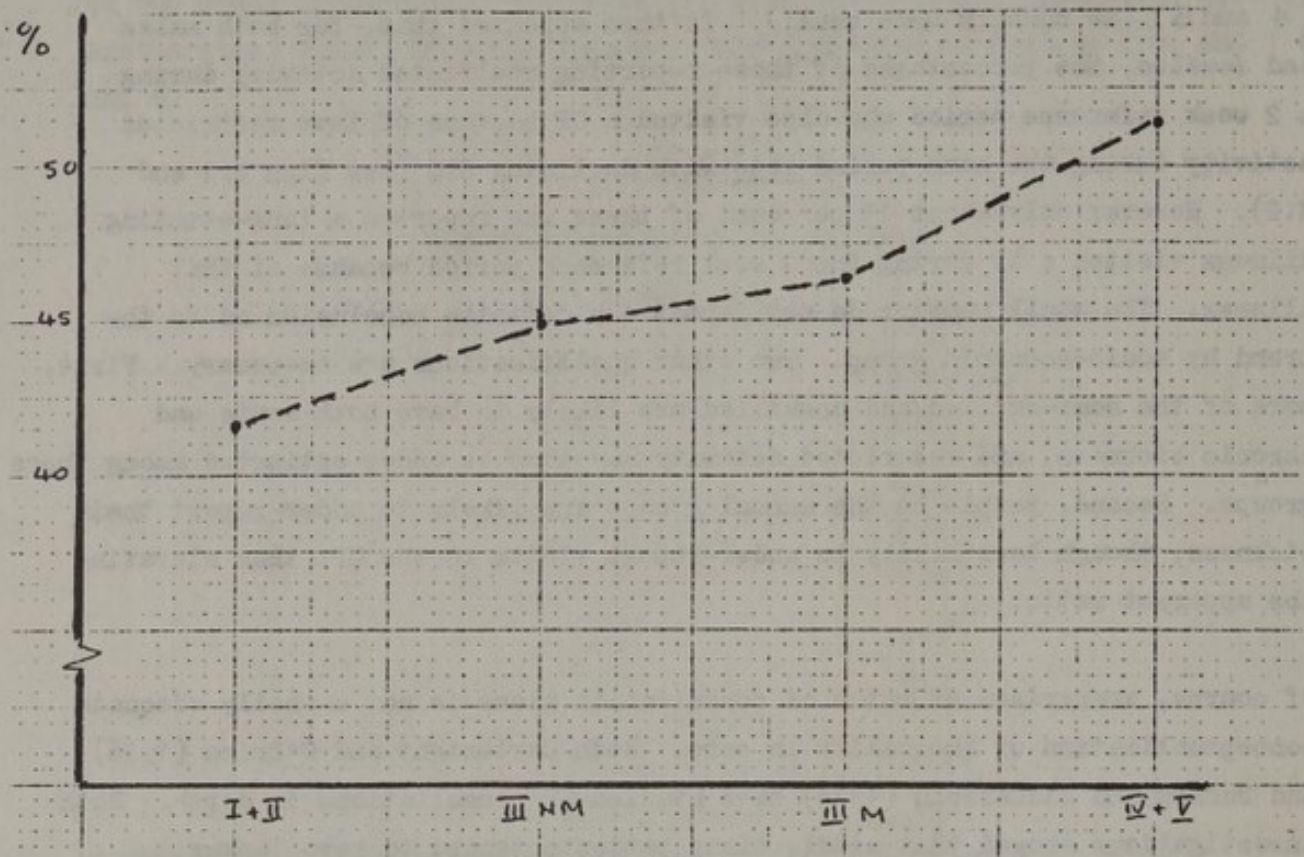
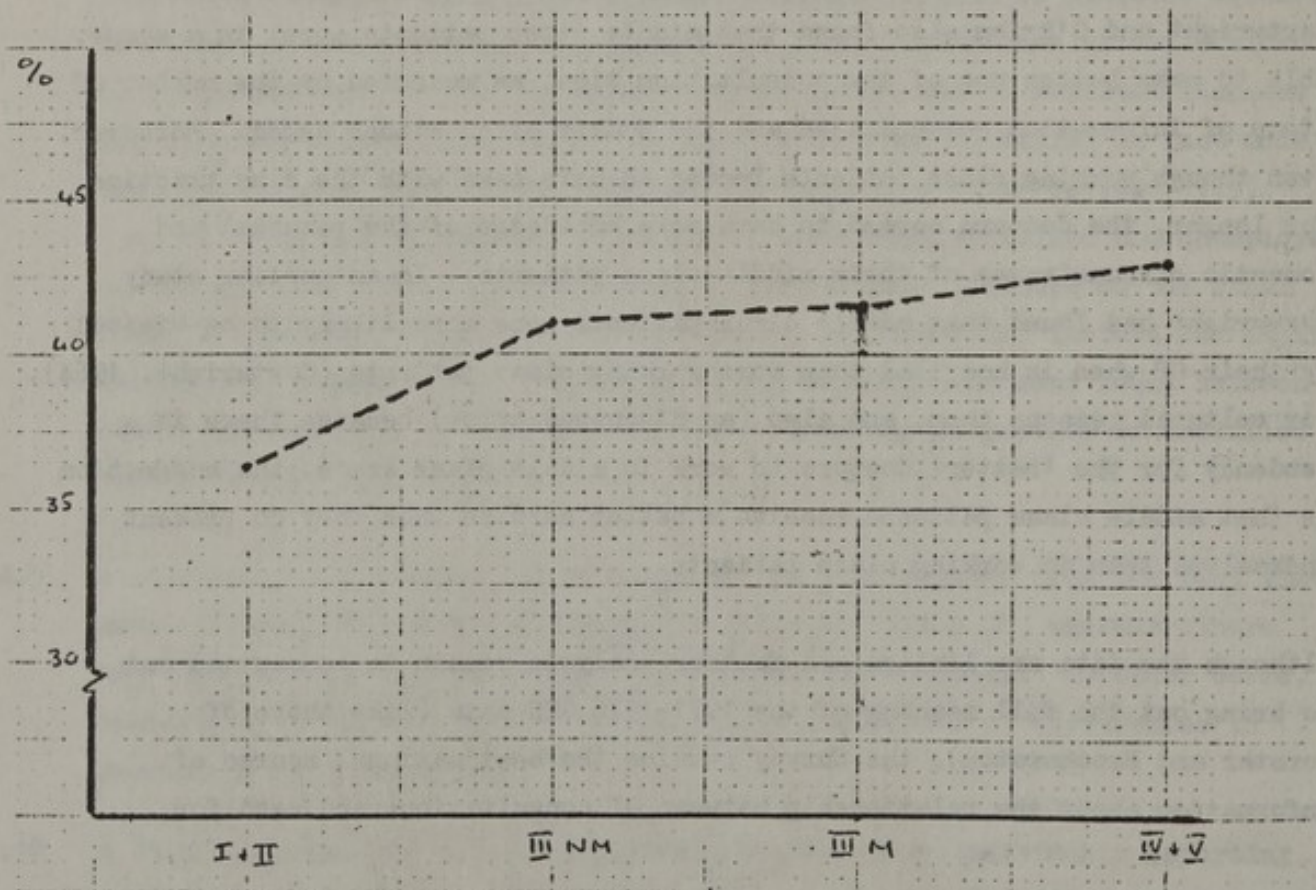


FIGURE 4.2 FEMALES SEEING A GP FOR THEIR RESTRICTED ACTIVITY



health care. As we have said we have strong reservations about the restricted nature of the indicators and about fluctuations, especially for particular socio-economic groups, from year to year (see Appendix 5). Nevertheless, the evidence can be taken to suggest that the level of consultation among partly skilled and unskilled manual workers does not match their need for health care (at least as implied by the GHS health indicators for all socio-economic groups). Table 4.3 illustrates trends from year to year in the excess of ill health and GP consultatives of semi-skilled and unskilled over professional groups.

- 4.13 The Table compares the rates of self-reported sickness with the corresponding rates of persons consulting and numbers of consultations for each of the year for which data were collected. (The basic data are given in Appendix 5). It illustrates the yearly fluctuations - in part due to sampling - occurring in the findings, especially in the relationship of sub-groups.
- 4.14 According to the available indicators, with one partial exception, ⁽¹⁾ the observed socio-economic or class differences in ill-health (long standing illness or disability, limiting long standing illness or disability, persons experiencing restricted activity in a 2 week reference period and number of days of restricted activity because of illness or injury - to which might be added absence from work for reasons of sickness though these were reported for only 3 years and so are not included) are larger than the corresponding group or class differences in GP attendance (rates for persons consulting and total number of consultations). If we were to combine different measures of chronic and acute ill health and compare "need" with "care received" (on the basis of some principle of weighting) then this conclusion would become still stronger.

(1) The relative consultation rates of semi-skilled and unskilled groups exceed the relative rates of restricted activity, though in most of those instances they no longer do so when days of restricted activity are taken.

TABLE 4.3
MORBIDITY AND GP ATTENDANCE INDICATORS FOR SOCIO-ECONOMIC GROUPS:
SEMI-SKILLED AND UNSKILLED AS PER CENT PROFESSIONAL

	Males					
	1971	1972	1973	1974	1975	1976
Long standing illness						
semi-skilled	-	158	163	157	160	157
unskilled	-	196	213	218	197	196
Limiting long standing illness						
semi-skilled	272	203	233	179	174	222
unskilled	371	290	333	274	244	292
Acute sickness (restricted activity)						
semi-skilled	126	133	110-	134-	102-	80-
unskilled	155	181	129-	150	85-	102-
Acute sickness (days per person)						
semi-skilled	-	169	168	169	130	122
unskilled	-	268	206	215	121	196
GP consultations: persons consulting (rate per 1000)						
semi-skilled	122	132	121	146	122	91
unskilled	128	157	145	141	111	111
GP consultations: rate per 1000						
semi-skilled	133	132	125	146	129	91
unskilled	143	175	164	147	121	125
	Females					
Long standing illness						
semi-skilled	-	274	214	182	197	176
unskilled	-	320	276	204	253	246
Limiting long-standing illness						
semi-skilled	245	303	257	213	259	248
unskilled	298	355	332	246	346	348
Acute sickness (restricted activity)						
semi-skilled	105	128	115-	115	134	95-
unskilled	107	141	113-	122	128	94-
Acute sickness (days per person)						
semi-skilled	-	205	137-	117	136	127
unskilled	-	238	148-	122	129	133
GP consultations: persons consulting						
semi-skilled	-	113	147	110	118	116
unskilled	-	112	141	123	111	115
GP consultations: rate per 1000						
semi-skilled	-	108	150	110	123	114
unskilled	-	117	150	120	107	102

Source: Reports of the GHS 1971-1976.

HOSPITAL SERVICES

- 4.15 There is no regular source of class-related information on use of hospital services comparable with that obtained on GP consultation rates from the GHS, even though questions on hospital attendance are asked in the Survey. In the case of hospital inpatients, the percentage concerned (~2%) is too small for any class breakdown of GHS data to be statistically meaningful. Attendance at outpatients are higher, and although since 1972 these rates have not been published on an SEG basis, information is available, as shown in Table 4.4. This suggests that there are no systematic class gradients in outpatient attendance for either males or females.

TABLE 4.4

PERSONS BY AGE, SEX AND SOCIO-ECONOMIC GROUP ATTENDING OUTPATIENTS
IN A 3-MONTH REFERENCE PERIOD
(rates per 1,000)

Great Britain. 1974-1977 data combined

Socio-economic group	MALES				FEMALES			
	0-14	15-44	45-64	65+	0-14	15-44	45-64	65+
1	96.2	79.0	87.9	132.2	76.9	103.3	101.6	104.2
2	96.3	94.4	98.4	112.0	67.4	96.9	110.3	97.4
3	113.0	100.7	122.3	142.0	77.9	107.3	123.8	134.5
4	89.5	112.9	117.0	123.5	75.1	96.4	112.6	122.7
5	82.5	102.8	132.0	122.5	68.6	86.6	114.1	121.9
6	108.2	133.5	113.7	104.7	58.9	90.9	107.6	130.9
All groups	94.2	105.4	115.8	123.2	72.6	98.0	114.2	123.7

(Note that regular attendances for antenatal care are excluded. Note also that the low response rate (GHS rates are only about 2/3 those reported in Hospital Activity Analysis) may affect the age and SEG distributions).

Source: GHS (unpublished data)

- 4.16 Data given in the 1972 GHS Report seemed to suggest that men in social class V aged 15-64 had particularly high rates of attendance. After retirement this was no longer so. Referring to this "relatively much greater use of 'out-patients' by unskilled males than by males of other groups" "the Report indicated that attendance for consultant out-patient, casualty, and ancillary services could not be distinguished. However, the decline in rate at retirement at least suggests that "the higher rates amongst unskilled males of working age than amongst males of other groups may reflect a rather particular use of out-patient facilities related to their greater risk of exposure to accident or injury compared with other groups" (GHS 1972, p.214). Though later data, presented in Table 4.4, do not show this discontinuity at retirement, the possibility of this special use of hospital out-patients is a matter of interest.
- 4.17 A study of a random sample of patients attending the accident and emergency departments of hospitals in the Newcastle-upon-Tyne area is relevant (Morgan et al 1974; Holohan et al 1975). The area was served by 3 hospitals, so far as accident and emergency services were concerned, and a random sample of 1% of those seen in a period of 3 months (except those subsequently admitted to hospital, or who were victims of road accidents) was interviewed. In fact, the overall class distribution of the sample (135 males and 97 females) was the same as the class distribution in the general population of the Tyneside conurbation - though this has a lower proportion of classes I and II than has the national population. 78.4% of the patients in the survey were self-referred, and there was no class gradient in extent of self-referral. Only 10% of patient had attended for reasons other than accidental injury. This study suggests that people self-refer themselves to A and E departments principally because they are seen as more "available" than the GP: they consider the organization of primary care (surgery hours, appointments system) makes it unlikely they will be seen promptly.
- 4.18 Such little evidence as is available on hospital in-patient care describes not the proportions of various social groups spending time in hospital but the social composition of the group admitted. For England and Wales, admission rates on an occupational basis were available from HIPE only prior to 1963, when data ceased to be centrally collected on that basis (mainly due to doubts as to the quality of the information). The older

data which are available do, however, suggest that the rate of usage of hospital beds rises with declining class. In Scotland, Carstairs and Patterson (1966) analysed hospital admission rates and duration of stay data and found clear upwards trends in both with declining class. Moreover, SHIPS (Scottish Hospitals In-patient Survey) does continue to code social class, and more recent figures confirm this class gradient, both in admission rates (given by SDR in Table 4.5) and length of stay (given by SBDR).

TABLE 4.5
HOSPITAL STANDARDISED DISCHARGE RATIOS (SDR) AND
STANDARDISED BED-DAY RATIOS (SBDR) BY
OCCUPATIONAL CLASS
(SCOTLAND, 1971)

Class	SDR		SBDR	
	Males	Females	Males	Females
I	79.5	95.9	63.7	92.5
II	80.9	98.0	73.3	93.6
III	94.0	90.4	93.9	91.0
IV	115.1	107.4	116.4	106.7
V	141.4	161.1	151.7	153.9

Source: SHIPS

- 4.19 A rough attempt at relating the composition of the hospital population to that of the population at large has been made in the Welsh Office using Welsh HAA and census data. Though this was done only for a number of occupational categories, it suggests that extractive occupations (eg coal mining) and metal working occupations are greatly over-represented in the hospital population, compared to 'other industrial occupations' and (still more) compared to 'clerical and sales' occupations.
- 4.20 Against this, of course, has to be set the possibility that systematic differences exist in the nature, or quality, of care received within the hospital. Whilst there is little evidence for this, a recent study of childbirth by Cartwright (1977) should be noted. This found that women from class V not only experienced the lowest degree of intensive care during their pregnancies, but were very much less likely to have their

babies induced in hospital (though the reasons for this are unclear, as indeed are its implications).

PREVENTIVE AND PROMOTIVE SERVICES

- 4.21 Although neither administrative returns nor the GHS provide information on utilization of community health and preventive services by social or occupational class, there is here a substantial body of research upon which to draw. As we shall illustrate from this research, it is well established that those in the manual classes make considerably less use of these services than do those in the non-manual classes. Moreover, the ambiguity which surrounded the relation of utilization to 'need' in the case of GP consultations is not encountered here. Assessment of morbidity, or need for care, is not at issue in comparing rates of attendance for ante-natal care (though this may be more essential for those rendered at risk by social factors), cervical screening, radiography, or immunization of children. Even those who have been led to doubt the importance of medical care for improving health (relative to the importance of socio-economic and demographic factors), such as Martini et al, have largely excepted these preventive services from their general conclusion.
- 4.22 In the case of family planning and maternity services substantial evidence shows that those social groups in greatest need make least use of services and (in the case of antenatal care) are least likely to come early to the notice of the service. Cartwright (1970) found clear class gradients in the proportion of mothers having an antenatal examination, attending a family planning clinic, and discussing birth control with their GP. Unintended pregnancies were more common among working class women. Bone (1973) also found that women from the non-manual classes make more use of family planning services than those from the manual classes. This was true both for married and for unmarried women. Brotherston has presented Scottish data showing that late antenatal booking is more common in poorer social groups, although the situation seems to be improving in all classes, (and has suggested that late presentation for antenatal care is an effective predictor of subsequent infant morbidity and mortality within families) (Brotherston 1976).

TABLE 4.6

LATE ANTENATAL BOOKING

% married women in each occupational class making an antenatal booking after more than 20 weeks of gestation

Scotland 1971-73

Occupational class	1971	1972	1973
I	28.4	27.2	27.0
II	35.3	32.3	29.8
III	36.3	33.4	30.6
IV	39.3	37.8	35.3
V	47.1	44.2	40.5

Source: Brotherston (1976)

Data from Scottish Information Services Division

- 4.23 Similar differences have been found in presentation for post-natal examination (Douglas and Rowntree, 1949) and (by Gordon, 1951) immunization, antenatal and post-natal supervision and uptake of vitamin foods. The National Child Development Study (1958 birth cohort) found substantial differences in immunization rates in children aged 7, as well as in attendance at the dentist.

TABLE 4.7

USE OF HEALTH SERVICES BY CHILDREN UNDER 7
BY OCCUPATIONAL CLASS (OF FATHER)

	GB 1965					
	I	II	IIIN	IIIM	IV	V
per cent who had never visited a dentist	16	20	19	24	27	31
per cent not immunized against						
smallpox	6	14	16	25	29	33
polio	1	3	3	4	6	10
diphtheria	1	3	3	6	8	11

Source: 2nd Report of the NCDS

4.24 Among women, it has been found that those in classes IV and V are much less likely to be screened for cervical cancer, even though mortality from this condition is much higher in these classes than in the non-manual classes. Table 4.8 taken from Sansom, Wakefield and Yule (1972), shows that while women from classes IV and V accounted for over one-third of all women living in the study area (Greater Manchester), they made up only about one-sixth of women who had a smear test done.

TABLE 4.8
CERVICAL SCREENING OF WOMEN (ALL AGES) BY OCCUPATIONAL CLASS

% women in each class in 1966 compared with two populations of screened women: Manchester area

Class	1966 Census (NW Region less Merseyside)	1965 profile of screened women (N = 5,000)	1968 profile of screened women (N = 34,851)
1	2.6	6.5	7.7
2	15.5	19.3	20.1
3	48.2	57.3	57.0
4	25.4	10.6	11.1
5	8.3	6.3	4.1

Source: Sansom, Wakefield and Yule (1972)

- 4.25 Further studies show that working class people make less use of dental services (Gray *et al*, 1970; Bulman *et al*, 1968) and of chiropody (Clarke, 1969) and receive inferior dental care (Sheiham and Hobdell, 1969). Many of these studies are admittedly old, and their findings cannot necessarily be accepted as still valid. Nevertheless, taken together, and in the absence of conclusions to the contrary, a clear relationship between social class and use of preventive services seems to have been demonstrated.
- 4.26 All these services have in common that the individual has to exercise his/her own discretion and initiative in obtaining the service. The class gradients reported may thus often compound differences in the personal choices or decisions made, in information possessed, and in the availability of services

(as reflected in proximity, access, and quality). That is, to some extent at least the problem may inhere in geographical differences in provision between areas of largely middle and largely working class residence. We take up below this interaction between class and geographic disparities. What of those (admittedly few) services which have an 'outreach' capacity? Do these show some tendency to compensate, or positively discriminate in favour of those in particular need? An important example is health visiting. Both Jefferys (1965) and Cartwright (1970) found that health visiting did not seem to favour one class or another. Cartwright's survey of mothers showed "no variation between mothers in the different classes in the number of times they had been visited by health visitors", suggesting that there is no compensatory positive discrimination. However the picture may not be quite so bleak.

- 4.27 In a partial follow-up of 852 children from the 1970 birth cohort study who at age $3\frac{1}{2}$ were resident in the SW of England and Glamorgan, Butler and his co-workers covered similar ground. First, like Jeffreys and Cartwright, they found no class differences in the percentages of children who had received a home visit from a health visitor in the first year or second and third year of life. Nor was there a difference in the percentages who had received 5 or more visits. However, when the data were reanalysed by their 'social index' (which takes account not only of fathers' occupation, but also of amenities and crowding in the home, parental education, etc) pronounced differences appeared. Thus, in the first year, whereas 46.9% of those in the 'advantaged' or 'neutral' groups on this index received 5+ home visits, 63.8% of those 'disadvantaged' did so. The same difference persisted in the second and third years. It may be, therefore, that health visitors are responding to a more subtle notion of advantage/disadvantage than is captured by 'occupation' alone.
- 4.28 A further indication that 'outreach' can be effective in reaching those in need has been described by Epsom (1978) in an account of the use of a mobile health clinic in Southwark.

CARE OF THE INFIRM AND DISABLED

- 4.29 There is little information on class inequalities in the care received by the infirm and disabled, though we now enter that awkward and neglected area where health care shades into the variety of other forms of social

service provision. That is, to make comparisons of the care, or services received by those who are disabled or infirm (including the aged infirm and the long-term chronic sick) would necessarily to be consider not only health care in the strict sense, but social work support, meals on wheels, home help, sheltered housing, mobility aids, sheltered work and rehabilitation etc etc: all or many of which may be crucial to the well-being of an infirm or disabled person. It is of obvious importance, where the attempt is to be made to take relevant services to those in need without awaiting demand, to be aware of the extent of need and of use. The surveys carried out as a result of the Chronically Sick and Disabled Persons Act of 1970, though varying somewhat from one local authority social service department to another, give some indication of the characteristics of this substantial group of people and of their needs - met and unmet.

4.30 Social or more strictly occupational class does not figure prominently as a classificatory variable in these surveys. In one after another attention is drawn to the economic hardship under which the majority of disabled people live and their dependency on State benefits: eg in the Newcastle study (1972), well over 90% were "heavily dependent" on these benefits; only about 10% were receiving any income from employment, and that generally very little. This is despite the fact that among those who did, or had, worked the range in occupations was broad: III NM (eg clerical), IIIM (Skilled trades), V (labourers) were all substantially represented. Not only does social class, as defined by the Registrar General, have little value as an indicator of the resources, or way of life, of this group, but other classificatory variables (notably degree of handicap, or whether or not living alone) are seen as of greater importance in improving coverage. Blaxter, in her sophisticated study of a sample of people disabled in adult life (Blaxter, 1976), shows how the resultant problems (financial and other) as well as the ability to find solutions to these problems was a function of class. Yet even here, when receipt of services (eg home nursing, home help) is considered, class does not figure as a dimension of analysis.

4.31 The fact is that, in contrast for example to current priorities in improving coverage of antenatal care, social class is not seen as a major dimension of unmet need. Without denying that extent of handicap is likely quite properly to remain paramount, it may well be that it is the narrowness of the current

operational concept of class which is partly at fault here. Few would deny that class (as reflected not only in accumulated financial resources and, to some extent, in the availability of a supportive social network, but also in the narrow sense of occupation) mediates the effects of a given impairment.

4.32 The slight, and unfortunately somewhat old, empirical evidence available does indicate that class inequalities are indeed to be found here. Townsend, for example, in a study of the elderly in residential homes, geriatric and psychiatric hospitals carried out some years ago, found not only that the manual and non-manual elderly were likely to be in different kinds of institution (the latter less commonly in hospital), but of a gap in the standard of living and care available in institutions catering principally for one or the other group (Townsend, 1962). Townsend and Wedderburn, in a national study of people aged 65 and over, found disparities in receipt of a number of services. Tables 4.9 and 4.10 show how publicly provided chiropody services, and domestic help, fail fully to compensate for unequal ability to purchase such services (Townsend and Wedderburn, 1965).

TABLE 4.9

PERCENTAGE OF OLD PERSONS OF DIFFERENT OCCUPATIONAL CLASS WHO RECEIVE OR FEEL THE NEED FOR CHIROPODY TREATMENT: BRITAIN 1962

Source of chiropody treatment	OCCUPATIONAL CLASS					
	I	II	III non-manual	III manual	IV	V
	%	%	%	%	%	%
Public or voluntary service	2	6	6	9	8	8
Privately paid	20	18	14	8	9	8
Non-professional or none, need felt	6	8	13	11	13	10
Non-professional or none, no need felt	72	68	67	72	71	74
Total	100	100	100	100	100	100
Number	82	557	396	1,193	1,040	457

Source Townsend and Wedderburn (1965)

Note: A further 42 persons were classed in armed services occupations, 10 had no occupation and 290 were unclassifiable.

TABLE 4.10

PERCENTAGE OF OLD PERSONS OF DIFFERENT OCCUPATIONAL CLASS WHO WERE RECEIVING PUBLIC OR PRIVATE DOMESTIC HELP, OR WHO SAID HELP WAS NEEDED: BRITAIN 1962

Source of domestic help	Occupational Class					
	I	II	III non-manual	III manual	IV	V
	%	%	%	%	%	%
Local authority	1	2	4	6	4	4
Privately paid	42	27	12	5	3	2
Other (eg family) or none, but need felt	10	7	6	6	6	4
Other (eg family) or none, no need felt	47	64	78	83	87	90
Total	100	100	100	100	100	100
Number	81	555	396	1,188	1,033	447

Source Townsend and Wedderburn (1965)

4.33 Equally a matter of concern is the difference in attitude between old people of different social classes which this work demonstrates. Table 4.10 shows that 90% of those in class V neither receive domestic help (from outside their family) or feel the need of it. Among the elderly who are incapacitated "nearly half those in Social Classes I and II already had privately paid or local authority domestic help, and nearly half the others said they needed help. But only a sixth of those in Social Class V who were severely incapacitated had such help already and only a fifth of the remainder felt the need for it". (Townsend and Wedderburn, 1965; 46). Whilst we cannot tell if these differences still exist, the study shows all too clearly the way in which norms and values associated with class may influence subjective perceptions of need.

4.34 In considering the needs of the disabled, aged infirm, and chronic sick, not only is it difficult clearly to distinguish needs for strictly medical services from needs for other supportive services, but it is similarly difficult to distinguish needs related to the condition 'itself' (ie medically defined) from

those relating to its social and economic consequences. In this context an inquiry into the circumstances of the long-term sick (ie receiving sickness, invalidity, and industrial injury benefits for periods of between 1 month and 1 year) is of relevance (Martin and Morgan, 1975). This shows not only that the sample of benefit-recipients as a whole contained a much higher proportion of semi-and unskilled manual workers (which was to have been expected), but that the longer the spell of sickness, the higher the proportion of unskilled workers. Moreover, and relevant to this section of our report, the longer the period of incapacity the less likely the sick person is to be able to return to the same type of work with the same employer as before. Skilled manual workers are more likely to have their jobs kept open for them than are semi- or unskilled workers. Unsurprisingly also, receipt of sick pay from the employer is also related to duration of invalidity and to level of job (SEG). Clearly, in considering the needs of the disabled, long-term sick, and aged infirm, financial problems and (in some cases) problems of subsequent re-employment are both pertinent and class-related. The implication of this for policy (which we take up in Chapter 9) is that the equalization of provision of health and social services is not justifiably separable from the equalization of the social and economic consequences of long-term invalidity or sickness.

THE INTERACTION OF GEOGRAPHIC AND SOCIAL DISPARITIES

- 4.35 It has long been known that differences are to be found between the health services available in well-to-do areas and in poor areas. Thus, in 1957 Martin, in a study of social aspects of prescribing, found that the average total cost of drugs per prescription was higher in wealthier areas. Noyce, Snaith and Trickey (1974) analyzed health expenditure at the regional level, and found a positive correlation between the percentage of the population in professional and managerial socio-economic groups and both community health expenditure and hospital revenue expenditure, and a negative correlation between expenditure and proportion of population in unskilled and semi-skilled occupations. They concluded "There are no regions of above-average spending which are not also high socio-economic status regions. Indeed, if one knew no other facts it would be possible to explain two thirds of the variation in community health expenditure by a knowledge of what proportion of the population in each region were managers, employers, or professional workers".

4.36 In 1971 Tudor Hart contrasted the availability of medical care in poor industrial areas of high need and affluent salubrious areas of lower need in memorable terms (Tudor Hart, 1971). He wrote:

"In areas with most sickness and death, general practitioners have more work, larger lists, less hospital support and inherit more clinically ineffective traditions of consultation than in the healthiest areas; and hospital doctors shoulder heavier case-loads with less staff and equipment, more obsolete buildings and suffer recurrent crises in the availability of beds and replacement staff. These trends can be summed up as the inverse care law: that the availability of good medical care tends to vary inversely with the need of the population served."

4.37 West and Lowe (1976) analyzed data on need for and provision of child health services for each of the 15 pre 1974 hospital board regions of England and Wales, collected for the Court Committee. Some of their findings are given in Table 4.11, which shows how, in particular, regional provision of GPs and health visitors is negatively correlated with a number of indicators of need (including stillbirth rate, level of infant mortality and birthrate to teenage mothers). There are very few positive correlations in the Table: midwives alone seemed to be relatively well distributed throughout the regions. The authors go on to suggest: "When data become available for area health authorities even greater differences between need and provision will probably be uncovered between areas than between regions" (CF Morris 1975 pp 53, 77). In the meantime it has at least been established that variations in expenditure (Richard 1976) and in the provision of services (Buxton and Klein 1975; Jones and Masterman 1976) are greater at the sub-regional than at the regional level.

4.38 Differences in the availability of services to the various social groups are likely to be more adequately expressed in terms of variation in provision between relatively small geographical areas. As Jones & Masterman point out "The knowledge that he or she lives in a relatively well provided region is of little consolation to the patient unable to enjoy satisfactory facilities in his or her locality". The most satisfactory level of disaggregation may well depend upon the particular service under consideration, being in some way a function of the catchment area of the service or facility. Thus, insofar as our principal concern here is with primary and community care, the crucial question becomes that of whether small typically working class areas are less well provided with health services than are small areas of typically middle class residence.

TABLE 4.11

CORRELATION COEFFICIENTS BETWEEN INDICATORS OF NEED AND PROVISION

CHILD HEALTH-RELATED SERVICES IN 15 PRE 1974 RHBS

(statistically significant coefficients only)

Need	Provision									
	No. paediatric medical staff	No. paediatric beds	No. obst/Gyn medical staff	No. special care baby units	No. midwives	No. GPs	No. HVs	No. 1a med staff	No. school nurses	
Live birth rate	-0.44	-	-	-	+0.47	-0.62	-0.49	-0.54	-	-
birth rates, mothers 15-19 years	-	-	-	-	+0.75	-0.73	-0.79	-	-	-
birth rate, mothers 35-44 years	-	-	-	-	-	-	-	-	-	+0.56
Low birth weight rate	-	+0.45	-	-	-	-	-	-	-	-
% population <15 years	-	-	-	-	+0.62	-0.63	-0.60	-	-	-
stillbirth rate	-	-	-	-	+0.48	-0.52	-0.74	-	-	-
infant mortality	-	-	-	-	-	-0.65	-0.50	-	-	-
mortality: 1-4 years	-	-	-	-	-	-	-	-	-	-
mortality: 5-14 years	-	-	-	-	-	-	-	+0.50	-	-

> 0.44 = $P < 0.05$
 > 0.59 = $P < 0.01$

Source West and Lowe (1976)

4.39 Whilst it is not possible to give a clear answer to this question, an exploratory study by Skrimshire (1978) is usefully indicative. This involved interviews with samples drawn from 3 areas of council housing: in Newham (East London) and from 2 homogeneous areas in the Midlands: one solidly middle class, the other a council estate with a history of social problems. Unlike Newham, which has long suffered from severe deprivation of the environment, both Midlands areas were situated in "a socially mixed county, with a teaching hospital, and an attractive environment: a highly desirable county in which to work, with no reputation for recruitment problems in general practice" (unlike Newham). Questions covered morbidity (GHS questions were used) and experiences in seeking help from the GP. Although much was found to be common to the 2 working class areas, differentiating their inhabitants from the middle class residents of the third area, this was not the whole picture. Indeed, the principal conclusion of the study is as follows:

"The provision of health care and the subjective experience of seeking that care are all partly determined by the socio-economic structure of society on an area basis, so that a working class person is at a greater disadvantage if he lives in a predominantly working class area than if he lives in a socially mixed area. The data ... are consistent with a theory of structural determination of need and demand for health care from an area, operating both through environmental and social conditions on the level of health, and through the social pressures and life experiences that further affect demand, particularly in the case of childhood illness. The level and quality of available medical manpower, relative to need and demand, is likely also to be strongly affected by the environment and social class composition of an area through the operation of the market for recruitment".

4.40 It is likely that similar conclusions would follow from a consideration of race, or ethnicity. However, information on use of services by ethnic groups is sparse. Coombe has referred to hesitation in seeking ante-natal care among immigrants, and their difficulties in securing adequate dietary information (Coombe, 1976). There is evidence of some lack of appreciation among health services staff of the special needs of some immigrant groups, as well as a clear lack of adequate facilities in some of the areas in which they have been obliged to concentrate.

CONCLUSION: THE STRUCTURE OF INEQUALITY IN USAGE

- 4.41 Generalization about inequality of utilization is made difficult partly because of sampling errors in the case of national surveys and of partial information in the case of local studies, and because of the (as yet unresolved) problem of relating utilization to need.
- 4.42 Inequalities appear to be greatest (and most worrying) in the case of the preventive services. Severe underutilization by the working classes is a complex resultant of under-provision, of costs (financial, psychological) of attendance, and perhaps of a life-style which profoundly inhibits any attempt at rational action in the interests of future well-being. Such factors are not, in this case, outweighed by the costs of present disruption of normal social functioning. We have also seen, however, how services provided on an 'outreach' basis can serve to reduce at least some of the costs of attendance, with beneficial results.
- 4.43 The situation is not clear cut in the case of GP attendance, partly because attendance rates cannot be compared with any precise measure of need. Excepting, for some years, children, more of those in lower than in higher SEGs consult a doctor, and their total consultations are, relatively, greater. But on most of the health indicators their need for care is greater still. It is hard not to conclude that poorer groups make relatively low use of GP services, irrespective of the separate question of the adequacy of the services to which they typically have access.
- 4.44 Middle class parents are, however, more likely than working class parents to seek medical attention for their children. Since the (direct) costs of attendance may be presumed similar, this may imply that working class adults are likely to be typically more sick than are middle class ones before help is sought. Moreover, we have seen also that middle class patients typically receive better care from their GP - a consequence, once more, of both inter-personal and ecological factors.
- 4.45 Hospital outpatient departments are used more by the working class than by the middle class. In the case of Accident and Emergency departments there is evidence of some use in place of the GP, access (as to the GP) being on the basis of self-

(or "lay") referral. It has been suggested that this preferred use of outpatients in treatment of 'traumatic' conditions (suffered at work, or in the home) is principally a result of their greater availability: they are open 24 hours a day, no appointment is needed, and availability of diagnostic aids is certain. Could it be that here the working class patient feels better able to count on good, and equal, treatment?

4.46 In the case of inpatient departments too evidence suggests greater use by the working class. It may be noted that, since admission is generally on the basis of GP referral, a higher proportion of working class patients than of middle class patients consulting a GP must be subsequently admitted to hospital. This in turn must imply that more working class patients have illnesses requiring hospital admission, or that the working class patients seeing his GP is typically sicker and/or that he or she is seen as less likely to receive adequate care at home. And indeed, evidence from a survey of the elderly suggests that this is so: public provision of domiciliary services seems not fully to compensate for differential ability to purchase such services.

4.47 It is hard to resist the conclusion that this pattern of unequal use is explicable not in terms of non-rational response to sickness by working class people, but of a rational weighting of the perceived costs and benefits to them of attendance and compliance with the prescribed regime. These costs and benefits differ between the social classes both on account of differences in way of life, constraints, and resources, and of the fact that costs to the working class are actually increased by the lower levels and perhaps poorer quality of provision to which many have access.

4.48 Class differentials in use of the various services which we have considered derive from the interaction of social and ecological factors. Differences in sheer availability and, at least to some extent, in the quality of care available in different localities provide one channel by which social inequality permeates the NHS. Reduced provision implied greater journeys, longer waiting lists, longer waiting times, difficulties in obtaining an appointment, shortage of space, and so on. A second channel is provided by the structuring of health care institutions in accordance with the values, assumptions, and preferences of the sophisticated middle class 'consumer'. Inadequate attention may be paid to the different problems and needs of those who are less able to express themselves in acceptable terms and who suffer from lack of command over resources both of time and

money. In all cases, for an individual to seek medical care, his (or her) perception of his (or her) need for care will have to outweigh the perceived costs (financial and other) both of seeking care and of the regime which may be prescribed. These costs are class-related.

4.49 It is the interaction of these two sets of factors which produces the inequalities documented in this chapter.

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CHAPTER 5

HEALTH INEQUALITIES: INTERNATIONAL COMPARISONS

5.1 This Chapter attempts to set the British health experience into the context of developments in other industrialised countries with which comparisons might reasonably be made. In the first part the focus is upon overall national levels and trends (specifically in mortality rates); in the second part data relating to experiences of inequalities in health are presented. International comparisons can sometimes throw additional light upon problems to which government policy is addressed, though clearly difficulties of interpretation derive from the influence of (the many unexamined) cultural and social structural variables. The health field is particularly complex in this sense when anything more than statistical description is attempted. Nevertheless, because the success of other nations (whether in raising income or reducing infant mortality) represents an inescapable yardstick by which national performance is always measured, the attempt to understand these successes is an essential input to analysis.

LEVELS OF HEALTH AND CHANGES OVER TIME

- 5.2 In part because morbidity data are not available for systematic international comparison the 'relative health' of nations tends to be expressed, and understood, in terms of relative levels of mortality. Infant mortality is often taken to be the most valid measure.
- 5.3 Tables 5.1 and 5.2 present the kinds of data which have often given rise to critical appraisal of the success, or otherwise, of health policy in Britain. Comparison on various possible bases yields the following results:-

i. 1975 Perinatal Mortality Rates

England and Wales (and Scotland still more so) had rates significantly above those of the 4 Nordic countries and of the Netherlands. France and Germany had rates similar to the British ones.⁽¹⁾

ii. Rate of Decrease of Perinatal Mortality

The overall decreases in perinatal mortality rates between 1960 and 1975 show that as a % of the 1960 rate, England and Wales, and Scotland in particular, performed more than averagely well. However, if we then look at the annual % decrease over the more recent period (1971-75) it appears that the result for England and Wales at least was no longer

1. More recent data show that by 1978 Scotland had caught up with England but that the conclusion otherwise holds. Rates of perinatal mortality in 1978 were: England 15.4; Wales 16.8; Scotland 15.4; Sweden (1977) 10.1; Norway (1977) 13.2; Denmark (1977) 10.6; Finland (1977) 11.0; Netherlands (1977 provisional) 12.9; France (provisional) 14.7; W Germany (1977) 14.9.

TABLE 5.1
PERINATAL AND INFANT MORTALITY

	PERINATAL MORTALITY PER 1000 LIVE BIRTHS				INFANT MORTALITY PER 1000 LIVE BIRTHS					
	1960	1971	1975	% Decrease 1960-1975	Annual % Decrease 1971-1975	1960	1972	1975	% Decrease 1960-1975	Annual % Decrease 1972-1975
England & Wales	33.5	22.5	17.9*	46.5 ¹	4.1	21.8	17.3	14.2*	34.3 ¹	4.5
Scotland	38.1	24.8	18.5*	51.3 ¹	5.1	26.4	18.9	14.8*	44.0 ¹	5.4
Sweden	26.2	15.7	11.1	57.7	7.3	16.6	10.8	8.3	50.0	7.7
Norway	24.0	17.9	14.2	40.8	5.1	18.9	11.8	11.1	41.3	2.0
Denmark	26.5	17.5	12.7*	52.1 ¹	5.5	21.5	12.2	10.3*	52.0 ¹	3.9
Finland	25.3	16.9	13.9**	45.0 ²	5.9	21.0	11.3	11.0**	47.6 ²	1.4
Netherlands	25.6	17.8	14.0	45.3	4.3	16.5	11.7	10.6	35.7	3.1
France	31.8	22.8	19.5**	38.7 ²	4.8	27.4	16.0	11.1	59.8	10.2
W Germany	36.3	25.6	19.4	46.5	4.8	33.8	22.8	19.7	41.6	4.5
(E Germany)	-	(19.4 ⁸)	(17.6)	-	-	-	(17.7)	(15.9)	-	(3.4)
USA	29.4	-	20.7	29.2	-	26.0	18.5	16.1	38.1	4.3

Sources 1960-1972 data: Health Care - the Growing Dilemma

1975 data: WHO and World Health Statistics 1978 vol 1

1975 France: Eurohealth Handbook 1978

* 1976
 ** 1974
 1 1960-1976
 2 1960-1974
 8 1972

TABLE 5.2

ADULT MORTALITY: DEATHS PER MILLION

	MEN				WOMEN							
	35-44		45-54		35-44		45-54					
	1964	1969	1975	1964	1969	1975	1964	1969	1975			
England and Wales	2471	2298	2095*	7330	7242	6985*	1778	1737	1468*	4382	4379	4298*
Scotland	3245	3195	2817*	9322	8757	8876*	2029	2098	1896*	5473	5646	5412*
Sweden	2205	2292	2343*	5223	5359	5736*	1444	1494	1372*	3546	3385	3056*
Norway	2327	2395	2012*	5664	5954	6009*	1299	1299	947*	2938	3288	2955*
Denmark	2128	2311	2420*	6126	5994	6865*	1695	1886	1579*	4000	4241	4529*
Finland	4427	4758	4171**	?	11462	10748**	1746	1680	1430**	4413	4343	3537**
Netherlands	2043	2086	1859*	5811	6100	5897*	1336	1473	1159*	3421	3418	3159*
France	3400	3650	3383**	8200	8050	8288**	1830	1773	1552**	4145	4135	3681**
W Germany	2919	3051	3016	7724	7372	7504	1942	1919	1601	4461	4368	4164
USA	3836	4108	3469	9643	9627	8563	2315	2383	1908	5227	5098	4563

Source 1966-69 data: McKinsey Health Care

1975 data: World Health Statistics 1978 (Vol 1)

* 1976

** 1974

satisfactory, and improvements were not up to those being achieved in any of the other countries.⁽¹⁾

iii. 1975 Infant Mortality Rates

When we turn to infant mortality (referring now to deaths in the first year, not week, of life) - to which socio-environmental factors are acknowledged to be of greater importance than for perinatal death - we find, once more, that the Nordic countries and the Netherlands show the lowest rates. Now, however, France is seen to have joined this group. There is then a significant jump to England and Wales, Scotland, Germany (West and East - the latter being substantially lower than the former), and the USA.

iv. Rate of Decrease of Infant Mortality

The decreases in infant mortality recorded between 1960 and 1975, as a % of the 1960 rates, show England and Wales to have done substantially less well than Scotland and, indeed, than any other country. By far the highest rate of improvement was obtained in France. In contrast to the perinatal rates, however, the relative performance of England and Wales, and Scotland in particular, was more creditable in the more recent period. Between 1972 and 1975 only France and Sweden recorded higher average annual rates of decrease.

v. Adult Mortality

The picture here is somewhat less clear. Certainly so far as younger men are concerned, the 1975 rate for England and Wales is adequate. Moreover, the general improvement recorded over the period 1964 to 1975 (or 6) was not paralleled in some of the countries with the lowest rates (Sweden for example, showed rising mortality among men). In the case particularly of women aged 45-54, however, the data offer little comfort.

5.5 How are such differences to be explained? One way is through comparison of the relative importance of causes of death. If Sweden is compared with England and Wales, taking rates of infant death for a number of major causes, it becomes apparent that perinatal factors, and respiratory conditions, are major contributants to the poorer British rate.

(1) This conclusion does not hold for the most recent period. Rates of improvement since 1975 have been similar to those of (eg) Finland, France, W Germany.

TABLE 5.3

MORTALITY RATES UNDER 1 YEAR PER 1000
LIVE BIRTHS, FOR SELECTED CAUSES (1976)

	Sweden	England and Wales	difference
infections (A1-44)	0.26	0.43	0.17
acute respiratory conditions (A89)	0.04	0.57	0.53
pneumonia (A91-2)	0.13	1.02	0.89
accidents (A138-46)	0.08	0.35	0.27
<hr/>			
various anoxic and hypoxic conditions of pregnancy (A134)	1.43	2.96	1.53
other causes of perinatal mortality (A135)	1.07	2.30	1.23
congenital abnormality (A126-30)	3.03	3.45	0.42

- 5.6 Out of the difference in national rates of 5.9 (per 1000 live births), 2.8 is accounted for by the perinatal factors referred to above, and 1.4 by respiratory conditions/pneumonia. In other words, it is not difficult to see how both factors impacting before and during birth, and those which relate principally to the environment and care of the infant have their effect. The difference in death due to congenital abnormality is, relatively, slight. The fact that in Sweden, with its excellent record in perinatal and infant death, the congenital abnormality death rate remain comparable with the situation in England and Wales, has led some commentators to the view that there may here be an "irreducible minimum" beyond which progress is (given present knowledge) unlikely. (See eg Pharaoh and Morris, 1979).
- 5.7 Another approach might be via comparison of levels of provision of health care. Table 5.4 provides some information on overall levels of provision of physicians, qualified nurses, and (non-psychiatric) hospital beds. Apparently, the differences in number of physicians per 10,000 population are not extreme, and W Germany (the most generously endowed throughout the whole period) shows up relatively poorly in tables of relative mortality. Supply of nurses seems better to accord with the evidence of mortality. But the importance of medical care provision - however expressed - has to be considered in relation to that of socio-environmental variables, as principal determinants of relative levels of, and changes in, the health of nations.
- 5.8 Anderson is one who attempted such an assessment in the course of his comparisons of the health services of England, Sweden and the USA (Anderson, 1972). Among the factors mentioned by him are a greater emphasis upon child health in Sweden compared with the health of old people in the USA (but

TABLE 5.4
 AVAILABILITY OF HEALTH CARE
 PHYSICIANS, NURSES AND HOSPITAL BEDS
 PER 10,000 POPULATION

	PHYSICIANS				NURSES			GENERAL (NON PSYCHIATRIC) HOSPITAL BEDS		
	1960	1969	1971	1975	1960	1969	1975*	1960	1969	1971
England and Wales	10.5	12.1	12.7	11.0	20.8 ¹	29.6	37.5	46.0	40.7	40.7
Scotland	11.8	13.3	15.6)		22.0	33.9*	48.2	47.8	48.3	49.4
Sweden	9.5	13.0	13.9	16.2 ³	28.6	38.2	71.1	-	67.1	69.4
Norway	11.8	14.1	14.6	18.3 ⁴	28.1	34.4	73.6	55.8	50.2	46.1
Denmark	12.3	14.5	-	17.9 ²	37.7	47.2	80.4	59.7 ¹	60.5 ²	60.1
Finland	6.4	9.5	11.1	13.3 ³	33.8	35.5	81.9	41.9	43.0	46.8
Netherlands	11.2	12.2	13.2	15.9 ⁴	-	44.8	32.2	45.0 ¹	47.9	53.6
France	10.0	13.0	13.9	14.6	18.6	25.8	50.2	55.5 ¹	-	60.5
W Germany	14.9	17.0	17.8	19.2	22.0	22.1	35.9	65.3	65.3	66.8
USA	13.4	15.5	15.4	-	27.9	33.5	63.7	41.4	46.5	46.7

Source McKinsey: Health - The Growing Dilemma

1975 Physicians data: Eurohealth Handbook

1975 Nurses data: WHO World Health Statistics 1978 vol III

- 1 1959
- 2 1968
- 3 1974
- 4 1976

*breaks in series: data not comparable around break (see nurses)

similar proportions of GNP devoted to health care); and differences in access between income groups (not treated in detail). The conclusion by which this author appears to set greatest store is this:

"the dominant reason why the Swedish mortality rates are lower than in any state in the United States is a high minimum standard of living for everyone and a cultural homogeneity..... Health services are, of course, also a factor in the low mortality rates, but the elimination of poverty in the United States in the sense true for Sweden would be more likely to bring mortality rates closer to Sweden than a policy limited to health services only" (p158)

5.9 A sophisticated statistical analysis by Fraser (1973) is of particular value. Fraser attempted to explain variation in infant mortality rates (taken to be a good measure of 'relative health') between 25 industrialised countries (including 5 from Eastern Europe). Dependent variables are infant mortality rates of 1955 (actually the average of 1954-1956), 1960 (1959-61) and 1965 (1964-66) used singly and in combination. Independent variables introduced in the first analysis (which used linear regression equations) included: number of physicians per 10,000 people; number of nurses and midwives per 10,000 people; and number of hospital beds per 1,000 people as medical care variables. Demographic and geographic factors were represented by % population living in cities of 100,000 population; population density over the country as a whole; area of the country; % change in population. GDP per capital and % 15-24 year olds in higher education stood for socio-economic factors (though the latter was properly recognised as a poor measure of average level of education).

5.10 Strong negative effect on infant mortality (in most regressions, ie when other variables are held constant) appeared with

- per capita GDP
- number of nurses and midwives per 10,000 population
- number of hospital beds per 1,000 population
- extent of urbanisation

5.11 Population density had a weak negative effect; area and % change in population no effect. The education variable produced internally inconsistent results whereas, most surprising of all, provision of physicians had a slight positive effect on infant mortality.

- 5.12 A second analysis, based on a more limited number of countries for which relevant data could be obtained, showed a weak relationship between inequality of income distribution and mortality (positive), and a weak positive relationship between birth rate and mortality rate. Finally, ranking countries for which Abel-Smith had produced estimates of the proportion of health expenditure devoted to non-personal public health services, gave a good (negative) rank order correlation with infant mortality.
- 5.13 This study clearly emphasises the importance both of medical and eco-social factors; provision of nurses and midwives and of hospital beds are the most important 'health service correlates' of low infant mortality, and per capita GDP and extent of urbanisation of the population the most important socio-environmental ones. The author considers that further work on income distribution and % preventive health expenditure is merited. Whilst correlations of these sorts do not, of course, 'prove' that these are the determinants of the rate of infant mortality prevailing in a given country they have to be seen as suggestive for policy and research.
- 5.14 A similar approach, used recently by Cochrane et al (1978), took 1970 mortality rates among different age groups as the dependent variable. Their study utilised data for 18 Western industrialised countries. Independent variables were mostly similar to Fraser's, but included also various aspects of diet, and per capita cigarette and alcohol consumption. These authors found that the major negative effects on mortality rates seem to derive from per capita GNP, population density, the proportion of health expenditure from public funds, and per capita sugar consumption. Once more, increasing provision of physicians accompanied increasing rates of mortality.
- 5.15 A weakness of both studies (acknowledged by Cochrane et al) is the limited attention paid to the importance of distributional characteristics of the economic and social structures, and of the existence of inequalities in access to, and use of, health services.
- 5.16 High overall national levels of infant mortality might in some cases be due to the effects of poverty (or other forms of deprivation) on certain groups within the society. As we have seen, it was to the differences in extent of inequality prevailing in Sweden and the USA that Anderson attributed the lower infant mortality rate of the former.

5.17 Some data relevant to further investigation of this problem are given in Table 5.5 though the significance of factors of this kind must await further statistical demonstration.

5.18 Regional disparities in provision of medical service, studied by the RAWP are not unique to Britain and, insofar as these are associated with regional health inequalities, may also be relevant to overall national rates. In fact, insofar as broadly aggregated data give an accurate picture, the regional distribution of physicians is more equitable in England than is the case in comparable European countries, as shown in Table 5.6

TABLE 5.6
REGIONAL VARIATIONS IN NO. PHYSICIANS PER THOUSAND POPULATION:
HIGHEST AND LOWEST AREAS

	England	France	Germany	Netherlands
Average	1.06	1.47	1.74	1.36
highest(H)	(NW Thames) 1.31	(Paris) 2.18	(W Berlin) 2.97	(Utrecht) 2.10
lowest (L)	(Trent) 0.91	(Basse Normandie) 0.98	(Nieder-Sachsen) 1.41	(Friesland) 0.92
Ratio H/L	1.4	2.2	2.1	2.3

Sources: England, France, Germany from A Maynard in Soc and Econ Admin 12,1(1978)3
Netherlands: Gezondheidsstatistiek Nederland 1974

TABLE 5.5

COMPARISON OF INEQUALITIES OF PRE-TAX INCOME AND
OF EDUCATION

	Gini coefficients ¹ for income inequality	Gini coefficients for ² education inequality
UK	0.38 (1964)	-
Sweden	0.39 (1963)	-
Norway	0.35 (")	-
Denmark	0.37 (")	males: 0.144; females 0.131 (1961)
Finland	0.46 (1962)	-
Netherlands	0.42 (1962)	0.167 (1962)
France	0.50 (1962)	males: 0.172; females 0.159 (1962)
W Germany	0.45 (1964)	-
USA	0.34 (1969)	0.190 (1960)

Sources: 1 Pankert (1973)

2 OECD (1970)

Note: Gini coefficients of income inequality will be much reduced in countries with powerfully redistributive fiscal policies when 'after tax' income is considered. Similarly, benefits when included much affect these figures.

INEQUALITIES IN HEALTH

- 5.19 Whereas in the UK mortality statistics and morbidity data, obtained for example through the GHS, are routinely presented by social class (according to the occupation-based definition of class discussed elsewhere in this report) the same is not true of other countries. Whether or not because social class is a less politically salient dimension of social stratification than is the case in the UK, and because other dimensions are of greater importance, health inequality data are more commonly presented on a geographic or, as in the USA, ethnic basis. To be sure, in those Nordic countries made up of industrialized densely populated southern regions and cold rural northern regions with sparse and declining populations, this is unsurprising. The fact is, therefore, that international data expressing the extent of health inequalities are not readily presented on a comparable basis. Moreover, where social or occupational groupings are used these are not strictly comparable with the groupings used in Britain by the Registrar-General. Additionally, the overall social class compositions of countries are far from identical. Nevertheless, though the data we have collected relate variously to regional, industrial, occupational or income groups, they do permit some attempt at answering the question which we are here addressing: are the health inequalities in England and Wales, for which we have presented abundant evidence, encountered also in Europe and the USA?
- 5.20 The best way of dealing with our somewhat disparate data is to make country-by-country comparisons with England and Wales.

Denmark

- 5.21 Denmark has lower perinatal and infant mortality rates than England and Wales (Table 5.1) and has succeeded in reducing the latter (though not the former) by more than have we. In England and Wales the ratio of class V to class I for neonatal mortality is 2, with regular class increments. Table 5.7 shows the Danish situation.

TABLE 5.7

DENMARK: NEONATAL MORTALITY RATE BY OCCUPATION

	1970	1972	1974
self-employed	10.9	8.1	5.7
salaried employee	9.9	9.8	7.5
skilled worker	10.1	8.9	8.1
unskilled worker	13.5	11.3	9.0
other/unknown	11.1	10.2	8.8
All	11.0	9.7	8.0

Source: Medicinisk Fødselssatistisk 1974
Copenhagen

- 5.22 Here too there is evidence of social inequality, though it is smaller than in England and Wales. The neonatal mortality rate for unskilled workers in Denmark has fallen by about the same percentage as for the country as a whole. This is not so of the UK.

Finland

- 5.23 Finland is a country which, though enjoying low rates of perinatal and infant mortality, suffers from very high rates of adult mortality: far above those of England and Wales. The existence of regional disparities in adult Finnish mortality is well-known: but differences between social groups are to be found too, as shown in Table 5.8

TABLE 5.8

FINLAND: AGE-ADJUSTED MORTALITY INDICES (1970) BY SOCIAL GROUP

	Male	Female
I higher admin or clerical employees, comparable employers, and people with academic degrees	78	95
II lower admin or clerical employees, and comparable employers	95	100
III skilled and specialized workers	92	102
IV unskilled workers	148	108
V farmers	87	96

Source Nayha (1977)

The ratio of the index for male unskilled workers IV to that for (I), 1.9, is somewhat higher than the ratio of SMRs for social classes V: I in England and Wales (1.8), although the inequality found in Finland among women is lower than in England and Wales.

France

5.24 The French data shown in Table 5.9 refer to men aged 45-64 (unstandardized for age), excluding those classified in the census as 'inactive' (16% of the total, and with a very much higher mortality rate) and excluding three regions of France in which a very high proportion of deaths are attributed to unspecified or inadequately specified causes. Although the extent of the inequality indicated is presumably increased by the greater number of occupational groupings compared to the Registrar-General's classification, it does seem that relativities are comparable with those of England and Wales.

TABLE 5.9

FRANCE 1968: MORTALITY RATES AMONG ECONOMICALLY ACTIVE MEN AGED 45-64
(UNSTANDARDIZED) (PER 100,000)

I	higher cadres (administrators etc)	699
II	industrialists, liberal professions, large commercial proprietors	919
III	middle cadres (including teachers, medical/social service personnel, army, police)	928
IV	artisans and small shopkeepers	1225
V	farmers	1117
VI	employees (including service workers, clergy)	1392
VII	qualified workers	1589
VIII	agricultural workers	1520
IX	other workers (including miners)	1169
	All	1189

Source Derrienic et al (1977)

If those classified as 'inactive' are included, the overall rate rises from 1189 to 1443. Thus, though the classifications within (I, II and III) on the one hand and (VII, VIII and IX) on the other does not correspond to that used in GB, the picture of distinctly higher mortality rates in the latter group is comparable with the British.

5.25 Pronounced differences in infant mortality rates also exist in France, both between socio-economic groups and between regions

TABLE 5.10

RATES OF INFANT, NEONATAL AND POST NEONATAL DEATH
BY SOCIO-PROFESSIONAL GROUP OF FATHER
(PER 1000 LEGITIMATE LIVE BIRTHS)

FRANCE

	1956-1960			1970-1972		
	Infant	Neo-natal	Post neo-natal	Infant	Neo-natal	Post neo-natal
liberal professions; higher and middle cadres	17.0	12.4	4.6	11.6	8.7	2.9
employees	24.9	19.7	8.2	14.7	10.8	3.9
industrial & commercial proprietors	25.4	17.4	8.0	15.0	11.2	3.8
skilled workers	28.1	17.7	10.4	26.2	11.4	4.8
farmers	31.2	20.8	10.4	15.2	11.4	3.8
specialised workers	32.9	19.6	13.3	19.0	13.2	5.8
agricultural workers	35.3	21.0	14.3	19.8	14.0	5.8
labourers	44.8	23.1	21.7	25.7	16.5	9.2
All	29.6	18.4	11.2	15.9	11.4	4.6

Note: certain categories of workers, which fall within the range shown, are not given.

SOURCE: DINH AND HEMERY (1977)

5.26 Table 5.10 shows that so far as the first year of life is concerned the ratio between mortality in the most favoured group (liberal professions etc) and the least favoured (labourers) fell slightly (2.6 to 2.2). There was no change in the ratio of neonatal rates (first month), which remained at about 1.9. In the case of post neonatal death rates, however, the least favoured social group has improved its relative standing most strikingly (ratio of 4.7 falling to 3.2). This latter change is in striking contrast to that noted for Great Britain, and seems to imply a greater levelling in the socio-environmental factors most particularly implicated in post neonatal death in the case of France than in that of Britain.

5.27 A factor of 2 separated the area of France enjoying the lowest infant mortality rate in 1970-72 (Ile de France, including Paris, 13.0 per 1000 legitimate live births) from that with the highest rate (Corsica, 24.6 per 1000). In 1956-60 these 2 areas, still ranked first and last, had equivalent rates of 21.8 and 40.2 - ie there had been no change in the ratio.

5.28 The interaction between socio-economic and regional disparities can be shown by the cross tabulation of infant mortality rates by occupation and region simultaneously. Dinh and Hemery show that, for the group "liberal professions and higher and middle cadres", the infant mortality rate in 1970-72 ranged from 10.2 in Haute-Normandie and Rhône-Alpes, to 17.6 in Corsica; moreover, in 2 areas (Franche-Comté, Languedoc-Rousillon) "industrial and commercial proprietors" actually had lower rates. Similarly, for "labourers", the range was from 18.3 (Pays de la Loire) to 33.4 (Franche-Comté); and once more in 2 areas (Corsica and Aquitaine) the group "specialized workers" showed up less well. In terms of the ratio mortality rates between "labourers" and "liberal professions" there was also a considerable range, from 1.4 (Corsica, Aquitaine) to 2.7 (Britanny).

W GERMANY

5.29 In the German case it seems necessary to use regional disparities as an indication of the existence of health inequalities. Those presented in Table 5.11 relate to infant mortality (first year) and to early neonatal deaths (first 7 days). Table 5.1 showed that on both these indicators the German experience is less favourable than that of England and Wales.

TABLE 5.11

W GERMANY 1974: INFANT MORTALITY AND EARLY NEONATAL MORTALITY RATES, BY LAND

Land	infant mortality rate per 1000 live births	early neonatal mortality rate
Schleswig-Holstein	18.0	10.5
Hamburg	19.0	11.2
Niedersachsen	21.9	13.5
Bremen	25.9	12.1
Nordrhein-Westfalen	23.2	14.3
Hessen	21.5	13.3
Rheinland-Pfalz	22.3	12.6
Baden-Württemberg	17.9	11.4
Bayern	20.4	13.2
Saarland	25.6	15.7
W Berlin	18.7	9.3
ALL	21.1	13.0

Source: Statistisches Bundesamt (1974)

5.30 Both rates, but particularly the infant mortality rate, show substantial variation. The same is true for England and Wales. The range in infant mortality rates for the German Länder is from 17.9 (Baden-Württemberg) to 25.9 (Bremen): a difference of 8.0 or 40% of the lower figure. The comparison may be made with the RHAs of England and Wales. The lowest infant mortality rate here (1975) is Oxford (12.68 per 1,000 live births), the highest Yorkshire (17.93) - a difference of 5.2 or about 40% of the lower figure (OPCS, DH3 no 2, 1977).

Netherlands

- 5.31 Here too social class or occupation categories do not seem to be employed in analyses of inequalities in health: provincial differences are, however, available. Table 5.12 shows variation in adult mortality rates between the Dutch provinces, standardized for age. Table 5.2 showed that in terms of crude death rates (as indeed for infant and perinatal death rates) the Netherlands was 'healthier' than England and Wales overall.

TABLE 5.12

NETHERLANDS 1971: AGE STANDARDIZED ADULT MORTALITY PER 10,000 POPULATION

Province	By Province	
	males	females
Groningen	88.8	71.6
Friesland	84.9	71.9
Drenthe	88.0	76.8
Overijssel	89.7	73.1
Gelderland	93.6	77.4
Utrecht	93.8	70.5
Noord Holland	94.5	73.0
Zuid Holland	92.4	71.4
Zeeland	80.9	68.5
Noord Brabant	95.5	79.4
Limburg	101.4	82.7
All Netherlands	92.8	74.3

Source: Centraal Bureau voor de Statistiek (1974)

- 5.32 Once more, comparison may be made with OPCS statistics giving SMRs by English and Welsh RHAs (OPCS DH5 no 2 1977). The range in SMRs among males is from 87 (Oxford), 88 (East Anglia) to 113 (North West) and 111 (Northern); for females the range is distinctly smaller, from 92 (Wessex) and 93 (East Anglia) to 108 (Northern) and 110 (North West). Allowing for the different bases on which the two sets of figures are given, the ranges from lowest to highest do not seem very different. The superior performance of the Netherlands seems, rather, to be reflected in the distribution of provinces within this range.

Norway

- 5.33 Like the Netherlands, Norway distinctly surpasses England and Wales in its rates of perinatal, infant, and adult mortality. Norwegian statistics give standardized mortality rates for the 20 Norwegian counties, in relation to the national average, for adult males and females. The picture differs somewhat between the two groups. In both cases, however, the highest rates are found in Finnmark (the most northerly and very sparsely populated part of the country): 122 for men and 118 for women (1969-72). In the case of men the next highest rate is found in the Oslo area (the industrialised capital in which over 10% of the population live): whereas in the case of women it is in Troms (a county also many hundreds of miles into the Arctic circle). These rates are 111 and 110 respectively. The southern regions of more moderate climate which are not industrialised have much lower mortality rates. Leaving aside Finnmark, the range for men is 85-111 and for women 95-110. However if Troms also is omitted, the range for women falls to 95-104, the figure for Oslo being 99 (ie less than the national average). Clearly, in the case of Norway climatic factors render such comparisons of uncertain value.
- 5.34 Also available are morbidity data, more or less comparable with those given in the GHS, on an income basis.

TABLE 5.13

NORWAY 1975. MORBIDITY ⁽¹⁾ BY AGE AND INCOME: PERCENTAGE OF ALL IN EACH GROUP

annual income	persons in multi-person households						single persons, all ages over 16
	AGE						
	0-6	7-15	16-30	30-49	50-66	67+	
under 15000 kr	35	31	36	52	74	80	78
15,000 - 29,999 kr	29	30	44	54	76	78	75
30,000 - 49,999 kr	33	36	45	54	72	78	58
50,000 - 79,999 kr	31	34	42	52	65	77	58
over 80,000 kr	24	32	39	48	60	67	-

(1) 'Morbidity' is defined as persons sick on 1 October and/or at least 1 day of restricted activity in the period 1-15 October.

Source: Central Bureau of Statistics, Oslo (1977)

These data suggest something of an income gradient in morbidity among single persons and among the older members of multiperson households, though not among 16-49 year olds.

Sweden

- 5.35 Sweden has the lowest perinatal and infant mortality rates in the world and, moreover, is succeeding in continuously reducing them. The Swedish situation in this respect is of particular interest.
- 5.36 Early in the century Sweden suffered from substantial differentials in infant death rates, on both a geographical and an income basis. Thus, among legitimate infants born in Stockholm between 1918 and 1922, the infant mortality rate in families with an income over 10,000 S Kr was 14.3 per 1000, in families with an income of less than 4,000 S Kr it was 48.9 per 1000*. Professor Sjolin of Uppsala University writes of this differential "Today the difference is probably completely erased, but there are no recent studies to confirm it". (Sjolin 1975). The decline in regional differentials is shown by Figure 5.1 which compares rates for the 3 most northern and relatively poor counties with 2 southern counties (Uppsala, Göteborg). By 1971, Sjolin writes, the northern county of Vasternorrland had the lowest rate of infant mortality among all the Swedish counties (8.2).
- 5.37 Moreover, Sweden seems also to have eliminated socio-economic differences in height and age of maturity among children. Lindgren (1976) found no such differences in a sample of 740 Swedish urban school children followed from age 9-17. (By contrast, Rona, Swan and Altman (1978) found that social class remains an important determinant of children's height - between ages 5 and 11.5 years - in England and Scotland. Moreover, within each of the class-groups I+II+IIIN; IIIM; IV, V: children with unemployed fathers were shorter.)

USA - THE REDUCTION OF INEQUALITY?

- 5.38 Instead of presenting data showing that on perinatal and infant death rates, on self-reported morbidity, and on any all other available indices, substantial gaps are to be found between States, between blacks and whites and (though data are scarcer) between occupational groups, we shall here take up the question of changing inequalities. Recent studies by Lerner and Stutz, Chase, and Wilson and White represented attempts at assessing the effect of the poverty programmes of the 1960s (the decade of the 'Great Society') upon health inequalities in the USA. These three studies focused respectively on adult mortality rates, infant mortality rates, and morbidity/utilization of health services.

*Rietz Acta Paediat 2 (1930) quoted by Sjolin

Sweden

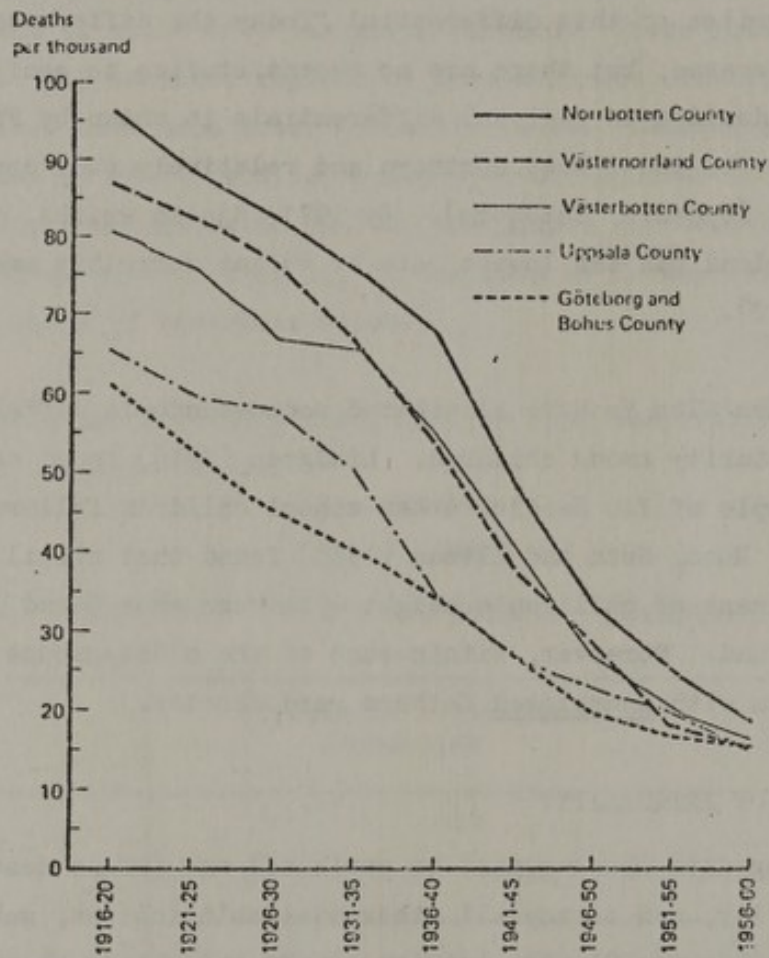


Figure 5.1 Infant Mortality in Five Swedish Counties, 1916-1960

source Sjölin (1975)

5.39 The decade 1960-70 was one in which, for the nation as a whole, the overall mortality rate continued to decline, and income rose substantially. Lerner and Stutz looked at corresponding changes in differences between whites and non-whites, and between the 10 highest income and 10 lowest income states, on the indicator of adult mortality rate, in this period.

TABLE 5.14

USA: 1960-1970 (CHANGES IN) AGE-ADJUSTED MORTALITY RATES BY STATE-INCOME AND RACE

	<u>1959-1962</u>	<u>1969-1971</u>	
high income states	743.9	690.4	(-7.2%)
whites			
low income states	738.9	729.3	(-1.2%)
<hr/>			
high income states	998.3	927.1	(-7.1%)
non-whites			
low income states	1102.4	1048.3	(-4.9%)

Source: Lerner and Stutz

5.40 Thus, although the relative positions of whites and non-whites did not change greatly, the gap between rich and poor states (taken as roughly reflecting rich and poor individuals) actually widened. This is attributed to the greater availability of medical advance in rich states, greater Medicaid expenditure in rich states, and selective emigration.

5.41 By contrast, Chase found that (using 'white' and 'all other' "as a substitute" for rich and poor): "Since 1960 the gap between the two race groups narrowed. This pattern was in contrast to that in the 1950s when the differences between the racial groups increased. In 1960 infant mortality rates for the two major groups differed by 20.3 per 1,000 live births. By 1972 the difference between them was 11.3 per 1,000, the narrowing of the gap since 1960 was greater after the first four weeks of life when socio-economic factors predominate than in the neonatal period."

- 5.42 Finally, Wilson and White's study, which used data from the Health Interview Survey, defined the poor as "persons whose family income was in the lowest 20% of the population" (ie less than \$3,000 in 1964; less than \$6,000 in 1973). These authors first showed that there had been a greater reduction among the poor in the proportion who had not seen a physician in the previous two years.

TABLE 5.15

USA: % WITH NO DOCTOR VISIT IN PREVIOUS TWO YEARS (ALL AGES)

	<u>white</u>		<u>all other</u>		<u>all</u>	
	poor	non-poor	poor	non-poor	poor	non-poor
1964	25.7	17.1	33.2	24.7	27.7	17.7
1973	16.8	13.2	18.5	15.3	17.2	13.4

- 5.43 On the other hand, there was no evidence for any decline in morbidity-differentials, as illustrated by Table 5.16

TABLE 5.16

USA: % POPULATION REPORTING LIMITATION OF ACTIVITY DUE TO CHRONIC ILLNESS

	<u>white</u>		<u>all other</u>		<u>all</u>	
	poor	non-poor	poor	non-poor	poor	non-poor
1964	28.0	9.0	16.9	7.2	25.1	8.9
1973	27.2	9.9	20.6	8.6	25.6	9.7

- 5.44 These studies taken together indicate that the medico-social programmes of the 1960s were associated with (since causality cannot be assumed) reduction in infant mortality differentials (though not adult mortality differentials) and improved utilization of medical services by the poor relative to the non-poor (but no reduction in differentials in morbidity).

- 5.45 In so far as this is an accurate picture, it might conceivably be seen as indicative of the relative feasibility of influencing the various indicators of 'health inequality' with which we are concerned.

5.46 A recent French study also throws some light on obstetric trends. Roumeau-Rouquette et al attempted to assess the effects of laws promulgated in France in 1970-1971 requiring all pregnant women to attend at least 4 prenatal consultations (at 3, 6, 8 and 9 months) and requiring examination of all newborn infants by a doctor in the first week of life. Additionally, prenatal consultation with a doctor qualified in obstetrics and additional consultations by those assessed as 'at risk' were recommended. These authors carried out a study of a representative sample of about 1,000 pregnancies in the Rhône-Alpes region in July 1972 and in June 1975 (Rumeau-Rouquette et at, 1977), to assess the effects principally upon patterns of use of services, but also upon outcome. Overall, the proportion of women having less than 4 consultations fell from 14.4% to 10.6%, and the number with an obstetrician responsible for prenatal surveillance rose from 56.5% to 69.3%. At the same time, however, there was a rise in the average educational level of the mothers, in the standard of housing, in the use of contraception, and in the percentage of mothers working, and a fall in the percentage of mothers who already had 2 or more children. So far as outcome was concerned, it was found that the distribution of birthweights was unchanged, but the rate of 'anomalies or pathologies at birth' fell from 23.8% to 15.6%.

5.47 The adequacy of prenatal surveillance as a function of various 'class' factors showed a complex pattern of change. In 1972 inadequate surveillance (total of less than 4 consultations or first consultation after 3 months) was associated with immigrant status (mother or father), no post-primary education (mother or father), number of children, and manual employment of father. By 1975 the association with educational level of mother and number of children had both fallen considerably. There was no clear change on the basis of manual/non-manual employment of father.

5.48 So far as policies designed specifically to reduce the overall incidence of perinatal and infant mortality (and the associated morbidity among survivors) are concerned, the successes of France and Finland are of particular significance. Finnish success in reducing these rates is attributed by the Wynns most particularly to

1. reduction in the hazards of childbirth for larger babies (over 2500g birthweight).
2. reduction in the proportion of babies born at below 2500g.

- 5.49 The Finns, they report, have not "improved the chances of survival of the reduced number of frail babies that that continue to be born in Finland" (M Wynn and A Wynn, 1974). Similarly, Geijerstam attributes much of Sweden's low perinatal mortality rate to the low incidence of low birth weight (Geijerstam, 1969) Nutrition seems to be crucially related to the incidence of low birth weight (see chapter 6) and it is perhaps worth noting at this point that antenatal clinics in Finland typically recommend the consumption of 1-1½ litres of milk per day by the pregnant woman - considerably more than is recommended in England. There is, of course, a typically large difference in the consumption of dairy products between England and Finland - among all income groups - a fact which may show up both in perinatal and adult mortality rates (though in opposite senses).
- 5.50 It is generally agreed that the high rates of attendance for antenatal care characteristic of Nordic countries are importantly related to low rates of morbidity and mortality. In Finland, a 1944 law required the establishment of a least one Maternal Health Centre in each local authority area. At that time, according to the Wynns, 31.3% of pregnant women who subsequently gave birth were registered: by 1968 99.3% were registered at one of the Health Centres. (The figure for Sweden is also over 95%.) Moreover, by 1968 also 91.2% were attending for first examination by the end of the 4th month of pregnancy. By contrast, it seems likely that only about 50% of women have registered by this stage in England and Wales, and in some areas the figure is undoubtedly very much lower.*
- 5.51 In Finland, the procedure then is that all women deemed to be at risk (for example, by virtue of a previous failed pregnancy, hypertension, etc) are referred from the Health Centre to the antenatal department of a major central hospital, either for one consultation or for all). This accounts for about $\frac{1}{4}$ of all the women.
- 5.52 In both Finland and Sweden domiciliary deliveries have virtually disappeared and in both countries policy is to concentrate delivery in major specialized centres.
- 5.53 If surveillance of all pregnant women from an early stage of their pregnancies is crucial, as seems generally agreed, the question naturally arises as to how this may be facilitated. (It is perhaps also worth adding that since those hardest to reach are likely, by virtue of their circumstances, to be at

* In Scotland, in 1973, only 64.7% of married social class IV women and 59.5% class V had registered by the 20th week of pregnancy (Brotherston, 1976)

particular risk, there is likely to be an increasing 'marginal rate of return' on coverage of the last few per cent. The gain between 90% and 95% could be as great as that secured by increasing coverage from 80% to 90%.) Both Finland and France have made use of financial incentives.

- 5.54 In Finland, only mothers who go for examination to a doctor, midwife or Maternal Health Centre within the first 4 months of their pregnancy can receive the maternity grant. In 1974 this could be taken as a cash grant of 80 FMK (£10) or in the form of a baby 'Kit' (which the Wynns estimated to be worth double) which most took. The view is that this relatively modest grant served as the necessary inducement at times and among groups of low income. Attendance now is simply taken for granted by all. It might also be noted that travel to the Health Centres is subsidized.
- 5.55 In France, maternity grants were initially seen as an instrument of 'natalist' policy. Between 1946 and 1975 they were paid only where 1. a baby was conceived within 2 years of marriage, or 2. the mother was less than 25 years old, or 3. the interval between births was not more than 3 years (Doguet, 1978). Today the grants which form part of a rather complex French 'family policy', are seen specifically as a means of reducing perinatal mortality and birth handicap. To this end the total grant of 1620 francs (£190) is paid in 3 instalments: at the end of 3 months, 6 months and 8 months of pregnancy (dates judged to be of significance for the detection of anomalies). Proof of attendance for these examinations is necessary for receipt of the sums due. A fourth examination, in the 9th month, is also required according to a law of 1971.
- 5.56 A recent secondary analysis of survey data relating to 11,000 1972 births shows that among french-born mothers (where the father also was born in France) 14% had 3 or less ante-natal examinations, and 9% attended for their first examination after 3 months of pregnancy. These figures rose to 27% and 16% for non-French (migrants) (and to 35% and 16% for the North African-born in the migrant group). However when those mothers who were French-born but were also both married to a manual worker and had received no post-primary education were considered alone they also rose to 20% and 12% (Kaminski et al, 1978). Thus, although there are both class and ethnic differences in this respect in France, like those in Britain, the overall rate of attendance seems to be distinctly better.

- 5.57 In both France and Finland financial incentives also play a part in ensuring post-natal medical examination.
- 5.58 In Finland, the Maternity Health Centres are informed of all births to mothers registered with them. The mother is visited by a midwife within 48 hours of returning home, who has the duty of ensuring that the child is registered at a Child Health Centre. Today, over 90% of children are registered within 1 month of birth. The proportion of those registered with the first year rose from 84.7% in 1957 to 94.2% in 1969.⁽¹⁾ Each child is seen 10-11 times in the first year (twice by a doctor), and then twice a year between the ages of 1 and 6 by Health Centre staff. The Wynns point to the important contribution made by these staff beyond the assessment of purely medical well-being. They teach parents about nutrition, the care of minor ailments, dealing with behaviour problems and the importance of mental stimulation of the child. It appears that parents increasingly go there for advice on aspects of child behaviour.
- 5.59 In both Finland and France financial incentive is used here too. In Finland a maternity allowance (at the rate of sick pay) is paid all insured working women for the period 18 working days before birth to 36 working days after. It is paid in 3 instalments, the third only after attendance for post-natal medical examination. In France, there exists a post-natal allowance of 2130 francs (about £240), also paid in 3 instalments. For the first, the child must be examined within the first week of life, for the second within the 9th month, and for the third within the 24th month.
- 5.60 As well as these incentives, it is important to note that in Finland, where an appointment at the Health Centre is missed, a midwife or health visitor visits the home. This is felt to be very important and is, of course, made possible by very much more generous staffing levels. Also regarded as important to Finnish practice is the accountability for coverage required of Finnish public health services. The implications of this for the UK are discussed in Chapter 7.

(1) This is higher than in Britain, where the National Child Development Survey found a figure of about 80%. Official statistics show that of children born in England in 1974 90.1% attended a child health clinic in 1976. However, in some AHAs the figure is very much lower: eg Birmingham 71.2%, Camden/Islington 70.6%, Salford 68.2%, Cornwall 62.4%

5.61 It is clear from these experiences that strenuous efforts to increase the coverage of ante-natal and child health services to near 100% yield major benefits for perinatal and infant mortality rates. It is not possible unambiguously to conclude that the financial incentives used in Finland and France are themselves directly responsible for the improved rates of attendance (and consequent reduction in death and, inevitably, in perinatal morbidity). But irrespective of this, the 'outreach' capacity of the Finnish system (following up all missed appointments, etc) must be stressed. So too, in our view, must the importance of adapting the functioning of these health centres to the needs and the difficulties of those whose attendance must be secured.

5.62 It is worth noting, also, that the obligations upon women in France to attend antenatal care in force since 1971, intended to increase coverage, form part of a broader attack on handicap of perinatal origin (Wynn and Wynn, 1976). Other measures include improvement in equipment and staffing of major obstetric departments; establishment of more ICUs for newborn infants; regulation as to minimum standards of equipment, staffing, size etc binding on all establishments with maternity units, whether public or private. This latter has led to the closure and amalgamation of many small units. Moreover, it now appears that concern in France is not with coverage of antenatal care (which is adequate) but with the poor quality, and often perfunctory nature, of the examinations given. Also, the striking reduction in 'class' differential in post neo-natal mortality rates suggests some levelling in social, economic and environmental conditions. It is noteworthy that, between 1956-60 and 1970-72 this reduction has been much greater than the (negligible) reduction in the class differential in neo-natal rate - implying a greater relative levelling of environmental conditions than in obstetric care.

CONCLUSIONS

- 5.63 Comparison of the British experience with that of other industrialised Western countries, on the basis of commonly used overall mortality rates, shows that British perinatal and infant mortality rates are distinctly higher than those of the 4 Nordic countries and of the Netherlands, and comparable with those of Western Germany. The rate of improvement in perinatal mortality enjoyed by Britain over the period 1960-75 was as good as that of most other countries though the rate of gain is now poor. Moreover in the case of infant mortality all comparable countries have done better, especially France. Adult mortality patterns, especially in the younger age groups, compare reasonably with other countries. ⁽¹⁾
- 5.64 Why, then, might it be that infant mortality in particular presents so dismal a picture? Analyses quoted earlier suggest that infant death rates are associated with a number of characteristics of socio-economic and health systems. Low infant death rate seems clearly to be associated with per capita GDP, and there is some evidence for an association with an egalitarian income distribution. (In other words distributional aspects of society - and the extent of income inequalities - may be related to national performance in the infant mortality rankings). So far as health policy is concerned, it seems that extent of provision of nurses and midwives, and of hospital beds, are more important than provision of physicians. Not unrelated, it seems that a relative emphasis upon preventive, antenatal, and child health services within health policy is required. International comparison here may thus have implications for policy.
- 5.65 It is possible, of course, that the superior performance of Sweden, Netherlands etc might be attributed to difference principally in the extent of internal inequalities. Thus, if the perinatal mortality rate for all England and Wales were equal to that of social classes I and II, or the infant death rate equal to that obtaining in Oxford RHA, there would be little difference between these countries and ours. The second question, then, is whether the inequalities in health between social classes and regions, found in Britain, also exist elsewhere.
- 5.66 Briefly, the evidence of section II - although disparate and not permitting comprehensive comparison - suggests that they do. The evidence relating to France and Germany (in the first case on an occupational basis, in the second on a regional basis) indicates disparities broadly corresponding to those of

(1) It has, however, recently been noted that whereas the death rates among men aged 45-54 from coronary heart disease in Australia, Canada, Finland and Australia are now declining, those in England and Wales have merely stopped rising. The reasons for decline remain to be explained (Morris, 1979)

Britain. Finland also seemed comparable. So too did the Netherlands, at least in terms of the total range of regional inequality noted. Only in the cases of Norway and Sweden did a significantly smaller inequality appear to obtain. Moreover, in both these cases the extent of regional inequality (at least on the index of adult male mortality rate) seems to have fallen consistently over the years. American evidence on changing inequalities suggests an improvement in the case of infants and access to medical services, but not in adult mortality or morbidity.

5.67 If the evidence for changes in the extent of inequalities is slight (and in the American case ambiguous) that for the success of specific policies designed to reduce inequalities is slighter still. Clearly, as the study by Rumeau-Rouquette et al showed, various dimensions of comparison can produce discrepant results, and changes in extraneous variables may often interfere. Of course, this study also suggested that reductions in inequality of access to, or utilisation of, prenatal care can come about.

5.68 None of the results quoted enable us to deal with the question of the relative importance of inequalities in provision or utilisation of health services on the one hand and other forms of inequality on the other in determining inequalities of outcome. (Although it is noteworthy that provision of physicians is more equal on a regional basis in England than even in the Netherlands.) An aspect of this question is that of the intervention of social class or related factors between morbidity and use of health services. Is it commonly the case that working class, or low income individuals or families have less recourse to the health services when they are sick? There are relatively few studies to draw upon.

5.69 One important one was carried out by Purola et al in Finland in 1964, just prior to the introduction of much expanded health insurance (Sickness Insurance Act) which for the first time covered primary medical care. Methodologically this study, like the General Household Survey, was based on a questionnaire administered to a representative sample of non-institutionalised families (not households). Questions covered self-reported morbidity, use of health services, income etc. The most important conclusion for our present purposes was that the number of consultations with a GP in a given period of time was proportional to income, when number of days of reported sickness was held constant. A similar relationship obtained in the case of the chronic sick. On the other hand, the number of days spent in hospital was not a function of income. Moreover, since it was

known that incomes in rural areas were lower than in urban areas, and had been established that distances to physicians were greater in rural areas and that consultation rates were inversely proportional to distance, the effects of income were examined holding both morbidity and distance constant. The effects of income on GP consultation rates and those of distance were independent of each other (Purola, 1968).

- 5.70 The Finnish Sickness Insurance Act was designed to reduce the financial disincentive to making use of physicians' services. It does not appear however that organisational or financial arrangements can wholly compensate for income inequalities in bringing about parity of usage.
- 5.71 An analysis by Salkever of data collected in 5 countries with very different health systems (Liverpool, Helsinki, Lodz, Baltimore and NW Vermont, and an area of Saskatchewan) - in the context of a WHO study - throws some light on this (Salkever, 1975). Relating probability of contacting a physician to an index of (perceived seriousness of condition; days restricted activity; days in bed), for various income levels, Salkever found first that in all cases except Saskatchewan low income children fared worse. That is, their reduced utilisation was independent of the organisation and costs of health care. Among adults, it appeared that the clearest association of low income with low utilisation was found in Liverpool. If American and French experiences are any guide, this is one aspect of the cause of health inequality which can be corrected.

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CHAPTER 6

EXPLANATION OF HEALTH INEQUALITIES

6.1 Standardised death rates in present day Europe have probably reached their lowest point in the entire history of human society. The twentieth century has witnessed a dramatic decline in the rate of infectious disease, as well as the introduction of powerful therapies for its treatment. Common causes of death which have thus greatly diminished, such as TB and diphtheria, were often linked to poverty and material deprivation. They have been replaced by new diseases, some of which seem instead to be linked with affluence and material abundance. On that account inequalities in health might have been expected to diminish. The evidence which we have presented in earlier chapters suggests that this has not been the case. We must now address ourselves to the question of why social class should continue to exert so significant an influence on health in Britain.

6.2 There are a number of approaches to explanation of the relationship between social class and health, or at least some aspect of it, in the present day. In our view none of these approaches provides a wholly satisfactory explanation of the relationship, or one that can account for life cycle differences in the influence of social class on the risk of premature death. Indeed the variable of social class is in itself multi-faceted and its influence probably varies according to age or stage in the life cycle and according to the development sequence of a disease episode itself.

A. THEORETICAL APPROACHES

6.3 At the most fundamental level, theoretical explanations of the relationship between health and inequality might be roughly divided into 4 categories:-

- i. artefact explanations;
- ii. theories of natural or social selection
- iii. materialist explanations; and
- iv. cultural/behavioural explanations.

In some partial respect each one of these explanatory forms sheds some light on the observed relationships between class and health in present day Britain. We will first describe and discuss in general terms the four approaches, and then

go on, by reference to the problems of different age-groups, to show that a satisfactory explanation must build essentially on the ideas of the cumulative dispositions and experience of the whole life-time, and of multiple causation.

The Artefact explanation

6.4 In this approach to the analysis of the relationship between health and social class, emphasis is placed on the "artificial" nature of the correlated variables. Both health and class are artefacts of the measurement process and it is implied that their observed relationship may itself be an artefact of little casual significance. Hence the suggestion that continuities in the pattern of health inequality in the twentieth century may be more a reflection of changing trends in the occupational structure of British society than of a causal link between material welfare and health (see OPCS, 1978). Shifts in the occupational structure have led to the decline of certain "traditional" partly skilled and unskilled manual occupations (Registrar General's Social Classes IV and V). Those men and women who continue to follow such trades tend therefore to be older on average than the rest of the active labour force because fresh entrants have been attracted to new job opportunities or they may be in 'residual' occupations which have always had a poor health record. (This evolution in the social structure has of course been accompanied by some change in ethnic composition of the population.)

6.5 Thus the failure of health inequalities to diminish is believed to be explained to a greater or lesser extent by the reduction of the proportion of the population in the poorest occupational classes (the implication being that the upwardly mobile either had better health than those who remained and that the health of some of the latter could even have since improved; or that the health of the upwardly mobile subsequently improved).

6.6 One of the problems here is that because of changes in occupational classification the change in recent decades in the distribution of population between the classes, and especially the "decline" in the proportion in class V, has been believed to be larger than in fact it has been (see Table 3.16 above). Table 6.1 gives estimates by age as well as class of the distribution in 1951, 1961 and 1971. For men aged 25 and over the percentage in class V declined from 11 to 8 and in class IV from 27 to 18 in the 20 years 1951 to 1971 (most of the corresponding increase taking place in class II, but also class I). However, the rate of change slowed down in 1961-1971 and it can be seen that between a fifth and a quarter of those in the youngest age-groups continued to be found in classes IV and V. Overall, substantially more than a quarter of economically active men remained in classes IV and V in 1971.

TABLE 6.1

Percentage of men aged 25 and over in five occupational classes in 1951, 1961 and 1971 (England and Wales), according to 1960 (and 1970) classification of occupations

Age	Year	Professional I	Intermediate II	Skilled III	Partly Skilled IV	Unskilled V
25-34	1951	2.1	7.9	54.5	26.8	8.6
	1961	5.3	12.9	55.9	18.4	7.5
	1971	7.5	18.1	53.2	15.2	6.1
35-44	1951	2.1	12.6	49.0	26.7	9.8
	1961	4.3	16.6	53.4	18.8	6.9
	1971	6.2	20.7	50.5	16.1	6.6
45-54	1951	1.9	13.1	43.5	28.5	12.9
	1961	3.3	18.8	48.5	21.1	8.2
	1971	4.8	21.3	48.8	17.9	7.3
55-59	1951	1.8	14.0	39.9	29.5	14.7
	1961	2.9	17.8	45.0	23.5	10.8
	1971	4.0	20.5	46.3	20.2	9.1
60-64	1951	1.7	13.6	38.3	30.0	16.3
	1961	2.6	17.5	42.7	24.5	12.7
	1971	3.7	18.7	45.3	21.4	10.9
65-69	1951	1.9	13.3	42.6	29.1	15.0
	1961	2.7	17.9	41.8	24.5	13.1
	1971	3.4	17.2	43.2	22.5	13.7
70+	1951	1.9	14.7	46.1	25.4	11.8
	1961	3.2	19.2	41.7	24.0	11.9
	1971	3.3	19.4	44.0	21.6	11.8
Total	1951	1.9	11.9	47.1	27.5	11.5
	1961	3.9	16.8	49.3	21.0	9.0
	1971	5.2	19.7	48.8	18.1	8.3

Note: An attempt has been made in this table to allow for changes of classification brought about after the introduction of the 1960 Classification of Occupations (there were only a few further changes in the 1970 classification and the figures from the 1961 and 1971 Censuses did not need to be adjusted before being compared). However, for 1951 we have changed the figures for each age-group by the proportion suggested for all age-groups in an exercise reported in The General Report, General Register Office, Census 1961, Great Britain, London HMSO, 1968, p 193. The 1961 data were

re-classified for a sample using the 1951 classification and compared with the 1961 data classified according to the 1960 Classification of Occupations. We have worked back to the 1951 data for social classes and changed the figures for each class by the proportion suggested by the results of the exercise carried out by the GRO. The 1951 figures given above must be treated as approximate only. But they are more nearly comparable with the 1961 and 1971 Census results than the figures published in the 1951 Census reports.

Source: General Register Office, Census 1951, England and Wales, Occupation Tables, London, HMSO, 1956.
General Register Office, Census 1961, England and Wales, Occupation Tables, London, HMSO, 1966, Table 20.
Office of Population Censuses and Surveys, Census 1971, Great Britain, Economic Activity Tables, Part IV, London, HMSO, 1975, Table 29.

2. Natural and social selection

- 6.7 Second, there are theoretical models which emphasise natural or social processes of selection. In this approach, social class is relegated to the status of dependent variable, while health itself acquires the greater degree of causal significance. The occupational class structure is seen as a filter or sorter of human beings and one of the major bases of selection is health, ie physical strength, vigour or agility. It is inferred that the Registrar General's class I has the lowest rate of premature mortality because it is made up of the strongest and most robust men and women in the population. Class V by contrast contains the weakest and most frail people. Put another way, this explanation suggests that physical weakness or poor health carries low social worth as well as low economic reward, but that these factors play no causal role in the event of high mortality. Their relationship is strictly reflective. Those men and women who by virtue of innate physical characteristics are destined to live the shortest lives also reap the most meagre rewards. This type of explanation has been invoked to explain the preponderance of individuals with severe mental disorders in social class V (a thesis which was reviewed critically in, for example, Goldberg and Morrison: 1963). It is assumed that affected people inevitably drift to the bottom rung of the Registrar General's occupational scale. Similar selective processes are thought to occur with other forms of disease even though the extent of drift may not be so great.
- 6.8 Another problem to which this mode of reasoning has been applied is the distinct regional pattern exhibited by mortality rates. In this case, the national economy is conceptualised as a mechanism of selection. Those parts of the UK with low rates of age-specific mortality and, by implication, apparently more fit populations, are

also believed to be regions where the economy is in a relatively healthy state and where job opportunities are better. This regional imbalance in economic vitality is associated with a trend in human migration which systematically drains the depressed industrialised regions of their fittest men and women. The net result is believed to be reflected in the differential regional pattern of age-specific mortality. Processes of selection may also influence the distribution of mortality between occupations. In certain types of manual work, the level of physical strength and stamina required may in itself act as a means of selecting or rejecting individuals. As a consequence although a given occupation might carry obvious hazards to the physical welfare of a worker, its tendency to attract and keep only the physically robust may disguise these inherent dangers (cf Fox and Collier, 1976). Thus it may be misleading to infer, on the basis of death rates, the level of health risk attached to different occupations; to do so is to assume that the pattern of recruitment is random rather than systematically exclusive.

3. Materialist or structural explanations

- 6.9 The third general type of explanation of the relationship between class and health emphasises the role of economic and associated socio-structural factors in distribution of health and well-being. There are many separate strands of reasoning within its explanatory rubric which can be more or less ordered according to the extent to which the primary causal significance is assigned directly or indirectly to the role of economic deprivation. Amongst explanations which focus on the direct influence of poverty or economic deprivation in the production of variation in rates of mortality is Marx's radical critique. This theory of political economy provides a theory of history linked to an explanatory account of the contemporary form and inevitability of economic exploitation.
- 6.10 Those associated with such a radical approach see health or the physical welfare of workers as a key dependent variable determined by the system of production which also gives a particular character to the culture and the ideology of society. Not all follow Marx and those who do risk interpreting modern problems in a way which he would not necessarily have approved. Crudely expressed in its original form, the argument was as follows. Capitalism is in essence a system of economic organisation which depends on the exploitation of human labour. The accumulation of profit, the guiding principle not only of the economic system, but of the whole form of capitalist social organisation, is the storing up in tangible form of the human effort and resources expended by individual workers over and above what they either require or

have been allowed, to maintain their bodies in a fit and healthy condition. Marx did not use the modern concept of health in his analysis and was primarily concerned with the material welfare of human beings. This is reflected in his theory of "immiserisation" which assumes a minimum subsistence level which capitalist social organisation systematically violates through its greed for profit. In the process of immiseration the worker experiences economic deprivation on an ever increasing scale until finally he is left with insufficient resources to maintain bodily health.

6.11 Placed in its historical context Marx's analysis can be seen, at least in part, as a counter critique to Malthusian theory which saw the relationship between death, disease and poverty as a natural phenomenon: the demographic safety valve of the fixed relationship between population size and the natural level of material wealth in the world. Marx's antidote to this "naturalistic" theory of social inequality stressed the potential elasticity of material production under the capitalist mode of production, while at the same time drawing attention to its dependency on an unequal distribution of resources as well as its inherent tendency to promote material inequality in health as well as property between human beings.

6.12 Most modern proponents of Marxist theory do not interpret the process of material exploitation in terms of human bodily resources, and tend to measure surplus value in terms of wealth or property, the factors into which human labour is transposed. With the benefit of a century's hind-sight the validity of much of this nineteenth century theory of the relationship between health and material inequality has been accepted today, especially for the earlier phase of competitive industrial capitalism (G F Stedman-Jones 1971; Thompson, 1976). Exploitation, poverty and disease have virtually become synonymous for describing conditions of life in the urban slums of Victorian and Edwardian cities, as they are today for the shanty towns of the underdeveloped world.

6.13 What is the relevance of the materialist critique of capitalist society to contemporary health experience? Can the premature mortality of the working class documented in Chapter 2 still be directly attributed to subsistence poverty and exploitation? It is true a relationship between material deprivation and certain causes of disease and death is now well-established, but then so is the capacity of the capitalist mode of production to expand the level of human productivity and to raise the living standards of working people. Economic growth of the kind most readily associated with the European style of industrialisation has in itself been credited with the decline in mortality from infectious disease during the nineteenth and twentieth centuries

(cf McKeown: 1976; Powles: 1975). Today death rates for all age groups in Britain are a fraction of what they were a century ago and many of the virulent infectious diseases have largely disappeared, (cf Morris, 1975; OPCS 1978), and the "killer" diseases of modern society - accidents, cancer and heart disease - seem less obviously linked to poverty. Against this background, the language of economic exploitation no longer seems to provide the appropriate epithet for describing "Life and Labour" in the last quarter of the twentieth century. Through trade union organisation and wages council machinery it is now argued that labour is paid its price and, since health tends to be conceptualised in optimum terms as a fixed condition of material welfare which, if anything, is put at risk by affluent living standards, it is assumed by many that economic class on its own is no longer the powerful determinant of health that it once was.

- 6.14 The flaw in this line of reasoning is the assumption that material subsistence needs can be uniquely and unambiguously defined in terms independent of the level of economic development in a society. People may have too little for their basic physiological needs. But poverty is also a relative concept, and those who are unable to share the amenities or facilities provided within a rich society, or who are unable to fulfil the social and occupational obligations placed upon them by virtue of their limited resources, can properly be regarded as poor. They may also be relatively disadvantaged in relation to the risks of illness or accident or the factors positively promoting health.
- 6.15 The structure of living standards has been slow to change in Britain. Personal wealth is still concentrated in the hands of a small minority of the population, as the reports of the Royal Commission on the Distribution of Income and Wealth have most recently shown (see Appendix 6, Table A6.1).
- 6.16 The question of whether the richest men and women in Britain have maintained their economic position at the expense of less well endowed citizens eludes a categorical answer. The Royal Commission on the Distribution of Income and Wealth has referred to the "remarkable" stability of the unequal distribution of income over the past 2 decades. (See also Appendix 6, Table A6.2). However, there is no doubt that the proportion as well as number of the population dependent on a subsistence or near-subsistence income from the State has grown. For some groups, and especially manual groups, relative life-time resources will have been reduced. Earlier retirement, unemployment and redundancies, single parent status and disablement - as well as the proportionate increase in the elderly population, all play some part in this development. For recent years Table 6.2 shows the tendency for those at the lowest relative income standards to increase in number and proportion.

TABLE 6.2

Numbers of persons in poverty and on the margins of poverty
(Family Expenditure Survey)

Income relative to supplementary benefit	Britain (000s)			
	1960a	1975	1976	1977
Under supplementary benefit standard	1260	1840	2280	2020
Receiving supplementary benefit	2670	3710b	4090b	4160b
At or not more than 40 per cent above standard	3510	6990	8500	7840
Total	7740	12540	14870	14020
Per cent of population	14.2	23.7	28.1	26.6

Notes: a. From Abel-Smith, B, and Townsend, P, The Poor and the Poorest, London, Bell, 1965, pp 40 and 44. The data are for the UK and are on a household rather than an income unit basis. It should be noted that this column is based on national assistance scales, not supplementary benefit scales.

b. Drawn separately from a supplementary benefit sample inquiry with people drawing benefit for less than 3 months excluded. In the FES, such people are categorized according to their normal income and employment.

Sources: For 1960, Abel-Smith and Townsend, 1965, pp 40 and 44. For 1975-1977, DESS (SR3) Analyses of the FES.

6.17 A paradox has thus to be noted. While we would not wish to assert that the evidence is consistent and complete, the proportion of the population with relatively low life-time incomes (in the widest sense of "income") seems to have increased in recent decades, just as the proportion assigned to classes IV and V seems to have decreased. People with low incomes are less able to gain access to the facilities and the knowledge commanded by those with high incomes. Thus whilst economic growth has improved the access of both groups to income and other resources, other groups have gained in proportion and since neither facilities nor knowledge is a finite commodity, those with relatively low income (in increasing numbers) have remained relatively disadvantaged.

6.18 So it has been with health. Social class IV or V may in time catch up with the contemporary levels achieved by I and II but by that time, the latter groups will have forged even further ahead. What is clear from all this is that there is nothing fixed about levels of physical well-being. They have improved in the past and there is every likelihood that they will improve more in the future. Meanwhile class inequalities persist in the distribution of health as in the distribution of income or wealth and they persist as a form of relative deprivation.

Poverty and Ill-Health

- 6.19 The relationship between average means and descending occupational rank is well-established in the UK - and also in other countries like the US. Reports of national surveys in both the UK and the United States for example, testify to this relationship (GHS, 1972, p188; FES reports; US, Vital and Health Statistics Series 10, no 70, 1968-69). However there is controversy about trends in the relationship between skilled manual and the lower non-manual workers (as shown in other income and earnings surveys). In a national survey carried out in 1968 the latter worked fewer hours, had larger employer welfare benefits in kind and longer holidays, had larger capital assets, were more likely to be owner occupiers and had fewer dependants. The former's overall living standards tended to be lower. The highest earnings among skilled manual workers also tended to be temporary (Townsend, 1979, Chapters 10 and 18).
- 6.20 It is on the basis of knowledge of the relationship between occupational class and family income that inferences are made about poverty and health. Unfortunately the opportunities of examining directly the association between income and health are restricted. Relatively few data about personal health can be related even to occupation and fewer still to income and to wealth.
- 6.21 More frequent adoption in studies of a more reliable measure of income is desirable (as for example in the GHS) but such a measure will not always be sufficient as an analytic variable in explaining health. Extension of the concept of income must be developed in 2 respects. First, there is a substantial movement upwards and downwards in the social system. Goldthorpe and Llewellyn have shown just how widespread mobility is, not only between generations, but for an individual male moving through his work career (Goldthorpe and Llewellyn, 1977). For example, they found that those born to fathers in their classes VI and VII (roughly equivalent to the Registrar General's III, IV and V) 43 per cent had by the time of the survey (when they were adult) moved out of these classes. Looked at in another way, of those in their classes VI and VII 31 per cent had

been born into a different class. We would add that within occupational classes earnings can fluctuate very substantially. While many non-manual occupations are "secure" in the sense that there is career expectation of incremental annual increases of salary, independent of any promotion, many manual occupations are insecure by virtue of dependence on overtime, the vicissitudes of trade and the economy generally and the tendency to move or be moved to lighter work in middle age. (See the evidence of substantial average loss of earnings during a three-year period on the part of the uppermost quartile of skilled manual earners, New Earnings Survey reports.) Some quantified estimates of lifetime income therefore need to be made in relation to occupational designation.

- 6.22 Second, during the decades since the war a growing fraction of family living standards has depended on benefits in kind. These include employer welfare benefits (sometimes in terms of accommodation and subsidised accommodation), social service benefits and owner-occupation. Methods of comprehensively and reliably valuing such resources and relating them to income have been devised but remain to be improved and accepted. The evidence relating financial poverty (causally) to ill-health is convincing, though only indirect.
- 6.23 The role played by material factors in the production and distribution of health and ill-health in contemporary times is a complex one. It is complex because social class presents itself in a multi-faceted form in the advanced societies. Apart from the variables most readily associated with socio-economic position, income, savings, property and housing, there are many other dimensions of social class which can be expected to exert an active causal influence on health status. These other dimensions are encountered in the world of work, in the conditions under which men and women earn their livelihood, in the level of danger and risk, in the degree of security and stability, in the scope for self fulfilment and job satisfaction and in the physical or mental character of the task itself. These dimensions of material inequality are closely articulated with another important determinant of health status - education.

Education and Health

- 6.24 Educational attainment, or more fundamentally, the process of individual intellectual development, is closely linked to social class. To a large extent, it is on the basis of success or the lack of it at school that children are selected for manual and non-manual work and as we have seen, this occupational distinction plays an important part in measured health status differentials. But we can go further. Bernstein has argued that distinctive patterns of child rearing and socialisation such as those which tended to differentiate between working and middle class families, produce quite different linguistic capacities which are in turn

correlated with quite different intellectual approaches to the social world (Bernstein, 1971). The working class child is rendered at a particular disadvantage on account of these differences because of the fit which exists between middle class norms of socialisation and the dominant structure of the educational system. The outcome of this is that children from middle class homes enter the school system already equipped with the appropriate mode of communication and, as a result, they have more successful educational careers and leave school with a greater facility to manipulate their social and economic environment (which of course includes health services) to personal advantage. These ideas carry the variable of education far beyond the simple idea of the transmission of knowledge and skills. They imply that education and linguistic skill are amongst the most important sources of advantage and disadvantage in both material and non-material spheres of human existence: determining the extent to which individuals are personally able to realise the level of human potential which advanced industrial civilisation has made possible. This dimension of class inequality in modern society brings us to the meeting point of the economic and the ideological in society. Should we ascribe the deprivation of linguistic, cognitive and communicative skills to economic or cultural factors? Socialisation experience is seen to play a significant role in the transmission of the crucial modern form of deprivation (and may also play a role, for example, in explaining the association between smoking and educational levels [GHS 1976] but is the practice of socialisation an entirely voluntaristic feature of social life or is it constrained by economic and occupational life? This "chicken and egg" debate cannot be easily settled (cf Rutter and Madge 1976).

Health and the National Economy

6.25 Two other lines of theoretical explanation require brief reference at this point. Each is concerned with the effects on the health of the population of macro-economic variables: levels of production and of unemployment, sectoral distribution of economic production, and so on. ⁽¹⁾ First, Brenner, making use of time series data trends in the US economy and fluctuations in rates of mortality, purports to show that recessions and wide-scale economic distress exert an impact on a number of health status indicators including foetal, infant and maternal mortality, the national mortality rate especially deaths ascribed to: cardiovascular disease, cirrhosis of the liver, suicide and homicide rates, and also rates of first admission to mental hospitals (Brenner, 1973, 1976, 1977).

(1) Studies of this kind were actually carried out by Morris and Titmuss in the 1940s, in the attempt to examine the effects of the violent economic fluctuations of the 1920s and 1930s upon a variety of health and mortality indicators (see eg Morris and Titmuss 1944a, 1944b).

In fitting the data on economic trends (essentially unemployment) to that of health status indicators, Brenner lags the latter between 2-5 years choosing the lag to obtain the best fit. By doing this, he purports to be able to estimate both the initial impact of recession on the dependent variable as well as the cumulative impact over the space of several years. Brenner posits time lags of varying numbers of years between economic change and changes in his various health indicators (on a purely empirical basis) thus establishing the direction of causality in a temporal sequence as well as suggesting the length of time involved in the development process of disease. The problem with such research is that of casual mechanism. How does unemployment increase mortality? Brenner makes use of the somewhat ubiquitous concept of 'stress' to link the two.

6.26 The second approach, in opposition to Brenner's, is concerned to disprove the common assumption (which Brenner's work supports), the economic growth leads to an increase in general levels of health. The basic theme which runs through the 'materialist epidemiology' approach is as follows. In the advanced capitalist societies, surplus value, ie the excessive extraction or exhaustion of human bodily resources and effort, in the productive process, is realised not through the depression of real wages as Marx argued during the last century, but through hazardous punishing and physically stressful work processes; human immiserisation is no longer manifested in terms of grinding poverty and deprivation, but finds expression in the spiritual and intellectual impoverishment of industrial workers. This situation is said to be the outcome of historical changes in capitalism itself. In the advanced societies, the exploitation of human labour for profit has become rationalised. Wasteful competition between small firms has been displayed by the emergence of large scale monopolies whose profits are realised not through a penny pinching approach to workers wages but through a two-fold process: massive expansion in the production of commodities, linked to the artificial stimulation of demand for them through advertising and the like. (cf. Stark, 1977). Here again it is argued that many of the commodities upon which individual families as well as Western economies depend for their livelihood are either directly poisonous or potentially dangerous for human health. But in this theoretical approach, emphasis is placed more on the process of production than on what is produced. It is in the actual process of commodity production therefore that disease is produced, through physical stress engendered by tense competitive work relations and routines and through social stress manifested in neglected or disrupted networks and relationships in the realm of domestic and community life. As demonstration of this theory, epidemiologists working in this

tradition have been sought to show the way in which changes in the business cycle correlate with changes in mortality. But here, the correlation of time series data on employment and death are presented in such a way that high rates of mortality appear to follow on from low rates of unemployment and high levels of prosperity. (cf. Eyer, 1975, 1977a, 1977b). In periods of high unemployment death rates are said to fall. This is said to result from the fact that the institutionalised pressure to consume is lessened, workers are relieved from stressful work routines, social solidarity increases, supportive relationships and networks are stimulated and human existence acquires a more varied and more elevated meaning. While not at all associated with this general theoretical approach Draper and his colleagues in Britain have been aware of the importance of certain elements within it, and have argued the negative consequences for health of indiscriminate economic growth, which can mean higher pollution, encouragement of consumption of commodities hazardous to health, and so on.

The Ameliorative Approach

6.27 Although we have so far interpreted 'materialist' or 'structural' explanations as being of a holistic, or macrostructural kind, this is not wholly the case. Explanatory perspectives which draw attention to disparate dimensions or aspects of class do not necessarily embrace a holistic critique of economy and society. Such approaches, which include that of social medicine, often stress (or empirically demonstrate) the significance of single causal variables such as insufficient income, poor or crowded housing, large families, insecure employment, manual occupations, inadequate diet or low levels of educational achievement. Such factors either singly or in combination with each other can be shown to exert an important influence on health status indicators like mortality so that they offer scope for the amelioration of inequality through special policy initiatives (Cf for example, Morris 1975; Townsend 1974; Zola and Koza 1967; Brennan and Lancashire 1978; Rainwater 1968; Cartwright and Dunnell 1972). In our report we have made, and will continue to make, much of explanations of this kind. But it must be recognised that factors such as these can themselves be explained in macrostructural terms. At what point one chooses to stop the analysis - ie what one accepts as an explanatory variable - is a matter of intellectual preference and of the task at hand.

4. Cultural/behavioural explanations

6.28 Cultural or behavioural explanations of the distribution of health in modern industrial society are recognisable by the independent and autonomous causal role which they assign to ideas and behaviour in the onset of disease and the event of death. Such explanations, when applied to modern industrial societies, often focus on the individual as a unit of analysis emphasising unthinking, reckless or irresponsible behaviour or incautious lifestyle as the moving determinant of health status (cf. Fuchs, 1974). These personal traits appear to be relevant causal agents in an historical context where the majority of premature deaths are caused by degenerative disease or motor accidents. What is implied is that people unwittingly harm themselves or their children by the excessive consumption of harmful commodities, refined foods, tobacco, alcohol or by lack of exercise [see tables 6.3, 6.4 and 6.5] or by their underutilisation of preventive health care, vaccination, antenatal surveillance or contraception. Some would argue that such systematic behaviour within certain social groups is a consequence only of lack of education, or of shiftlessness, foolishness or other individual traits. More theoretically developed as the basis for cultural/behavioural explanations is the 'culture of poverty' thesis - which has much in common with the idea of 'transmitted deprivation'.

TABLE 6.3

Food Consumption by Income Group (oz/person/week)

-GB, 1977

Income group	Food				
	white bread	brown, including wholemeal bread	sugar	potatoes	fruit
A	18	4.8	9.3	29	33
B	25	3.4	11	39	24
C	28	2.8	13	49	20
D	31	3.3	15	52	17

Gross weekly income A < £110

D < £ 40

Source: Morris (1979) adapted from Household Food Consumption and Expenditure (HMSO)

TABLE 6.4

Cigarette smoking by Socio-Economic Group - (males and females aged 16+)

1975-1976

SEG	Current Smokers %
<u>Males</u>	
professional	25
managerial	39
intermediate non-manual	40
intermediate manual	51
semi-skilled manual	53
unskilled manual	59
	—
all	47
	—
<u>Females</u>	
professional	28
managerial	36
intermediate non-manual	36
intermediate manual	43
semi-skilled manual	41
unskilled manual	39
	—
all	39
	—

Source: General Household Surveys, 1975, 1976

TABLE 6.5

Participation in active leisure pursuits: ratio of rates for male non-manual to manual workers by age

(males aged 16 or over engaging in each activity in the 4 weeks before interview)

	GB 1977		
	Age Group		
	16-29	30-59	60+
Squash/fives	4.4	6.9	*
athletics	3.3	3.3	*
rugby	2.9	*	*
golf	2.8	3.2	4.9
badminton	2.8	2.8	*
cricket	2.4	1.7	*
tennis	2.4	4.1	*
table-tennis	1.7	3.1	*
swimming outdoors	1.6	2.1	*
walking (more than 2 miles)	1.6	1.8	1.7
bowls (indoor)	1.4	1.3	1.1
bowls (outdoor)	1.4	1.4	1.6
playing football	1.1	1.6	*
swimming (indoor)	1.1	2.2	*
dancing	0.9	1.1	1.2
gymnastics/yoga/keep fit	0.9	2.1	*

* 10 or fewer participants in either manual or non-manual group

Source: General Household Survey, 1977

6.29 As originally proposed by Oscar Lewis, an anthropologist who studied poor communities in Central American and, later, migrant groups in New York, the "culture of poverty" was intended to apply only to market-organised social structure with poorly developed public systems of health, welfare and income maintenance (cf Lewis, 1967). Starting from a distinct cultural anthropological perspective, Lewis argued that human existence in any given environment involves a process of biological and social adaptation which gives rise to the elaboration of a structure of norms, ideas and behaviours. This culture over time acquires an integrity and a stability because of the supportive role it plays in helping individuals to understand and cope with their environment but, through its influence on socialisation practices and the like, it also comes to have an important autonomous influence in the social consciousness of individuals. The integrity of the culture ensures its autonomous survival even when the material base from which it emerged has changed or been modified. It is for this reason that people cling on to outmoded ideas or old-fashioned practices which do not seem to accord with the changed material realities of modern existence. In fact, the 'culture of poverty' thesis has been widely criticised by British social scientists, eg Holman (1978, Chapter 3), Rutter and Madge (1976) and Townsend (1979, pp 65-71).

6.30 Consider, for example, the diffusion of acceptance of the idea of family planning. There is general agreement that this practice was first adopted by the professional classes, from whence it diffused to classes beneath (Banks and Banks, 1964). Why should it have happened like that? To pose this question is, in essence, to question the applicability of the 'culture of poverty' thesis. One answer is surely that men and women who felt secure and in control of their material lives were most reluctant to leave reproduction to the will of God - when a means of personal control was available. The question which must be posed a century later is why some young men and women, especially in the lower occupational classes, continue to leave the procreative dimension of their lives in divine hands? Is it lack of knowledge, outmoded ideas, or lack of access to the means of contraception - or is it due to an underdeveloped sense of personal control or self-mastery in the material world? It can certainly be argued that what is often taken for cultural variation in cognition and behaviour is merely a superficial overlay for differing group capacities of self-control or mastery, which are themselves a reflection of material security and advantage.

B. TOWARDS EXPLANATION OF THE EVIDENCE ON HEALTH INEQUALITIES

6.31 Seeking to apply, and to choose between, such complex approaches to explanation (some of which, like that we have labelled 'materialist' or 'structural' themselves include competing approaches) when applied to evidence as complex as that which we have assembled, is a daunting task. Intellectual honesty demands that we make clear our belief that it is in some form or forms of the 'materialist' approach that the best answer lies. But there can be little doubt that amongst all the evidence there is much that is more convincingly explained in other terms: cultural, social selection, and so on. Moreover it may well be that different kinds of factors, or forms of explanation, are appropriate to different stages of the life cycle. This possibility has guided our presentation of data for explanation.

1. Birth and Infancy

- 6.32 The beginning of the human lifetime, birth itself and the first year of life, has witnessed amongst the most spectacular declines in mortality of all age groups during the last century (cf OPCS 1978). Between 1846 and 1976, death rates for infants of less than one year fell by more than 90 per cent and yet at the beginning of the 1970s the ratio of deaths for infants in social class V compared to social class I was between 4 and 5 to 1. How can this inequality amidst so much improvement be explained?
- 6.33 In the present day the cases of childbirth involving the greatest risk are those where the mother is older and where she has already produced several children. Such cases were, of course, more prevalent in Victorian society where knowledge about birth control was scant and where rather different ideologies about family size existed. In recent years the percentage of mothers in classes IV and V having a fourth or fifth child has decreased, but remains higher than in classes II and III. Class I produces a relatively large number of 4 and 5 child families. It may be that higher rates of stillbirth, or perinatal death, are a consequence of differences in maternal age and parity between the classes.

TABLE 6.6

Still births and post-neonatal mortality rates by occupational class, age and parity, 1975-6

Age and parity	Stillbirths ⁽¹⁾			Post neonatal deaths ⁽²⁾		
	I + II	IV + V	Ratio	I + II	IV + V	Ratio
<u>No previous births</u>						
25 years	7.8	12.2	1.6	2.6	5.2	2.0
25-29 years	8.4	13.2	1.6	2.3	3.1	1.3
30 years	11.5	22.1	1.9	2.7	3.3	1.2
<u>1-2 previous births</u>						
25 years	6.6	7.9	1.2	5.0	9.6	1.9
25-29 years	6.2	9.2	1.5	3.2	4.5	1.4
30 years	7.4	14.1	1.9	2.8	4.1	1.5
<u>3+ previous births</u>						
25 years	7.1	12.3	1.7	14.3*	15.1	1.1
25-29 years	11.5	15.6	1.4	5.3*	8.4	1.6
30 years	11.4	22.1	1.9	3.0	6.2	2.1

Source: Medical Statistics Bureau, OPCS 1978, Social and Biological Factors in Infant Mortality, 1975-76.
Occasional Paper No.12, Table 6, p.16

Notes: (1) Rates per 1,000 total births.

(2) Rates per 1,000 live births.

Ratios IV+V/I+II

* Less than 20 events.

6.34 However, as table 6.6 indicates, class inequalities in rates of death at birth and throughout the first year of life are found even when parity and maternal age are held constant. While age and parity exert an important influence on the risk of all stillbirths, the significance of these variables is much more evident among the wives of semi-skilled and unskilled manual workers. The risk of stillbirth for the wives is professional and managerial households is lower no matter what their age or their previous record of pregnancies.

(Similarly for perinatal death rates: at all ages and parities, the class differentials remain.) Rates of post neonatal mortality differ somewhat. Once again the variables of age and parity are more significant sources of differentiation among underprivileged women, but the pattern is different. Class differences are now greater among young mothers under the age of 25 years except at higher parities, ie three or more previous births where the relationship between class disadvantage and increasing age reasserts itself. The conclusion which must be drawn from Table 6.5 is that occupational class differences are real sources of difference in the risk of infant mortality and not merely proxies for the variables of maternal age and parity.

6.35 Also to be explained are similar differences in the class incidence of low birth weight for, as we shall see, this is a handicap which (except under the most advantageous conditions) has long-term implications for the health and development of the neonate.

6.36 Examining the historic decline in perinatal mortality rates Hellier (1977) has established that over half can be attributed to such factors as mother's health and quality of obstetric care. Similarly, Doll, Hill and Sakula (1960) suggest that variations in the incidence of congenital malformations can largely be attributed to the nutritional status of the mother and the presence/absence of viral infections in pregnancy (eg influenza). In the light of the evidence which we have presented there can be no doubt that mothers' health, nutrition, and obstetric care received (given differences in date of presentation) are all class related.

6.37 Other explanations of early death, low birth weight, and congenital abnormalities which the literature yields are more complex. Lawrence, Carter, and David (1968), for example, suggest that genetic factors play a 'predisposing' role in giving rise to congenital defects - adverse environmental factors acting as a 'trigger'. Janerich (1972) comes to a similar conclusion. Illsley's work shows a mechanism for such genetic predisposition to become class-related.

6.38 Class differences in infant mortality have been ascribed to selective processes in mating and marriage. Illsley (1955) carried out a study of infant deaths in which he investigated patterns of hypergamy and hypogamy in relation to the physical characteristics of the mothers. He found distinctive patterns in relation to variables like height. Tall women showed a marked propensity to marry hypergamously (ie to be upwardly mobile at marriage, short women showed

the opposite tendency - to marry below their father's social class. These inherent physical characteristics of women were then translated into differential rates of infant mortality; the mothers of greater stature having lower rates of infant death. Illsley concluded that social class differences in social class differences in infant mortality had a physical component: higher class men appeared to be recruiting as wives the most efficient child-bearing women.

6.39 Baird's thesis of 'transmitted nutritional deprivation' offers another variant on the explanatory theme of selection (Baird, 1974). He suggests the existence of a vicious cycle of nutritional deprivation which leads to low birth weight and congenital malformation. This cycle is difficult to break because it originates in the nutritional deprivation of the mother, not at the time of giving birth, but at the time of her own birth. By this account, perinatal death and low birth weight are seen as caused by the effects of nutritional deprivation upon the reproductive capacity of female infants. These explanations are based upon data accumulated on the childbearing population of Aberdeen over many years and they offer important insights into the mechanisms and processes whereby social class differences in mortality are produced and perpetuated.

6.40 If the relative importance of factors such as all of these in determining rates of perinatal death (and of handicap among survivors) is controversial, the situation is somewhat clearer in the post-neonatal period. When we look at the causes of death in infancy which exhibit the steepest class gradients, there seems to be much evidence to suggest that the important causal variables are contained within the contemporary socio-economic environment and therefore subject to human intervention in the short term. As Figure 2 in Chapter 2 clearly indicates, the causes of infant death which are most likely to be associated with the stature or the nutritional status of the mother have the shallowest of gradients, whereas respiratory disease and accidents show steep class gradients. These observations lead us directly to consider the role of material deprivation on the life chances of the newborn.

6.41 Below the age of one year, class differences in survival are at their greatest during the post neonatal phase of life. This clearly represents a point of development when the individual is in need of almost continuous care and total attention from its parents and we may hypothesise that any factors which increase the parental capacity to provide adequate care for an infant will, when present, increase the chance of survival, while their absence will increase the risk of

premature death. The most obvious such factors fall within the sphere of material resources: sufficient household income, a safe uncrowded and unpolluted home, warmth and hygiene, a means of rapid communication with the outside world, eg telephone or car, and an adequate level of man - or woman power (ie two parents would normally provide more continuous care and protection than one). In addition to these basic material needs must be added other cognitive and motivational factors which are not independent of the distribution of material advantage. Those factors would include knowledge, certain skills and resources in verbal communication and a high level of motivation to provide continuous and loving care. When all these factors are present the infant's chance of survival is very good indeed. When some or even many of these are absent, then the outlook is less propitious. Moreover, it should not be forgotten that these very same factors play a part in determining the development of the infant's own cognitive/linguistic and other skills. Competences acquired at this stage of life can profoundly influence later intellectual (and hence educational) achievement.

Health Inequality in Childhood (1-14 years)

6.42 The evidence for health inequality between children in the different social classes presents something of a paradox. Rates of mortality throughout childhood form quite steep class gradients when parental occupation is used as a basis of presentation and yet, as the evidence in Chapter 2 shows, self-reported rates of morbidity for this age-group display a rather less consistent picture of disadvantage. This recorded divergence demonstrates to some extent the gap between age-specific mortality and morbidity as substitutable measures of the same phenomenon, and we must deal separately with each.

6.43 The most important causes of death amongst all children aged 1-14 were (in descending order): accidents poisoning and violence; respiratory disease; neoplasms; congenital abnormalities; and infections. Among 1-4 years olds, and this we wish to stress, almost all the differences in mortality rate between social classes I and V is due to: accidents, poisoning and violence; respiratory disease; and congenital abnormalities (which of course play a more important role at younger ages). Among older children, deaths from accidents, poisoning and violence remain highly class related (Table 6.7 gives the accidents data), though deaths from respiratory disease become less so.

TABLE 6.7

Fatal accidents in childhood by sex and social class - (1-14 years)

	Social Class						All	Ratio V/I
	I	II	IIIN	IIIM	IV	V		
Boys	25.8	39	44.5	56.3	66.2	122	586	4.7
Girls	18.8	19	21.4	24.9	35.1	63.1	29.4	3.4
Sex Ratio	1.36	2.05	2.08	2.26	1.88	1.93	1.99	

Source: Occupational Mortality 1970-72

Rates per 100,000 population.

6.44 Since a great deal of the class differential in mortality among 1-4 year olds is due to just two causes: respiratory disease, and accidents and violence, one approach to explaining this inequality is by unraveling those aspects of social situation, of way of living, responsible for respiratory disease and accidents/violence - and which may then prove to be closely associated with social class. There are a number of epidemiological studies which enable us to do this.

6.45 Reviewing clinical examinations of the 1946 birth cohort up to the age of 15, Douglas and Waller (1966) found that the principal correlate of respiratory symptoms was the extent of air pollution in the children's area of residence. There was no tendency for working class children to be more concentrated in high pollution areas, and social class had a small independent effect. A study of 2,000 children living in Harrow (which did not permit consideration of a range of air pollution levels) concluded (Leeder, Corkhill, Irwig, Holland and Colley, 1976): "illnesses occurred much more commonly in infants born to families which had several other children already, and in those families where the parents had respiratory disability or were smokers". When all relevant variables were taken together in a logistic model, the most important proved to be:

1. bronchitis/pneumonia in siblings
2. parental smoking
3. number of siblings
4. parental history of asthma/wheeze.

Social class had no effect independently of these factors. It may thus be that much of the class gradient in morbidity (if not mortality) from respiratory disease can be explained in terms of parental smoking (ie secondary inhalation of smoke) and size of family (and the likelihood of infection by siblings). Both smoking and family size are clearly related to class.

6.46 Colley and Reid's (1970) study of over 11,000 children aged 6-10 in a number of urban environments were concerned with the interplay of social class and physical environmental variables. Here too, a past family history of respiratory disease was associated with chronic cough in the 6-10 year olds (who were examined by school medical officers). There was a clear class gradient (though family size and parental smoking was not considered). There was a rather complex relationship with air pollution levels. Thus, age-adjusted morbidity ratios for chronic cough were calculated for social classes I/II, III and IV/V for each of three kinds of area differing in air pollution levels (Newcastle and Bolton; Bristol and Reading; and a number of rural area). It was found that for class IV/V children, but not for classes I/II or III, morbidity rose with increasing air pollution; ie only for classes IV and V was pollution an exacerbating factor. (For all classes, morbidity was distinctly higher in Wales, even in rural Wales where pollution was lower. This was felt to require explanation in genetic terms or in terms of selective emigration). Colley and Reid argued that geographic variations within classes IV and V could not be explained by domestic circumstances such as differing levels of crowding (which were not great).

6.47 Finally we might refer to analysis of data from the US National Health Survey (which, like the GHS, is based on self-reporting). Speizer, Rosner and Taget (1976) found "a strikingly higher prevalence of reporting asthma and bronchitis in children over 4 years residing in the same household as a parent with CNSLD (chronic non-specific lung disease)..... [this] is not due to confounding by age, sex or smoking. Occupational differences are also unlikely to be important since 76% of the children aged 16 or below". Their conclusion is that the principal factor is a "familial (household) aggregation of disease". This they take to be due to a combination of genetic and environmental factors. Evidence for the relevance of the former was the six-fold excess of disease in children with both parents having CNSLD compared to those with only one. Higgins and Keller (1975) provide further evidence for some genetic factor in transmission. [In general, evidence on the genetic contribution to health inequalities tends to be indirect: little is really known of the importance of genetic factors].

6.48 The general implication of these studies seems to be that the class gradient in bronchitis among children is largely a consequence of parental smoking, family size (and the increasing likelihood of infection by siblings), and a parental history of lung disease (which may to some degree genetically place the child at risk). Parental history of lung disease is also, as shown independently, a function of type and severity of occupation. Environmental pollution is also implicated, and may be a particular danger for those children (from classes IV and V) rendered prone through other factors.

TABLE 6.8

Causes of death from accidents of children aged 1-16 years 1968-84

Type of accident or violence	Total age 1-14 years		Age in years					
			1-4		5-9		10-14	
	Number	%	Number	%	Number	%	Number	%
<u>Total accidents and violence</u>	10,887	100.0	4,371	100.0	3,712	100.0	2,794	100.0
<u>All accidents</u>	10,204	93.8	4,017	91.9	3,566	96.1	2,633	94.2
Motor vehicle collision with pedestrian	3,656	33.6	1,146	26.2	1,739	46.8	771	27.6
Other motor vehicle collisions	1,199	11.0	211	4.8	378	10.1	614	22.0
Other transport accidents	619	5.7	153	3.5	198	5.3	268	9.6
Accidental poisoning	276	2.5	181	4.1	35	0.9	60	2.1
Falls	625	5.7	285	6.5	155	4.2	165	6.6
Fires	904	8.3	629	14.4	210	5.7	65	2.3
Natural and environmental factors	47	0.4	20	0.5	6	0.2	21	0.8
Drowning	1,401	12.9	608	13.9	524	14.1	269	9.6
Inhalation of food or other object	343	3.2	252	5.8	51	1.4	40	1.4
Accidental suffocation	375	3.4	211	4.8	47	1.3	117	4.2
Blows, cuts, explosions etc	460	4.2	195	4.5	135	3.6	130	4.7
Accidents caused by electric current	150	1.4	60	1.4	42	1.1	48	1.7
Surgical and medical complications and misadventures	24	0.2	17	0.4	4	0.1	3	0.1
Other accidents	125	1.1	47	1.1	36	1.0	42	1.5
<u>Total violence</u>	673	6.2	356	8.1	156	4.2	161	5.8
Suicide	33	0.3	0	0	0	0	33	1.2
Homicide	417	3.8	248	5.7	95	2.6	74	2.6
Injury undetermined whether accidentally or purposely inflicted	223	2.1	108	2.5	61	1.6	54	1.9

Source: OPCS

6.49 The second condition responsible for much of the gradient in child mortality at ages 1-4 was accidents and violence of which, as Table 6.8 shows, accidents were the principal cause of death. The increased risk of death faced by lower class children in ordinary everyday activities such as playing at home or in the neighbourhood or (among older children) travelling to school by foot or bicycle, has to be viewed in terms of differences in the environment to which children from different classes are typically exposed. Among child pedestrians, for example, the risk of death from the impact of a motor vehicle is multiplied by 5-7 times in passing from class I to class V; for accidental death caused by fires, falls and drowning, the gap between the classes is even greater. These differences demonstrate the non-random nature of accidents as a collective class of events. While the death of an individual child appears as a random misfortune, the overall distribution clearly indicates the social nature of the phenomena. How is it to be explained?

6.50 From among the different modes of explanatory reasoning outlines above, we may quickly dispense with those which attribute causality to the influence of selection or which reduce the problem to an artefact of the measurement process. Accidents have two primary causes: either environmental hazard, or dangerous behaviour reflecting carelessness, adventure or irresponsibility. These primary causes involve both material and cultural factors and indeed a full explanation of inequalities in the risk of death in childhood implicates each of them.

6.51 As Table 6.7 shows, while boys in all social classes bar I experience double the risk of a fatal accident of girls, the gap between the social classes is much more striking most especially for boys. When the two extremes of the occupational spectrum are compared it can be seen that children in the lowest social class are almost five times more likely to die before reaching school leaving age. The sons of other manual workers carry over twice the risk of accidental death. The loss of these lives so early in the lifetime, surely reflects the interaction of both material and cultural factors.

6.52 The consistency of the sex differential in each social class is a measure of differences in the way in which boys and girls are socialised. Patterns of child-rearing for all social classes with the exception of professional households, appear on the basis of Table 6.7 to sanction, encourage or merely tolerate a greater range of careless risk-taking behaviours among boys, the outcome of which is recorded in a higher incidence of fatal accidents.

6.53 Health inequalities in childhood expressed in the form of mortality rates can therefore be seen to be at least in part the reflection of cultural practices in socialisation. In the modern world there is nothing obligatory about the different preferences which parents show towards the behaviour of their sons and daughters; a fact which is perhaps reflected in the reduced sex ratio of social class I and which offers some scope for a reduction in this specific form of inequality. Class differences between children in the risk of accidental death, too, may appear in part as a manifestation of distinctive patterns of child-rearing on the part of parents in the different occupational classes. But such "patterns" have to be seen in the light of the great differences in the material resources of parents, which may place significant constraints on the routine level of care and protection that they are able to provide for their children. Children of parents in social classes IV and V are amongst the poorest members of their age group in the population. Their opportunities to play safely within eye - or earshot of their parents are far fewer than those of their better endowed peers higher up the social scale. Furnishings, including forms of heating in the home, are likely to be less safe, as are the other domestic appliances which they encounter.

6.54 These manifestations of the differences in the material resources of households mean also that the children of semi and unskilled workers are more likely to be thrown onto their own devices during holidays and out of schools hours, and this alone would be sufficient to increase the probability of their being involved in an accident. In reflecting upon these forms of health inequality in childhood and adolescence it is impossible to escape the conclusion that the physical welfare of children is closely linked with material resources, and that the distribution of the former is a reflection of the distribution of the latter. In the context of childhood therefore, the most straightforward of materialist explanations is capable of providing a simple chain of causation by which the pattern of health inequality is illuminated. Households in social classes IV and V simply lack the means to provide their children with as high a level of protection as that which is found in the average middle class home. These resources consist of income, property and territorial space but they may also take an associated non-material form. As Brown and Harris concluded on the basis of their research in Camberwell, one of the reasons for the greater prevalence of accidents in working class homes is the higher incidence of stressful life events experienced by mothers. Such women, who lack the means to resolve the recurrent setbacks which dominate their domestic lives, are

less well equipped to provide continuous and vigilant protection and care to their children:

"The mother's psychiatric state and the presence of a serious long-term difficulty or a threatening life event were related to increased accident risk to children under 16. These factors were more common among working class children, and in so far as they are causal, they go a long way to explain the much greater risk of accidents to working class children." (Brown and Harris, 1978).

Because Brown seeks to link aetiological factors back to social structural differences which both generate them and determine the severity of their impact, his work provides a unique link with the second approach to the explanation of health inequalities.

- 6.55 The second, methodologically distinct, approach, which also enables us to make sense of differences in morbidity among children (including self-reported data on both morbidity and GP consultations), focuses upon characteristics of life in the deprived household. A valuable recent such study has focused upon 6-7 and 10-11 year old boys from severely deprived large families in Birmingham, known to the social services department. Children were compared with a control group of similarly aged children, living in the same area but not under social service department supervision. The study fell into, and was published in, two parts.
- 6.56 In the first Brennan focused upon medical characteristics (Brennan, 1973), but interpreted broadly. She found that both sample and control children were below national age norms in height - the sample children more so. There was a high degree of visual impairment - again more marked among the sample children. (Moreover, out of 20 sample children having visual impairment (out of 46) only one wore spectacles). There was a higher degree of hearing loss among children. Finally 78.2% of sample children (and 58.9% of control children) were diagnosed as having some illness on clinical examination (far higher than indicated for the city as a whole from school health records): the most important were respiratory disorders, orthopaedic defects, speech defects, skin disorders, and chest complaints.

6.57 The second study (Wilson and Herbert, 1978) considered also the 3-4 year old siblings of those older brothers, and made extensive use of interviews, observation over a long period, and psychological test data. This study vividly illustrates the nature and the effects of considerable poverty on family life and on child development. It suggests that ill-health, inhibited cognitive development, and behaviour problems are associated in a general 'poverty syndrome'. For example, of the 3-4 year olds in a specially established experimental play group:

"The pervading impression of the group is one of bewildered, 'lost' children, who did not know what to expect, who continued to be worried, and who seemed unable to relax; an impression which was reinforced by their very poor clothing, unkempt appearance and smell" (p64).

6.58 Accidents to the children were common: 34 out of 56 families had experienced severe accidents (1 child had lost an eye, 16 suffered burns or scalding needing skin grafts ...).

Particularly striking (once again) is the extent to which ill-health was found to cluster in families. Of the 56 families studied:-

"In forty families all, or most, members of the family were reported (ie by themselves) as having had much illness, or as suffering from defects or conditions which affected their activities. Respiratory diseases were most frequently mentioned, followed by gastric conditions and skin conditions."

Moreover, "only 4 among the 16 fitter families can be truly said to be healthy"; and obstetric problems were frequently mentioned.

6.59 The following quotations illustrate how these authors make sense of their findings:

"Thus the children, in the process of growing up, have many shared experiences. They live in overcrowded conditions, being members of large families; their homes are inadequate by current standards; the neighbourhoods are rough and disliked by most who have to live in them.

They experience poverty, by which we mean that they go short of things considered essential or normal by others around them. Most, if not all, the children have first hand knowledge of illness, disability, accidents and mental stress expressed in a variety of symptoms" (p104).

"The objective is survival, the operative unit is the family. The needs of individuals must take second place. Decisions were made at family level and related to the main wage earner or recipient of benefit rather than to the needs of individual children." (p186)

6.60 The GHS shows that acute disorders are, on the whole, more prevalent amongst the sons of non-manual parents, a pattern which is reflected in the distribution of GP consultations in childhood. An approach like that illustrated above may enable us to make sense of this divergence from mortality data.

Self-reported sickness is not a standard health indicator and it might be expected to vary between socio-economic groups as much on account of variation in cultural values, in the meaning of everyday experience, and on the degree of behavioural flexibility available to men and women in different socio-economic groups, as on the more obvious manifestations of sickness or disorder. Consultation is obviously easier for non-manual households. They are more likely to have a telephone readily to hand to make enquiries or arrange appointments, and access to private motor cars means that a visit to the GP's surgery causes less trouble and inconvenience. These sorts of differences represent inequalities in the distribution of opportunities to consult and, given that the act of consultation itself is likely to make an episode of sickness seem more "concrete", certainly more memorable, that might even make an important difference to the incidence of "remembered" - ie self-reported-sickness. Since self reports of sickness amongst children are generally provided by parents, the much higher rate among boys in non-manual households may reflect great accuracy of recall on the part of their mothers or fathers. Perhaps professional parents might be more likely to remember or to acknowledge episodes of acute sickness among children because their own daily activities may be more flexible, making it easier for them to care for a sick child or attend for medical consultation. For the opposite reasons a working class parent would be more prone to scepticism of children's complaints. If keeping a child at home presents greater disruption to the income generating activities of a household then parents might be expected to have a higher tolerance for minor disorders amongst their children.

- 6.61 At various points in this report we have indicated the importance which we attach to the promotion of health in its 'positive' sense. In childhood this may reasonably be interpreted in developmental terms, and it is relevant to consider finally research evidence relating to physical, behavioural, and cognitive development in children.
- 6.62 In a series of studies over 2 decades, Pasamanick and his associates in the USA found associations between prematurity and birth complications and a subsequent history of cerebral palsy, epilepsy, mental deficiency, behaviour disorders, reading disabilities, strabismus, hearing disorders, and autism (see eg Pasamanick et al 1956: Pasamanick and Knobloch 1960). Douglas in an analysis of IQ tests administered to children from the 1946 birth cohort aged 8 and 11 matched 'premature' babies (who had had birth weights of $5\frac{1}{2}$ lbs or less) with controls similar in terms of sex, ordinal position in the family, mother's age, social group, and degree of crowding in the home (Douglas, 1960). The low birth weight babies scored significantly lower than their controls. They also did less well in the 11+ examination. Douglas attributed this to significant differences, which he also found, in social and educational backgrounds of parents and grandparents, parental interest in school progress, etc. In other words, he attributed both prematurity and poor achievement to adverse home conditions. Drillien, however, found that children of birthweight less than $4\frac{1}{2}$ lbs contained a high proportion of dull, retarded, and grossly defective children. Below 3 lbs birthweight only 13% were of average or above average intelligence (Drillien, 1959). Illsley (1966) found a clear association between birthweight and IQ within each social class at age 7: the effects of low birthweight being greater for children born into the lowest classes. Illsley does not feel it is possible to distinguish the possible routes by which this may come about: the parallel effects of environmental influences on reproductive health and cultural background; organic impairment in utero; and genetic inheritance.
- 6.63 Birch and Gussow (1970), reviewing numerous studies from many countries, conclude that whilst a good postnatal environment can compensate for the perinatal stress associated with prematurity, an environment which is not satisfactory can represent a cumulative hazard. They argue that for children born into poverty the circumstances surrounding their development in utero and their birth may be significantly responsible for "minor disorders of perception and cognition, an increase in

impulsivity or distractability, a delay in the mastery of certain bodily functions ..." (p67).

- 6.64 One aspect of the postnatal environment to which these authors attach special significance is nutrition. There is circumstantial evidence that nutritional deprivation can affect not only external physical growth, but also the brain and central nervous system. Eichenwald and Fry (1969), amongst others, have related nutrition to learning. Birch and Gussow suggest that the effect of malnutrition upon the brain during the period in which this is growing fastest (first 6 months after birth), unlike the effect on other growth, is not fully compensable. Whilst in the case of humans there is no direct evidence that effects observed are due to malnourishment rather than other aspects of deprivation, laboratory studies of animals provide some confirmation. Here, an effect of malnutrition during the period of rapid brain growth upon brain size and number of brain cells has been demonstrated, and an effect which cannot fully be made good later. Malnutrition appears also to produce abnormal EEG patterns, in both animals and human infants. Birch and Gussow conclude (p212):

"Thus the evidence would seem to indicate that severe undernutrition during the early months of a child's life may reduce the number and size of cells in his brain as well as the extent of myelination, and that nutrition imbalance of a severe degree may produce structural changes in the brain and spinal cord, abnormal electrical activity, and pathological lesions of the central nervous system ... However ... the relationship between these findings and children's mental development is an open question, because we know too little at present about the functional implications of most of what we can learn by looking at the brain, weighing it, or its constituents, or reading the pattern of electrical activity on its surface."

- 6.65 It is, of course, less controversial to point out that "a hungry child is unlikely to be alert during lessons" (DHSS Eating for Health 1978; 43). There is, it must be reiterated, ample evidence for the association of adequate nutrition with achievement of full potential for physical growth. The importance of milk in the nutrition (and hence growth) of children has been shown in a number of studies reviewed by the Sub-Committee on Nutrition Surveillance (Report, 1973). Moreover, the lessons of the food policy introduced during

the Second World War, to ensure fair shares for all, and which resulted in one of the most rapid falls in perinatal mortality rate (between 1940 and 1948) should not be forgotten.

- 6.66 Social scientists, of course, have stressed the effects of different aspects of the impoverished early environment on intellectual development, including patterns of parenting (themselves relatable to the effects of economic stress, housing, and family size). Wilson and Herbert (1978), for example, refer to the effects of "delegation of mothering to older siblings; early severance of mother-child contact and play in the unsupervised stress play-groups, scarcity or absence of toys" for "the training of the young child in the achievement of age-appropriate behavioural standards ... language development ... the development of creative activities, power of concentration, manipulative skills" etc (p184-5).
- 6.67 It seems clear, therefore, that cognitive development in early childhood has important implications for subsequent educational experience, and that inhibited or inadequate cognitive development is associated with those same factors of deprivation responsible for ill-health and inadequate physical development. Moreover, it thus becomes possible to trace a link (all too often reinforced by social processes) to occupational ascription/attainment. At the same time, too, child ill-health has important implications for adult health (in the negative sense), as research shows.
- 6.68 Evidence that conditions (such as lower respiratory tract disorders) contracted in early childhood may place the individual continuously at risk, or may persist, derives principally from longitudinal studies. The study of 1,000 Newcastle families illustrates dramatically how repeated respiratory infections in the first 5 years, if inadequately treated, can lead to some degree of disability at age 15 (Miller, Court, Knox and Brandon, 1974: pp 94-128). This is sometimes due to permanent damage caused to the respiratory tract. In the Newcastle study 208 children aged 14 were identified as being 'at risk' of respiratory infection, on the basis of severe illness in the first 5 years and other indications, and compared with a group of 97 controls of similar age. Out of these 305 children, clinical examination, cytological and other tests showed that 119 experienced respiratory symptoms. Of these 107 came from the 'high risk' group. In 45 cases disability was substantial.

- 6.69 Studies such as these (and there are many more) suggest, as the Court Committee put it, that inadequately treated bouts of childhood illness "cast long shadows forward".

Health Inequalities in Adult Life

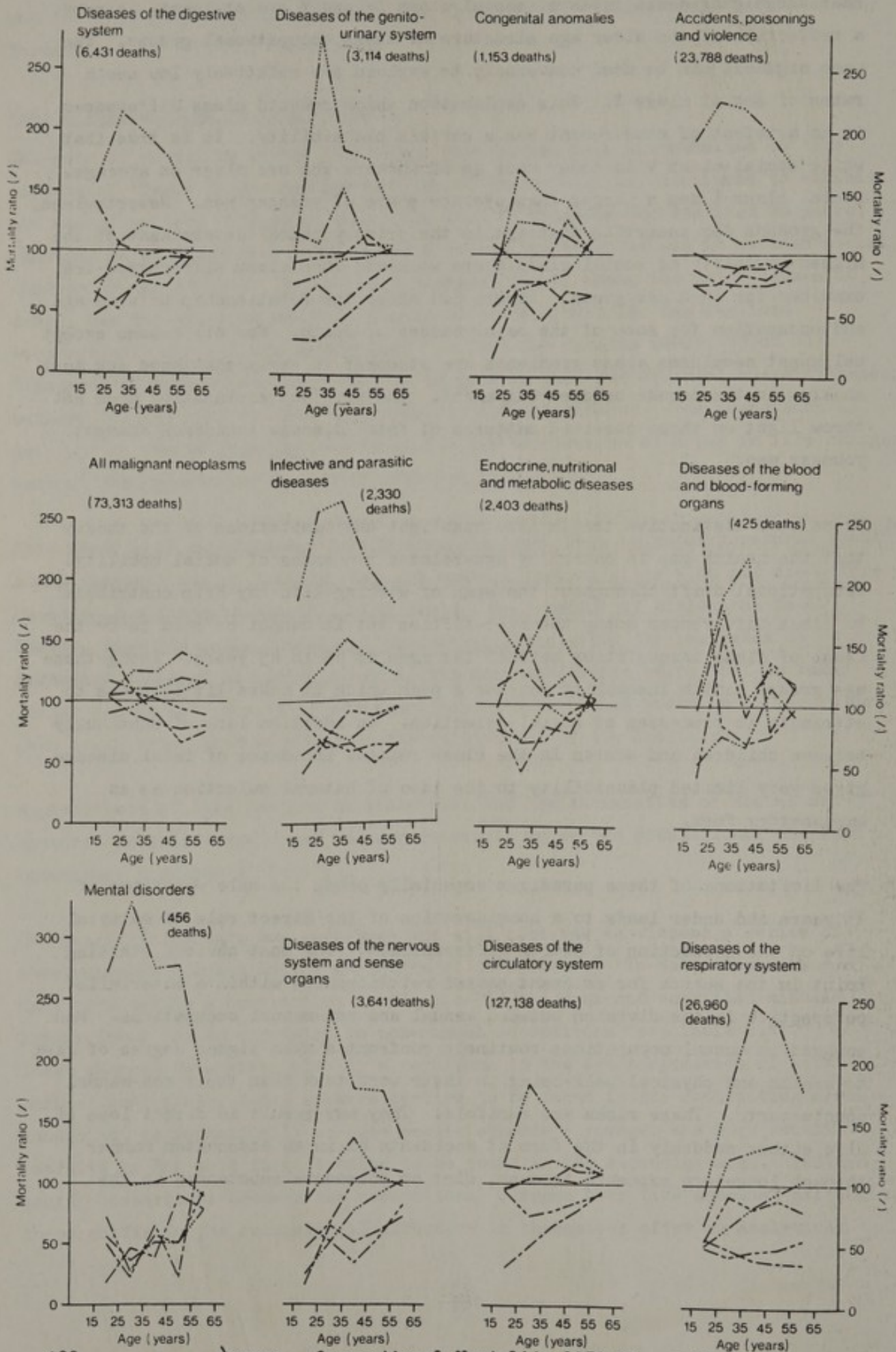
- 6.70 The rate of mortality in Britain today, once it has been standardised to take account of trends in the age composition of the population, continued to exhibit the steady pattern of decline which has been in evidence for the last 70 years, (though, as we showed in Chapter 3, this is not the case for men in certain social classes or age groups). Respiratory disease, which, among the major causes of death, has the steepest and most linear of class gradients, has declined substantially for all age groups over the last two decades (OPCS, 1978: 11). Standards of health have continued to improve in post-war Britain, but differences between occupational classes have remained or even widened. The phenomenon is principally one of relative deprivation - the maintenance of a gap in life chances against the dynamic background of improved prospects.
- 6.71 This feature of contemporary trends suggests that there is nothing natural about class inequalities in health. Men and women in social class V do not die before their fellow human beings in social class I as a matter of biological fate. Indeed, they are quite capable of collectively achieving the low rates of mortality achieved by social class I, the only difference being that it takes longer and by the time it is achieved, social class I has moved on to record an even lower rate, thereby ensuring the maintenance of the health gap.
- 6.72 Explanations of this failure to distribute the health benefits of social and economic progress evenly and contemporaneously among the occupational classes have taken a number of forms.
- 6.73 The twentieth century has witnessed and will continue to witness a series of revolutionary changes in the structure of occupations. To date these changes have resulted in a contraction in the size of the semi and unskilled manual labour force and an expansion in non-manual occupations (see Table 6.1). These changes have given rise to alterations in the age composition of each occupational class, older workers tending to be found in the contracting areas - though not as emphatically as some people suppose - younger and more recent recruits to the work force tending to be found in the expanding area. Besides making comparisons between the occupational classes over time somewhat difficult, these shifts in the occupational structure in themselves offer an analytical

solution to the continuing pattern of health inequality, for it is argued that the higher death rates of social class IV and V are at least, in part, a reflection of the older age structure of these occupational groups. The same argument can be used conversely to explain the relatively low death rates of social class I. This explanation which reduced class differences to an artefact of measurement has a certain plausibility. It is true that while social class V is today made up of workers who are older on average, social class I has a larger than average share of younger men. Nevertheless, the grounds for asserting that age is the primary causal determinant of the higher mortality of social class V are weakened when class differences are examined for each age group. Figure 6.1 shows the relationship between age and occupation for some of the major causes of death. For all causes except malignant neoplasms class gradients are steepest in early adulthood and most shallow in the decade before retirement. The artefact explanation does not throw light on these observed patterns of fatal disease incidence amongst younger men.

- 6.74 These same distinctive trends also highlight the limitations of the thesis that the health gap is caused by age-related processes of social mobility. Occupational drift throughout the span of working life may help contribute to class differences among the over-fifties but it cannot be said to be the cause of class inequalities between the ages of 15 to 45 years. Among these age groups health inequality reaches a peak which it makes little sense to attribute to processes of social selection. In addition lack of continuity between children and adults in the class related incidence of fatal disease gives very limited plausibility to the idea of natural selection as an explanatory form.
- 6.75 The limitations of these paradigms especially among the male workforce of 45 years and under leads to a consideration of the direct role of material life on the production of health differentials. The most obvious starting point in the search for relevant causal relationships within a materialist perspective is the division between manual and non-manual occupations. Men engaged in manual occupations routinely confront a much higher degree of risk to health and physical well-being in their work task than their non-manual counterparts. These risks are manifold. They may result in direct loss of life either suddenly in the form of accidents or in an attenuated manner through long-term exposure to dust, dirt or poisonous substances in the

FIGURE 6.1

Mortality Ratios by Occupational Class, Age and Cause of Death
(Men 15-64; England and Wales)



workplace. The same eventualities may also entail antecedently, physical injury, disability and chronic illness. The direct risk of physical disability in manual work presents itself in a variety of forms. Amongst these, accidental injuries are the most obvious but other forms of physical impairment affecting vision, hearing and breathing are also common accompaniments of productive processes involving manual employment which it must be said, are in no way compensated for by way of financial reward or wages.

- 6.76 But significant as is occupational hazard in the production of broad differences in health between manual and non-manual workers and between men and women, it is not a sufficient explanation.
- 6.77 The influence of material deprivation in the aetiology of modern degenerative disease processes is poorly understood in the present day especially amongst workers below the age of 45. In the past poverty was an obvious antecedent in mortality associated with starvation, infection, and respiratory disorders but its possible influence in deaths traced to, for example, cancer or circulatory disease is less clear-cut. These causes of death, because they dominate the disease profile of the wealthy advanced industrial nations have been dubbed the diseases of affluence and, although their aetiology is in general poorly understood, it is thought that they have their origins in overindulgence rather than poverty and in behaviour which abuses and misuses the human body. The modern diet, with its emphasis on highly refined foods, and modern sedentary patterns of work and leisure are prime targets in the search for causes of premature death in the twentieth century and, at a rather more specific level, the mass consumption of tobacco products is blamed for the early onset of some diseases (eg lung cancer) (see Tables 6.3, 6.4 and 6.5).
- 6.78 This association between disease and death on the one hand, and the consumption of tobacco products on the other, provides an example of the way in which threats to health and well-being continue to be tied up with the productive activities of human beings on which they depend for material subsistence and on which, in the long run, social progress tends to be judged. The mass production and consumption of commodities (including cigarettes) is at the heart of economic life in the advanced societies, and cigarette production is a source of government revenue as well as industrial profits. Governments have been unwilling to bring in legislation to ban the production and the sale of tobacco despite the almost irresistible case that has been built up against it on health grounds in recent years.

- 6.79 The habit of cigarette smoking therefore provides a convenient focus around which to explore the causal relationships in patterns of health inequalities among adult men and women. This is so because of social life and specific patterns of behaviour which are often attributed to culture.
- 6.80 Among heavy smokers in Britain men outnumber women and, following trends over the last decade or so, manual workers have increasingly come to outnumber their non-manual counterparts.
- 6.81 This demographic picture of cigarette consumption reinforces the clinical view that smoking is damaging to health, since the statistical characteristics of heavy smokers are the same as those of the people who are most likely to lose their lives before retirement.
- 6.82 Can this demographic coincidence help us to understand the underlying cause of the health inequalities that have been observed among adult men and women? Given that cigarette manufacturers are now obliged to warn their customers of the dangers of smoking it would seem on the face of it that smoking is a wilful, self-destructive habit and that those people who fail to take heed of the risks have only themselves to blame if they forfeit their health as a result. Such a conclusion assumes that smoking is an entirely voluntaristic behaviour, the indulgence of the irresponsible. This idea does not square with the fact that the consumption of cigarettes, depends on a multi-million pound industry, is sanctioned by Parliament, treated as an important source of taxation income, and freely permitted in public places, even on premises owned by the National Health Service. As health educationalists are fond of pointing out, tens of millions of pounds are spent every year in Britain on the promotion of smoking through advertising and sports sponsorship while only a fraction of this amount goes on publicity about the attendant health risks.
- 6.83 These facts about tobacco and its role in the economy are an indication that smoking remains part of material and cultural life in Britain. But changes are taking place and not surprisingly the avant garde of culture change are drawn from people in the higher social classes. If cigarette smoking is a major contributory cause of deaths due to cancer or heart disease, then the uneven response in the population to the news that it is dangerous is likely, in the future years, to make class differentials in health even wider than they are at present.

- 6.84 Moreover, in recent years sex differences in the pattern of smoking have begun to even out, perhaps a reflection of the increased earning capacity of women and their claims for equality with men. But the overriding characteristic of people who have continued to be heavy users of tobacco products despite the adverse publicity is manual work. Why is this so?
- 6.85 In general it seems likely that people who have the scope within work and leisure relationships and activities to find compensatory means of fulfilling the needs which smoking satisfies, will be more likely to take the warnings about cigarettes seriously and to amend their behaviour in favourable directions. This inference serves as both reminder and reflection of the fact that the structure of work opportunities and the associated levels of financial rewards (what sociologists term the social division of labour) remains fundamentally unequal in present day Britain. This structure of inequality which discriminated, between men and women, between races, regions and social classes, has many dimensions. Income, wealth, job security, pension rights, credit-worthiness, are among the most obvious, but equally significant, especially in their implications for health are education as a continuing lifelong process, and protection from threats to physical well-being. These characteristics of the work that people do and the context in which they do it, are reflected in the quality of the lives they lead. From this perspective smoking behaviour cannot be taken as a fundamental cause of ill-health, it is rather an epiphenomenon, a secondary symptom of deeper underlying features of economic society.
- 6.86 The drift of this section has been to argue that it is from the realm of the materialist perspective that the most plausible explanation of health inequality between adults in Britain is to be found. It has also been argued that it is not possible to distinguish clearly between cultural and material influences in human behaviour. It is no good treating cigarette smoking as an aberrant or irresponsible behavioural response while society as a whole permits, even depends on, the widescale production and promotion of tobacco goods. Human health is a part of the organisation of material existence. It is both produced and endangered by the work which men and women do in order to earn their livelihood. The manufacture and consumption of tobacco products and its effects on health provides a very clear example of the limitations of conventional health policy as a means to reduce health inequality. The prematurely lost lives of working class men and women will not be saved in the acute hospital or in the GPs surgery.

Health and Inequality in Old Age

- 6.87 The classification of elderly men and women into occupational classes is made more difficult by the fact of retirement. Occupation becomes a less central point of retired person's social identity and, in consequence, it is often forgotten, ignored or treated superficially in the process of collecting survey data. These tendencies feed into the processes of generating statistical rates, making it rather more difficult, for example, to compute class based rates of mortality. There is little doubt, however, that the class-based mortality gradients which follow the population from birth, through youth to middle age do not suddenly disappear after retirement.
- 6.88 The new longitudinal survey being produced in the OFCS will, in time, provide a sound picture of class inequalities in rates of mortality among the retired. The early returns for this survey suggest that observed gradients will be more shallow for this age group. This trend is not unexpected. In adult life class inequalities in mortality become reduced in late middle age as the risk of death increases, the expected trends for old age merely complete this already established pattern.
- 6.89 If we were to argue along the lines of a "Selection of the Fittest" theory we might conclude that the flattening out of gradients amongst the elderly was the result of a filtering process which preserved only the most robust of social classes IV and V for survival into retirement. It is difficult either to prove or discount this inference but the data of morbidity differentials in old age do not support it. Chronic or longstanding disorder is more prevalent among retired manual workers and their wives suggesting, if anything, that the link between relative material deprivation and poor health is sustained throughout the whole lifetime. At the same time it is likely that some men or women engaged in semi or unskilled manual work in the years immediately before retirement may well have arrived at their present jobs because poor or failing health caused them to forfeit a more demanding but better paid skilled manual occupation. In such cases, the descent into the lowest occupational classes on account of ill-health may well be a portent of an earlier than average age of death.
- 6.90 After retirement the appropriateness of mortality rates to health status measurement is increased by the fact that health may literally become a matter of life and death for the over sixty-fives. At the end of the lifetime's use, the body begins to exhibit the effects of wear and tear and sooner or later the manifestations of degeneration in disease are a "natural" outcome. In general, it is

reasonable to conclude that these processes occur sooner rather than later in men rather than women, and in manual workers rather than non-manual workers. An equally reasonable conclusion is that the timing of these outcomes are the end product of inequalities in the use made of, and the demands upon, the human body earlier in the lifetime. In practical terms what is implied is that men in our society lead lives which are more punishing to the human frame, and that among men, manual work involves greater use of sheer physical resources and hence more 'wear and tear' on the body. Appropriate forms of redistribution between the sexes and the occupational classes might be expected to introduce a greater degree of evenness in these lifetime processes of physical growth, maturation and decay.

- 6.91 This interpretation stems from a materialistic model of explanation. It suggests that inequalities in health are the direct reflection in a dynamic sense of inequalities in the social division of labour. In the collective effort of social production, some workers literally give more of themselves than others and hence their bodies wear out first. But inequalities in health at the end of the lifetime also emanate from the distribution of rewards associated with the social division of labour. Old age is a time of poverty, albeit poverty expressed in the form of relative deprivation. But relative deprivation among Britain's aged can mean material scarcity in very real terms (as deaths from hypothermia among the old reveal in severe winters). A recent DHSS Report estimated malnutrition at 7% among a sample of the elderly who were studied (DHSS 1980 p3). In old age the relationship between income and the capacity to protect personal health is stronger perhaps than at any other time in the life cycle, and in general it is fairly certain that individuals who are well endowed through generous or index linked pension schemes will lead the healthiest, the most comfortable, and the longest lives after retirement. These material fortunes or misfortunes of old age are closely linked with occupational class during the working life. To have secure employment and an above average income when one is at work is to be better able to provide for one's retirement. It is in this way that continuity in the distribution of material welfare is sustained, and inequalities in health perpetuated, from the cradle to the grave.

C. CONCLUSIONS

- 6.02 This consideration, seriatim, of different stages of the life cycle leads to several conclusions. In the first place, although different kinds of explanation have to be combined, and although cultural explanations and a genetic contribution

of importance to early childhood conditions have their place (although knowledge of the latter is inadequate), nevertheless we feel that more of the relevant evidence is explained by what we call 'materialist' or 'structural' explanations than by any other form of explanation. However, this rubric, it will be recalled, covered many subsidiary approaches which need to be remembered and carefully set out.

- 6.93 The second important conclusion we wish to draw is this. Some of the evidence on class inequalities in health is adequately understood in terms of specific features of the socio-economic environment: features (such as accidents at work, overcrowding, smoking) which are strongly class-related in Britain and also have clear aetiological significance. Since such features are recognised objectives of various areas of social policy we feel it sensible to offer them as contributory factors to be dealt with in their own right and not to go on to explain their incidence further in social structural terms. The same is true of other aspects of the evidence which we feel show the importance of measures related to the health services. Antenatal care, for example, is of clear importance in preventing perinatal death, and the international evidence presented in Chapter 5 shows that much can be done through improvement of antenatal care and of its uptake. The international evidence also suggests the importance of preventive health within health policy, despite studies (to which we have alluded earlier) which suggest that little of the differences in mortality either between nations, or between British regions, can be explained in terms of health care provision. But beyond this there is undoubtedly much which cannot be understood in terms of the impact of so specific factors. Much, we feel, can only be understood in terms of the more diffuse consequences of the class structure: poverty, work conditions (and what we termed the social division of labour), and deprivation in its various forms.
- 6.94 It is this acknowledgement of the complex nature of the explanation of health inequalities - involving access to and use of the health services; specific issues in other areas of social policy; and more general features of class, material inequality, and deprivation - which informs and structures the recommendations we make in Chapters 8 and 9.
- 6.95 These recommendations draw in another way upon our interpretation of the evidence. It is our view that early childhood is the period of life at which intervention could most hopefully break the continuing association between health and class. That is, not only may subsequent health (or propensity to ill-health) be to some degree determined in early life, but there may be some co-determination of subsequent educational (and hence to some degree occupational) achievement and future health status at that time. In our recommendations, therefore, we focus

particularly (although not exclusively) upon measures directed towards reduction of health inequalities in childhood.

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CHAPTER 7

THE NEED FOR ADDITIONAL INFORMATION AND RESEARCH

- 7.1. At various places in this Report we have drawn upon data from a variety of sources, including routine birth and death statistics, statistical returns collected for administrative or management purposes (such as the Hospital In-Patient Inquiry, HIPE), annual surveys (such as the General Household Survey, and the National Food Survey), the 3 national Birth Cohort studies and, of course, specific research projects. The scope and the quality of national statistics relating to health and mortality are exceptional: we appreciate that our task would have been more difficult in most if not all other European countries.
- 7.2. Nevertheless, at this point we must turn to consideration of information needs which are not met, and which we feel necessitate either the initiation of further research or modification of the regular instruments of data collection. Although this distinction is obvious and necessary, the collection of routine statistics (generally for administrative purposes) should not be seen as, or become, independent of research whether once and for all or carried out at regular intervals. In the health field as in many others social research may serve to point up new ways in which the provision of services, or use of services, or unmet need, should be monitored. The categories by which statistics are presented (such as age groups, social classes and income groups) must be sensitive to the implications of research for their adequacy and validity.
- 7.3. There is another general point about administrative statistics which needs to be made. The form of such statistics both reflects and determines the way in which the adequacy and performance of a service to which they relate is understood. This is broadly true at all levels of administration and provision. Modification of such statistics might serve in an important way to sensitise those responsible for providing health care to the saliency of possibly neglected matters, or to transform the way in which 'performance' is conceived. Two examples will suffice. Comprehensive and careful recording of occupation (or social class) on a hospital in-patient's record could have value in educating clinical and nursing staff to the importance of social factors in the aetiology of diseases, in ill-health. Second, in the UK community health returns are largely restricted to the volume of services provided (eg the number of children registered at Child Health Centres) in different areas.

- 7.4. In Finland, by contrast, reporting is of the proportion of all pregnant women and of all children (within age groups) who register. Assessment of provision is thus manifestly on the basis of coverage. Wynn and Wynn (1974) attribute some of Finnish success in reducing perinatal and infant mortality rates to precisely this fact.

SOURCES OF INFORMATION RELATING TO HEALTH AND NEED FOR CARE

- 7.5. Because direct information on the distribution of sickness in the population is scanty, we have found it necessary (as did the Resource Allocation Working Party) to make use principally of (standardised) mortality rates as a proxy for the relative ill-health of different groups. In this section we discuss the sources of information on sickness itself which are now available.
- 7.6. In Chapter 1 of our Report we referred to the variety of notions of health and ill-health: it is of course health (and most desirably health in its positive sense of 'well-being') that we are concerned to promote. Direct information on the health of the population (rather than its sickness) is still less available, as we shall also show.

1. General Household Survey

- 7.7. The kind of data on the prevalence of long-standing illness, limiting long standing illness, and restricted activity due to acute illness which the GHS yields has been discussed elsewhere.
- 7.8. It has to be borne in mind that the GHS gives self-reported illness. Results are based on respondents' perception of their own ill-health and on their willingness and ability to explain it to lay interviewers. The answers given are not validated against any medical records, and it is known that certain conditions (notably mental illness) are under-reported. No attempt is made to measure the "medical" severity of any condition reported. On the other hand, we have no evidence that variation between social groups in reported health is explained by differences in their perceptions of health rather than differences in their health conditions.
- 7.9. In the case of acute sickness whereas in the early years of the survey a clear social class gradient appeared this was less obviously the case in 1975 and 1976: it may in general be valid to deduce trends only from aggregated annual samples.

- 7.10 For the 1977 and 1978 Surveys, the health questions were redesigned, and comparison with earlier years is not now possible. The basic approach was to identify, by means of questions related to lists of illnesses, all those respondents who felt that they had either a long-term or a short-term health problem, however trivial. At this stage a much higher proportion of the sample reported ill-health than did so in previous surveys. A further series of questions then sought to determine whether these respondents acted differently from normal or restricted their normal level of activities because of ill-health. 1977 data show a clear class gradient for chronic sickness, but no apparent class-relationship in the case of short-term ill-health. (This contrast is perhaps rendered over-sharp by the exclusion from the category of 'short-term ill-health' of all consequences of, or acute episodes in, chronic conditions).
- 7.11 We do not believe that the different indicators used for the 1977 and 1978 Surveys were a real improvement over those used earlier and now reintroduced for 1979. In particular, the usual distinction between chronic sickness or disablement and acute sickness is confused by extension of these concepts to "chronic health problems" and "short-term health problems" respectively. Better would be to obtain information, for different population groups, about episodes of acute or short-term illness during a 12 month period and about long-term chronic illness or disablement and relate the two in terms of frequency and severity so that comparisons with (eg) annual GP consultation and hospital out-patient attendance rates become more meaningful.

2. Sickness Benefit

- 7.12 The annual DHSS publication Social Security Statistics includes a number of tables relating to sickness benefit. These tables give figures of the payment of sickness benefit by sex, age, region and cause. Information is not available for occupational groupings so analysis by social class or SEG is impracticable. Even if it were, limitations of this source of information are, firstly that it applies to the employed and insured population only and therefore excludes children, the elderly and many married women; second that it omits sickness absences of three days or less for which benefit is not paid; and finally that the diagnosis recorded may not properly reflect the physician's views as these evolve in the light of further tests. It also needs to be remembered that ability to continue work despite being ill or injured is influenced by the

nature of the employment. (The current DHSS cohort study of a sample of unemployed men and their families should yield valuable information on the relations between ill-health, sickness benefit receipt, and absence from work/unemployment).

3. National Morbidity Survey

- 7.13 This is a sample inquiry of general medical practitioners which examines the patterns of morbidity seen in general practice. The first such study, carried out in 1955-1956, related to consultations with 76 practices (120 practitioners). It was reported on by Logan and Cushion in 1960, and we have referred to its conclusions earlier. A second study (in 1970/71) was based upon 53 practices, and there is a continuing exercise involving only 20 GPs, though these have not yet reported consultations, diagnosis etc, on an occupational basis. A further survey is planned for 1981. Given the size of the sample (doctors participating are volunteers) and the conflation of need for treatment with presentation, it is doubtful whether this survey could be a major source of distribution of morbidity. Of course, this is not to deny that the records of GP consultations could be used as a most significant source of data.
- 7.14 The limitations of these sources are all the more apparent when the problems inherent in the conceptualization of health are called once more to mind. As we explained elsewhere, our view of 'health' is broader than the 'absence of sickness'. It is thus our view that the monitoring of ill-health (itself still so imperfect) should evolve into a system also of monitoring health in relation to social and environmental conditions. This of course represents a major research task.
- 7.15 Two areas where progress in this direction could certainly be made, are i. in relation to the development of children, and ii. in relation to disability. This brings us to the fourth existing source of information.

4. Community Health Statistics

- 7.16 In the context of our particular focus upon child health it is of interest to see what information could be made available on a regular basis. We know from the various birth cohort studies upon which we have drawn earlier in our report that the prevalence of defective vision and hearing, tooth decay,

respiratory disorders and other indicators of ill-health and inhibited development are class-related among children. However because of the relatively small number of cases of certain handicapping conditions it is not always possible to be confident of these apparent variations. Data from Scotland based on medical examinations given to school children at the age of 5 also indicate variation in tooth decay and refractive error (Scottish Health Service Common Services Agency).

7.17 There is also some evidence for the interaction of social class and environment, such that children born into social class V and also into (eg) a heavily polluted area may be at particular risk (Colley and Reid, 1970).¹ It is unlikely that relatively small research studies could yield conclusive evidence on what could be an important priority for public policy, and hence it is worth seeing what may be obtained from national statistics. AHAs currently report on their school health surveillance procedures, on the proportions of pupils referred for further medical examination, and on the presence of skin disease. The Working Group on Community Health Statistics has recommended that they also report on their policy of screening for hearing and vision, and on the numbers referred as a result of these tests. (Implementation of this recommendation has been deferred from 1979 to some later date). Scottish experience suggests that it might be possible to note 'parents occupation' when these tests are carried out, since such information may well be available within the school. Unfortunately present practice with regard to regularity of surveillance/screening differs greatly between one AHA and another: perhaps inevitably given differing manpower situations. Moreover, the results of tests are presented only in terms of proportions suffering from visual or hearing impairment.

7.18 There is a real need for continuing assessment of the development of children, from birth at least through primary school: this is 'health' in one of its most crucial senses. Such assessment needs to be carried out in relation to social class, and must include surveillance of the nutrition of children. Studies of the kind we have in mind were in fact initiated in 1971 (when the availability of school milk was reduced, and the price of school meals

¹ Complementing evidence (eg in the RG's Decennial Supplement) that infant mortality within a given social class varies between standard regions.

raised) under the auspices of the Committee on Medical Aspects of Food Policy (COMA), and a further study is being planned. Some of the findings of this work are discussed in Chapter 9, where we present our recommendations for policy relating to school meals and milk. The feasibility of surveillance of that kind has now been demonstrated, and the assessment of children's growth in relation to class and nutrition should become a matter of routine.

- 7.19 We recommend that school health statistics should routinely provide the results of tests of hearing, vision, and measures of height and weight, in relation to occupational class. Authorities might also be requested to report separately upon schools in inner city areas, or to differentiate between a wide range of urban-rural locations. As a first step we recommend that health authorities, in consultation with education authorities, select a representative sample of schools in which assessments on a routine basis be initiated. This should be done in consultation with the National Survey of Health and Growth at St Thomas'. In our view it is information of this kind, more than current workloads, which should form the basis of planning provision in this area of community health. We therefore suggest that some of the additional resources which we recommend be put into the school health service be used in improvement of school health statistics, along these lines.
- 7.20 In the course of discussions with Health Authorities, substantial difficulties have been seen in the collecting and annual reporting of data in this form, and it might be that prior study of feasible means of overcoming these difficulties would be desirable.
- 7.21 We should also like to see progress towards routine collection and reporting of accidents to children. Such reporting should ultimately distinguish not only between occupational classes and age groups, but also locations of accidents (road, home, school, other) and (as appropriate) the articles or building design features involved in accidents. At present the only national source of information is the HIPE. However not only does HIPE fail to record social (occupational) class, but it also omits the vast bulk of accidents not requiring in-patient admission. More promising is the Home Accident Surveillance System established by the then Department of Prices and Consumer Protection towards the end of 1976. This involves the collaboration of 20 hospitals, distributed throughout England and Wales, and is particularly concerned with the formulation of safety standards for consumer goods used in the home. One report on domestic

accidents to children has recently appeared (Department of Prices and Consumer Protection, 1979). It is clear in principle that an extension of this approach could have important implications for establishment of safety standards relating not only to domestic consumer goods (important enough) but to building and to road safety provision. It is worth recalling that fully a $\frac{1}{3}$ of child deaths between ages 1 and 14 are due to accidents. We recognise that there are difficulties in working towards a national system of child-accident reporting, which may require the co-operation not only of hospital A and E departments, of the police (in the case of traffic accidents), but conceivably of health visitors also. In view of the importance of the topic, we recommend that representatives of appropriate government departments (Health and Social Security, Education and Science, Environment, Trade, Transport, and the Home Office) as well as of the NHS and of the police, should consider how progress might rapidly be made on improving the information on accidents to children. The Child Accident Prevention Committee, if suitably constituted and supported, might provide a suitable forum for such discussions, to be followed by appropriate action by government departments.

7.22 A further area where a concept of health broader than (acute) sickness has to be employed is in relation to the distribution of impairment and disability. Harris' survey (1971) found that there are some 3 million impaired persons over the age of 16 living in private households in Great Britain, or 7.8% of the appropriate population. This figure ranged from 0.89% of 16-29 year olds to 37.8% of 75s and over. The General Household Survey shows the prevalence of restrictive long standing illness, disability or infirmity to rise with SEG. Nevertheless, and despite the requirements of the Chronically Sick and Disabled Persons Act 1970, little is known of the provision of services to this group, their need for services (which might vary with social class as well as with the nature of the handicap), the aggravation of their conditions by bouts of acute sickness (and its implications) and so on. No such information is available on a national basis, and we would like to see local authorities reporting systematically on numbers of disabled as well as (however crudely) on assessments of severity of disablement. In the late 1970s local authorities had begun to classify handicapped people by the self-care criteria used by Harris, but that classification is not yet comprehensive, even for the physically handicapped, and needs to be extended, above all to the mentally handicapped. Social service departments and local officers of the Department of Employment should seek to introduce categorisations of severity, preferably on the basis of the limitation of activities put forwards in the WHO definition (See Chap 1, pp 11-12). This would permit comparison of priorities between services, as well as between authorities.

SOURCES OF INFORMATION RELATING TO USE OF HEALTH SERVICES

1. General Household Survey

7.23 Since 1971 the General Household Surveys have contained information about consultations with GPs in the previous two weeks (NHS consultations only), attendance at hospital out-patient departments, and hospital in-patient spells both in the last three months. The data on GP consultations are generally regarded as accurately reported (though not subject to any independent verification) and produce higher rates than the National Morbidity Study. The situation is somewhat different with regard to hospital statistics, since administrative data are also available (see below). However, so far as out-patients are concerned, overall rates reported in the GHS are not compatible with those reported on SH3 returns to the DHSS. This is partly because reporting is on a different basis. The GHS gives the rates per 1000 for people who, during a three month period, attended "as a patient the casualty or out-patient department of a hospital (apart from straightforward ante- or post-natal visits)". Secondly, the average number of attendances per out-patient, within the three month period are given. (Overall, for England and Wales, the attendance rates (1975) are 97 for males, 88 for females, each attending on average 2.2 times). Administrative returns give 'new out-patients per 1000 population', 'total out-patient attendances per 1000 population' on an annual basis. Partly as a check on survey data, it would seem useful if a GHS tabulation could be given of total out-patient attendances per 1000 population, converted to an annual basis.¹ Moreover, unlike GP consultation rates, hospital out-patient utilization rates have not, since 1972, been published broken down by SEG,² and we should like to see the tabulation proposed above given by SEGs. The situation is different again for utilization of hospital services on an in-patient basis, where once more administrative statistics are available. Again, however, they are available on rather different bases.

¹ We are advised that comparison on this basis yields a (1977) GHS figure some 80% of that derived from SH3 returns. It is probable that this difference reflects both inadequate recall (and hence a weakness in the GHS) as well as fundamental problems in the comparison (eg a visitor to hospital who on one occasion both sees a consultant and receives therapy will report one visit in GHS but be recorded twice in SH3 returns).

² It has been suggested that in some groups hospital out-patient departments are to some extent used in place of the GP (ie where other groups would naturally resort to their GP). The results of a question inquiring into the reasons for which some people visited hospital without first talking to a GP have also not been published.

SH3 and HIPE returns (see below), apart from being on an annual basis, include long-stay (eg geriatric) hospital patients [who will be under-represented in the GHS] and report rates of discharge and death together, though the two can be separated. Thus, rates of 'discharge and death' given in tables based on these administrative returns are very much higher per 1000 population than rates reported in the GHS. The two cannot be reconciled because of differences of definition. Moreover, the GHS rates ("Number of medical and surgical in-patient spells per 1000 persons in a 3-month reference period") are very low indeed (about 2%) and so difference between SEG rates, at least for a single year, would not be statistically significant.

- 7.24 In the early years of the GHS, the attempt was made to inquire into the use made of community health services in a single month (including Health Visitor, District Nurse, Chiropody, and Child Health (Clinic/Child Welfare Centre) services). The question was later dropped, because not only was utilization at a very low level, but also respondents had difficulties in distinguishing between the various services with which (in some cases) they had been in contact.

2. NHS Hospital Activity Statistics

- 7.25 The basic source of information on hospital activity is the SH3 Return, which shows the level of activity for each hospital classified by specialty. Data collected include the average number of available and occupied beds, the number of discharges during the year, the number on the waiting list at the end of the year, the average length of stay of patients discharged during the year, the number of discharges and deaths per available bed, and the number of day cases attendances. Information on out-patient activities includes the annual number of clinic sessions held, the number of new out-patients seen during the year and the total attendances due in the year (both new and old patients).
- 7.26 A particular point needs to be made in respect of waiting lists statistics, which have been suggested as an indicator of differential need. Even if occupation data were available, the use of waiting list information in this way presents problems, as the existence of a long waiting list may itself serve to suppress potential demand. There are believed to be variations in clinical practice both in respect of the propensity of general practitioners to refer patients to hospital and also the policy adopted by consultants in the management of their waiting lists. Marked differences in both these operating characteristics make it difficult to draw conclusions based on comparison between waiting list statistics.
- 7.27 The SH3 return really provides only a set of measures of activity and workload and says nothing as such about the patients themselves. For this type of information we need to turn to HAA/HIPE.

HAA/HIPE

- 7.28 It is reasonable to consider the Hospital-In-Patient Enquiry (HIPE) and Hospital Activity Analysis (HAA) together. Although their historic origins differ, HIPE data is now generally produced as a sample extracted from HAA records. The underlying concept of hospital activity analysis is that the basis document should form the front sheet of the patient's casenotes. The information collected on admission includes (as well as medical data) Name and Address, Age and Date of Birth, Country of Birth, Occupation of Patient or of Husband, Source of referral, Next of Kin, Source of Admission.
- 7.29 Although hospital activity analysis provides considerable information in terms of individual episodes of patients care, it is of limited value from our present

point of view. The level of health care activity depends on both the need for services and their availability. The considerable geographical variations in services provided per head of population (which would almost certainly be reflected in similar data for social classes) cannot be separated into the element due to differences in need and those due to differences in provision. A further weakness is that the information on occupation (on which any social classification must depend) is not held centrally. The practice by individual RHAs is known to vary: one region is known to code up the occupation data collected on HIPE while another has deleted the item from the form altogether.

7.30 Although reservations must be held about the quality of occupation information which is collected on admission to hospital, we feel this merits further study, as outlined below (page 211). It should also be noted that published results of the equivalent Scottish survey (SHIPS) do include a class breakdown.

7.31 Similar procedures apply to the Mental Health Enquiry which is similar to HAA/HIPE but is conducted in respect of patients in mental illness or mental handicap hospitals and units. Again occupation data is not held centrally and it is not known how extensively it is entered on the original form.

3. Community Health Service Statistics

7.32 Area Health Authorities report also on the range of community health services provided in their areas, notably:

registered nursing homes;
ante- and post-natal clinics, mothercraft and relaxation classes;
child health clinics;
health visiting, home nursing and midwifery services;
ambulance services;
immunisation;
chiropody;
tuberculin tests and BCG vaccination;
school health services;
child guidance clinics;
family planning services;
dental services.

7.33 Much of this information is reported in annual volumes of Health and Personal Social Services Statistics. In no case, however, do the data collected include 'occupation' (or any proxy) which would permit evaluation of use by social classes. The Working Group on Community Health Service Statistics, in making proposals for rationalising and improving these statistics, made no reference to social class.

7.34 It is apparent that, at present, systematic knowledge of the use made of the various health services by different social groups is extremely scanty. The principal source, the General Household Survey, presently reports only on (NHS) GP consultations on this basis. Results obtained on use of hospital services are not so given, and the sample size and rates of utilization would not permit a meaningful breakdown of in-patient hospital usage by SEG.

7.35 Collection and central reporting of occupational data within the context of the various administrative returns obviously poses major problems of feasibility and of accuracy. However, because we feel the arguments in favour of there being some measures of differential use available

for planning are powerful, we set them out below. We would like to draw these arguments to the attention of those responsible for the major review of all health service statistics which we understand has been initiated.

7.36 The first argument relates to the basis for establishing priorities in public expenditure. In so far as estimates of the redistributive effects of different elements of public expenditure (or proposed new spending) are, or might become, an important element of policy-making, it becomes crucial to know how services are used. It is obviously of particular importance to have this information in respect of the hospital services, which represent over 60% of all health expenditure. From the redistributational point of view class may be at least as important as age (on which basis data are available). The procedure currently used, which allocates the benefits from NHS expenditure among income groups solely on the basis of the average age/sex composition of households in each income group plus knowledge of average age/sex differences in utilisation,¹ is not adequate. It remains to be seen whether GHS data will suffice here, although in view of the limitations on analysis of hospital in-patient rates, this is doubtful.

7.37 The second argument concerns the extent to which some social groups may be making inadequate use of services in relation to their needs, and obviously has relevance for any attempt at directing services more specifically to areas of need. Although there is little direct evidence on 'need' for health care we do have indicative information. Some is provided by the General Household Survey, from which the conclusion has been drawn in the Reports that those in SEGs IV and V are not, in fact, less likely to consult a GP when they are ill. (We have discussed this conclusion, which conflicts with the "use-need" ratios often calculated from SEG rates of illness and consultation, in Chapter 4). In the area of preventive medicine however the situation is different. Here there is substantial research, much of which we have drawn on elsewhere in our report, which indicates declining use of child health, ante-natal, dental, and other services with declining occupational class. However

¹ "Effects of taxes and benefits on household income 1976".
Economic Trends 292 February 1978.

these findings are often based on relatively small samples, are out of date (eg data on 7 year olds deriving from the National Child Development Study relate to 1965), and cannot be related to the differential extent of provision of the individual services at the area level.

- 7.38 Especially in child health success must be measured as much in terms of the extent to which services reach those most at risk, as by extent of overall coverage, and both of these are more important indicators than a simple measure of scale of service provided or workload. We referred earlier to the importance of local accountability on the basis of coverage in the Finnish ante-natal and child health services. There would seem to be a strong case for something similar being attempted here. But the ideal measure, and one which developments in statistical reporting must move towards, is assessment of the extent to which children from social classes IV and V and other high risk groups are reached by appropriate health services. Inclusion of 'parents' occupation' in school and other child health records, and reporting on this basis, is an invaluable first step.
- 7.39 The third argument refers to the 'substitution' of services, touched on earlier in this chapter. If it is true that many working class people use hospital out-patients where middle class ones would consult their GP, or that health visitors pay more attention to the working class children that the clinics do not see, then there are important implications for the utilisation of resources at the local area. Although there is need for more research here (since if such substitutions systematically occur it is important to know which and why) it will be through statistics devised in the light of research that the situation can be kept in view.
- 7.40 Research seems particularly necessary in relation to the differential utilization of community health services, since as we have shown such data are available neither through the GHS nor from administrative returns. Moreover, earlier experience with the GHS underlined the difficulties of investigating this particular issue. We consider that a small number of experimental studies should be mounted, possibly making (confidential) use of service records, and designed both to give preliminary indication of

differential use by occupational class under different scales of provision of services, and to explore the problem of routine recording of occupational data in administrative returns. It may also be that such studies could be extended in the attempt to develop questions suitable for inclusion in the GHS, and which would ultimately permit assessment of the extent to which those within different social groups have access to these services.

7.41 We would like, at this point, also to draw attention to the importance of the National Food Survey for which the Ministry of Agriculture Fisheries and Food has responsibility. This annual survey is the principal source of information on the food purchase/consumption (and hence diet) of the population, and hence of great importance from the perspective of this report. There are, however, problems relating to the low response rate of the survey. We feel that much could be done, through greater recourse to epidemiological expertise (perhaps particularly the expertise of the OPCS) to transform the survey into a more effective instrument of nutritional surveillance in relation to health.

7.42 We recommend that consideration be given (drawing upon epidemiological expertise within the OPCS and elsewhere) to development of the National Food Survey into a more effective instrument of nutritional surveillance in relation to health, through which various 'at risk' groups could also be identified and studied. We fully recognise that such a development may raise questions about proper responsibility for the survey.

FURTHER RECOMMENDATIONS

7.43 In this chapter we have made various recommendations which we feel will improve and extend the quality of class-related health and health services utilisation data on a regular basis and enhance knowledge of their inter-relationship.

7.44 There are arguments in favour of at least some of the administrative data-collection processes (undertaken by AHAs) including the recording of occupation. This is particularly the case in relation to child health services and the screening and surveillance of children (at least when

reporting of this becomes routine), and in relation to the use of hospital in-patient facilities (where the GHS sample size is necessarily inadequate). We recognise that there are counter-arguments, based on considerations of feasibility and doubts as to the quality of occupation-related data, and we hope that in any major review of health service statistics both sets of arguments will be considered. In the meantime we feel that a pilot inquiry into data-quality and implications of HIPE returns in a small number of AHAs which do currently code occupation would be worthwhile. As a second stage of such an inquiry, and if the collaboration of hospital staff could be secured, the attempt might be made to check the reliability of occupational information recorded on admission (perhaps through next-of-kin).

7.45 The importance of the problem of inequalities in health and their causes as an area for further research needs to be emphatically stated. We recommend that it be adopted as a research priority by the DHSS and steps taken to enlist the expertise of the Medical Research Council (MRC), as well as the Social Science Research Council, in the initiation of a programme of research. Such research represents a particularly appropriate area for Departmental commissioning of research from the MRC.

A Strategy for Advance

7.46

In our view, the 5 areas in which further research (leading, it should be said, in some instances to improved or augmented administrative statistics) is essential are:

- a. surveillance of the development of children, especially in relation to nutrition and to accidents);
- b. better understanding of health effects of such aspects of (what can be regarded as) individual behaviour as smoking, diet, alcohol consumption, exercise;
- c. the development of area social condition and health indicators (for use in resource allocation);
- d. health hazards in relation to occupational conditions and work.

The importance of each of these derives from its relevance for our overall strategy for the development of policy.

- e. study of the interaction of the social factors implicated in ill-health: over time, and within small areas.

7.47

The first has been discussed briefly above. It is discussed further, in the context of the implications for policy which flow from work already carried out, in Chapter 9. So far as the implications of behaviour for health are concerned, there is little doubt that among "the most difficult diseases to prevent are those on which depend on individual behaviour" (Prevention and Health p 38). The problem is widely recognised, and whilst we consider further research particularly on the health effects of diet and exercise/leisure behaviour to be important, enough is already known for us to make a number of recommendations in Chapter 8. The further development of social condition/health indicators requires some discussion here.

7.48

Social factors in resource allocation and planning

In Chapter 8 we argue in relation to resource allocation for (at least partial) substitution of social condition indicators for standardised mortality indicators in calculation of revenue targets, particularly at sub-regional levels. Whilst we believe our argument to be well-founded we are conscious of certain weaknesses in the social condition data currently available. Most significantly, data are typically out-of-date (deriving only from the census), and do not reflect health

needs as well as they do, say, housing need. We should like to see research designed to see how easily these difficulties can be overcome initiated. This would on the one hand be concerned with the development of health indicators: drawing not only upon the established (census) indicators of social disadvantage but also upon information which could be gleaned from records of school health, sickness absence, concentration of handicapped people, etc. On the other hand, it would attempt to establish the feasibility (including cost) of regular sampling of health district/local authority populations in order to provide necessary information on a sufficiently up-to-date basis.

- 7.49 We also argue in chapter 8 for a shift of resources into community and preventive health somewhat more rapid than in current planning guidelines. Fraser, in a study from which we quoted in chapter 5, found some evidence for a negative correlation between the proportion of a country's health expenditure which is on preventive health and that country's infant mortality rate. He felt this relationship, which he investigated using only limited data, merited further study. We agree. The same author, again using very limited data, found an inverse correlation between infant mortality rate and extent of inequality in income distribution between countries. This too is worthy of further study and, especially if cross national time series data were utilised, could be of profound importance. We should like to see support given to a study of this kind.

The 'Social Class' Variable

- 7.50 One line of criticism of the notion of social class used in mortality and other statistics which we have already described (Chapter 1) is of the inadequacy with which 'occupation' expresses the life-style or command over resources of many substantial minorities. It was suggested that this may be the case, for example, with the elderly, or the long-term unemployed, for whom 'occupation when last employed' may not be an entirely adequate indicator.* It may be that a composite indicator is to be preferred.
- 7.51 Indicators of this kind have been widely used in the characterization of social conditions: that is in relation to small areas (eg Gardner, Crawford and Morris, 1961). As Reid says, however, they have been very little used, in Britain, for the characterization of individuals (Reid, 1977, p 15-16).

* Here too it may well be that the current DESS cohort study, involving interviews with a sample of 2,300 unemployed men will shed some light.

- 7.52 One attempt at ranking social conditions has been made in the context of the Bristol follow-up of the 1970 Birth Cohort Study (Child Health and Education in the Seventies). Their Social Index compounds occupation with level of education, housing (tenure, crowding, possession of amenities) and an 'assessment' of the area of residence. Each of these was scored and weighted to produce a one-dimensional index.
- 7.53 Preliminary indications are that Social Index score groupings are better able to discriminate on such variables as child developmental indicators and use of child health services than is RGS social class alone (Osborn and Morris 1979). Further work along these lines would be well worthwhile (part of which ought to be to examine the sensitivity of the results to the weighting method used), not least because it enables the effects of social class and area-based forms of deprivation to be studied together. Another possibility is to attempt to create composite indicators of family class, by combining husband's occupation, wife's occupation (if any), and the occupations of their fathers into a single index. Such an index (for which data exist at least within the national birth cohort studies) is likely to have much greater explanatory power with regard to child health than father's occupation alone. (Though the value of such an index is likely to be far wider - eg in explanation of wealth or educational inequalities.)
- 7.54 An alternative to the use of such composite indicators, which also seems worth pursuing, is to examine the independent effect of the various dimensions of social stratification for which social class stands: eg income, education, housing, etc. Partly because they respond differently to change over the life cycle the correlation between occupation and such indicators as these is far from perfect. Hence it is possible that much closer correlations between mortality/morbidity and other socio-economic variables are concealed.
- 7.55 Examination of this possibility might be pursued through further analysis of GHS data, and in principle regression analysis could be attempted using the wide range of socio-economic variables included in the Survey. We recognise that this does pose problems (for example the income data have not been considered to be of high quality, and there would be practical problems in producing a tape permitting analyses of health data in terms of socio-economic variables not hitherto considered in relation to health) - but we feel that much may be gained, and we should like such a study to be attempted.
- 7.56 A third significant issue which has been raised (Askham 1969) is the possibility that within social class V there is actually concealed an 'underclass': an 'unstable

social class V' .. If this is so, and it seems very likely, it might explain the growing discontinuity at class V in the association between class and (eg) post-neonatal death rate. Moreover, Baird, Birch, Horobin, Illsley and Richardson (1969) have shown that within class V the incidence of mental sub-normality is significantly greater among those families with a large number of children, those living in the 'poorest' type of area, in the 'poorest' type of residence, those with a disorganised family life and those families which lived in poverty. There is other evidence for a relationship between family size and childhood illness (eg bronchitis), and between childhood accidents/violence and family size and instability and parental history of psychiatric and physical illness. Nevertheless, as Morris has recently argued, we know far too little about the composition of class V (Morris, 1979).

7.57 It may be that the studies based on random samples (such as the GHS), or birth cohort studies, which we have suggested as a means of unravelling the relationship between social class and other (eg area-based) deprivations will not permit this issue to be broached. This is essentially because only about 6% of such a sample is now class V and the numbers involved do not therefore permit special analyses by family size, instability etc. What is needed here amounts to a study specifically of occupational classes IV and V, along the lines of the GHS, but taking more account of job/family/housing change; presence of mental handicap; family history of illness; retrospective study of periods of poverty, etc. This might be done by sampling in localities selected on the basis of their occupational class composition.

7.58 An alternative (or complementary) approach might be through study of selected industries possessing a suitable mix of social classes. Such a study would not focus exclusively upon specific occupational diseases (although it would involve rather broader questions relating to working conditions and health, such as safety, hygiene, pollution, and the effects of shiftwork upon self-reported health). It would include interviews with members of employees' households or families, and would use 'industry' both as a basis for securing a suitable national sample, and for examining the effects of a wide range of work-conditions upon health.

Ethnicity and Health

- 7.59 We have already indicated, in chapter 2, how slight is the information available in this country on the relationship between ethnicity (or race) and sickness. Small scale studies do suggest that somewhat different patterns of sickness obtain within immigrant communities (eg Gans (1966) found a higher prevalence of diet deficiency disorders among some children of immigrants (and we understand that rickets is still very common among Bengali children in Britain); Oppé (1964) found a higher prevalence of respiratory disorder among West Indian children; and Hood et al (1970) found West Indian children to be more prone to minor physical disorders), but this requires substantiation from larger scale work.
- 7.60 These differences appear to be explicable principally in terms of environmental variables. There is evidence for this from the United States (for example from comparison of differential mortality rates from birth through to the post-neonatal period - see Birch and Gussow pp 20-45). There is also evidence from this country of particularly delayed presentation for ante-natal care in some immigrant communities.
- 7.61 In chapter 8, which includes our proposal for an experimental action programme in a limited number of areas, we suggest that the training of health visitors for work in immigrant communities might be one aspect of such a programme. But further research is also needed. This would be designed to establish (1) the special health problems and health care needs (if any) of the principal immigrant communities; (2) whether there are other ways in which social policy can serve to reduce the health-effects of environmental and social factors upon a population which may, for various reasons, be at particular risk in respect of its health. A current study of the Bangladeshi community in Tower Hamlets is of the kind needed, but not only should there be more such research, but steps must be taken to facilitate contact between researchers in this poorly-developed field.

The Interaction of Social Factors: (1) interaction over time and transmission of ill-health

- 7.62 If respiratory disease is commonly to be found in all or most members of affected families, (for which there is evidence) how much more generally common is this familial aggregation of ill-health? If the family itself functions as a significant agent of transmission of ill-health (whatever the broader structural context) certain forms of intervention may acquire particular importance, as indeed may certain lines of further inquiry.

- 7.63 Some indications should be available from the GHS. In the context of the additional analysis which we have recommended, it should also be possible to look at the effects of (i) number of siblings and (ii) parental health on the morbidity of children. We would expect significant relationships to emerge, especially in class V, in line with the results of other research.¹
- 7.64 In so far as this may be the case, 2 lines of further study seem to be indicated. First, ways might be found of introducing consideration of health variables into the more common socio-economic studies of inheritance of wealth, educational attainment and occupation. Second, it becomes desirable to determine the relative importance of parental ill-health as against other social and economic disadvantages (with which of course it will often be associated) in 'determining' the health of children. Again, a start may be made with GHS data, since 'parental morbidity' might be introduced into a regression analysis (together with other socio-economic variables), taking the health of children as dependent variable.
- 7.65 But in order to study the dynamics of child health - the process by which ill-health and educational under-achievement (whether a consequence of handicapping conditions, absence from school, or cultural factors) develop together and so perpetuate the link between health and social class - it is necessary to turn to longitudinal studies.
- 7.66 In our view 3 issues upon which research needs to be brought to bear are:
- i. the interaction of processes leading to physical and mental disadvantage, handicap and ill-health;
 - ii. the role which services related to child health play, and might play, in inhibiting the cumulation of disadvantage;
 - iii. the routes by which some children escape what is for most born into similar conditions an unenviable fate.
- 7.67 Questions such as these and others involving changes over time, such as the consequences for health of social mobility, are best examined through the

¹ Eg Wilson and Herbert, studying 56 deprived families, found that in 40 "all or most members of the family were reported (ie by themselves) as having had much illness, or as suffering from defects or conditions which affected their activities" (Wilson and Herbert 1978).

longitudinal study, although the formulation of guiding hypothesis will in general derive from prior cross-sectional studies.

- 7.68 The OPCS longitudinal study (LA), based on a 1% sample of the census plus a 1% sample of all those subsequently added to the population by birth or immigration, is a potentially most important example of this approach. Utilizing census data as well as subsequent 'life events' (eg death of spouse, cancer registration, emigration, internal migration, death) routinely recorded, for each individual in the sample, the study permits a much more sophisticated examination of the relations between census indicators (such as housing conditions) and mortality than available from correlation. We have already (in Chapter 2) made use of some preliminary data from this longitudinal study, which showed the significance of housing tenure for mortality. Its value as a means of investigating the correlates of mortality is well recognised, and we need say no more than that we look forward with interest to the detailed studies being prepared (Goldblatt and Fox 1979).
- 7.69 The 1946 and 1958 national birth cohort studies represent a different approach in that the population is constant, and these have already yielded much of great value. Now that information on the children of the first group (who are now 33) is becoming available our understanding of inter-generational processes should be vastly enhanced. For our present purposes it is to the third such study (1970 births) that we can turn for a fundamental approach to the 'determination' of morbidity and development in children born into a world much more like that with which policy must now deal.
- 7.70 Available for analysis (but as yet largely unanalysed) are data on the 1975 follow-up of the 16,000 children in the 1970 birth cohort (1,000 of whom were also followed up at age 3).¹ Included are interview schedules completed by the mothers of the 5 year-olds interviewed by Health Visitors, and covering obstetric details (including subsequent births to the mother); breast-feeding; immunisations; visits to clinics, to GPs, to hospital and to the dentist; visits from Health Visitors; hospital admissions; operations; certain medical conditions (including hearing or vision difficulties); details of accidents; bouts of wheezing; loss of consciousness; speech difficulties, etc. Also available are Developmental History Schedules which the health visitors completed from the records of health visitors, child health clinic and hospitals, and from 'at risk' registers (where available). This includes the results of all screening and check-ups done up to the 5th birthday.

¹ Birth data were reported in R Chamberlain et al British Births

7.71 Analysis of this data could include, as

dependent variables

use of child health services

accidents

specific morbidities (respiratory disorders, accidents, skin disorders, etc)

developmental indices (size, test performance, behaviour, eyesight/hearing etc)

independent variables

class

Social Index (see above)

family size

parental and sibling health

mothers' mental health

region

health service usage

geographic mobility

7.72 Hopefully more precise hypothesis linking such variables with morbidity will have previously been generated by the further analyses of GHS data which we have proposed. A question on the occupation of the parents' parents at the time the child's parents left school may permit some comment on the implications of inter-generational social mobility (as well as attempts at creating an indicator of 'family class').

7.73 The dynamic element enters from the linkage of these data with the original 1970 (birth) data. It would thus be possible to look for the significance of (eg) obstetric factors, birthweight, use of ante-natal services, as well as changes in family circumstances (eg social class-housing) or behaviour (eg smoking) for the health of 5 year olds.

7.74 It should be possible to take children born into a socially disadvantaged group (say, class V) and see which of them were now at age 5 in advance of the 'norm' (in terms of health, development) for class V births. To what extent is this 'escape' associated with above average use of health services, social or geographical mobility or other factors? Similar analyses might be attempted for children born into very large families, or to unsupported mothers.

7.75 There is one other way in which a crucial element of change might be examined (although technical questions relating to the extent to which this is feasible remain). This is through linkage between this cohort study and one of the earlier ones. Between 1946 and 1970 a great deal changed in Britain - economically, socially and in terms of the availability of health services, not least through establishment of the NHS. Although we have been able to look at trends in mortality data in relation to social class earlier in our Report, linkage of cohort studies would enable us to go much further in assessing the consequences of specific long-term shifts in the economic and social structures, and of health, educational and other social policies, upon that most crucial outcome: the health of children.

The Interaction of Social Factors: (2) interaction in small areas.

7.76 The longitudinal approach as described above is uniquely able to permit analysis of the way in which the variety of socio-economic and environmental variables relevant for health interact over time. Because of its value as a means of investigating (class differences in) child development we set great store by such an approach.

7.77 A second approach which we feel offers scope for major advances in understanding focuses upon the way in which economic, social and environmental variables interact within small geographical areas. Such a study would be limited to a small number of such areas, selected on the basis of social condition or health data. It would involve collection of detailed economic, social, environmental and occupational data, as well as data on the health, ill-health, and mortality of the population. It would necessarily be a multi-disciplinary exercise. Such a study, we believe, would also permit far more detailed appreciation of the health effects of social and economic policies (without the need to assume the independence of such policies) than is possible from aggregate level data.

CONCLUSIONS AND RECOMMENDATIONS

7.78 In this Chapter we make various recommendations which will improve and extend the quality of class related health and health service utilisation data on a regular basis and enhance knowledge of their inter-relationships.

7.79 It is argued, in relation to health, that the monitoring of ill-health (itself still so imperfect) should evolve into a system also of monitoring health in relation to social and environmental conditions. Two areas where progress could be made are (i) in relation to the development of children, and (ii) in relation to disability. Certain modifications to community health statistics are proposed:

We recommend that school health statistics routinely provide, in relation to occupational class, the results of tests of hearing, vision, and measures of height and weight. As a first step we recommend that health authorities, in consultation with education authorities, each select a representative sample of schools in which assessments on a routine basis be initiated.

7.80 We should also like to see progress towards routine collection and reporting of accidents to children, ultimately distinguishing age and occupational class of the parents as well as location and circumstances of accidents. In relation to traffic accidents there should be better liaison between the NHS and the police, both centrally and locally.

We recommend that representatives of appropriate government departments (Health and Social Security, Education and Science, Environment, Trade, Transport and the Home Office) as well as the NHS and the police, should consider how progress might rapidly be made. The Child Accident Prevention Committee if suitably constituted and supported, might be a suitable forum for such discussions, to be followed by appropriate action by government departments.

7.81 In relation to the disabled, we should like to see local authorities reporting systematically on numbers of disabled as well as (however crudely) on assessments of severity of disablement applying to mentally handicapped people, elderly people in residential homes and other groups of handicapped people, as well as the general classes of the handicapped, as at present.

7.62 In our view it is the extent to which need is unmet, rather than pressure upon existing services, which should form the basis for planning, and it is this view which has underpinned our recommendations. Turning, then, to the health services themselves, it is clear that systematic knowledge of the use made of the various services by different social groups is extremely scanty. We recognise that collection and central reporting of occupational data within the context of the various administrative returns poses problems of feasibility and accuracy. Nevertheless we feel that the desirability of such information is such that further thought should be given to how these problems might be overcome, within the context of the current review of health service statistics.

7.83 Further, we draw attention to the importance of the National Food Survey as the major source of regular information on the food purchase (and hence nutrition) of the population. We recommend however, that consideration be given (drawing upon epidemiological expertise within the OPCS and elsewhere) to development of the National Food Survey into a more effective instrument of nutritional surveillance in relation to health, through which various 'at risk' groups could also be identified and studied.

7.84 Beyond this, we feel that the 5 areas in which further research is needed are:

- surveillance of the development of children, especially in relation to nutrition and to accidents;
- better understanding of health effects of such aspects of behaviour as smoking, diet, alcohol consumption, exercise;
- the development of area social conditions and health indicators (for use in resource allocation);
- health hazards in relation to occupational conditions and work;
- study of the interaction of social factors implicated in ill-health: over time, and within small areas.

7.85 Though these issues are in an obvious sense quite distinct, yet they can also be seen as aspects of an overall strategy, and it is this strategy which we particularly wish to commend. Our concern is with the interaction of variables traditionally seen as directly implicated in ill-health (such as smoking behaviour and work conditions) with social variables. It will be necessary to examine the

effects upon the health of social groups of a wide range of social and behavioural variables: implying further work both on the development of health indicators and upon the way in which disadvantageous social and environmental conditions may give rise to or exacerbate the effects of patterns of dietary behaviour, leisure behaviour etc.

7.86 The importance of the problem of social inequalities in health and their causes, as an area for further research needs to be emphatically stated. We recommend that it be adopted as a research priority by the DHSS, and steps taken to enlist the expertise of the Medical Research Council, as well as the Social Science Research Council, in the initiation of a programme of research. Such research represents a particularly appropriate area for Departmental commissioning of research from the MRC.

7.87 Whilst we ourselves have not attempted to develop a research strategy in detail within this report, it is our view that 2 types of study are needed. First, a study of the interaction of social and environmental variables over time, and their relationship to the (healthy) development of children. The longitudinal approach, as in the existing cohort studies, is appropriate here. Second, a study carried out in a small number of carefully selected places. Such a study would concern itself with the whole range of social conditions relevant for health, as well as patterns of behaviour which may in some senses be damaging to health. Crucial for further progress in the elimination of health inequalities is greater understanding of the interactions of this complex set of variables: social and individual. Such interactions will necessarily have both diachronic and locational dimensions, and the studies we have in mind will be sensitive to, and permit elucidation of, both.

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CHAPTER 8

POLICIES TO REDUCE INEQUALITIES OF HEALTH:

17 PLANNING THE HEALTH AND PERSONAL SOCIAL SERVICES TO REDUCE INEQUALITIES: AND A DISTRICT ACTION PROGRAMME

8.1 In the preceding analysis we have traced the decline of infectious disease and the relatively greater importance today among the causes of death and ill-health or injury, of conditions attributable to or exacerbated by smoking, environmental pollution, the hazards and poor conditions of work, and accidents. In explaining the decline in infectious disease also many authorities (see, for example, McKeown, 1976, chapters 3 and 4) have emphasised the importance of an absolute historical improvement in living standards (nutrition, housing, sanitation, environment - stemming partly from an increase in family incomes) in proving a bulwark against infection, or at least the worst effects of infection, as well as improvements in medicine and the health services. In general terms, therefore, any strategy to reduce inequalities in health is bound to involve areas of social policy outside the health services as well as within them. In the next chapter we will outline some of the major steps which can be taken outside the purview of the health and personal social services and devote this chapter to the services falling under the general administration of the Department of Health. Inevitably this will include some services, like services for the under fives and the nutritional services, for which the Department of Health is jointly responsible with other departments.

A. THE DEFINITION OF OBJECTIVES AND PRINCIPLES

8.2 What kind of strategy for the health and health related services in reducing inequalities of health needs to be developed? We believe that a three-fold scheme of priorities - for children at the start of life, for those bearing the brunt of cumulative ill-health and deprivation, and for everyone in terms of preventive action - follows logically from our analysis in earlier chapters. Let us consider these in turn.

8.3 First, inequalities between the occupational classes in mortality rates are greatest in infancy and early adulthood. It would be wrong to suppose that

improvements could be introduced for infants and young children without paying heed to the need for improvements in the living standards of their families, and the physical constitution and access to health services of their parents, particularly their mothers. Nevertheless the wide gap in life-chances, especially among infants, together with the likelihood that the beneficial effects of any reduction of that gap will be carried over into adult life and may lead to savings in health expenditures, demands that action must be taken at that stage. It seems to us, on the basis of for example, mortality data, that action needs to be taken within the health services to improve access and facilities in particular for pregnant mothers and others with infants, and that a bigger shift must take place to the community health services than hitherto planned. Thus the great majority of "excess" deaths in classes IV and V are attributable in the case of infants initially to congenital abnormalities and other complications of birth and of the perinatal period, in later infancy respiratory diseases play a major part. In the case of children aged 1 - 14 the great majority of "excess" deaths in these classes are attributable to accidents and (again) respiratory disease and congenital anomalies (see OPCS, 1978, pp.168-171). As we will later go on to show, this means that special measures need to be taken in particular to improve and equalise the quality of community health services, particularly those devoting resources disproportionately to children and which prevent risks of ill-health, injury or accident.

8.4 Second, we have shown that inequalities in health tend to arise from the cumulative deprivation of a life-time. The length as well as the fact of exposure to bad housing, poor working and environmental conditions, activities inimical to health (like smoking) and low income will be associated with the incidence and severity of chronic ill-health and disability as well as premature death. It cannot be sufficient to plan only for the next generation or to take steps to prevent certain health problems from arising in the future. Those who are the worst victims of past and current industrial and social practices deserve services to restore health and enable them to cope with disabilities. There is considerable evidence of the inequalities which exist. Thus, the reports of the General Household Survey for the 1970s (see Chapters 2 and 3 above) have consistently found a very marked difference between socio-economic groups in the prevalence and severity of disablement. In the

case of adults aged 15-64 the great majority of "excess" (over expected) deaths in classes IV and V are diseases of the circulatory system (especially ischaemic heart disease and myocardial infarction), diseases of the respiratory system (especially bronchitis and pneumonia) and accidents (especially motor vehicle accidents) (OPCS, 1978, pp.42 and 64-66). Quite apart from preventive action within and outside the health services we consider that steps deserve to be taken to provide improved treatment for chronic conditions and services for rehabilitation, participation and domestic independence. If a broad meaning of "health" is adopted of the kind we have favoured the physical, psychological and service problems of disabled people would occupy a prominent position in a strategy to reduce inequalities of health. Moreover, as with our first objective, a marked shift of resources to community health and welfare services would be implied. We appreciate that the problem is widely dispersed in the population and that it may be possible to increase or transfer resources to measures to deal with it only gradually. Preference would have to be given to most severely disabled people first, and access for less severely disabled people improved at later stages. Inequalities between occupational classes seem to be largest among the youngest adult age-groups though the problem of disablement is of course proportionately much smaller than at older ages.

- 8.5 Third, ill-health can be prevented and health positively encouraged by anticipatory planning, education and the right structure of services. Any examination of the causal factors accounting for inequalities, for example, in mortality rates, demonstrates both in relation to health policies and other policies the multiplicity of factors deserving attention. Such examination also opens up the possibility of causal determinants prior to those initially identified. Thus, it is now widely accepted that the contribution of medical interventions to the reduction of mortality and morbidity - even that associated with infectious disease - has been less than once thought to be the case. Nutrition or diet, for example, can be a major determinant of resistance to disease. Adequacy of diet can itself be investigated in relation to social and economic factors. It becomes clear that whilst the determinants of adequate nutrition are complex, low income (combined with withdrawal of welfare foods, restricted access to markets from which the rural poor in particular may suffer, and excessive advertising of soft drinks, confectionery, and other foods of little nutritional value) can be a barrier.

8.6 What is clear is that equity in health depends on a high national standard of knowledge about self-care and the care of children and other dependants, and the pursuit of activities conducive to health, which themselves depend on such factors as high standards of home-keeping, good education and widely diffused physical and sporting activities. This suggests a coherent national programme of enormous scope and we can only hope to give illustrations of some of the most important parts of such a programme. They will include an expansion of health education, selective screening, and strong anti-smoking measures. What is important to convey is the relative inexpensiveness of measures which might reduce the numbers of certain kinds of patient or casualty. We are deeply conscious not only of the preposterously small part of NHS resources committed to "preventive health" but also the lack of understanding by health authorities (education authorities) of good health practice and how they might contribute to strengthening and supplementing such practice.

8.7 Our objectives are therefore three-fold:

- (i) To give children a better start in life.
- (ii) For disabled people, to reduce the risks of early death, to improve the quality of life whether in the community or in institutions, and as far as possible to reduce the need for the latter.
- (iii) To encourage good health among a larger proportion of the population by preventive and educational action.

8.8 These objectives are of course interrelated. If they are pursued vigorously inequalities in health can be reduced. Later we set out in some detail how they might be interpreted. We recommend their adoption by the Secretary of State for Social Services.

8.9 How far are these objectives observed at the present time? If the analysis of inequalities in health has implications for policy then present methods of planning and resource allocation need to be reviewed to find whether any changes are required. In the next section, therefore, we will review DESS priorities and go on, in the following section to review methods of allocating

resources to the health and personal social services. Our concerns are very much within the spirit of the two documents on priorities: Priorities for Health and Social Services in England and The Way Forward, and the Resource Allocation Working Party Report. We note that the Royal Commission on the National Health Service broadly endorsed both the priorities and the method of allocating resources (Report, 1979, pp 69 and 345). This prepares the ground for the two final sections of the chapter. In these sections we propose first a programme for all areas, and second an additional programme to be attempted experimentally for ten areas with highest mortality.

8.10 This strategy requires one further brief introductory comment. What might be called an "area deprivation" strategy has not so far been formally adopted in health care policies although it has been followed up in the policies of other central departments - the Department of Education, the Home Office and the Department of the Environment - in the last 12 years. The concepts of "Educational Priority Area", "Community Development Project", "Housing Action Areas" and "Inner Cities" have become well-known. The idea of "positive discrimination" has been pursued with enthusiasm though with some loss of clarity and coherence. Thus, different passages of Chapter 5 of the Plowden Report could be read as advocating discrimination in favour of the most educationally deprived areas, schools and pupils. These three are of course very different policies and an almost totally different list of beneficiaries. We are conscious of both the advantages and disadvantages of different forms of "positive discrimination". The term itself can be misleading because it implies, or rather tends to be taken to mean, that individuals, groups or populations are singled out for preferential or above-average treatment to redress their deprivation. In practice, close examination suggests that new programmes are attempting only to bring services in a small number of places closer to the national standard by exceptional, supplementary action. There have been difficulties in selecting areas of deprivation because of lack of certain kinds of information. And the programmes have rarely been related either to the possibility of putting experimental schemes subsequently into wider practice or integrating them fully into the administration of services in their areas. On the other hand, when money is tight there is some advantage from developing demonstration, experimental and compensatory projects.

8.11 We believe that additional resources need to be committed to those at relatively high risk of ill-health or premature death through the community health, health-related and preventive health services. This must include action in all areas as well as in areas of high risk. The argument for selecting a small number of areas for special action is three-fold:

i. for purposes of demonstration. When resources are scarce the beneficial effects of adopting additional measures generally can be demonstrated for a few places; (ii) for purposes of experiment. When there are doubts about the best methods of developing certain features of services - for example early ante-natal attendance or collaboration in assessment and visiting of disabled or elderly people by the statutory and voluntary services - alternatives need to be tried and evaluated; (iii) for purposes of developing reasoned priorities. Comparatively little is known about the relationship between health service inputs and outputs and it is becoming more and more important to discover what additional developments (and rearrangements of service) are most economically related to high standards of health in a population and the reduction of inequalities in health. Research and information services have developed too haphazardly. While they have to continue to be developed in all regions of the country a complementary strategy of concentrating studies in a few areas deserves to be properly backed. Experienced and clever investigators can be induced to go to areas where the greatest problems are to be found. A programme of inter-related studies will be a lot cheaper to finance, and is more likely to produce the kind of results likely to assist the formulation of priorities.

8.12 For the above reasons we have divided the ensuing sections following our introductory section (A), on objectives and principles of analysis, into 4 parts: (B) a review of existing plans and priorities; (C) a review of the current methods of allocating resources; (D) the need for a district action programme in all areas, and the major components of such a programme; and (E) an additional and experimental programme in 10 areas of high mortality and social conditions.

B. PLANNING

8.13 In developing the right strategy existing methods of planning must be carefully reviewed. In this Section (B) we shall discuss the Government's formulation of priorities, and in the next Section (C) the methods of allocating resources "equitably and efficiently to relative need" (according to the terms of reference of the Resource Allocation Working Party). Priorities in the

development of services, set out in the consultative document on Priorities (1976) and the Way Forward (1977) were reaffirmed in the planning guidelines for 1978-79 issued to health and personal social service authorities. For this period of the late and middle 1970s, therefore, the emphasis in theory has been upon care in the community. The document on Priorities sought above average (ie > 2% on current account) rates of increase in expenditure on services used mainly by the elderly (including home-nursing, hospital geriatrics, home helps etc); on services used mainly by children and families with children (including health visiting); and on services for the mentally handicapped. A less than average rate of growth was envisaged for acute and general hospital services, while (in the light of the then declining birthrate) expenditure on hospital maternity services would actually be reduced. Attention has also been drawn to the continuing importance attached to preventive health measures, expanded family planning services, the special needs of ethnic minorities (and the special problem of late entry to ante-natal care), the Inner City, development of facilities for women seeking termination of pregnancy, the rationalisation of acute hospital services, and the need to 'consider ways in which local take up of ante-natal services might be improved'. With these general statements about priorities we are in whole-hearted agreement, though we regard improvement of the quality of maternity care as crucial: there can be no scope for savings here. Nonetheless, at least 2 disconcerting observations need to be made. First, objectives are neither clearly defined nor operationalised. A good example is that of 'community care'. The Department itself seems to mean different things by this concept at different times. For example, in one overall review of planning the Department defined one of its primary objectives for the elderly to be to develop domiciliary provision and encourage 'measures designed to prevent or postpone the need for long-term care in hospital and residential homes' (DHSS, Social Care Research 1978, p.13) but in the planning document The Way Forward community care was defined to cover a whole range of provision, including community hospitals, hostels, day hospitals, residential homes, day centres and domiciliary support. 'The term "in community care" embraces primary health care and all the above services, whether provided by health authorities, local authorities, independent contractors, voluntary bodies, community self-help or family and friends'. (The Way Forward 1977, p.9).

TABLE 8.1

Distribution of expenditure within the personal social services

Year	percentage distribution of local authority expenditure				
	residential care	community care	day care	other	total
1974-5	49.6	22.7	11.3	16.5	100
1975-6	51.0	21.7	11.4	16.0	100
1976-7	50.8	21.0	11.8	16.4	100
1977-8	50.6	21.1	12.0	16.3	100

Source: Cmnd 7049 (for 1974-5) and Cmnd 7439 (for 1975-78)

8.14 We appreciate that clarification of the objectives can sometimes provoke public controversy (because people then have something precise with which to agree or disagree), and that time can be taken up in needless acrimony. But the purpose of better educating the public can be served, the need for accountability in a democracy strengthened, and, very important, short-comings or ambiguities in the initial thinking made good.

8.15 Second, some of the changes recommended in the plan are simply not materialising, or are materialising so slowly as to be difficult to discern. Thus, the latest trends in spending on the personal social services give little or no sign of the planned decline in spending on residential care, with the corresponding expected increase in community care (Table 8.1). And a summary of local authority planning returns does not bear out the change in emphasis recommended by the DHSS. (Local Authority Personal Social Services Summary of Planning Returns 1976-77 to 1979-80, 1978). Developments can also be traced in the public expenditure White Papers. In 1972-73 and 1973-74 expenditure on the personal social services at constant prices grew by 15 per cent per annum (CMND 7049) whereas in 1974-75 and 1975-76 the rate slowed to 8.3 per cent and 6.5 per cent respectively, and became a negative rate in both 1976-77 and 1977-78, being minus 1.3 per cent and minus 1.6 per cent respectively (CMND 7439). So despite the high priority given to the growth of the personal social services in the 1976 consultative document and subsequently, the publications in fact marked a halt in the previous exceptional growth of those services. Moreover since expenditure in 1977-78 and 1978-79 estimated in the latest White Paper (CMND 7439) falls short of what was planned in the previous 2 White Papers by about 2 per cent and one per cent respectively, there is reason to doubt the Government's capacity to realise the prospective plans for growth of between $2\frac{1}{2}$ per cent and 3 per cent in the next 5 years. Planned changes in the emphasis of spending were modest, excessively modest as we will argue below, but the inability to fulfil them requires analysis and explanation.

8.16 The latest guidelines, representing the priorities of the previous government, are shown by programme and by sector in Tables 8.2 and 8.3. No doubt these will be reviewed during the current financial year by the present administration, following the general decisions about public expenditure and cash limits announced with the Budget proposals in June 1979. Expenditure on community

Summary Table by Program: (£m November 1976 Prices)

TABLE 8.2

	Out-turn 1976/77		Illustrative Projection 1981/82		Illustrative Annual Growth Rate per annum on Revenue Account
	Revenue	Capital	Revenue	Capital	
GRAND TOTAL	5608	477	6211	397	2.1
PRIMARY CARE	1102	31	1237	19	2.3
Family Practitioner Services	1019		1144	1	2.3
Prevention	14		17		3.5
Family Planning	12		15		5.2
Other Community Health	58	31	61	18	1.2
GENERAL & ACUTE HOSPITAL AND MATERNITY SERVICES Sub-total	2169	294	2327	222	1.4
Acute IP and OP	1661)	294	1822)	222	1.9
Ambulances	104)		111)		1.3
Other Hospital	178)		182)		0.5
Obstetric IP and OP (1)	202)		188)		- 1.7
Midwives	24)		24)		0.0
SERVICES MAINLY FOR ELDERLY AND PHYSICALLY HANDICAPPED Sub-total	735	61	863	46	3.3
Geriatric IP and OP (2)	263	35	310	36	3.3
Non-Psychiatric DP	15		18		3.6
District Nursing	81		108		6.0
Chiropody	11		13		3.7
Residential Care	170	20	188	9	2.1
Home Help	105		131		4.5
Meals	12		15		4.3
Day Care	23	5	26	1	2.3
Aids, Adaptations, Phones etc	13		14		2.5
Services for the Disabled	42	1	40		- 1.0
SERVICES FOR MENTALLY HANDICAPPED Sub-total	241	28	282	28	3.2
Mental Handicap IP and OP	189	16	209	11	2.0
Residential Care	22	7	32	12	8.3
Day Care	30	5	41	5	6.0
SERVICES FOR MENTALLY ILL Sub-total	430	28	477	43	2.1
Mental Illness IP and OP	393	24	426	32	1.6
Psychiatric DP	16		20		4.5
Residential Care	5	2	8	5	10.1
Day Care	4	2	9	6	18.7
Special Hospital	12		15	1	3.9
SERVICES MAINLY FOR CHILDREN Sub-total	317	19	368	22	3.0
Health Visiting	47		63		6.0
School Health	51		51		0.0
Welfare Food	18		19		0.7
Residential Care	143	16	164	18	2.8
Boarding Out	20		26		5.7
Day Nurseries	33	2	37	3	2.7
Intermediate Treatment	1		2		14.9
Central Grants and YTCs	5	1	6	1	5.2
OTHER SERVICES Sub-total	614	16	657	17	1.4
Social Work	107		119		2.3
Other LA Services	28	12	30	9	1.6
Hosp & Comm Health Admin	207		203		- 0.4
LA Admin	132		148		2.4
Centrally Financed Services	140	4	157	8	2.2

All figures are approximate. Discrepancies are due to rounding.

Abbreviations: DP, IP, OP, YTCs - Day patients, In-patients, Out patients, Youth treatment centres.

Notes: (1) See paragraph 4.11.

(2) Includes "units for younger disabled."

Summary Table by Sector (Cm November 1976 Prices)

TABLE 8.3

	Out-turn		Illustrative Projection		Illustrative Annual Growth Rate on Revenue Account
	1976/77		1981/82		
	Revenue	Capital	Revenue	Capital	
GRAND TOTAL	5608	477	6211	397	2.1
HOSPITAL AND COMMUNITY HEALTH sub-total	3524	400	3840	319	1.7
HOSPITAL sub-total	2917	369	3174	301	1.7
Acute IP and OP	1661	)	1822	)	1.9
Other Hospital	178	) 294	182	) 222	0.5
Obstetric IP and OP (1)	202	)	188	)	- 1.7
Geriatric and YD IP and OP (2)	263	35	310	36	3.3
Non-Psychiatric DP	15		18		3.6
Mental Handicap IP and OP	189	16	209	11	2.0
Mental Illness	393	24	426	32	1.6
Psychiatric DP	16		20		4.5
COMMUNITY HEALTH sub-total	297	31	352	18	3.6
Health Visiting	47		63		6.0
District Nursing	81		108		6.0
Midwives	24		24		0.0
Prevention	14		17		3.5
Chiropody	11		13		3.7
Family Planning	12		15		5.2
School Health	51		51		0.0
Other Community Health	58	31	61	18	1.2
Ambulances	104		111		1.3
HCH Administration	207		203		- 0.4
FAMILY PRACTITIONER SERVICES sub-total	1019		1144	1	2.3
LA PERSONAL SOCIAL SERVICES sub-total	847	71	991	68	3.2
<u>Residential</u> Elderly + Disabled	170	20	188	9	2.1
Mental Handicap	22	7	32	12	8.3
Mental Illness	5	2	8	5	10.1
Children	143	16	164	18	2.8
Boarding Out	20		28		5.7
Home Help	105		131		4.5
Meals	12		15		4.3
<u>Day Care</u> Elderly + Disabled	23	5	26	1	2.3
Mental Handicap	30	5	41	5	6.0
Mental Illness	4	2	9	6	18.7
Day Nurseries	33	2	37	3	2.7
Aids, Adaptations, Phones etc	13		14		2.5
Social Work	107		119		2.3
Intermediate Treatment	1		2		14.9
Other LA Services	28	12	30	9	1.6
Administration	132		148		2.4
CENTRALLY FINANCED SERVICES sub-total	217	6	236	10	1.7
Welfare Food	18		19		0.7
Services for the Disabled	42	1	40		- 1.0
Special Hospitals	12		15	1	3.9
Central Grants + YTCs	5	1	6	1	5.2
Misc Centrally Financed Services	140	4	157	8	2.2

All figures are approximate. Discrepancies are due to rounding.

Abbreviations: DP, IP, OP, YD, HCH, YTCs — Day patients, In-Patients, Out-patients, Younger District, Hospital and Community Health, Youth treatment centres.

Notes: (1) See paragraph 4.11

(2) Includes "units for younger disabled."

health services is shown as projected to increase by 3.6 per cent per annum, compared with 2.1 per cent for all health and personal social services, and 1.7 per cent for hospital services. Within the community health total, expenditure on health visiting (mainly directed at children) is seen as growing by 6 per cent per annum. We have already stressed the importance we attach to the 'outreach' capacity of health visitors. We are less happy about the projected zero growth rate for the school health service and only 0.7 per cent for welfare food. The justification for not increasing expenditure on school health is the declining numbers of school-age children over the coming years. In our view there are many areas where even a decline in school population should not outweigh the need more regularly to monitor the health of all school children in determining the proper distribution of expenditure. If, as we recommend in Chapter 7, statistical reporting on the working of the school health service were made on the basis of the extent to which children, and particularly children at risk by virtue of social factors were examined, then the deficiencies of current levels of provision would be apparent. Such universal monitoring of child health is an essential accompaniment of the more selective interventions of health visitors. So far as welfare food is concerned we are aware of the low take-up and aware also that the figures have dwindled since the heavy advertising programmes in 1971 and 1972, when take-up was greatly improved. Until April 1971, parents of children under 5 years of age could obtain a milk token book which entitled them to one pint of milk at a cheap rate. The extension of eligibility for free milk has not fulfilled expectations and we recommend that a non-means-tested scheme should now be introduced, beginning with couples with their first infant child, and infant children in large families. Publicity for, and distribution of, national dried milk and welfare vitamins should also be improved.

- 8.17 Table 8.3 indicates that, overall, the community health service share of the total hospital and community health budget is intended to grow from 8.4 per cent in 1976-77 to 9.2 per cent in 1981-82 (Revenue account only). This expenditure includes 3 items - provision for the care of young children, provision for disabled and elderly people, and prevention - which we consider deserve to be accorded higher priority. Some other items deserving higher priority are to be found elsewhere in the table, particularly under the headings "Personal Social Services" and "Family Practitioner Services". What is the right distribution of resources between services? It may be argued that there is very

little hard evidence on the relationship between further investment in particular parts of the health and personal social services and an improvement in the health of the population. Yet the existing distribution as between different types of health care or service is not the result of the accumulation of knowledge of the best use of national resources in securing a healthy society, but more the result of the historical interplay of the health care professions, central and local administration and party and public opinion. Admittedly there are pointers from certain types of research. Thus, the DHSS sponsored a study of infant deaths in 3 areas to try to identify avoidable factors contributing to deaths. Two paediatric assessors believed there were avoidable factors in just over a quarter of the deaths - divided between parental factors (a third), general practitioner or hospital factors (a quarter) and social factors (a third). The hospital factors included hospital-acquired infection, diagnostic failures or delay and faulty management. The GP factors included delay in visiting, slow referral to hospital, underestimation of the severity of the condition and diagnostic delay or failure. (Report of Public Health Medical Subjects 1970 No 125). In other studies the poorer outcome of treatment for certain conditions in some hospitals than others has been measured. (For example, Ashley, Howlett and Morris 1971). These suggest what kind of steps can be taken to correct the distribution of resources or concentrate them and improve accountability and administration. But they hardly allow precise quantitative assessment of the percentage of expenditure which should be devoted to each service. The same might be said, for example, of studies of in-patient costs in acute and long-stay hospitals and studies of the merits of residential versus domicilliary care. Thus, for elderly, physically handicapped, mentally handicapped, and mentally ill people quantitative evidence can be collected on capacity for self-care, desire for independence, the degree of their social interaction, the frequency of medical and nursing treatment, general satisfaction with residence and the costs of accommodation. This kind of work may be said to be vital for the purpose of reaching better judgments about the desirable future balance between different types of service. But any claim to discriminate mathematically and finally the exact percentage of the population who should be in hospital or other residential accommodation rather than provided with supporting services in the home must remain spurious.

8.18 Nonetheless, there are 2 methods of making more reasoned estimates of how resources should be allocated between services. One is to acknowledge the

force of certain evidence or arguments in favour of the more rapid growth of some services than others. Concessions can be made to studies of short-falls in provision for meeting needs, studies showing the cost and other advantages of alternatives to institutional care and the pressure of public opinion in favour of improving services for dependent groups in the population, such as the elderly, as well as protecting and expanding general practice.

- 8.19 Thus, in 1976, the DHSS argued for a relatively higher rate of growth for primary than for hospital care (both acute and long-stay), and high rates of growth for day care for the elderly and other minorities, residential care of the mentally handicapped and mentally ill, home nursing and health visiting. Zero rates of growth were recommended for school health, clinics, welfare food and the midwifery service. However, no rationale was offered for the percentage rates chosen (DHSS 1976 pp 82.3).
- 8.20 The other is to make estimates of the shortfall of need in different sectors so that a statement of long-term objectives can be operationalised. A good example is provided by a succession of studies of the need of the elderly for home help (Townsend and Wedderburn 1965; Harris 1968; Hunt 1970). For some years the DHSS has consequently accepted a guideline of 12 home helps per 1000 elderly (Circular 35/72). By 1976 the number had in fact reached 6 per 1000.
- 8.21 These 2 methods need to be more explicitly developed and integrated. Whatever the difficulties involved in spelling out health care objectives in terms of resources, manpower and structures of service it is important for this to be done. Better short-term decisions about relative rates of growth of different parts of the health and personal social services (which are of course shaped in part by external economic and political factors) can then be taken. Moreover, some of the problems (often of a political nature) of translating long-term objectives into programmatic measures of an immediate as well as more distant kind can more realistically be confronted. If both methods had been adopted in the consultative document on Priorities (1976) it is unlikely that the irony of adopting a rate of growth for the home help service which would take 35 years to reach its object would have been missed.
- 8.22 Another example can be taken from the White Paper on Better Services for the Mentally Handicapped (1971). An attempt was made in Table 5 of that document to list the objectives of policy (flowing from research into the

capacities of patients) in a quantitative form. It was proposed to reduce the number of adult in-patients of hospitals in a programme covering 15 to 20 years from 51,000 to 27,000 and to increase the number in residential care in the community (including short stay) from 5,300 to 29,400. Clearly there were marked implications for the allocation of resources between services of a proportionate kind as well as absolute kind, which were not clarified and, despite some obvious difficulties, deserve still to be clarified. At the rates of progress during the 5 years 1971-1976 Tyne has estimated that the former will take another 29 years and the latter 17 years to achieve (Tyne, October 1978).

- 8.23 While we are aware of the problems of conceptualising and measuring "need" (see for example the discussion in Lind and Wiseman 1978, pp 414-416) we consider there is no better alternative conceptual basis for developing a coherent rationale for the allocation of health care resources, and recommend accordingly.
- 8.24 Our brief outline of recent plans published by the DHSS has called attention both to the relatively weak and inconsistent advocacy of a transfer of resources to community care and the evidence that Government intentions have not even been carried into effect in the mid and late 1970s. We recommend a shift of resources within the National Health Service and the personal social services on a larger and more determined scale than so far accomplished towards community care and particularly towards the increased availability of care for young children, and see this as an important part of a strategy to break the links between social class or poverty and health. As Table 8.4 suggests, there are parts of the health service in which current levels of expenditure need not be exceeded, or might even be reduced, because the number of patients or residents can be reduced and (as in the case of pharmaceutical services) major savings made in costs which otherwise seem all too likely to escalate.

TABLE 8.4

Planned and Recommended Revenue Expenditure on Selected Services (£m)

(Nov. 1976 prices)

	1976-77 actual	1981-82 DHSS projection (1978)	1981-2 Alternative I	1981-2 Alternative II
SERVICES TO BE GIVEN HIGHER PRIORITY THAN AT PRESENT	£m	£m	£m	£m
1. <u>Health and Welfare of mothers and pre-school and school children</u>				
Midwives	24	24	26	28
Family Planning	12	15	20	21
Health visiting	47	63	66	70
Day nurseries	33	37	60	63
School health	51	51	60	65
Welfare food	18	19	40	43
Boarding out	20	26	28	30
Sub-total	205	235	300	320
2. <u>Family practitioner (other than pharmaceutical)</u>	440	494	514	547
3. <u>Care of disabled in their own homes</u>				
Home nursing	81	108	116	124
Chiropody	11	13	13	14
Home help	105	131	160	170
Meals	12	15	20	21
Day care	57	76	90	96
Aids, adaptations	13	14	30	32
Services for disabled	42	40	50	53
Sub-total	321	397	479	510
4. <u>Other specific preventive measures</u>	14	17	50	53
Total selected "higher priority" services	980	1143	1343	1430
recommended increases (Total 1, 2, 3 and 4)	-	-	+ 200	+ 287
SERVICES TO BE GIVEN SMALLER PRIORITY THAN AT PRESENT				
Acute IP and OP				
5. Mental handicap IP and OP				
Mental illness IP and OP				
Residential care for elderly				
6. Pharmaceutical services				
Total selected "lesser priority" services (5 + 6)	2992	3295	3095	3295
recommended decrease "lesser priority services" (5 + 6)	-	-	- 200	0
6. Experimental 10-area programme			(30)	30

8.25 The first column of Table 8.4 shows actual expenditures under a number of programme headings for 1976-77. The second column, a projection of expenditures to 1981-82, is indicative of the modest shift of resources sought by the previous administration. (1) In the third column (labelled "Alternative I") we illustrate how the more determined shift of resources we consider necessary might be brought about essentially within planned levels of expenditure. This illustration shows savings of £200 million in 1981-82, set against additional expenditure of £200 million plus £30 million for the experimental 10-area action programme described below (see p 54). This reallocation of resources does not imply reduction in current levels of expenditure, but only in the (admittedly small) anticipated rate of growth. In our view the largest scope for reductions in rate of growth of cost, if not in absolute cost, is in pharmaceutical services, and in general we endorse the recommendations made by the Royal Commission on the National Health Service designed to achieve this end (Report, Chapters 7 and 8).

8.26 Some of us consider that the rate of growth to 1981-82 envisaged in the planning documents quoted (ie an expenditure of £3295 million on what we term 'low priority services') will do no more than permit an overall maintenance of current levels of provision. It would then follow that any reduction, even in these services, would have serious consequences. Column 4 in Table 8.4 (labelled "Alternative II") illustrates how the shift of resources we have recommended should be brought about on the more optimistic assumption that no service should be financed at a level below that previously forecast for 1981-82, and that additional resources could be made available. On this basis our proposals would require an additional £287 million, plus £30 million for the experimental action programme.

(1) Between 1976-77 and 1977-78 expenditure on our heading 1 (mothers and children) rose from £221.3 million to £230.8 million (at 1978 prices); or expressed as a percentage of all NHS and PSS expenditure, from 3.64% to 3.71%. Expenditure on our heading 3 (disabled) rose from £352.6 million to £359.4 million, but as a percentage of total NHS and PSS expenditure this actually represented a slight fall: from 5.80% to 5.78%. (Expenditure figures taken from Royal Commission on the NHS Report Table E1 p 426).

- 8.27 These recommendations should, however, be thought of as money saving in two senses. First, by reducing inequality and laying a better basis for the maintenance of health, the incidence of ill-health (and hence the need for health care treatment) will be diminished. Second, by precautionary and supportive action the need for more expensive types of treatment will be reduced. Thus, whilst it may be true that many of those in hospital require additional resources, yet if fewer patients need be admitted or if the duration of stay can be safely reduced, there can still be scope for savings.
- 8.28 We recognise that the links in planning between domiciliary and residential services need to be developed as much as the links between health and personal social services. In the next few years we recognise that conditions will differ between Areas and Districts and that the scope for redeployment of resources will depend very much on, for example, the revenue consequences of capital schemes now coming 'on stream', but we see no reason why an upwards revision of the approximate magnitude we have suggested should not now be a general target.
- 8.29 Diversion of resources to those NHS Regions, Areas and Districts in greatest need, and (through the planning process) to fulfil the 3 objectives listed above are 2 essential aspects of the strategy to tackle health inequalities. Two kinds of district action programmes deserve to be developed; one which flows from the fresh principles of allocation of resources to all districts, and supplementary programmes in areas of greatest need. These will be discussed in turn. We do not believe that new programmes for special areas make sense independently of changes in general policy and administration.
- 8.30 Within the NHS there is a strong case for a new programme of activity, even though it would necessarily include a number of elements of existing activity. Personnel at all levels would wish to play their part in a new Health Development Programme and would expect to do so. Morale would suffer if an opportunity were not created and certainly there is a large amount of evidence that morale is a critical problem at the end of the 1970s. 'It is not the organisation that is the Services' chief ailment. The prime trouble is low morale in many workers - and some would no doubt assert that reorganisation increased their despondency ... What [the Service] needs, above all else, are clearer efforts, visible to all, to increase the satisfaction and togetherness of its employees'. (Editorial, The Lancet, 6 January 1979). Obviously adequate reward has much to do with morale

but involvement in a project to raise standards and save lives would, we believe, capture the imagination and release the enthusiasm of many groups of health personnel.

- 8.31 It will not be our purpose to spell out a programme in every last detail. Since the Royal Commission on the NHS has recently reported on a wide range of matters that would be invidious. Our task is rather to emphasize the principal causes in inequality in health and specify the kind of measures that can be adopted to reduce such inequality, leaving to the Secretary of State, after studying the Royal Commission's Report, the responsibility of accepting and extending our suggestions in relation to those of the Royal Commission as he sees fit, but also to district teams the responsibility of deciding how national guidelines can be applied to local conditions.
- 8.32 In general we believe our recommendations complement those of the Royal Commission, particularly in relation to the need to improve primary care and introduce better preventive services and services for different groups of handicapped people.

(C) RESOURCE ALLOCATION

- 8.33 Within the planned growth of resources for the health and personal social services the Secretary of State has sought to reduce inequalities in the allocation of resources to different areas. The strategy was outlined in the 1976 Report of the Resource Allocation Working Party. Our recommendations complement those of that working party, in further operationalizing the philosophy expressed in their report. Some comments on the RAWP approach, which has been misunderstood by many commentators and which is fundamental to the reduction of inequalities in health, are a necessary preliminary.
- 8.34 The appearance of the Working Party's Report (Sharing Resources for Health in England, 1976) was very welcome. It had been appointed in May 1975

"to review the arrangements for distributing NHS capital and revenue to RHAs, AHAs, and District respectively: with a view to establishing a method of securing, as soon as practicable, a pattern of distribution responsive objectively equitably and efficiently to relative need and to make recommendations".

- 8.35 The Working Party interpreted the underlying objective as being to secure, through resource allocation, that there would eventually be equal opportunity of access to health care for people at equal risk (1976, p.7). We would wish to endorse this objective. Secondly, as the terms of reference directed, the RAWP team emphasised the importance of ensuring that the availability of the finite resources at the NHSs disposal, "should be determined in relation to criteria of need" (1976, p.8). Their procedure was essentially to use age-sex structure of the population together with standardized mortality ratios (in the case of certain services) to 'weight' regional populations for each of the various groupings of services. These groupings were: non-psychiatric in-patients; all day and out-patients; community health; ambulances; mental illness in-patients; mental handicap in-patients; and family practitioner committee (FPC) administration. Target revenues for each region were built up by assigning to each of these groups of services its current share of total national expenditure: costs of FPC services being excluded. SMRs, it was argued, were the best available indicator of morbidity (and hence, by implication) of need for services. It was recommended that similar methods to be used in allocation at the sub-regional level. The effects of seeking to reallocate resources by means of weighting populations on the basis of their age and sex structure differ substantially from those of utilising a formula based also upon SMRs -thereby taking account of populations with disproportionately large numbers of people in the unskilled and partly skilled manual classes at greater risk of ill-health and mortality (See Fig A7.2).
- 8.36 In the case of capital expenditure needs, populations were weighted not by age, but by family practitioner consultation rates. Further information on the RAWP methodology is given in Appendix 7. It must be emphasised that the most important innovation introduced by the Working Party, and the one having most effect on allocations made, is the introduction of a morbidity factor based upon SMRs. Strong criticisms have been made of this (for example, Barr and Logan, 1977, pp.996-997) and we would accept that where possible age-specific mortality ratios should be used either in substitution or conjunction. But though further refinements will have to be made, we do not think that the principle should be abandoned. Our view is that the SMR is the best available indicator of health care need, when used in conjunction with information about size and structure of the population. Those who have objected that morbidity indicators do not always correspond with SMRs (for example, Snaith, 1978) do not appear to give sufficient weight to the incompleteness of the former. Thus while there are separate indicators of acute and chronic illness they are neither comprehensive nor easily combined. Moreover further studies have tended to demonstrate a significant relationship between such indices of short, medium and long-term morbidity as are available and mortality, for areas and not only regions. (W Midlands Regional Authority, 1977)

8.37 Where the Working Party have less to say is first in accepting the current distribution of resources as between in-patient and community services, and second in accepting present national rates of utilisation of different types of service. What happens is not a good measure of what should happen, however convenient that may be. However, an ideal allocation of resources cannot easily be defined and to us it seems possible only to give some preliminary indications of the steps that can be taken quantitatively (as in Table 8.4 above) to incorporate shifts between services and changes in the patterns of utilisation of services, along with the shifts implied by the RAWP analysis, that may be required. While acknowledging that those figures are preliminary and can be much improved, we seek to make two points: first, that policy priorities in the change in emphasis of services can be related much more exactly to needs for health care than has been appreciated; and that only by insisting on such a process of reasoning is it possible to produce, over a period of years, the necessary resources to make a sufficient contribution to the reduction of inequalities in health.

Resource Allocation in Practice

8.38 How were the recommendations of the Resource Allocation Working Party put into practice? In the early stages of applying a new form of allocation one would expect certain modifications to be made at national, regional and area levels. Decisions also have to be made about the rate of advance towards targets. At national and regional level this was brought out in the Secretary of State for Social Services' statements of 21 December 1976 and 5 February, 1979 and his detailed letters to Regional Health Authorities of the 21 February, 1977 and 28 February, 1978 (See Appendix 8). Thus, attention was called to "certain specialist facilities which serve more than one region", "the need to replace expensive equipment in dental hospitals", and various provisions for teaching, (Statement of 5 February, 1979) Acting on Departmental Advice, RHAs have also made modifications to "bring major capital works into use", "enable clinical teaching to be maintained" and made good imbalances in distribution between areas, districts and individual hospitals "not picked up by adjustments to targets based on patient flows". (Appendix 8, letter of 28 February, 1978, p.2). Table 8.5 sets out the decisions about allocation of resources for 1979-80, based on the RAWP methodology, reached by the then Secretary of State.

Resource allocation at the Sub-Regional level

- 8.39 We are unable to give a comprehensive picture of how the RAWP methodology has been applied by the Regions: systematic data on this were not made available to us . We therefore attempt only to illustrate the new process of allocation at this level. The evidence of the last 3 years is that the 14 RHAs have by and large endeavoured to implement the RAWP methodology, though 4 have not yet applied the SMR principle and 5 of the others have not yet felt able to adopt the more sophisticated cause-specific SMRs recommended in calculating the needs of their areas and districts for non-psychiatric in-patient care. Even among RHAs adopting the full methodology the progress made towards the restrictedly defined targets

TABLE 8.5

Proposed allocation of resources for 1979-80 in relation to assessment of needs.

Regional Health Authority	1	2	3	4	5	6	7	8
	Starting figure (ie 1978/79 main revenue allocation) £'000	Revenue "target" £'000	Distance from "target" as % of starting figure	Revenue increase %	Main revenue allocation £'000	Distance from "target" after allocation as % of allocation	Capital allocation excluding joint finance £'000	
North Western	371,878	416,572	- 12.02	3.00	383,028	- 8.76	36,700	
Northern	272,094	300,513	- 10.45	2.77	279,624	- 7.47	23,800	
Trent	358,297	394,735	- 10.17	2.73	368,067	- 7.25	37,000	
West Midlands	426,405	462,502	- 8.47	2.51	437,095	- 5.81	32,000	
East Anglian	151,641	163,189	- 7.62	2.40	155,281	- 5.10	19,600	
South Western	268,867	285,954	- 6.36	2.26	274,937	- 4.01	21,000	
Wessex	217,847	230,906	- 6.00	2.22	222,677	- 3.70	20,700	
Yorkshire	308,756	327,218	- 5.98	2.22	315,606	- 3.68	29,300	
Mersey	231,069	237,808	- 2.92	1.90	235,459	- 1.00	22,400	
Oxford	177,571	179,633	- 1.16	1.75	180,671	+ 0.58	12,900	
SW Thames	296,993	283,218	+ 4.64	1.34	300,963	+ 5.90	18,400	
SE Thames	372,052	338,462	+ 9.03	1.12	376,212	+ 10.03	22,700	
NE Thames	389,333	348,358	+ 10.52	1.06	393,453	+ 11.46	24,700	
NW Thames	351,236	308,751	+ 12.10	1.00	354,746	+ 12.98	18,500	
	4,194,039	4,277,819	- 2.00	2.00	4,277,819		339,700	

NOTE: revenue figures at November 1978 price levels: capital at forecast 1978/79 out-turn prices.

Source: DHSS, 5 February 1979 (Announcement of revenue and capital allocations to RHAs 1979-80).

8.40 has been cautious, as Table 8.6 illustrates. After allowance for administration and a few other items the Table gives the AHA 'target' resources. It should be noted that the target for Newcastle includes a figure amounting to nearly 10 per cent of that target, representing the Service Increment for Teaching (SIFT) which is calculated independently of formula (1). It can be seen from the Table that the Northern Region had an additional £6.7 million (at constant prices), or 2.6 per cent, to distribute in 1979-80, compared with the previous year. (This represents about £1.5 million or 0.6 per cent more than the standard national increase.) Nearly half the available increase was earmarked for the 'Regional Consequences of Capital Schemes' (see column 3) - much of it going to one of the best endowed AHAs. We understand that future provision of this kind is likely to go disproportionately to the AHAs which are least well endowed, but the figures illustrate the 'off-setting' outcome that adjustments of this kind can have when attempts are made to equalise resources. The Table also illustrates the differential allocation of the remaining £3.5 million, ranging from an additional 0.9 per cent to Durham AHA to 2.2 per cent to South Tyneside. Assuming that the figure of £3.5 million was the maximum available for distribution this meant, in the case of these two AHAs, that Durham AHA obtained about £170,000 less for 1979-80 than it might have done under "incremental" planning arrangements and South Tyneside AHA obtained about £80,000 more. There will be those who would judge such sums as small relative to total health expenditures. We take the view that if sustained for a number of years in a cumulative way and translated into the right services these changes in expenditure can exert a significant impact, and if, in addition, greater flexibility can be introduced into the flow from hospital-based to community services, and improvements also made in the distribution of general practitioner and health-related services, a notable transformation could be brought about in a period of 10 years.

(1) Some critics eg. The Radical Statistics Health Group, 1977, pp.14-15, have argued that this element of the procedure not only protects the relatively high resources of teaching hospitals but "also re-allocates funds back to the Thames regions".

TABLE 8.6

NORTHERN REGIONAL HEALTH AUTHORITY
1979/80 Revenue Cash Allocations
November 1978 pay and prices

1. Targets are based on the regional formula.
2. "Betterment" funds are distributed pro rata to distance from target.

AHA	1979/80 TARGET	1979/80 STARTING FIGURE	PROVISION FOR RCCS	DISTANCE FROM TARGET	GENERAL DEVELOPMENT FUNDS	1979/80 PROPOSED ALLOCATION	% TARGET
	(1)	(2)	(3)	(4)	(5)	(6)	(7)
CLEVELAND	49088	43375	550	5163	735	44660	90.98
CUMBRIA	37337	34417	100	2820	401	34918	93.52
DURHAM	48715	45271	500	2944	419	46190	94.82
NORTHUMBERLAND	28582	25409	68	3105	442	25919	90.68
GATESHEAD	14219	12678	-	1541	219	12897	90.70
NEWCASTLE (T)	59283	53586	1840	3857	549	55975	94.42
NORTH TYNESIDE	9467	8561	-	906	129	8690	91.79
SOUTH TYNESIDE	10311	8950	-	1361	194	9144	88.68
SUNDERLAND	27822	24978	194	2650	377	25549	91.83
TOTAL FOR AHAs	284824	257225	3252	24347	3465	263942	92.67

SOURCE: Northern RHA, 1979.

8.41 Whilst recognising the force of some of the criticisms of the RAWP methodology that have been put forward - eg, age-specific mortality ratios should replace SMRs - we have argued that the approach is nonetheless justified. However, it has not been consistently applied at area or district level. Nor has the possibility of supplementing the approach by means of additional indicators of need been sufficiently discussed. Partly this is a question of time to develop an appropriate methodology, especially to deal with the problems of measuring utilisation when there are big differences between the statutory boundaries of health districts and the catchment areas of services, especially hospital services, in those districts. The characteristics as well as numbers of patients attending services outside the districts in which they live have to be checked and used in planning. Partly it may be a question of bringing general practitioner and health-related services also into the reckoning. But there is the question too of securing public confidence in the procedure. This leads us to recommend inviting Health Authorities to consider increasing the volume of information collected and published regularly for each health district about (a) health experience (indicators of activities as well as of morbidity and mortality); (b) rates of usage of health and health-related services (including GP consultations, out-patient attendance, home nursing and health visits and in-patient and residential care) and (c) social and environmental conditions. Some of the misunderstanding of the RAWP report was due to the fact that precise illustrations at district level of the actual and desirable operation of different services were not given. We are conscious that some Authorities already collect such information for administrative and planning purposes but do not always make it readily available. While we would not wish to justify massive additional expenditure for this purpose we believe that during the present period of severe expenditure restraint it will become increasingly important for authorities to relate health service inputs to outputs and that modest expenditure on developing relevant information may be necessary to ensure economical methods of management.

8.42 We consider it both desirable and feasible in the allocation of resources that some account be given of (i) the composition of the population of an area, in terms not only of age/sex and social or occupational class but also of other groups likely to have particular needs for care, and (ii) extent of overcrowding and other aspects of physical-environmental conditions having established links with ill-health. To some extent this issue can be clarified by comparing the effects for areas and districts of applying (a) the SMR principle (b) social indicators of need. Our intention here will be to show only how and why this

might be done. There are difficulties involved, as discussed above, in applying RAWPs philosophy at a sub-regional level (for this, see Snaith (1978), Senn and Shaw (1978)), to some extent associated with fluctuations in small numbers of deaths. While not all RHAs have yet adopted the methods recommended in applying resources to areas and districts we suggest that some would be less hesitant if they were encouraged to review and bring forward evidence of other indicators than mortality of health experience and compare health with other area indicators.

Area Indicators of Social Deprivation

8.43 Are there area indicators of social deprivation which might be used independently or in supplementation of SMRs in developing a formula for resource allocation? Relevant indicators cannot, in general, be derived from surveys (such as the GHS) since sample sizes are inadequate for a breakdown by Health District or Area. The principal sources must be the Census (which means, of course, that indicators now reflect conditions obtaining in 1971) and, in principle, routinely-collected administrative and vital statistics. The Census provides information on a range of deprivation-related factors, available at local authority, ward and enumeration district level. Despite the age of currently available data, and despite the fact that indicators reflect housing need in greater detail than they do other forms of need or deprivation, the census indicators remain the principal source of ecological data on social conditions. Valerie Imber has used them to classify the 108 English local authorities with responsibility for personal social services (metropolitan districts, non-metropolitan counties, London boroughs) in terms of 'need' for these services. Because of the close connection between this form of 'need' and that for health care (and particularly need for preventive health care), her analysis provides a convenient starting place. It should be remembered that these 108 authorities (at least outside London) are essentially contiguous with the Area Health Authorities.

8.44 Imber begins with the variables listed in Table 8.7, but on the basis of the high correlations of some with others, and of a priori judgement as to which, though they reflect social conditions, are less obviously associated

TABLE 8.7

Distribution Statistics of Social Indicators (1971 Census of Population):
New Local Authorities

No	Variable	Mean	Range
1	Number of children aged 0-4 years/1000 population	78	26-104
2	Number of persons aged 65 years +/1000 population	131	74-235
3	Number of Irish Immigrants/1000 population	22	3-87
4	Number of New Commonwealth Immigrants/1000 population . .	29	2-145
5	Number of Economically Inactive persons aged 15 years +/1000 population aged 15 years +	375	247-492
6	Number of households with more than 1 person/room/1000 households	66	32-164
7	Number of households with more than 1 person/room/1000 households	674	551-826
8	Number of households living in rented property/1000 house- holds	530	298-987
9	Number of households living in privately rented furnished property/1000 households	52	4-380
10	Number of households lacking at least one basic amenity/1000 households	184	25-489
11	Number of pensioners living alone/1000 pensioners	247	150-359
12	Number of households having one car or less/1000 households	916	810-981
13	Number of persons in employment without HN or degree/1000 population	917	803-980
14	Number of persons out of employment/1000 population	49	26-115
15	Number of unskilled workers/1000 population economically active	73	31-161
16	Number of persons employed in agriculture/1000 population economically active	19	0-133
17	Number of married women working more than 30 hours with children under 5 years of age/1000 working married women with children under 5 years of age	313	179-999
18	Number of lone parent families with children/1000 of all families with children	94	42-197
19	Number of married couple families with 4 or more children/ 1000 married couple families	42	24-116
20	Number of economically inactive males 15-19/1000 population males 15 - 19	391	260-558
21	Number of economically inactive males 15-64/1000 population males 15 - 64	82	51-157
22	Number of economically inactive males 15-59/1000 population males 15 - 59	78	48-158
23	Number of households rented from council new town or SSHA/ 1000 households	291	77-695

Source: Imber (1977)

TABLE 8.8

CORRELATIONS BETWEEN INDICATORS OF SOCIAL NEED

	6	9	10	11	14	15	17	18	19	23
	Over-crowding	Private Rented Furnished Accommi:	Lack of Amenities	Lone Pensioners	Un-employment	S.C. V	Working Mothers	1-Parent Families	Large Families	Council Housing
9	.479		.586	.447	.067	-.164	.430	.752	-.068	-.376
10	.696			.736	.415	.477	.519	.794	.231	.051
11	.673				.469	.514	.208	.792	.289	.223
14	.637					.704	.150	.458	.665	.517
15	.615						.106	.309	.617	.725
17	.437							.381	.064	-.023
18	.735								.275	-.003
19	.618									.519

from Imber (1977)

with need, is able to reduce the number of variables from 23 to 10 (1). Our purpose here is less that of classification than of selecting a limited number of variables which might be used in practice as differential indicators of need for health care (or for specific services) and it will be necessary to select still further from these indicators. Those used by Imber, with their correlation coefficients, are shown in Table 8.8.

- 8.45 Table 8.8 suggests not only that, were a single factor to represent all aspects of 'need' sought, then 'overcrowding' has the highest correlations with all other indicators; it also shows how the variables cluster and might reasonably be reduced in number.
- 8.46 Since our focus here is principally upon the health services (though the problems to which these address themselves are not clearly separable from those of the personal social services), it is necessary to say something about the relations between these social need variables and mortality rates (ratios) - the RAWP indicator of need for health care.
- 8.47 There is in Britain a long tradition of study of the relationships between social conditions and mortality rates. Within this tradition, Gardner, Crawford and Morris (1961), used a variety of census indicators, plus a number of climatic and air pollution indicators, in the attempt to explain differences in adult mortality rates between the larger county boroughs of England and Wales. Multiple regression techniques allowed these authors to show, for example, that "social conditions" (an indicator combining degree of overcrowding, social class, average educational level etc was used), air pollution levels, and inclement climate were separately associated with mortality rate from bronchitis.
- 8.48 Using (like Imber) the 1971 census data, together with 1971 mortality rates for children aged 0-4 and 5-14, Brennan and Lancashire sought to relate the death rates for children to social need variables, also at the county/metropolitan borough level (Brennan & Lancashire (1978)). Using Kendall's rank correlation

(1) She then finds, by a cluster analysis procedure, that there are two distinct kinds of area showing high need for social services: inner city areas (typified by poor housing, high concentration of one-parent families and pensioners living alone) and areas dominated by newer housing estates with high concentrations of unskilled workers and large families.

coefficient, significant correlations were obtained between mortality rate (especially for the younger children) and extent of overcrowding, lack of basic amenities, extent unemployment among male working population, and extent of council house occupancy.

3.49

A significant correlation was also obtained with proportion of unskilled workers and the authors then examined whether or not social class composition (understood in the restricted sense of the percentage of population in class V), housing variables (density, possession of amenities), and unemployment rate are independently related to mortality rates. Calculation of partial correlations (housing variables and unemployment rate held constant) show that the effects are independent of each other in the case of the under 5s.

3.50

Although this analysis does not bear upon causes of mortality at the individual level, it is important here in suggesting that areas having high unemployment rates, or bad housing, or a high proportion of unskilled workers (or worst, all three) are likely to have high rates of child mortality (especially in the first 5 years of life). (1) It also suggests, as the authors themselves conclude, that percentage of population in social class V alone will inadequately reflect the extent to which social factors pre-disposing to high infant mortality are present in an area. Brennan and Lancashire found in general a "strongly positive association" between high mortality and low socio-economic position ($P < 0.001$) for the age group under 5 years, with the older age group showing a less marked

(1) A more sophisticated approach to the establishment of casualties would require hypotheses as to the probable delays with which deterioration (improvement) in socio-economic conditions impacts upon mortality rates. There is no reason to such lags will necessarily be the same for, say, housing conditions and unemployment. In Brenner's work time series data are used to derive lags on the basis of best fitting of curves. Thus, he argues that post neo-natal mortality rates respond to changing unemployment with a delay of 3-5 years (Brenner, 1973/1979). In Britain an early study was carried out by Morris and Titmuss. They examined the relationship between rates of unemployment and mortality from rheumatic heart disease in the late 1920s to 1930s, and concluded that the strongest association between a changing rate and changing mortality was "when a mortality lag of 3 years is introduced". (Morris and Titmuss, 1944, p 7).

association (ibid). Of course more "inclusive" measures of class composition remain to be examined in relation to mortality. Table 8.9 shows which (post-reorganisation) metropolitan districts and non-metropolitan counties show up worst on each of 4 of the census indicators and 3 indicators of mortality (using this time recent mortality data). The frequent appearance of certain areas notably in the North West and the North East is apparent. Further work on relationships between indicators of social disadvantage and of mortality is needed.

TABLE 8.9

HIGHEST RANKING LOCAL AUTHORITY AREAS ON EACH OF 8 CENSUS AND MORTALITY INDICATORS
(ENGLAND)

1	2	3	4	5	6	7
HOUSEHOLDS WITH >1 PERSON ROOM (PER 1000 HOUSEHOLDS)	NO. UNEMPLOYED PER 1000 PERSONS	NO. UNSKILLED WORKERS PER 1000 ECONOMICALLY ACTIVE	MARRIED COUPLE WITH ≥4 CHILD- REN PER 1000 MARRIED COUPLE FAMILIES	PERINATAL MORTALITY RATE (AVERAGE 1974-6)	INFANT MORTALITY RATE (1 YR) (AVERAGE 1974-6)	ADJUSTED MORTALITY RATIO (1976)
Knowsley Islington* Hackney* Tower Hamlets* Lambeth* Kensington/Chelsea Hammersmith Southwark* Brent Camden*	Knowsley Liverpool* S. Tyneside Sunderland Manchester* Newcastle* Cleveland Gateshead* Hammersmith Tower Hamlets* Tower Hamlets* Islington*	Tower Hamlets* Southwark* Newham* Knowsley Liverpool* Cleveland Hammerside Salford* Newcastle* Islington*	Knowsley Liverpool* Manchester* Birmingham* Cleveland Sefton Hackney* Lambeth* Newham* Salford* Wirral S. Tyneside Dunderland Lewisham*	Wolverhampton Sandwell Liverpool* Gateshead* Salford* Rochdale Bolton Manchester* Walsall Knowsley	Rochdale Oldham Salford* Wolverhampton Manchester* Bradford Calderdale Kirklees Walsall	Salford* Tameside Gateshead* Liverpool S. Tyneside Tower Hamlets* Durham Bolton Wirral N. Tyneside

Sources: Columns 1-4 Imber, 1977
5-6 DESS/OPCS (Unpublished)
7 OPCS Local Authority Vital
Statistics 1976

* indicates Inner City Partnership Scheme area

Note: Adjusted Mortality Ratio (AMR) is the local death rate standardized for population age/sex structure and divided by the national rate.

Social Need and Mortality Factors in Resource Allocation

- 8.51 The RAWP philosophy requires allocation of resources in relation to need for health care; it is further argued that mortality rate (SMR) is the best indicator of need. We do not dissent from the view that SMR is indeed the single best readily available indicator. Some would no doubt argue that, since at the ecological level (child) mortality and social conditions co-vary (as Brennan and Lancashire showed) the case for this single indicator is strengthened. We have sympathy with this line of argument but prefer to keep an open mind. First, the case is at best preliminary. We would wish to see more sustained comparison of different measures of social or occupational class and social need. Second, a combination of SMR and other measures used in supplementation seems likely to produce more satisfactory, and administratively and politically defensible results. Our argument is that by also taking account of population and community characteristics (other than age/sex) indicative of need for care, as well as physical amenities and environmental conditions, a better overall measure of need for resources can be produced. This is not easy to prove since there is no direct measure of need which would permit regression of SMR (and any alternative measure of morbidity or health) and social conditions together.
- 8.52 Elsewhere in our report we have shown 1) that a ghigh rate of early mortality in a population is indicative of a high proportion of surviving babies profoundly at risk of serious ill-health; and 2) that though the risks attaching for example to low birth weight) can be compensated by an advantageous neo-natal environment, they are exacerbated by a disadvantaged environment. In other words, though social factors may be reflected in the (infant) mortality rate they also increase the need for care among the survivors.
- 8.53 It remains true that the relative weighting of social factors and mortality rate in any need formula must be somewhat arbitrary. Yet since there is an element of necessary arbitrariness in the whole RAWP approach we do not see this as an argument against the attempt being made.
- 8.54 What we have in mind is perhaps best illustrated with reference to one of the (arbitrary) divisions of health services used to build up weighted populations - community health services. The basis for weighting population for community health proposed by RAWP is first, on the basis of age structure (since the

average expenditure rates per capita on community care vary with age, approximately in the ratios 0-4 years 100; 5-14 years 48; 15-64 years 4; 65+ 47) and second by SMR (1). On the basis of our previous reasoning, and of the findings of Brennan and Lancashire, we may say that children living in overcrowded conditions, in areas of high unemployment or high concentrations of unskilled workers are at particular risk. We also know, though this is on a different basis, that children from one-parent families, or pensioners living alone, are likely to require more than average attention from health and personal social services. Since what is being established through population - weighting procedures is an 'ideal' (target) distribution of resources (with progress towards that target being a separate question) there is a particularly strong case for taking account of those special needs. In other words, in building up the weighted populations for community health purposes, the number of children in age range 0-4 should be weighted for overcrowding, for the proportion in large families, for occupational class and for unemployment. The number of elderly should be weighted for the proportion living alone.

1. It is therefore theoretically possible for an area with a low mortality rate but a large number of children to gain at the expense of an area of high mortality rate but an aging population, compared with a distribution on an unweighted population basis.

- 8.55 We are very conscious of the fact that the limited number of indicators of area deprivation available from the census provide a much better guide to positive discrimination in housing policy than in health policy. Indicators which better reflect the implications of social conditions for health service needs are required, and must be devised. In Chapter 7 we have recommended that regular surveillance should be used to devise area indicators of child development: 'direct' measures of this kind provide a longer-term objective in generation of data for resource allocation procedures. But in the meantime, we should like to see many more NHS Regions and Areas, on the basis of Departmental advice, beginning to make use of available indicators of social need to supplement mortality rates in determining target allocations.
- 8.56 But we realise that some RHAs have yet to adopt mortality rates as the principal method of allocation, and recommend that the Secretary of State should now ensure that they do.
- 8.57 We do not believe that a more equitable distribution of resources alone, without parallel attention to how these resources are to be used, will greatly serve to reduce inequalities in health. In the debate on the RAWP recommendations too much attention has been concentrated on criteria of the need for health care and too little on the effects upon health of allocating resources to one type of service rather than another. As argued in Section B of this chapter we believe both that "need" for health care must govern the definition of priorities and that at the present time definition of such need shows the case for making a more pronounced shift of resources towards community and preventive health care. This leads us to suggest a possible modification to the implementation of the RAWP philosophy. At present "health related" and family practitioner services are excluded from the RAWP formula. We believe this to be wrong in principle because they form an integral part of the Government's objectives for better distributed and more efficient health services, and should thus be financed on the basis of need. We consider that the criteria used in allocating resources for community health should eventually be extended both to health related and family practitioner services. We recognize, however, that this objective poses certain problems. A number of Regions currently gaining under the RAWP formula also have the highest expenditures on family practitioner services

(though this is not necessarily indicative of the quality of these services). Progress towards modification of the RAWP formula to include these and "health related" services must be in parallel with the determined attempt at improving the quality and coverage of general practice which we recommend below (page 268). (It should be noted that the Royal Commission on the NHS recommended the dissolution of Family Practitioner Committees and a study undertaken of the desirability and feasibility of a common budget for the family practitioner and hospital and community services. (Report p.351.))

8.58 At present, the proposal is that weighted populations for each of the groups of services distinguished should be combined on the basis of the share of total revenue which each of these services currently represents (see Appendix 7) - ie 8.8 per cent for community health, 55.9 per cent for non-psychiatric in-patients, etc. We believe that this process should reflect not current distribution of expenditure but that which is aimed at in the planning of services. That is, if community health is a priority (and is intended to absorb, say, 10 per cent of total resources, excluding those for family practitioner services, within 5 years time) then it is this figure which should figure in the combining of weighted populations. We therefore recommend that the resources to be allocated should be based on the future planned share for different services, including a higher share for community health.

8.59 Finally, we realise that a systematic planning process was introduced in the DHSS as lately as 1974 and a system of social services planning as lately as 1976. It would be surprising if in the few years since that time a method of allocating resources in tune with priorities had spread smoothly throughout the services. But it is necessary to stress the necessity of relating accounts of health service performance - whether expressed in terms of expenditure on sub-categories of each service at national, regional, area and district or local level, manpower as items of service - to the operational definition of priorities for past and future years. We would reiterate the Royal Commission's endorsement of the Expenditure Committee's categorical view that:-

"the expenditure planning and priority setting of DHSS should be synchronised so as to enable Parliament to examine the relationship between the two." (Ninth Report from the Expenditure Committee Session 1976-77, 1977, p1vi; and see also Report of the Royal Commission on the NHS, 1979, p.56).

D. A DISTRICT ACTION PROGRAMME

8.60 Our further health service-related recommendations designed to implement the 3 objectives set out at the beginning of this Chapter (page 4), fall into 2 groups. We first outline the elements of what we have termed a District Action Programme. By this we mean a general programme for the health and personal social services to be adopted nationwide, and involving necessary modifications to the structure of care. Second, (Section E below) we recommend an experimental action programme, involving provision of certain services on an experimental basis in 10 areas of particularly high mortality and adverse social conditions, and for which special funds are sought.

i. Health and Welfare of Mothers and Pre-School and Schoolchildren

8.61 Under-utilization of the community and preventive health services by poorer groups is well documented. Whilst we cannot assess the extent to which this is a consequence of inequitable provision of services (so that, for example, working class women might have longer journey times and waiting times in visiting child health clinics), we do know that under-utilization is also associated with organisational and cultural aspects of services. One authority puts the problem as follows -

'Under-utilization of ante-natal and child-health services result from inadequacies in the services themselves and particularly from their insensitivity to the uncertainty and conflict of responsibility mothers feel regarding the question of their baby's health. Two particular areas of inadequacy are highlighted by recent research: firstly, inadequacies as regards the organisation of ante-natal clinics (timing of clinics and length of waiting, location of clinics, facilities for children and other relatives, etc) and secondly, inadequacies as regards the actual content of the check-up (lack of individual attention and advice tailored to the individual's needs, lack of privacy, etc)'.

(Graham, 1978)

8.62 We recommend that Areas and Districts should review the accessibility and facilities of all the ante-natal and child-health clinics in their areas, and develop plans to increase utilization by mothers. On the basis of our own field

experience this must include such reforms as experimenting with evening and weekend opening, the dispersion of ante-natal sessions from hospitals covering large catchment areas to new centres in small areas, and the humanisation of ante-natal procedures and settings especially in clinics in hospitals. One clinic which we visited was described to us (not unfairly as it seemed) as a "cattle market". We are aware that some of these matters will be illustrated in a forthcoming report on initiatives adopted in various parts of the country in "reaching the consumer in the ante-natal and pre-school child health services" which is being prepared by the Child Poverty Action Group in association with the Department of Child Health Research Unit in the University of Bristol.

- 8.63 The DHSS should publicise factors which explain high utilization in some areas, (eg Liverpool) and low utilization in others (eg Salford). Wherever possible clinics should be established in conjunction with group practice and health centres, in partial fulfilment of the recommendations by the Court Committee. As some commentators have pointed out, relatively few General Practitioners are keen to devote more of their time to practising preventive medicine, and a change in outlook will take a long time to bring about (Alberman, Morris, and Pharoah, 1977, p 394). But the change might be encouraged if more health visiting staff are seconded full-time or part-time to group practice. There is room for experimentation and it is possible for some health visitors to combine territorial and team responsibilities. There is an even more powerful case to be made out for the secondment of social work staff but in this case knowledge of welfare rights would be a very necessary part of their skills. Ease of access, good facilities, respect for the individual and availability of care and advice throughout infancy and childhood might be the watch-words of any planned development of services. The inducements available in France and Finland (see Chapter 5, p 143) have been called to our notice, but we are aware that they were introduced in very different conditions and are not convinced that reluctance on the part of the individual mother-to-be is the key factor in under-utilization in Britain. A case independent of that to induce mothers to attend clinics early can be made for an increased rate of maternity grant and allowance. In Finland the establishment of a national network of clinics in 1945 preceded the introduction of payments, and in France ante-natal payments were introduced many years before the dramatic improvement in the French perinatal mortality rate.

8.64 With the increasing number of births in hospitals there is the problem of securing the involvement of the family practitioner at an early stage in the life of the child. There are a number of steps which might be taken. One, already mentioned, is the association of more ancillary staff with primary health care teams. (We would then urge that the teams should generally be constructed on the basis of two and at most three General Practitioners so that some contribution might be made to the vitality and integration of the local community.) Another is immunisation. "Should not the responsibility for this now rest squarely with the General Practitioner and his nursing colleagues? He has the knowledge of family history, and of the health and development of the child, to help him take the responsibility of advising on the timing and safety of immunisation and vaccination - and the authority with the public to carry it through. Moreover, the General Practitioner will often be the first to know untoward reactions and he can follow children with such reactions." (Alberman, Morris and Pharoah, 1977, p 394). In principle we advocate such a policy, though we recognise that for some time to come there will have to be back-up provisions in the community where the medical service is inadequate.

8.65 We are very concerned about the standard of general practice in some poor areas with high mortality. There are single-handed general practitioners who live at a considerable distance from the areas in which their patients reside, have little knowledge of or interest in local culture (which leads them to prescribe or otherwise treat patients inappropriately), who rely for a disproportionately large part of the year, the week or the day on the deputising services, and take little or no interest in the possibilities of new health centres, group practice or other forms of collaboration among and between health service and social service professional personnel.

8.66 Some are considerably older than 65 and others are new to practice in this country and include those who are virtually in transit to other career destinations. There are some who have resorted to work in these areas because they have been unsuccessful elsewhere and are exposed here to less criticism. We are aware that working in such areas are also some of the best and most dedicated members of the medical profession. As the Royal Commission on the NHS said of declining urban areas, "Many health professionals are coping

courageously and effectively in these areas, but there is evidence in some places that services are inadequate. The GPs tend to be older and to have large lists. The accepted view today is that a GP will work most efficiently in a group practice or partnership with several other GPs and there may be some connection between the extent of single-handed practice and low quality of care, although there are many excellent single-handed GPs. More single-handed practices are found in the inner city areas." (Report, 1979, p 88). While the extent of the problem cannot, regrettably, be quantified and while there are wide variations between areas, we are satisfied that the dimensions of the problem in some areas are serious. The Royal Commission on the NHS also recognised this and made certain specific recommendations to remedy matters - namely of the need for close supervision of deputising services, a review of controls on the appointment of GPs, the offer of an assisted voluntary retirement scheme to GPs, a study of the feasibility of introducing a compulsory retirement age, the introduction of audit or peer review of standards of care and treatment and the development of health centres as a priority in inner city areas - with which we agree and which we endorse (Report, opcit, pp 91-91). But other steps might also be taken. We recommend that the professional associations as well as the Secretary of State and the Health Authorities should accept responsibility for making improvements in the quality and geographical coverage of general practice, especially in areas of high prevalence of ill-health and poor social conditions. Where the number or scope of work of general practitioners is inadequate in such areas we recommend Health Authorities to deploy or redeploy an above-average number of community nurses attached where possible to family practices. The review of coverage must include definitions of desirable standards of practice and keeping abreast of modern methods of practice as well as advancement in medical knowledge, and not only questions of remuneration and inducement. We further recommend that the distribution of general practitioners should be related not only to population but to medical need, as indicated by SMRs, supplemented by other indicators, and that the per capital basis of remuneration be modified accordingly.

- 8.67 One possibility deserving careful consideration is the attachment of additional, newly qualified GPs, to existing group practices and health centres for periods of, say, 2-5 years. Every effort should be made to provide housing temporarily

or permanently within the areas. One problem of the poor areas is that health centres are not yet the main form of medical organisation. In Gateshead only a fifth and in Tower Hamlets fewer than a tenth of GPs are in health centres. Previous studies have demonstrated that a more effective policy deserves to be adopted. "The NHS has not brought about any dramatic shift in the location of GPs Areas which are currently facing the most serious shortages seem to have a fairly long history of manpower difficulties, whilst those which are today relatively well supplied with family doctors have generally had no difficulty in past years in attracting and keeping an adequate number of practitioners" (Butler, Bevan and Taylor, 1973) . A separate type of study of data from the NHS, mortality statistics and GP statistics in 1972 and 1973 found a lack of significant positive correlations between age-standardised acute sickness, chronic sickness or mortality and the number of GPs per million population, suggesting that the supply of GPs is not matched to health care need (Forster, Frost, Francis and Heath). In addition to the weakened medical service which we consider exists in some poor areas there is a heightened need in those same areas for medical care - as indicated by SMRs, rates of limiting long-standing illness and low participation rates of the preventive services. As a previously quoted survey of general practice concluded, "certain areas of the country are medically deprived in the sense that the existing services are unable to cope with the demands placed upon them, while others have a relative abundance of medical resources in relation to their needs" (Butler et al, 1973).

- 8.68 With the relative increase in number of one parent families and increased employment of young mothers with children, the problem of facilities for those without relatives living nearby is considerable. Present plans for the expansion of day nurseries are meagre, and the rate of expansion needs to be larger. Within the proposed Health Development Programme at national level we recommend the financing of new services for children under 5 from the savings that are being made as a result of the decline in the school population. This proposal is further elaborated below (Chapter 9, pp 318-321).
- 8.69 Traditionally the school health service has afforded opportunities for preventive work, including health education. In areas of social need there are advantages in intensifying some of the present work. It would be possible to monitor the health of children in certain types of family more frequently, for example, and there are also possibilities of relating health surveillance to teaching about health and the health services. Both a Scottish Home and Health

sub-group on the child health service and the Court Committee argued for the greater integration of the child health services (Scottish Home and Health Department, 1973 and 'Fit for the Future', 1976) and this was accepted in principle by the Secretary of State (Circular HC(78)5). The Scottish working party expected 'that in the course of time much routine school health work will be carried out by primary care teams but the more specialised aspects such as the assessment of handicapped children will be the responsibility of paediatricians working closely with other professional colleagues'. (Towards an Integrated Child Health Service, 1973, p 101). Like the working party, we recognise that there will have to be different systems of provision of school health care for some time to come, but recommend that every opportunity should be taken to link revitalised school health care with general practice, and to intensify surveillance and follow-up both in areas of special need and for certain types of family. For this purpose we take the view that certain assessments can be undertaken by social workers (and health visitors) - especially where they are already working in association with group practice.

8.70 It is perhaps necessary to refer briefly to the special place of child guidance within the school health service. Child guidance clinics have traditionally provided psychiatric care for relatively small numbers of maladjusted children on an intensive basis. There is evidence of long waiting lists, misunderstood systems of queuing, and of a negative image of the work of the clinic among parents (Fitzherbert, 1977 pp 85-96). At the same time there is evidence from surveys in the Isle of Wight and in London (Rutter et al 1970; Rutter et al 1975) of a very much higher prevalence of maladjustment among children than had been thought, or than could be helped by traditional psychiatric methods. There is a growing view, which we share, that emphasis must increasingly be upon preventive methods; upon increasing co-operation between psychiatrists, educational psychologists and teachers. For example, the "nurture group" pioneered by Marjorie Boxall provides a special therapeutic environment (to compensate for inadequate early experience) within the infants school, from which children are gradually returned to normal classes. Such experiments must be encouraged and evaluated.

8.71 For handicapped children Ministers have already accepted in principle the establishment of District Handicap Teams. The teams can help to provide careful diagnosis and continuing help and advice and support to handicapped children and their parents. We recommend that an assessment which determines severity of

disablement should be adopted as a guide to health service priorities, and that this should be related to the limitation of activities rather than loss of faculty or type of handicap. This procedure would help to equate the provision of services for mentally handicapped as well as physically handicapped children. Though we attach priority to the implementation of this recommendation in the case of disabled children, we believe that it must ultimately apply to all disabled people. We recognise that since 1977 most local authorities have adopted classification of severity of disablement of people on their registers of the handicapped. We hope this can be extended to people with all types of handicap and to patients in the Health Services. We argue elsewhere for the rapid confirmation in legislation of the Pearson Commission's recommendation for an allowance for severely disabled children, within a comprehensive disablement allowance for people of all ages. Receipt of such an allowance could operate as a form of registration, which would allow the need for services to be monitored.

ii. The Care of Disabled and Elderly People in their Own Homes

8.72 When disablement is understood in terms of functional limitation it becomes possible to rank severity and provide a better guide to the selection of priorities. Efforts have to be made to compare the entire range of provision of services, specifying numbers accommodated or served to a varying extent and at varying cost, with assessments of both objective and subjective needs. For example, conventions about the division of clients according to type, or conventional categorization of clients or patients as requiring hospitalisation, residential care, sheltered housing or domiciliary support, may need to be re-examined. Quality of care, as evidenced by detailed analysis of hospital costing returns, disposition of manpower, size of wards and number of amenities, access to occupation and degree of social integration, does not correlate well with degree of need. We take the view that 2 forms of inequality affecting disabled people have to be distinguished. One is inequality in opportunities for treatment, care and rehabilitation between those in different types of hospital. We recommend a review of the distribution of facilities and services between acute and long stay units and also of the distribution of elderly patients in geriatric, psychiatric and general hospitals. In relation to mental and physical state many people seem to find themselves in a particular type more by chance than specific medical reason. The second form of inequality is inequality in the opportunities for care, rehabilitation, occupation, privacy and social relations between, on the one hand, hospital patients, and residents of local authority, voluntary and private homes, and, on the other, disabled people living in their own homes. These inequalities have attracted rather less attention than inequalities in services between areas.

8.73 Although further steps are required to reduce inequalities in quality of care and individual rights within institutions and between institutions and private households, we take the view that the first step is to clarify the meaning of community care and give much greater emphasis to the tendencies favoured in Government planning documents. Thus it could be argued that provision for the reduction of the population of mental handicap hospitals could be accelerated, that the objectives outlined in the 1971 White Paper on Mental Handicap were too cautious and that those objectives are being fulfilled too slowly. The Report of the Committee of Enquiry into Mental Handicap, Nursing and Care comprehensively endorses this point of view. The Committee has reiterated the condemnation of conditions in too many hospitals (Oswin, 1978; Morris, 1969). It identifies 3 broad sets of principles:

- (i) Mentally handicapped people have a right to enjoy normal patterns of life within the community.
- (ii) Mentally handicapped people have a right to be treated as individuals.
- (iii) Mentally handicapped people will require additional help from the communities in which they live and from professional services if they are to develop to their maximum potential as individuals.

8.74 The Committee concluded

"The mentally handicapped person should have access to the full range of services and facilities available to the general public and specialist services should be provided only where the general services cannot cope with a special need. But where special provisions are required they should offer a wide range of options in the 3 spheres of day, domiciliary and residential services. Mentally handicapped people in residential care should not be isolated from their neighbourhood or, more importantly, from their families. The staff who care for mentally handicapped residents should be compassionate and caring, but also professionally trained; their role should be to help each mentally handicapped person to develop mentally, physically and emotionally. Residents should live in small family-type groups sharing experiences informally with the staff, making their own decisions and taking necessary risks." (JAY Committee, March, 1979, page 140.)

8.75 In realising such aims one obstacle in the development of services for mentally handicapped people, as for other groups of disabled people, is that responsibility for sheltered housing, as distinct from residential accommodation, is not the responsibility of the personal social services. As a consequence we believe that residential care is sometimes offered to disabled people when sheltered housing would be the more rational choice. We recommend that a Working Group (to include representatives of voluntary organizations concerned with relevant client groups) should be set up to review whether sheltered housing should be a responsibility of social service or housing departments and make recommendations.

8.76 Community care for elderly people has not been developed as rapidly as general aims of policy suggest. The 1976 Consultative Document on Priorities stated "The general aim of policy is to help the elderly maintain independent lives in their own homes for as long as possible. The main emphasis is thus on the development of the domiciliary services and on the promotion of a more active approach towards the treatment of the elderly in hospital. But old people who can no longer continue to live independently in the community even with the support of all available health and social services will need long-term residential or hospital care" (DHSS, 1976, page 38). In practice, evidence of capacities among residents and their subjective preferences is not always given the attention it deserves. We recommend that clear criteria for admission to, and for continuing residence in, residential care should be agreed between the DHSS and the local authority associations, and steps taken

TABLE 8.10

Evidence of capacity of elderly residents of Homes for self-care

Date of Study	Scope of study	Percent of residents with capacity for self-care (local authority residents only unless otherwise specified)
(i) 1958-59	National sample survey of Homes in England & Wales	72% neither bedfast nor requiring help dressing 59% mobile outside Home without assistance 52% (new residents only) with "little or no incapacity for self-care"
(ii) 1963	National sample survey Homes in Britain	37% little or no incapacity for self-care 21% little or no incapacity for self-care <u>and</u> household management
(iii) 1969	National survey, Homes in Scotland	67% complete capacity for self-care (ie able to wash, dress and use toilet) 48% "fit" ie having complete capacity for self-care plus no impairment or only mild impairment of mobility, mental state and continence
(iv) 1970	National census, Homes in England	45% minimally dependent (ie continent, mobile without assistance, able to eat and drink without assistance, <u>and</u> mentally alert)
(v) 1972	Survey of council Homes in eight London Boroughs	55% high or very high capacity for self-care
(vi) 1973	64 Homes in Cheshire	63% able to wash, dress, feed and go to toilet unaided 42% no mobility problems, no assistance of any kind required <u>and</u> no behavioural problems

Sources: (i) and (ii) Townsend, 1962 and 1973; (iii) Carstairs and Morrison, 1972; (iv) DHSS, 1975; (v) Plank, 1977; (vi) Kimbell and Townsend, 1975.

to encourage rehabilitation, and in particular to prevent homeless elderly people from being offered accommodation only in residential homes. Priority should be given to expansion of domiciliary care for those who are severely disabled in their own homes. It may be that in the light of criteria which emerge numbers in residential care could be frozen and even reduced, thereby freeing additional resources. At times the DHSS has seemed to favour such a policy (for example, DHSS, Social Care Research, 1978, page 13). Table 8.10 illustrates recent evidence about the capacities of residents. In the 1970s the population of residential homes has become older. Below are the latest statistics made available by the DHSS. The rise in the percentage aged 85 and over certainly suggests that the percentage likely to be severely or substantially incapacitated may also have increased (though that correlation needs to be demonstrated). However, there remains considerable evidence that a substantial fraction of residents, perhaps two-fifths or even more do not require continuous or even substantial occasional "care and attention" in a residential setting, as the table illustrates. (This may not mean that it would be right or practicable to attempt to find some alternative accommodation for these particular residents, rather that alternative accommodation must be found in future for those who would be admitted unnecessarily).

Percentage of elderly residents of different age (England)

	65-74	75-84	85+	Total	Number
1966	21.2	47.1	31.7	100	87,100
1970	20.1	44.9	35.0	100	99,700
1973	19.7	43.0	37.2	100	105,500
1974	19.6	42.6	37.8	100	107,200
1975	19.0	43.2	38.0	100	109,700

8.77 The report of the comprehensive Scottish Survey by the Research and Intelligence Unit of the Scottish Home and Health Department, based on research at the end of the 1960s, concluded:-

"61% of residents had characteristics which suggest they might live in sheltered housing ... with assistance from the domiciliary services if necessary." (Carstairs and Morrison, page 73).

8.78 For the early 1970s there were broadly similar findings for parts of England, as Table 8.10 shows. Social service departments have continued in the mid and late 1970s to undertake studies of their elderly residents. The conclusions about the extent to which residents could or should live in alternative accommodation vary, sometimes because it is not easy to decide whose view of the capacities of residents is most "objective" or disinterested. The latest studies continue to produce findings in favour of an emphasis on community care. Thus, a Warwickshire study concluded that "given sufficient domiciliary services and alternative suitable accommodation including very sheltered housing and supervised lodgings, the rate of elderly people in our old people's homes could be significantly reduced per 1,000 of the elderly population". (Oldfield and Whitbread, 1978, page 8). Other research studies have also produced evidence that substantial proportions of the residents have capacities for self-care and even housecare. (See Alexander and Eldan, 1979; Bond and Carstairs, 1979).

8.79 We believe that the tendency of the residential population to grow and become older reflects in part the social difficulties of the elderly population - not just because more of the elderly are aged 75 and over - but because of lagging real incomes, displacement at younger ages from occupations and housing, and especially the tendency for women increasingly to outlive men and live alone. Services and community initiatives have not developed fast enough to meet nearly enough of the additional problems of the over 75s. But part of the explanation is to be found in the reduction of the percentage of elderly cared for within the hospital system. The elderly residential population has grown at the same time as the hospital population has diminished. For reasons of cost or professional definition of medical or nursing need, including ideas contributed by a new group of geriatricians, fewer elderly are to be found in hospital at any particular date. We are not sure that the most severely disabled section of the elderly residential population have as much access to medical and nursing expertise as they would have done had they been in hospital. Nor are we aware that rehabilitation is pursued as actively with the less severely incapacitated in residential homes as it is with the severely incapacitated in hospital. We believe that the future functions of residential accommodation deserve therefore to be thoroughly reviewed. They are by far the most costly element in the personal social services. In planning an efficient system of care for the elderly we may need to ensure that the minority of people in residential accommodation who are very frail and require close and continuous medical and nursing supervision and

treatment for long-term rather than short-term conditions deserve to be in very small residential nursing hospitals, annexes and even day centres under local geriatricians. On the other hand, sheltered housing may be the best environment for that large fraction of people in residential accommodation whose disabilities are slight or at least not substantial, and perhaps in some instances also of residents whose disabilities are severe. We therefore recommend that the present functions and structure of hospital, residential and domiciliary care for the disabled elderly should be reviewed in relation to their needs to decide the best and most economical balance of future services. We believe that such a review is likely to demonstrate the accelerated relative priority that deserves to be accorded to the development of domiciliary services. Strictly, the responses to the consultative document A Happier Old Age (DHSS 1978) provide in some respects the material for just such a review. However, the issue deserves more sustained expert examination and research, especially into the subjective attitudes of elderly patients and consumers of residential and community services, than it appears to have attracted.

8.80 The care of disabled people, many of whom are elderly disabled people, requires more co-ordinated action by health and social service authorities than currently exists. The introduction of joint funding has encouraged more collaborative planning. We recommend that this initiative should be developed and that there should be further central government funding of a more specific kind to encourage joint care programmes. Within the general category of severely disabled people, sub-categories should be more clearly defined so that both types of authority can comprehend their individual but also joint responsibilities at different stages of chronic illness or disablement. We further recommend that sums within the joint finance allocation should be reserved for payment to authorities putting forward joint programmes to give continuing care to disabled people - for example, post-hospital follow-up schemes, pre-hospital support programmes for families, and support programmes for the severely incapacitated and terminally ill. Funding might be based on a percentage or per capita grant. Health and local authorities may be involved in broader types of in-service training and acknowledgement of the need to interchange staff between hospital and day centre, or hospital and home.

8.81 Like all policies, a more vigorous community care policy on behalf of disabled people in their own homes would encounter many difficulties. Risks are involved in encouraging some people to continue living alone when disabled. Attempts to increase the pattern of social contacts in supplementation of support services

for some elderly people living alone have not always met with success, and traditions of individual privacy, quite apart from the constraints of poverty and bad housing, do not make any easier the patterns of supportive social interaction which would better suit disablement in old age. In the long run a choice has to be made between the encouragement of further dependency on the part of disabled people in the hands of different professionals, and the ready availability in the community of support, with greater diffusion of information and expertise, reciprocation of services within the community, self-help, and all the risks of depending on spontaneous and other expressions of good-will among neighbours and generally in the community.

8.82 For community care is itself a form of "prevention". It helps people to deal with their own problems in their homes and preserves for them the dignity of the status of responsible actors.

8.83 In Table 8.4 particular attention has been called to the rapid expansion of the home help service. In practice many home helps undertake a wide range of responsibilities on behalf of disabled people and we recommend that this should be formally encouraged, with short courses of training, specialisation of some functions and with access to mini-bus transport, especially to day centres.

iii. Prevention - the role of Government

8.84 A consultative document on prevention and health was published in 1976 and was reprinted 3 times within the space of a year. This indicates widespread public interest. Paradoxically, the 1978-79 planning guidelines issued by the previous administration allowed for a growth of expenditure on prevention from only £14 million in 1976-77 to £17 million in 1981-82 (at 1976 prices) which would still be less than 0.3% of revenue expenditure on health and personal social services.⁽¹⁾ This expenditure covers vaccination and immunization programmes, fluoridation, and other preventive measures - mainly preventive medicine and health education.

8.85 As Ministers stated in a foreword to the document on Prevention and Health "the preventive approach should permeate and inform all aspects of the health services". This will involve a change of outlook in the DHSS and more determined changes in organisation and the allocation of resources. For the attainment of national objectives the distribution of information and knowledge about health and

(1) Moreover, provisional 1977-78 figures show that expenditure on prevention actually fell between 1976-77 and 1977-78: from £15.6 million (at 1977-78 prices) to £15.1 million. (Report of the Royal Commission on the NHS, Table E1).

management of illness needs to be less hierarchical and more widely shared. In part this means taking a new view of health education. We have already called for the resurgence of the school health service and the introduction of special forms of teaching in the schools. But the issue is not simply the better instruction of individuals at key periods of their lives. As those concerned with health education are aware, there are at least 3 distinguishable sets of reasons for health education: "to produce changes in beliefs and behaviour in order to reduce mortality and morbidity; to influence norms and values governing the use of health services; to produce a general understanding of certain more diffuse 'health' issues in order to obtain a population who have a general understanding of health issues and to avoid certain forms of 'undesirable' or not directly definable 'unhealthy' behaviour". (Tuckett, 1979, page 4). A balance has to be struck between creating better and safer conditions of work, safer travel, well-regulated manufacture of food products and other goods, and the creation of social and occupational conditions minimising stress, as well as the conventional "do-it-yourself" approach to health education. We are conscious of studies showing that the 19th Century reduction of mortality owed more to improvements in the standard of living, changes in public engineering and the quality and availability of food supplies than specific measures to treat infectious disease and administer forms of screening like small-pox immunisation (McKeown, Record and Turner, 1975, especially pages 401-422).

8.86 While laying stress on the importance of designing and regulating appropriate occupational environmental and social structures, we recommend that a greatly enlarged programme of health education, with a particular focus on schools, should be sponsored by the Government. The DHSS and the DES, as well as other Departments would be involved, and at the local level health education in schools should be the joint responsibility of AHAs and LEAs. Such a programme of health education would include new initiatives to use the media for publicity; a drive to involve young parents in a programme of health education arranged in conjunction with local clinics, and corresponding programmes for those caring for disabled people at home.

8.87 It is not, however, sufficient to regard preventive medicine as purely a question of individual initiative and responsibility based upon more information (important though this is). We explained in Chapter 6 (see pp 166 - 169) how the very possibilities for such initiative and responsibility are themselves a function of social circumstances. We accept, for example, the importance of publicity for, and advice on, the importance of adequate diet and of exercise, for health.

Yet, it is not always possible for people to act in what they know to be their own best interest. Whilst the value of exercise must be made clear through the media, facilities for exercise are also required. We thus endorse the view of the Expenditure Committee (HC 169-i, 1977) when they recommended "The Department of the Environment and local authorities (should) be required to make more adequate provision for physical recreation in any future major developments or redevelopments both public and private, particularly in inner city areas". We consider also that additional grants for the establishment of facilities for physical recreation should be made available. Vaccination and immunization are not used as much as they should be and in some cases (eg polio) the rate of immunization has declined. Doctors and others in the NHS must convince members of the public of the importance of these preventive measures. Tougher measures against both smoking and alcoholism are required. In general we would note that the Government's response to the Expenditure Committee Report (Preventive Medicine), contained in the White Paper Prevention and Health (Cmnd 7047, 1977) failed to provide the positive measures we believe necessary.

8.88 We recommend that national health goals should be established and stated by Government after wide consultation and debate. Measures that might encourage the desirable changes in people's diet, exercise and smoking and drinking behaviour should be agreed among relevant agencies.

8.89 In the case of smoking these measures are clear, and cannot rest upon exhortation alone. An anti-smoking policy must involve new forms of education and counselling but also preventive and stringent control measures. During recent years there is disturbing evidence of growing inequality in cigarette smoking between rich and poor sections of the population. Between 1958 and 1975 men in professional occupations reduced their smoking by more than half whereas unskilled workers increased their consumption by 9% (Atkinson and Townsend, 1977, page 493). We take the view that unequal access to information about the effects of smoking has contributed powerfully to this trend. We recommend the adoption of the following measures; which should be seen not only as priorities in themselves, but as illustrative of the determined action which needs to be taken by government in relation to all necessary elements of a strategy for prevention:

- i. Legislation rapidly to phase out all advertising of tobacco and sales promotion of tobacco products (except at place of purchase).

- ii. Sponsorship of sporting and artistic activities by tobacco companies should be banned over a period of a few years, and there should be stricter control of advertisement through sponsorship.
- iii. Regular annual increases in duty on cigarettes in line with rises in income should be imposed, to ensure lower consumption.
- iv. Tobacco companies should be required, in consultation with the Trades Unions, to submit plans for the diversification of their products over a period of 10 years with a view to the eventual phasing out of sales of harmful tobacco products at home and abroad.
- v. The provision of non-smoking areas in public places should steadily be extended.
- vi. A counselling service should be made available in all health districts, and experiments in methods to help people reduce smoking should be encouraged.
- vii. A stronger, well-presented health warning should appear on all cigarette packets and such advertisements as remain, together with information on the harmful constituents of cigarettes.

8.90 We appreciate that cigarette smoking has a very strong hold on a large section of the population and that no Government can appear to be excessively authoritarian in its measures to eradicate it. Nonetheless, international comparisons have shown that Britain is particularly weak in the policies it has pursued. For example, in 1976 Britain was 17th among 20 European countries in provision of non-smoking facilities and bans on smoking in public places. (ASH, 1976; and see also House of Commons Expenditure Committee, report on Preventive Medicine, 1977). We would wish to stress the relevance of an anti-smoking campaign to any measures at district or national level to reduce inequalities in health.

iv. Screening programmes

8.91 In considering whether screening programmes should be advocated as a means of reducing inequalities in health, it is useful to distinguish between general screening programmes, based on a questionnaire, medical examination, and/or selected laboratory tests in varying combinations; and specific screening programmes, dedicated to the early discovery of particular conditions, which can either be treated (eg diabetes mellitus, hypertension) or prevented (neural tube defects, Down's syndrome).

- 8.92 In this country, general screening programmes have usually been offered to, and accepted by, special groups of high income such as business executives, in whom compliance tends to be higher than average. The question naturally arises, whether extension of such programmes to groups of lower income would carry a high priority. A field study in general practice in South-East London cast considerable doubt on this, since after five years there was no detectable benefit in terms of actual outcomes. On balance, the cost of population screening and the possible production of anxiety, might well outweigh any likely benefits, even where there is a known higher incidence of disease in lower income groups. A similar view on unselected screening is expressed by the Royal Commission on the National Health Service in para. 5.7 of their report.
- 8.93 Advocacy of screening for specific disorders presupposes that the likely incidence of the disorder is high in the population to be screened; that there would be effective treatment available; and that under field conditions there would be adequate compliance, leading to the arrest of the disease (Holland, 1977). We are not satisfied that these conditions would be generally met; but there is an important exception in the possibility of averting congenital disability, with its burden to the family and the individual, by an antenatal screening programme. In this context, we would recommend that steps should be taken to educate women of child bearing age in the importance of reporting suspected pregnancy at the earliest possible stage, so that antenatal care can be provided early in pregnancy. The provision of antenatal services is of course a recognised priority, but has to be supplemented by educational measures to ensure that they are taken up.
- 8.94 Given early attendance at antenatal clinics, there are practicable programmes for screening for Down's syndrome and for neural tube defects in the fetus. These programmes do, however, involve amniocentesis, which carries a small risk of damage to the fetus; and they lead to termination of the affected pregnancy, subject of course to the consent of the mother. In relation to adult disease, it is relatively simple to screen for hypertension, and also for diabetes mellitus, for both of which effective treatment is available. Since a high proportion of patients are seen by their family doctors over a two-year period, taking the blood pressure and testing urine could be made standard at routine visits, and this is already quite a common practice; this might involve less difficulty and expense than the mounting of a special

screening programme, which would involve an additional visit by the patient, possibly followed by long-term treatment with which he would not necessarily comply.

8.95 In the light of the present state of knowledge we recommend that antenatal screening for Down's syndrome and for neural tube defects (especially in high risk areas) on the one hand, and in relation to adult disease for severe hypertension on the other, should be made generally available.

8.96 We have merely outlined some of the major ingredients of a universal district action programme. Scope should be left for local and voluntary initiative. In particular we hope that Community Health Councils might be invited to monitor developments in their areas. What is most important is that standards of health, and knowledge about health, should be raised through face-to-face contacts and local group practices, clinics, day-centres and schools.

E. A PROGRAMME FOR 10 SPECIAL AREAS

8.97 We recommend that the Government should finance a special health and social development programme in a small number of selected areas, costing about £30m in 1981-82 (the figure indicated in Table 8.4). The following 10 areas have the highest death rate, standardised for population and age/sex structure. (See also Table 8.9):

Salford
Tameside
Gateshead
Liverpool
South Tyneside
Tower Hamlets
Durham
Bolton
Wirral
North Tyneside

- 8.98 It should be pointed out that within these areas wide variations in mortality rates are also to be found. In Gateshead, for example, the ratio of infant mortality in some wards to that in others in the mid 1970s was 3 : 1 (when standardised for numbers of births). Appendix 9 gives an illustration from the Central Health District of Birmingham of a ratio between wards which was nearly as high. It will be noted that the wards with highest mortality were also wards with the smallest proportions of population in classes I and II.
- 8.99 We propose that in each of the 10 areas experimental programmes within the 3 spheres of activity specified above for all districts (namely health and welfare of mothers and pre-school and schoolchildren; care of disabled people in their own homes; and prevention) should be introduced. We envisage that a proportion (say at least £2m) of the £30m should be reserved for evaluative research and statistical and information units, and that the remaining sum should be divided among the 10 areas for development of the types of services listed below.
- 8.100 In order to gain a better sense of the problems to be found in these areas, two, Tower Hamlets and Gateshead, were visited by members of the Working Group. Appendices 2 and 3 summaries the problems as they are seen by the Area Health Authorities and the kind of measures which they consider additional funds would help to finance. Gateshead is in fact already one of the 3 beneficiaries of the Comprehensive Community Programme and Table 8.11 summarises the health service components of the AHA's urban programme bid. There is no doubt that the health and personal social services (and especially the community health services) in such areas of high mortality (where there are also other indicators of severe health and social problems) deserve additional Government resources.
- 8.101 It is perfectly true that many innovations in service, provision on a local basis (such as mobile clinics) are already being attempted in areas like the 10 listed above. Many of these may indeed be proving successful in reaching these in particular need (the mobile clinic may well be an example), but these innovations are rarely (if ever) the subject of rigorous experimental assessment. It is this essential element of experimental assessment, the equivalent of the randomised clinical trial of clinical procedures, that we wish to stress: certainly in relation to child health, but also in relation to disabled people. Without this not only can change be on no more than an intuitive basis, but learning

(by one area from another) is inhibited. Although the precise form of the proposals will need to take specific aspects of the local situation into account (and there is inevitably an element of overlap among our 3 spheres of activity) the following would appear to be among the candidates for action:

Making Clinics more responsive to needs

- i. Developing clinics in group practice and dispensing hospital clinics dealing with large populations;
- ii. Provision of child play facilities;
- iii. Combining child welfare and ante-natal clinics;

TABLE 8.11

PART OF GATESHEAD AHA URBAN PROGRAMME BID

	1979/80		1980/81
	<u>Capital</u>	<u>Revenue</u>	<u>Capital</u>
<u>Maternity Services</u>			
48 Extension of maternity department at Queen Elizabeth Hospital (Additional equipment)	150,000 10,000		70,000
49 (Promotional campaign to reduce smoking in pregnancy)		10,000	
<u>Elderly patients</u>			
50 (Improve services for elderly patients at home (4 district nurses and 1 chiropodist) (Upgrade wards 6 and 7 at Dunston Hill Hospital (2 geriatric wards)	95,000	27,200	
<u>Mental Illness</u>			
51 Develop community psychiatric nursing service and day hospital (community nurses and occupational therapists)	20,000	31,500	
52 Upgrade Occupational Therapy Department at St Mary's Hospital (especially to improve rehabilitation)	70,000		
<u>Deprived children</u>			
53 Consultant plus four specialised nurses (health visitors and a school liaison officer)		27,000	
<u>Primary care</u>			
54 Four additional health visitors		12,000	
TOTAL	345,000	107,700	70,000

Prices are at November 1977.

- iv. Evening and weekend clinics;
- v. Setting up counselling services for mothers, covering pregnancy, infant and child care and family health;
- vi. Provision of detailed nutritional counselling to pregnant women by trained nutritionists;
- vii. Additional or special clinics for (1) lone and/or young mothers (2) handicapped children.
- viii. Experiments to enable mothers to keep in touch with each other independently of ante-natal, and post natal appointments by such developments as Young Family Centres and the provision of facilities to enable mothers and babies to meet together regularly.

Domiciliary services

- i. More health visitors to
 - a. follow up all missed clinic appointments;
 - b. undergo special training in helping ethnic minorities;
 - c. provide better services at home for severely disabled people.
- ii. Liaison between GPs and health visitors: GPs should notify health visitors of all pregnancies promptly, and all pregnant women should be visited. GPs can be encouraged either in existing partnerships or health centres or if single handed, collaboratively, to set up special maternity and infant care groups (possibly, through notification of first births, for first-time mothers and, through child benefit registrations or schools, of mothers of 4 or more children).
- iii. Active development of community nursing services so that nurses are trained to work in the community as well as hospital and prevent certain hospital admissions as well as provide services for disabled or chronically sick people when discharged;

iv. Planned joint services with (a) social service departments (b) voluntary bodies. Schemes should include attachment of social workers to primary care teams and use of voluntary visitors on a "Preventive" basis for disabled.

v. Special counselling services (including services on income rights, heating and housing problems) for severely disabled (especially elderly and mentally handicapped) people and their relatives.

School health

- i. Special programme of assessment of health of school children;
- ii. Special health education programme in schools as an integral part of the curriculum.

Food

- i. Special welfare food provision on greatly increased scale;
- ii. Enhanced (free) school meals programme.

Smoking

Experimental anti-smoking programmes (educational and therapeutic).

Screening

Experimental services aimed specifically at older mothers, and middle-aged people.

8.102 It should not be supposed that an additional area programme would simply add to existing resource allocation. It would contribute to better balance between necessary and less necessary services and hence would contribute to the more economical satisfaction of the aims of the health and personal social services.

CONCLUSION AND SUMMARY OF RECOMMENDATIONS

- 8.103 We have identified 3 objectives for the administration of health and personal social services and recommend their adoption by the Secretary of State. They are:-
- i. To give children a better start in life
 - ii. For disabled people, to reduce the risks of early death, to improve the quality of life whether in the community or in institutions, and as far as possible to reduce the need for the latter.
 - iii. To encourage good health among a larger proportion of the population by preventive and educational action.
- 8.104 We believe that if these 3 objectives are pursued vigorously inequalities in health can be reduced. To fulfil them we recommend a shift in the allocation of resources (Table 8.4). However this in itself is not enough. It must be combined with an imaginative (and in part necessarily experimental) approach to the nature and delivery of care. District Action Programmes, (by which we mean general programmes for the health and personal social services to be adopted nationwide and involving necessary modifications to the structure of care) should be developed in each area; and an additional experimental Programme should be funded in 10 areas of high mortality and adverse social conditions.
- 8.105 We have first argued for changes in the planning of the development of health services and especially resource allocation. We believe that allocation of resources should be based on need. We recognise that there are difficulties in assessing need, but we agree that standardised mortality ratios (SMRs) are a useful basis for broad allocation at regional level. At district level, further indicators of health care and social needs are called for. These should be developed as a matter of urgency, and appropriately to reinforce, supplement or modify allocation according to SMRs.
- 8.106 Resources within the National Health Service and the Personal Social Services should be shifted more sharply than so far accomplished towards community care: particularly towards ante-natal, post-natal and child health services, and home help and nursing services for disabled people. We see this as an important part of a strategy to break the links between social class or poverty and health.
- 8.107 In building up revenue targets it is not the current distribution of expenditure between services which should be used, but that which is aimed at in the planning of services. In particular, this process should reflect the higher share of resources for community care which (along the lines of DHSS planning guidelines) we have recommended.

8.108 While we are aware of the problems of conceptualising and measuring "need" we consider there is no better alternative conceptual basis for developing a coherent rationale for the allocating of health care and resources, and recommended accordingly.

8.109 Our main recommendations for a District Action Programme can be listed under the 3 objectives set out above.

(A) Health and welfare of mothers and pre-school and schoolchildren

i. A non-means-tested scheme for free milk should now be introduced beginning with couples with their first infant child and infant children in large families.

ii. Areas and districts should review the accessibility and facilities of all ante-natal and child health clinics in their areas and develop plans to increase utilisation by mothers, particularly in the early months of pregnancy.

iii. Savings from the current decline in the school population should be used to finance new services for children under 5. A statutory obligation should be placed on local authorities to ensure adequate day-care in their area for children under 5, and a minimum number of places (the number being raised after regular intervals) should be laid down centrally. Further steps should be taken to reorganise day nurseries and nursery schools so that both meet the needs of children for education and care.

iv. Every opportunity should be taken to link revitalised school health care with general practice, and intensify surveillance and follow-up both in areas of special need and for certain types of family.

Some necessary developments apply to other groups as well as children and mothers.

v. The professional associations as well as the Secretary of State and the Health Authorities should accept responsibility for making improvements in the quality and geographical coverage of general practice, especially in areas of high prevalence of ill-health and poor social conditions. Where the number or scope of work of general practitioners is inadequate in such areas we recommend Health Authorities to deploy or redeploy an above-average number of community nurses, attached where possible to family practice. The distribution of general practitioners

should be related not only to population but to medical need as indicated by SMRs, supplemented by other indicators, and the per capita basis of remuneration should be modified accordingly.

vi. An assessment which determines severity of disablement should be adopted as a guide to health service priorities, and this should be related to the limitation of activities rather than loss of faculty or type of handicap.

Although we attach priority to the implementation of this recommendation in the case of disabled children we believe that it must ultimately apply to all disabled people. We are aware that since 1977 most local councils have adopted classification of severity of disablement of people on their registers of the handicapped. We hope that this can be extended to people with all types of handicap and to patients in the Health Services.

(B) The Care of Disabled People in their Own Homes

i. A Working Group (to include representatives of voluntary organisations concerned with relevant client groups) should be set up to review:

a. whether sheltered housing should be a responsibility of social service or housing departments, and to make recommendations; and

b. the present functions and structure of hospital, residential and domiciliary care for the disabled elderly in relation to their needs, and to decide the best and most economical balance of future services.

ii. Joint funding should be developed and further funding of a more specific kind should be introduced, if necessary within the existing NHS budget, to encourage joint care programmes. A further sum should be reserved for payment to authorities putting forward joint programmes to give continuing care to disabled people - for example post-hospital follow-up schemes, pre-hospital support programmes for families, and support programmes for the severely incapacitated and terminally ill.

iii. Clear criteria for admission to, and continuing residence in, residential care should be agreed between the DHSS and the local authority associations, and steps taken to encourage rehabilitation, and in particular to prevent homeless elderly people from being offered accommodation only in residential homes. Priority should be given to expansion of domiciliary care for those who are severely disabled in their own homes.

iv. The functions of home helps should be extended to permit a lot more work on behalf of disabled people; short courses of training, specialisation of functions and the availability of mini-bus transport, especially to day centres, should be encouraged.

(C) Prevention: The role of Government

i. An enlarged programme of health education should be sponsored by the Government, and necessary arrangements made for optimal use of the mass media, especially television. Health education in schools should become the joint responsibility of LEAs and health authorities. However, we do not believe that an effective programme of preventive health can be a matter entirely for personal initiative and responsibilities. Commitment on the part of Government is required, and has not so far been demonstrated especially in so far as it involves (as it must) departments other than the DHSS. For example, there has been no major attempt at making more adequate provision for physical recreation in inner city area developments, as recommended by the Expenditure Committee in 1977. Additionally, the decline in recourse to vaccination and immunization (eg in the case of poliomyelitis) is worrying. Doctors and others in the NHS must be encouraged to convince members of the public of the importance of these preventive measures.

ii. National Health Goals should be established and stated by Government after wide consultation and debate. Measures that might encourage the desirable changes in people's diet, exercise, and smoking and drinking behaviour should be agreed among relevant agencies.

Legislation, and fiscal and other financial measures may be required and a wide range of social and economic policies involved. We see the time as now opportune for a major step forwards in the field of Health and Prevention.

iii. Stronger measures to reduce cigarette smoking must be adopted. Our recommendations here should be seen not only as a priority in themselves, but as illustrative of the determined action by government necessary in relation to all essential elements of a strategy for prevention.

Measures should include:

- a. legislation rapidly to phase out all advertising of tobacco and sales promotion of tobacco products (except at place of purchase);
- b. sponsorship of sporting and artistic activities by tobacco companies should be banned over a period of a few years, and meanwhile there should be stricter control of advertisement through sponsorship;
- c. regular annual increases in duty on cigarettes in line with rising income should be imposed, to ensure lower consumption;
- d. tobacco companies should be invited to submit plans in consultation with Trades Unions for the diversification of their products over a period of 10 years with a view to the eventual phasing out of sales of harmful tobacco products at home and abroad;
- e. a stronger well-presented health warning should appear on all cigarette-packets and such advertisements as remain, together with information on the harmful constituents of cigarettes;
- f. the provision of non-smoking areas in public places should be steadily extended, and
- g. a counselling service should be made available in all health districts, and experiment encouraged in methods to help people reduce smoking.

We have already recommended that steps be taken to increase utilization of antenatal clinics, especially in the early months of pregnancy. Given early attendance there are practical programmes for screening for Down's syndrome and for neural tube defects in the foetus. In relation to adult disease screening for severe hypertension is practicable, and effective treatment is available.

iv. In the light of the present state of knowledge we recommend that antenatal screening for neural tube defects (especially in high risk areas) and Down's syndrome on the one hand, and in relation to adult disease for severe hypertension on the other, should be made generally available.

Additional Funding for 10 Special Areas

8.110 We recommend that the Government should finance a special health and social development programme in a small number of selected areas, costing about £30m in 1981-82. At least £2m of this sum should be reserved for evaluation research and statistical and information units. The object would be both to provide special help to redress the undeniable disadvantages of people living in those areas but also to permit special experiments to reduce ill-health and mortality, and provide better support for disabled people. Some possibilities have been illustrated particularly in connection with the development of more effective ante-natal services.

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1. The first part of the report is devoted to a general survey of the situation in the country.

2. The second part deals with the economic situation and the measures taken to improve it.

3. The third part discusses the social and cultural aspects of the country's development.

4. The fourth part is devoted to the political situation and the role of the government.

5. The fifth part discusses the international relations of the country and its role in the world.

6. The sixth part deals with the future prospects of the country and the challenges it faces.

7. The seventh part is a conclusion and a summary of the main findings of the report.

8. The eighth part contains the appendixes and the references used in the report.

9. The ninth part is a list of the abbreviations and symbols used in the report.

10. The tenth part is a list of the names of the authors and the institutions involved in the preparation of the report.

11. The eleventh part is a list of the names of the members of the committee that approved the report.

12. The twelfth part is a list of the names of the members of the committee that supervised the work of the authors.

13. The thirteenth part is a list of the names of the members of the committee that reviewed the report.

14. The fourteenth part is a list of the names of the members of the committee that recommended the report for publication.

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POLICIES TO REDUCE HEALTH INEQUALITIES: [2] A WIDER STRATEGY

- 9.1 In Chapter 6 we showed that people's associations, and mutual expectations at work, in the home and family, in the neighbourhood and community, and in other organisational or social roles, are continually evolving, and that marked differences in the material base or context of their associations substantially explain inequalities in their health and well-being.
- 9.2 Whilst the health care services can play, and do play, a significant part in reducing inequalities in health, yet measures to reduce differences in material standards of living as experienced at work, in the home and in everyday social and community life are of even greater importance. We have in mind not simply a general reduction in inequalities in living standards but particularly a relative improvement of the living standards of certain groups of poor people, including families with children, together with measures to prevent new structures and technologies from undermining the existing living standards of some groups. Like the strategy we outlined for the health care system in Chapter 8 the strategy which deserves to be adopted outside that system needs to be comprehensive and interlinked rather than fragmentary. Among the policies which are then pursued certain priorities to help groups of poor people and prevent new forms of deprivation from arising must be selected. Efforts therefore have to be made both to identify key elements and integrate them into a concerted whole. We will outline how a broad strategy might then be made up and make certain specific proposals for inclusion in it. Thus we will first outline the general need for an anti-poverty strategy, and then discuss and recommend selected measures - especially for families with children and disabled people.

A Comprehensive Anti-poverty strategy

- 9.3 Despite increases in GNP during the 1960s and 1970s successive Governments have recognised the wide extent of poverty in the United Kingdom. In 1966 the Report of a Government survey of retirement pensioners estimated that up to 750,000 elderly people were living below national assistance standards - most of whom were eligible to draw national assistance and were not claiming it (Ministry of Pensions and National Insurance, 1966, p.20). In 1967 a further report on a survey of families with children estimated that there were

160,000 families with half a million children who were living under the new Supplementary Benefit scale rates (Ministry of Social Security, 1967, p. iv). Further reports from the DHSS in the early 1970s tended to confirm the large numbers of people with incomes below the scale rates and yet who were in, or they were dependants of people who were in, full-time employment. (See for example, Howe, DHSS, 1971). In Table 6.2 we showed, on the basis of DHSS estimates, that in 1977 over 14 million people (or 26.6% of the population) had incomes of not more than 40% above the supplementary benefit level. About a third were employed, or were dependants of people who are employed, and about two-fifths were retirement pensioners. (Because of under-representation of elderly and sick and disabled people, the use of a measure of "normal" instead of "current" income for people who have been sick or unemployed for less than 3 months, and the exclusion of those receiving supplementary benefit from the data, numbers with incomes below SB level are underestimated (Townsend, 1979 pp. 275-276 and 908-909).) At these levels of income there is evidence of multiple deprivation in diet, housing and environmental amenities, leisure activities and at work. Because of changes in earnings and numbers of dependants the movement of people into and out of poverty is considerable, and while there is no hard evidence for a long span of individual life it may be inferred, from (i) survey of cross-sectional data, (ii) data about incomes currently and for the previous year, and (iii) New Earnings Survey data followed through for several years, that a very high proportion of manual workers experience poverty, or exceptionally low living standards, for a substantial part of the life-cycle.

9.4 There are differences of view about what in fact constitutes poverty. The main question is how far a definition acceptable to government should depend on needs as assessed in contemporary society and how far on needs as measured by some historical bench-mark. Today's poor in Britain have more purchasing power than the poor of the depression years of the 1930s because of the growth of national prosperity. But they are living in a different kind of society, in which they have and are held to have different obligations as workers, parents, householders, friends and citizens. We therefore take the view that any historical standard of need becomes more and more unreal with the passage of time in a changing and especially growing economy even when it is repriced in accordance with rises in the cost of living. An effort has to be made very few years to redefine the standard itself in accordance with changing social conditions. As long ago as 1812 Adam Smith recognised this for consumer goods in declaring that "by necessities I understand, not only the commodities which are indispensably necessary for the support of life, but whatever the custom of the country renders it indecent

for creditable people even of the lowest order to be without". The latest report of the Supplementary Benefits Commission (Annual Report for 1978, 1979) expresses the point as follows: "Poverty in urban industrial countries like Britain is a standard of living so low that it excludes and isolates people from the rest of the community. To keep out of poverty they must have an income which enables them to participate in the life of the Community."

- 9.5 In our view the structural dimension is of as much, if not greater, importance than the historical dimension in explaining why inequalities in health exist and how they are perpetuated. What is undeniable is the huge difference between some non-manual occupations and certain manual occupations in mortality and morbidity, and the corresponding difference in material amenities at work and outside work, which are both reflected in, and determined by, the allocation of resources.
- 9.6 A comprehensive anti-poverty strategy must therefore fall into two parts. One is a fairer distribution of resources. While measures have to be taken to increase the living standards of poor people relative to those who are better-off we believe that post-war history shows the inadequacy of the approach to this problem which has been followed by successive governments. Following the Beveridge philosophy of the war years it was supposed that the state did not so much have to intervene in the initial production and determination of the structures of wealth and of gross incomes in the first place, as develop the taxation of some forms of gross incomes once received or determined, so that minimum subsistence incomes for the poor could be financed. High rates of taxation had been introduced in the war. The problem was that after the war steps were taken on behalf of those principally affected to reduce the impact of progressive taxation both by inflating gross incomes and substituting fringe benefits in kind - which escape tax altogether or attract a lower rate of tax. Moreover, the number of dependent poor for whom taxes (or the equivalent in national insurance contributions) had to be raised was rapidly increasing.
- 9.7 Thus, the aim of different political parties in Britain to raise the relative living standards of the poor was largely frustrated by growing opposition to progressive taxation (as well as diminution of its practical effects) and by the steady growth relative to the employed population of the dependent population. Different examples might be given of this growth. Between 1951 and 1976 the number of social security beneficiaries (excluding those receiving family allowances) grew from just over 7½m to 14½m, or by 88 per cent, while the

total population increased from 51m to 56m or by only 10 per cent (Social Trends, 1979, pp. 32 and 116). The Government expects the number of social security beneficiaries to grow to over 15½m by 1982-3, even on an assumption of no growth in unemployment (Qnnd. 7439, p. 151).

- 9.8 In effect governments tried to meet this developing problem by lowering the tax threshold and shifting the balance from direct to indirect taxation. They also tried to reduce the growing costs of categories already defined as dependent, as well as meet the additional costs of new categories whose needs came to be recognised publicly, by relying increasingly on the supplementary benefit and other means-tested schemes.
- 9.9 But the post-war consensus about the entitlements of the poor and the methods of financing their incomes appears to have reached a dead end. In the 1980s either the living standards of the poor will not be maintained relative to the rest of the population as their numbers grow, or if living standards are maintained or efforts are made even to improve them, then radically new methods of financing them from the prosperous sections of the population have to be devised.
- 9.10 We believe that a new approach to the fairer distribution of resources needs to be developed on the following basis. The dispersion of resources is in fact very unequal, and the long-term objective of reducing by a moderate amount the proportionate share of, say, the top 30 per cent of income recipients, would substantially augment the sum redistributed at present to the poor. (If the shares of disposable income of the top 30% as given in Report No 5 (p.75) of the Royal Commission on the Distribution of Income and Wealth, were only moderately reduced after a programme of new measures, the sum available for distribution in social security benefits, for example, could be doubled.) Though the political task will be difficult, greater restriction on the amount of wealth which may be inherited and accumulated, together with more effective measures to inhibit the growth of top incomes and reduce present differentials in incomes, preferably within the framework of nationally agreed and statutorily enforced maximum and minimum incomes, with appropriate adjustments for dependancies, will need to be developed. Quite what form this might take, and how it might be democratically agreed and enforced, is not something which it is possible to develop in these pages. However, we believe that pride of place in a comprehensive anti-poverty strategy must be given to the greater equalisation of wealth and of other resources, with the possibility of defining national minimum and maximum

earnings (and family income) as indispensable elements of a nationally approved framework of incomes. Within statutory limits local and industrial or occupational wage-levels might be negotiated. Below we will recommend certain measures to be included in such a strategy.

- 9.11 The second part of a comprehensive anti-poverty strategy is to encourage self-dependence and a high level of individual skill and autonomy as a basis for creating a more integrated society. We believe that this is possible only by raising the standards and broadening the content of education so that the need for advice or supervision from professionally trained personnel in medicine, nursing, law, housing, child care or administration is less marked or frequent and the capacity to undertake a range of skills greater; by improving individual access to information about, and control over, what goes on in the immediate community as well as society generally; and by conferring rights to employment and occupation and creating corresponding opportunities for such employment. There are of course possibilities of augmenting formal education as, for example, Halsey and others have shown in pre-school teaching schemes (Halsey, 1980) and of introducing into the curriculum more studies of such subjects as health and nutrition, and (some believe) political education. Methods of enabling adults to have better access to knowledge, theoretical and practical, are equally important.
- 9.12 Britain has an honourable history in the development of local voluntary organisations. There are many good modern reasons, (including community profit from technological advances) for vigorous support and encouragement of local community associations and groups - especially those run by their membership.
- 9.13 Access to fulfilling employment or occupation is the most important of the rights which are necessary to promote the principle of self-help. Among a variety of possible measures there are two which deserve special mention. One is the energetic sponsorship of new industrial enterprise, based upon newly emerging technologies. In face of a world recession in world trade and severe foreign competition the nation cannot afford to be timid. The other measure is to expand employment within different branches of community service. Up to the present time the youth opportunities programme and similar schemes have done little more than provide some people who would otherwise count as unemployed with temporary, and ill-paid, employment. There are thousands of other men and women who have been unemployed for many months and whom it costs the state nearly as much to support as it would if they were employed in

different kinds of service to raise the quality of life for elderly and disabled people.

9.14 This is necessarily an abbreviated outline of a possible strategy, and yet it is within such an outline that a number of specific measures deserve to be picked out and explained as priorities for the Government to consider. In the rest of this Chapter we will develop certain priorities outside the health care systems which correspond with the same objectives to which our recommendations for the health service were directed.

9.15 The major thrust of the strategy to be outlined in this Chapter is towards families and children. Top priority must be given to measures which will enhance family living standards and reduce the high risk of children suffering those forms of deprivation and poverty which inhibit health development. In drawing this conclusion we are conscious in particular of two facts of the utmost importance:-

i. There is evidence of substantial deprivation among young children (for example, Wilson and Herbert, 1978; Bone, 1977) and, after people of advanced age, they run the highest risk of all age-groups of being in poverty (Townsend, 1979, p. 285);

ii. Those in middle and late middle life (mostly couples without dependants) have a standard of living, measured in relation to supplementary benefit scales rates, far higher than that of families in which there are young children (loc cit., 1979, Figure 7.1 p. 288). This difference between the young and the middle aged appears to have grown more marked in recent years, partly because the rearing of children has been completed after the first 20 or 25 years of adult life by more married couples in each succeeding cohort, but partly because more married women have re-entered employment, non-manual occupations with strongly defined incremental pay scales have grown disproportionately, and more of the middle aged have had access to cheap housing - through the completion of mortgage repayments or a relative fall in the real value of repayments, because of inflation. The implication for policy is therefore both that a need exists to direct more resources towards children and that checks might be placed on the tendencies for people in middle life without dependants to attract an undue share of additional national resources - so that adequate measures for young children might with less difficulty be financed. A complex

programme covering financial well-being, education, nutrition and housing must be developed. In the chapter we have selected some principal measures to give effect to such a programme.

A. A POLICY FOR FAMILIES AND CHILDREN

9.16 It is our view that the abolition of child poverty should be adopted as a national goal for the 1980s. We recognise that this requires a redistribution of financial resources far beyond anything achieved by past programmes, and is likely to be very costly. We recognise also that with the growth in national income it will become easier to find the resources for such an anti-poverty strategy. The recommendations which we make below are presented as a modest first step which might now be taken towards such an objective.

1. CHILD BENEFIT

9.17 The history of child benefit has proceeded through 2 stages and is now entering a third. The first was the campaign to establish family allowances, culminating in the Family Allowances Act 1945. History demonstrates the different motives of the participants in the campaign. "Family allowances were supported in the early days as a means of reducing inequalities between rich and poor, and between men and women. To socialists and feminists these were worthy ends in themselves but were not regarded as legitimate ends for government social policy until the Second World War. Broader support from Liberals and Conservatives was forthcoming only when family allowances became linked with other problems: a declining birth rate, poverty and malnutrition among children, the maintenance of work incentives and the need to curb inflation. These problems were established concerns of government and thus, by association, the legitimacy of family allowances was enhanced". (Land H., 1975, p.227). But although the functions of family allowances were differently regarded, the government had finally accepted the principle that "society should include in its economic structure some form of direct financial provision for the maintenance of children, instead of proceeding on the assumption that, save in cases of exceptional misfortune, this is a matter which concerns only individual parents and should be left to them because normally men's wages or salaries are, or ought to be and can be made to be, sufficient for the support of their families". (Rathbone, E, 1940, p.xi). The government paid 25p (less than the 40p recommended by Beveridge) per week for every dependent child excluding the first. This amount compared with 52½p for each child, including the first, which was paid as an allowance to the wives of men in the armed forces at the time. The total cost of these "separation" allowances for children was approximately £80m compared with the cost of £57m in the first year of family allowances (Land, H. 1975, p.215).

9.18 The second stage in the evolution of universal cash allowances for children was the eventual re-kindling of a campaign to extend family allowance to the first child in the family and simultaneously increase the real value of all family allowances, partly in exchange for the phasing out of child tax allowances. This stage culminated not so much in the Child Benefit Act of 1975 as the completion of its phasing-in during the 2 years from April 1977, up to the Budget of 1979. What were the important developments during this period? In the previous 3 decades government support for family allowances

had flagged. For example, between 1946 and 1978 pensions and other major social security benefits were increased on 17 occasions, whereas family allowances were increased only 6 times. In the late 1960s and 1970s evidence of poverty among the families of wage-earners was widely discussed (Abel-Smith, B, and Townsend, P. 1965). Scandinavian, EEC and Eastern European countries had introduced childrens' allowance schemes which were more generous, relatively to average earnings and GNP. For example, in 1975 the UK coverage of children through its family allowance programme was the lowest of the 9 EEC countries and its expenditure on family benefits as a percentage of GNP not only the lowest but less than half the average percentage of the other 8 countries. (EEC, Report on the Development of the Social Situation in the Communities in 1976, 1977, pp 222-225). Britain's poor record in family benefits over a considerable span of years must be linked not only to the relatively large numbers of wage-earning families found in national and international surveys to be living in poverty or on its margins (Ministry of Social Security 1967; DHSS analyses of family poverty 1974-76) but the failure of infant mortality rates to decline as rapidly as those of some other countries (Chapter 5., p122). Again, inflation in the last 15 years has tended to hit the poorest hardest (see, for example, the evidence by Professor J Muellbauer, The National Consumer Council, David Piachaud, and the Low Pay Unit in Royal Commission on the Distribution of Income and Wealth, 1978. Though see Department of Employment Gazette February 1979, March 1979, for a contrary view).

TABLE 9.1
Change in value of tax threshold 1955-56 to 1977-78

Year	Value of allowance at current prices			Value of allowance at constant prices				
	Single	Married	Married plus		Single	Married	Married plus	
			2 children 11-16	3 children 11-16			2 children 11-16	3 children 11-16
1955-56	180	309	566	694	100	100	100	100
1966-67	283	437	797	977	112	101	100	100
1968-69	283	437	751	885	104	94	87	84
1970-71	418	598	904	1030	136	113	93	87
1972-73	591	771	1180	1358	165	125	104	98
1974-75	625	865	1363	1586	134	108	92	88
1975-76	675	955	1453	1676	116	96	79	74
1976-77	735	1085	1703	1986	109	94	80	76
1977-78	945	1455	1891	2096	-	-	-	-

Source: Royal Commission on the Distribution of Income and Wealth, Report No 6: Lower Incomes, Cmnd 7175, London, HMSO, May 1978, p. 311.

The constant price index has been recalculated to a 1955-6 base.

- 9.19 The factors summarised above were among the ingredients determining the relativities of living standards and lay behind an increasingly tempestuous debate about government family policy in the late 1960s and early 1970s.
- 9.20 By 1976 the rate of family allowance was £1.50, paid for each child after the first, and on which tax was paid. However, because of the effects of "clawback" introduced in 1967-8 at the time of a previous increase in family allowances this was worth only 62¹/₂p to the great majority of families paying tax at the standard rate. Additionally, there was tax relief for each child of £300, £335 or £365 according to age. This was equivalent to £2.02, £2.05 and £2.46 a week respectively to a parent paying tax at the standard rate. Tax relief was worth a lot more to families with high incomes paying tax at the higher rates. The continued fall in tax thresholds and the consequent application of "clawback" to low income families meant that fewer and fewer families benefitted.
- 9.21 As part of their tax credit scheme foreshadowed in the budget of 1972 and illustrated in a Green Paper in October 1972 (Cmnd 5116, 1972), the Conservative administration proposed to abolish these 2 forms of allowance and pool the money in a child "credit" for each child in the family. The Labour Party had been developing a "Child Endowment" scheme (Labour's Programme, 1973, p 71). So far as children were concerned, a Parliamentary Select Committee on tax credit helped to resolve some of the differences between the parties. It agreed unanimously to recommend that child credit should be paid to the mother and should be "a cash payment on a universal basis through the Post Office". This represented an important change in the principle of tax credits.
- 9.22 After the election of 1974 the proposal had a chequered history right up to the point when a benefit of £1 per week for the first child was introduced in April 1977. This still meant that the level of child support (including the residual value of child tax allowances) remain below that even for the late 1960s, as Table 9.2 shows. In purchasing value the support for families with more than one child represented a lower value than available even in 1946 (Hansard, 1 February 1979, cols 525-6) but in April 1976 the rate of child benefit was increased to £2.30 for each child, in November 1978 to £3 and in April 1979 to £4 per child. The completion of these phases can be said to mark the close of the second stage of the history of child support. (For a detailed account of the recent history, see The Great Child Benefit Robbery, April 1977; Land, H. 1978; Field, F. February 1978; and Field, F. September 1978).

TABLE 9.2

VALUE OF FAMILY SUPPORT TO STANDARD RATE TAX PAYER AS A PERCENTAGE OF AVERAGE GROSS AND NET INCOME

YEAR	a. VALUE OF CHILD TAX ALLOWANCES AND FAMILY ALLOWANCES/CHILD BENEFITS AS PERCENTAGE OF GROSS INCOME FOR:			b. VALUE OF CHILD TAX ALLOWANCES AND FAMILY ALLOWANCES/CHILD BENEFITS AS PERCENTAGE OF NET INCOME FOR:		
	1 CHILD FAMILY %	2 CHILD FAMILY %	4 CHILD FAMILY %	1 CHILD FAMILY %	2 CHILD FAMILY %	4 CHILD FAMILY %
OCT 1964	4.7	10.8	22.6	5.5	11.9	23.8
OCT 1965	4.6	10.5	21.9	5.5	11.8	23.3
OCT 1968	4.0	9.0	18.4	4.8	10.8	21.2
OCT 1969	3.7	8.2	16.7	4.5	9.9	19.5
APR 1970	3.4	7.7	15.8	4.3	9.5	18.8
APR 1970	3.1	6.9	14.2	3.9	8.6	17.2
APR 1971	3.5	7.8	15.9	4.5	9.6	18.7
APR 1972	3.2	7.0	14.4	4.0	8.6	16.9
APR 1973	2.7	6.1	12.5	3.5	7.6	15.2
APR 1974	3.2	6.8	13.9	4.2	8.7	16.9
APR 1975	2.7	6.2	12.8	3.7	8.3	16.4
APR 1976	2.8	6.4	13.0	3.9	8.6	16.6
APR 1977	2.9	6.0	12.0	3.9	7.9	15.1
APR 1978	3.2	6.3	11.9	4.3	8.3	15.3
NOV 1978	3.7	7.2	13.9	5.0	9.6	18.1
APR 1979	3.8	7.3	13.6	5.0	9.6	17.4

NOTES:

The figures for years from 1968 to 1976 inclusive take account of the effect of Family Allowance deduction ("clawback") as well as tax on the family allowance.

The figures of gross and net income include family allowance and child benefit as appropriate.

Gross average earnings have been derived from estimates of the average weekly earnings of full-time adult male manual workers (October Inquiry) up to April 1970, and adult male employees in all occupations (New Earnings Survey) from April 1970 using the Department of Employment's monthly indices of average earnings for interpolations and extrapolations.

Net earnings are gross earnings less income tax and National Insurance contributions at the non-contracted out rate.

All children taken to be 11 years of age or under.

For tax years 1964/65 and 1965/66 the average earner (with the exception of a one child family in 1965/66) paid income tax at a reduced rate and therefore received less child support than the standard rate taxpayer.

9.23 The current rates of child benefit do not yet represent levels sufficient to ward off poverty, equalise living standards between families with and without dependants, and lay the basis for meeting a child's immediate needs in modern society. The welcome improvements introduced in the last 2 years can be regarded primarily as restoring levels of support to those in the late 1960s.

9.24 Inflation has continued to eat into these improved rates. Table 9.3 helps to put the outcome into perspective. Progress on child benefits remains of vital importance. In April 1978 the then Leader of the Opposition Mrs Thatcher affirmed that the child benefit scheme was "a major part of the Opposition's family policy" (Hansard, 12 April 1978) and the Secretary of State for Social Services, Patrick Jenkin, stated in 1977 that a Conservative administration would give the child benefit scheme "top priority". We would wish to underline the importance of child benefit from the perspective of the health and life chances of children (and, of course, at the same time, their parents). An adequate level of child benefit would have the following advantages:

i. Reduces poverty. Child benefit increases the incomes of those families who fail to claim FIS or supplementary benefits and who are entitled to claim those benefits. It also helps those claiming means-tested benefits who, because of particular rules, remain in poverty for certain periods, or qualify only for insufficient amounts. Such statements can be made if what might be called 'the state's poverty standard' is accepted as the criterion of poverty.⁽¹⁾ They become stronger if a higher alternative standard, as increasingly urged by some social scientists, pressure groups and even administrators (for example, SBC annual report for 1975) is adopted.

ii. Helps to offset low income or/and loss of income. After several years of high rates of unemployment, and the prospect of further high rates for some to come, child benefit makes an important contribution to family incomes when relatively low wage rates are likely to become increasingly common, and mothers have less opportunity to take jobs to supplement family living standards.

(1) Government sources in fact refer carefully to the "supplementary benefit standard" but, as noted earlier (Chapter 6) a "poverty standard" or "poverty line" is the description frequently adopted in both scientific and popular usage.

iii. Promotes adequate diet. Definition and public discussion of the amount required by children helps to direct attention to their needs. Child benefit provides an important direct contribution to the dietary and health needs of children and mothers, as well as an important indirect contribution to maintaining family living standards relative to those of single people and couples without children. This has become especially true since the withdrawal of free school milk and food subsidies.

iv. Strengthens mother's role. The right to obtain the money for children strengthens the mother in planning and catering for the needs of children.

v. Meets additional expenses of children in a changing society. Modern society continues to impose new obligations upon families, including those for the maintenance of health. New types of expenses are associated with the individual child rather than with the family as a whole. For example, the school leaving age has been raised and families are expected to meet new expenses for school kits, transport costs, fares for school trips, domestic science materials and text books. There are continuing pressures, in the schools, clinics and day nurseries, and via the media, to raise standards of child care. In an increasing number of instances, parents are finding that they have to meet educational, health and welfare expenses. (For a discussion of family expenses, see, for example, Bull, D G, 1979).

vi. Anti-inflationary. During the war Keynes and subsequently others appreciated the value of child benefits in limiting the case that can be made in a particular year for wage and salary increases. Child benefit has come to be recognised as an important element in any nation's anti-inflationary policies. But it can also be an important element of stability for individual families during periods of rapid inflation, when individual wage rates and other sources of income are apt to rise unevenly or remain static. Provided child benefit rates are reviewed annually, a measure of protection for families against high rates of inflation can be provided.

vii. Restores greater equity between those of different age. Recent evidence of the interaction between wealth accumulation and income

suggest that there have been trends in living standards in favour of the middle-aged without dependants, as compared with families with children. The spread of salary with increments, house purchase with mortgage periods generally from 20-25 years, and the evolution of structures in industry and public service with seniority rights and better fringe benefits for long-established employees, have all contributed to these trends. New ways have to be found of counteracting these trends in order to prevent social minorities and those with heavy dependancies from experiencing relative deprivation.

TABLE 9.3

THE COMBINED VALUE FOR FAMILY ALLOWANCES/CHILD BENEFIT AND CHILD TAX ALLOWANCES^(a) TO THE STANDARD RATE TAXPAYER 1965-1978, AND WHAT THE VALUE WOULD HAVE BEEN IN 1978 IF THE 1965 VALUE AS A PERCENTAGE OF NET AVERAGE INCOME HAD BEEN MAINTAINED

YEAR	ACTUAL AMOUNT PER WEEK (c)			
	1 CHILD £	2 CHILDREN £	3 CHILDREN £	4 CHILDREN £
1965 (Oct)	0.91	2.10	3.35	4.60
1978 (Nov)	3.63	7.27	10.90	14.54
1979 (Nov)	4.00	8.00	12.00	16.00
What 1965 values would have been at later dates (if maintained in proportion to net income) (b)				
1965 (Oct)	0.91	2.10	3.35	4.60
1978 (Nov)	3.57	8.31	13.30	18.65
1979 provisional (Nov)	4.11	9.44	15.30	21.45

(a) For children under 11.

(b) Net earnings are average gross earnings of full-time adult male manual workers in manufacturing industries and some of the principal non-manufacturing industries as published by the Department of Employment including Family Allowance/Child Benefit as appropriate less income tax and National Insurance contribution at the non contracted out rate.

(c) For tax year 1965/66 the average earner (with the exception of a one child family) paid income tax at a reduced rate and therefore received less child support than the standard rate taxpayer.

Source: DHSS for data other than the estimates in the final line (for 1979 (Nov) of the table, which have been prepared by the Working Group.

9.25 In October 1965 the combined value of family allowances and child tax allowances for a standard rate taxpayer with one child was £0.91, with 2 children £2.10, with 3 children £3.35 and with 4 children £4.60 per week (SBC, Low Incomes, 1977, p.90). If these values had been maintained to November 1978 in relation to net incomes of families they would have been £3.57, £8.21, £13.30 and £18.65 respectively. The approximate equivalent values for November 1979 are £4.11, £9.44, £15.30 and £21.45. It can be seen that the rates actually introduced in April 1979 restore the value of family support only for the one child family (and even for that family were likely to have fallen below the 1965 equivalent by November 1979). For families with 3 or more children they clearly fall substantially short of restoring that value. At £4 the child benefit represents only about 4 per cent of average gross male earnings in late 1979. The short-term rate of national insurance benefit for a dependent child was £1.70 (in addition to child benefit of £4) from November 1979, and the supplementary benefit rate for a child of under 5 was £5.20 and for a child aged 5-10 was £6.25 per week.

9.26 Child benefit should vary by age. Up to the present, supplementary benefits for children and child-tax allowances have varied by age. The supplementary benefit rates for children of different ages are set out below:

	From November 1979	
	£	as per cent for married couple rate
Married couple	29.70 ^a	100
Single householder	18.30 ^a	62
Any other person 18 or over	14.65	49
16-17	11.25	38
Dependent child 13-15	9.35	31
11-12	7.70	26
5-10	6.25	21
Under 5	5.20	18

Note: a Ordinary rate only

The range by age is wide and has remained wide since the supplementary benefit scheme, and before that the national assistance scheme, was first introduced.

There are powerful arguments for higher rates for children, particularly older children. (See, in particular, Wynn, M. 1970; Walker, C L and Church, M. 1978; Field, F. February 1978; and Townsend, P. 1979, especially chapter 6). A number of those giving evidence to the Select Committee on Tax-Credit argued that child credits should be paid on an age-related basis (Women's National Commission, Women's National Advisory Committee of the Conservative Party, the Child Poverty Action Group and Professors Abel-Smith, Atkinson and Kaldor) and the Committee believed "there would not be serious administrative difficulties in introducing differentiated child credits". (Select Committee on Tax Credit, 1973, p 25). In Western Germany the rates for children are much higher than in Britain. Thus the average rate for children aged 12 to 15 in 1977 was 75 per cent, and for dependants aged 16 to 21 90 per cent of the single householder rate, compared with 51 per cent (for children aged 13 to 15) and 61 per cent (for dependants aged 16 to 17) in Britain (Whittle, C. 1977, p 36).

- 9.27 In their review of the supplementary benefits scheme a team of officials concluded that the children's scale rates should continue to be age-related (Social Assistance, p 52) and that 3 age-bands was the smallest number compatible with the principle that could be administered economically. As recently as the mid 1970s child tax allowances varied according to age and fell into 3 bands: under 11, 11-16 and over 16. The first was 80 per cent of the third.
- 9.28 The importance of a properly endowed child benefit programme to the future health of the children of this country cannot be exaggerated. Others have endorsed this principle. For example, in its reports for 1975 the Supplementary Benefits Commission stated, "The adequacy of family benefits in general, and the new child benefits in particular, seems to us to be the most urgent concern of the whole field of social security" (Cmnd 6615, p 17). This was reiterated in the next report. "Ultimately we would like to see a level of child benefit equivalent to the allowances we pay for children in families living on supplementary benefit - currently about £5 per week for each child on average". (Cmnd 6910, p 5). In its response to the "Social Assistance" Review the Commission went on to affirm "Further improvements in child benefit and help for the unemployed - particularly in the form of better opportunities for work - are the most urgent of our proposals". (Response of the SBC, 1979, p 40). From our different remit to examine inequalities of health we endorse those priorities. We recommend as an

immediate goal the raising of the level of child benefit to 5.5% of average gross male industrial earnings - in November 1979 equivalent to the rate for a dependent child of a sick or unemployed person (£5.70 including child benefit).

In the longer term, we recommend that larger child benefits be paid for older children, perhaps with age bands corresponding to those used by the SBC. Also in the longer term we should like to see age-related child benefit rates index linked to average gross male industrial earnings or, because an increasing number of women are entering employment and because in many cases both husbands and wife have earnings, to some other perhaps more appropriate standard (such as average net disposable personal income). Otherwise it will be difficult to maintain the "tax equity" as well as the "need-serving" functions of child benefit. One parent families present special problems, and in our view their financial needs too would be better met through an increase in child benefit.

2. INFANT CARE ALLOWANCE

9.29 In discussions of the virtues of age-related child benefit attention is sometimes drawn to the financial problems of couples having their first child. Certainly there can be a dramatic fall in family living standards if the wife gives up paid employment to start a family. In exchange for the loss of one of the two wages there are, at least for a time, 2 dependants. Young couples with children also tend to have smaller incomes than older couples with children. But in designing a child benefit scheme it is not possible to meet all such problems of income support. Essentially any system of child benefits must be designed to deal with considerations of needs, or equity, as they apply to families with different numbers of children of different age. Problems of need or equity which arise by virtue of differences in the age, status or conditions of each of the parents, can only be met in a different or complementary scheme. In recent years many countries have begun to recognise that better provisions have to be made for the needs and dependencies of married women. Thus, important changes were introduced in Britain in the Social Security Pensions Act of 1975, and through the introduction of an Invalid Care Allowance and a non-contributory Invalidity Pension for disabled married women. Historically the home responsibilities of married women have been recognised by the development of the Married Man's Tax Allowance - which has been worth about $1\frac{1}{2}$ times his tax allowance as a single person. If the wife goes out to earn, the couple enjoy a tax allowance which is about $2\frac{1}{2}$ times the single person's allowance. At the higher levels of income the couple's combined income becomes subject to the higher rates of tax. In that situation the wife can choose to be assessed as a separate individual

on her earned income, in which case the husband's married allowance is reduced to a single personal allowance. Reduced tax may then be paid by the couple, which may more than compensate them for the loss of the married allowance. The careful examination of the tax credit scheme in the early 1970s (Select Committee on Tax Credit, 1973) and subsequent comprehensive examinations of the tax structure (for example, the Meade Report, 1978; Field, F. Meacher, M. and Pond, C. 1977) have shown that the tax allowance is inequitable, clumsy and costly as a form of help for mothers in families. With the fall in the number of years during which a married woman is responsible for young children and with the rise in numbers seeking employment, the combined system of income benefits and tax allowances for married women has become more disjointed.

9.30 A re-grouping of resources on behalf of young mothers with children is required. In principle needs at childbirth are met through the maternity benefit and maternity grant. But the grant has not been maintained during inflation and would need to be raised to about £100 (from the present £25.00 - which has not been changed since 1969) to restore its value to that equivalent to the payment when first introduced.⁽¹⁾ We recommend that the grant should be increased to £100 to acknowledge the high cost to parents of childbirth.

9.31 The special responsibilities of caring for young children, other than through the married man's tax allowance, are, however, not yet recognised in Britain. Some other countries (Hungary is one example) have introduced infant care allowances in addition to child benefit. The case for the introduction of a home responsibility payment has been made in Britain. "The benefit would be paid to all families in which there were children or other dependants needing home care, except those where the social insurance benefit included a dependant's allowance for the wife. In the case of children such a benefit could presumably be paid simply by paying an addition to the child benefit payable for the eldest dependent child in the family, and it might be better presented in this way. The payment for the care of adult dependants would then be a separate benefit, a development of the present invalid care allowance". (The Meade Report, p 287. See also pp 498-499). The Child Poverty Action Group has proposed a more differentiated scheme, whereby

(1) An increase to £57 would restore the maternity grant to its value in 1973 (Minister for Social Security, Hansard 20 July 1979).

women with children under 5 would receive twice as much as those with dependent children of school age. (Select Committee on Tax Credit, Vol II, pp. 325-30). The allowance could be phased in, beginning with all births after a particular date. We recommend the introduction of an infant care allowance of approximately the same level as of child benefit, to be paid to mothers of children under 5 years of age, to be phased in over a period of 5 years. As suggested later, (p 000) the cost might be met not so much from new resources as by restricting the scope of the married man's tax allowance to wives with dependants.

- 9.32 Beyond these initial elements of an anti-poverty strategy, a number of other steps need to be taken.

3. PRE-SCHOOL EDUCATION AND DAY CARE

- 9.33 In Chapter 8 we recommended that local authorities should be under a statutory obligation to ensure an adequate provision of day care facilities (taking this term to include not only places in day nurseries but also in nursery classes, and with trained and registered child minders). To emphasize the importance we attach to this recommendation as well as its central place in any policy devoted to meeting the developmental needs of the under 5s, we further elaborate on it at this point.
- 9.34 That the desire for day provision on the part of parents of under 5s greatly exceeds what is currently available is well-known. Bone's survey found that "Provision was wanted for twice as many children as were receiving it, so that whilst 32 per cent of children were using facilities, they were desired for 64 per cent" (Bone, 1977: p. 13). The survey also found this unmet desire to be class-related, as shown in Table 9.4 below. Moreover it is clear that cost is one factor inhibiting usage of what facilities are available, by the children of working class parents. Bone found that among the children of manual workers only, use of facilities fell rapidly with declining weekly income. The nature of the facilities available is another factor, for it is well-documented that there is considerable difficulty in filling places in nursery schools or classes in working class areas, whereas day nurseries (which are open all day) in the same area generally have long waiting lists.

TABLE 9.4

DESIRE FOR DAY PROVISIONS FOR UNDER 5S

BY CLASS*
(%)
CLASS

	I	II	IIINM and IVNM	IIIM	IVM and V
DAY PROVISION USED	40	40	32	29	24
NOT USED BUT DESIRED	22	26	36	33	39
<hr/>					
DAY PROVISIONS NOT DESIRED	37	33	31	36	33

Source: Bone 1977 Table 3.2

*this survey used a different social class breakdown including a "semi-skilled non-manual" (IVNM) category.

9.35 It is clear that day nurseries, nursery classes, playgroups, childminders and so on meet different needs of families and of their children. Local authority day nursery places are largely restricted to children regarded by social workers as "at risk", or living in poor housing, or where a single parent is anxious to go to work. Staffed by nursery nurses they are less specifically concerned with the child's cognitive development than are nursery schools or classes. Our own view of the close relationship between health, social well-being, and cognitive development in children leads us to argue for much greater integration between these forms of provision. This is of course widely acknowledged (as in the joint DES/DHSS circular on Co-ordination of Provision for the Under-Fives of January 1978). So too is the need for more flexible provision of nursery education, better catering to the needs of working mothers (CPRS 1978). It must be borne in mind that not only is the proportion of under 5s with mothers in paid employment rising (25% in 1976) but that empty school places represent an inefficient use of resources.

9.36 The needs of mothers for whom financial or other exigencies render paid work essential are only one set of legitimate claims upon the system of day provision. Bone's survey offers an estimate of the requirement on the

assumption that all children in a sense disadvantaged in any of a number of ways should be catered for. The need criteria used (which more or less correspond to those leading to priority admission to day nurseries) were

NEED GROUP A

Child had only one parent

or

Child had 2 parents but father's income was less than 150% of long term SB level

or

Child's household accommodation 2 or more bedrooms less than standard

or

Child's household accommodation was inadequate in 4 ways

or

Child was definitely handicapped (definite diagnosis)

NEED GROUP B

Child already allocated to need group A

or

Child's mother was worried he might be handicapped (no definite diagnosis)

or

Child was 3 or 4 years old and soiled himself more than twice a week

or

Child's mother classified as 'depressed' or 'anxious'

or

Child had behaviour difficulties (on standard scaling)

On this basis, 15% of all pre-school children fell in need group A, and 36% in need group B. Only 28% of children in need group A were making use of any form of day provision, and 30% in need group B.

9.37 Leaving aside the nature of current provision (and its suitability for individual families and children) the scale is today inadequate to the needs even of deprived children alone. In 1976, in England as a whole, there were 159.9 places per 1000 under 5s in day nurseries (la and private), play-groups and childminder groups. Additionally, 109.2 per 1000 under 5s (including rising 5s) had full or part-time places in nursery or non-nursery schools. This shows that in England there was provision for 26.9% of under 5s. (CPRS 1978). Since then the nursery school programme has suffered in public expenditure cuts and the situation has undoubtedly deteriorated.

9.38 1976 figures for local authority areas with highest rates of area deprivation or infant mortality (Table 8.9) show that total provision in most barely matches the national average figure of 36% of children in need of such provision. In some cases provision was very much lower eg Knowsley 18.1%, Tower Hamlets (including ILEA average of school places) 29.3%.

9.39 It is not possible for us here to make detailed calculations of the need for day provision. Clearly the unmet need is substantial. On the most conservative of estimates, the difference between the 36% of children whose health and cognitive and psychological development (or financial circumstances, with the risks that might ultimately be entailed) make their need for day care overwhelming, and the 27% of all under 5s currently receiving some provision (ie 9% of some 3¼ million under 5s in England and Wales) amounts to a minimum need of some 300,000 places. (This of course based on the impossible assumption that all current places are taken up by children in need). If the criterion of parental desire for some day provision were to be adopted, then the number of places available would have to be doubled, according to Bone's survey. This implies the creation of some 900,000 extra places in England and Wales.

9.40 The health and developmental needs of children, especially children rendered at risk by their environments in so many ways, lead us to emphasise the importance of day facilities for under 5s catering to both these needs, and provided on an adequate scale. The precise pattern of such provision will necessarily vary with local conditions. It is clear that all available resources in the community must be used to their utmost: childminders, voluntary organisations, and parents. More efficient use of existing facilities, such as nursery schools and classes is also required. We are eager to see local authorities sponsoring collaborative arrangements between parents and others in the local community to complement the extended statutory services for the under 5s. This represents the principle of prevention at the local level. To reiterate the recommendation we have already made in Chapter 8: We recommend that a statutory obligation should be placed on local authorities to ensure adequate day-care in their area for children under 5 and that a minimum number of places (the number being raised after regular intervals) should be laid down centrally.

4. NUTRITION - SCHOOL MILK AND MEALS

9.41 In Chapter 6 we drew attention to the importance of the nutrition of children for their development. The DHSS booklet Eating for Health stated:

"If all were to enjoy the best possible diet, the variation in average height and weight of different socio-economic groups in the United Kingdom would probably be less marked. The attained height of adults depends to some extent on nutrition during growth as children and in particular during the most rapid period of growth as babies. Any

persistent restriction of diet in a young child may impair growth to such an extent that the affected child never reaches its full hereditary endowment of height." (DHSS 1978: pp 12-13)

- 9.42 This booklet goes on to point out the remarkable gains (notably in perinatal mortality) which followed war-time food rationing (despite the overall shortages of food), and the introduction of such welfare foods as cod-liver oil and welfare orange juice:

"The unequal distribution of food, which had restricted the diet of families with low incomes, was made equitable by this system which included food subsidies on and control of the price of meat, bread, sugar, milk, potatoes, butter, margarine, cheese" (p 16).

- 9.43 The wartime scarcities which led to these policies fortunately no longer exist. It nevertheless remains important to ensure that all children are adequately nourished, if all are to achieve their potential for healthy growth.

- 9.44 In 1967 the Committee on Medical Aspects of Food Policy commissioned a nutritional survey of pre-school children, which was carried out in 1967-8 and eventually published in 1975. The acknowledged under-representation of large families, poor families, and immigrant families in this survey must to some degree reduce the confidence which can be placed in the assessment of the adequacy of nutrition among these 'at risk' groups. The study nevertheless showed a clear decline in vitamin intake (A, C, D) with rising family size, and declining occupational class and income. Protein consumption rose with income though there was no trend on either of the other variables. Calcium intake showed no trend. Total energy consumption actually rose with increasing family size, declining social class, and falling income (except among the poorest families) - but some of this trend was certainly due to extra consumption of "added sugar" (sweets, biscuits, soft drinks ect) in poorer, larger working class families. (DHSS Reports on Health and Social Subjects, No 10 1975).

- 9.45 Although the Report concluded that there is "no evidence that our pre-school children were underfed" and that "this is true equally for the children of larger families in social classes IV and V and for the children of small families in social classes I and II" it is hard to see how this conclusion

was reached. Distributional data are not given, except that the proportions of children having intakes below 80% of recommended levels of specific nutrients are given for "low income and "other" children." In fact, though there was virtually no difference between these groups, the proportions were substantial: ranging from 20-30% in the cases of energy, total protein and iron to 45% (low income) and 56% (other) for vitamin C (p 27).

- 9.46 The survey also showed the importance of milk in the diet of children. Although this was age-related, even at age $3\frac{1}{2}$ - $4\frac{1}{2}$ milk continued to provide (on average) 16% of total energy intake, 26% total protein, 62% calcium, and 42% riboflavin.
- 9.47 A study of a sample of about 1000 children resident in Kent aged 8-11 and 13-15, carried out between September 1968 and March 1970 throws some light on the nutritional status of older children. The sample employed was deliberately weighted to include larger numbers of children from occupational classes IV and V, large families, and lacking fathers, and included a dietary assessment over a one week period. Important conclusions were that: there was no clinical evidence of nutritional deficiency and significant differences in average daily nutrient intake were not associated with class, number of siblings, or whether or not the mother worked. However, the quality of the child's diet (expressed in nutrients per 1000 kcals) was class-related: falling with declining occupational class (Cook et al 1973). The study also showed that differences in nutrient intake, and quality of diet, were not explained by income differences when other class-related factors were held constant (Jacoby et al 1975).
- 9.48 Few today would dissent from the view that adequate nutrition is essential if a child is to enjoy a healthy childhood and to achieve his or her developmental potential. In the absence of a comprehensive food policy attention quite properly focusses on provision of school milk and meals.
- 9.49 One third of a pint of milk was available free every school day to all school children from 1946 to 1968. From 1968 it ceased to be provided to secondary school pupils. In 1971 it was stopped for all children after the end of the school year of their seventh birthday, except where the school doctor recommended otherwise. Late in 1978 local authorities were once more permitted (though not obliged) to provide milk for 7-11 year olds.

In 1971, when the reduced availability of school milk was accompanied also by an increase in the price of school meals, the Committee on Medical Aspects of Food Policy (COMA) was asked to monitor the effects of these changes. Its Sub-Committee on Nutritional Surveillance issued an interim report in 1973 in which it indicated the dimensions on which effects would be monitored: height, obesity and dental caries were central.

9.51 So far as provision of milk to primary school children aged 7+ is concerned, the evidence - though not clear cut - does not indicate a significant effect on growth. The earlier study of Kent children to which we referred above, conducted in 1968 - 70, found that among 8-11 year olds, those who regularly drank school milk had significantly higher intakes of energy, calcium, and animal protein, but that this was not associated with height or other measures of nutritional status (Cook et al 1975a). The same research group, conducting a national surveillance study of a longitudinal kind under COMA auspices found that between 1972 and 1973 the growth of 6-7 year olds was not influenced by availability of school milk. The same held true of a special sample of children from occupational classes IV and V (formed by aggregation of successive age cohorts) (Cook et al, in press). A study of 7-8 year olds in South Wales, employing a sample deliberately weighted in favour of large families, and occupational classes IV and V, also found that growth over 21 months was unaffected by provision of school milk (Baker et al 1978). Cook et al summarize by stating "the availability of school milk has no real effect on group well-being where drinking milk at home is almost universal". It has however been suggested that linear growth may not be a wholly adequate measure of the benefits of milk consumption. Reed, for example, has referred to the need also to take account of bone status (Reed, 1978).

9.51 Moreover, current policy towards provision of school milk has to be judged, and developed, in the light of the continuing fall in household consumption of liquid milk revealed by the National Food Survey. In 1977 this average household consumption was 4.54 pints per person per week, compared with 4.71 pints in 1976 and 4.76 pints in 1975 (National Food Survey, 1977: p 7). Moreover, the Survey shows that in 1977 of 7-9 year olds in lower income families with 3 or more children, 12% consumed less than 2 pints per week in the home, and over 25% less than 3 pints.

- 9.52 It is clear that current policy must therefore be kept continuously under review, in the light of these trends, and also in the light of further research on growth and development.
- 9.53 The evidence in relation to provision of schools meals is more clear cut.
- 9.54 School meals are intended to provide about one third of the daily allowance of nutrients and energy for a child, and are recommended to contain, on average, 29g. total protein, 880 kcals energy, and 32g fat. We have no evidence as to the range in nutritional quality of the meals in practice provided. We have no doubt that this meal is the principal source of essential nutrients for many poor children. Many may be offered a poor quality evening meal, and many come to school without breakfast. (This 16 hour 'fast' may well affect the child's powers of concentration, and hence his ability to profit from his schooling). It should be regarded as a matter of importance - on education and health grounds - to ensure that all children receive a school meal or an adequate substitute at least during term time. To leave school children, especially young school children, to make their own free choices as to what food is to be purchased would be wrong. Children will frequently prefer to consume foods high only in sugar and other sources of energy. As an inadequate substitute for a nutritious meal, this is likely to lead to increases in obesity and in dental caries.
- 9.55 Certainly, great importance has been attached to the nutritional variety and adequacy of school meals by a number of official committees. For example, the Working Party on the Nutritional Aspects of School Meals has commented "We do not think it is safe to assume that all children necessarily receive a satisfactory diet at home. We are especially concerned that all children should receive enough protein at school since any shortfall in the midday meal might easily not be made up in other meals or snacks and drinks consumed outside school" (DES 1975, p8).
- 9.56 The survey of Kent children aged 8-11 and 13-15 offers some support to these views (Cook et al, 1975b). Consumption of school meals (about 80% overall) proved to be higher among children without fathers, with working mothers, etc. Distinguishing children who had all 5, or no, school meals in the test week, the study found that younger children who had school meals had higher lunchtime intakes of nearly all nutrients (and more nutrients per 1000 kcals) than those who did not. It also found that children from classes IV and V taking school meals obtained a very much higher proportion of their total weekday nutrient

intake from their lunches than did children from the same classes who did not. The same was not consistently true of class I/II children.

- 9.57 Taking these findings together with known biases in consumption of school meals, it is possible to include, with the authors, that
- "families without a father, those in lower social classes, and with large numbers of children relied to a greater extent than others on the intake of nutrients important for growth from school meals. This reliance may or may not depend on a conscious decision. The present study took place before recent large increases in the cost of protein - rich foods and such families may now rely even more on the food intake from school meals".
- 9.58 Yet the percentage of pupils receiving school meals (whether free or paid for) is falling: from 70% in 1975 to 62% in 1977.
- 9.59 Partly because of cost, partly because of poor quality but partly because of administrative inertia a very large number of pupils do not have meals at school. We believe that the number of schools with facilities for providing meals for all or most of their pupils can be increased, and that more consultation with parents about the organisation and administration of meals would be an important element in raising quality. Children from families living in poverty sometimes attend schools lacking facilities for meals, and although others go home at mid-day for meals because their parents believe they can provide a more nutritious meal for them, there is no doubt that some would get meals at school if they were an automatic right.
- 9.60 The attitude of a school does seem to influence the consumption of school meals and the eating habits of children generally. The importance of adequate nutrition for a child's physical development and concentration in school must be brought home to teachers. In this community dietitians have an important role, and one which is not facilitated by the size or priority typically attached to the service. Meals are also social occasions, when some of the intentions of an education can be consolidated - through example as well as instruction and free conversation. School staff are apt to underestimate the value of social relationships that can be developed.
- 9.61 A second factor is that of the cost of school meals (about to rise drastically in the current period of public expenditure cuts), and the availability and up-take of free meals. In May 1978 some 15% of pupils received free school meals.
- 9.62 Recent results from the Surveillance Study being carried out by the St Thomas' group show that children receiving free school meals are significantly shorter

than those who do not. Though the study was not designed to assess the value of school meals in terms of growth, the indications are "that free school meals are going to the right group of children and that withdrawal might well prejudice their future development" (Rona et al 1979).

9.63 At present local authorities administer a Government scheme making school-meals free for children of parents receiving Supplementary Benefit or parents whose income is below certain limits laid down in national regulations. The limits are revised regularly, normally when Supplementary Benefit scales are increased. In recent years the Department of Education has estimated that about three-quarters or four-fifths of children eligible to receive school meals free are in fact receiving them. Others consider the right figure may be no higher than 60 per cent. Part of the problem arises in fluctuating incomes and frequent assessments or reassessments, but also in the fluctuation in standards of living brought about by changing household dependencies. Experimental campaigns by the Government, especially in 1967 and 1968 under Mr Gordon Walker, have shown that take-up can be increased substantially through letters addressed directly to parents and through advertisements. But because of the numbers of children passing through the schools and fluctuations in family living standards, quite apart from the effect of inflation, higher take-up rates do not endure. Twice in 1977 and again in 1978 the Secretary of State for Education was asked to renew the approach adopted by Patrick Gordon Walker and issue a simple letter to all parents advising them about free school meals. Although an estimated half of million children were not obtaining free dinners although entitled to them, this invitation was not accepted. Whatever the exact short-fall, there is no doubt that it is substantial and there have been a large number of research studies demonstrating that means-tested exemption from charges for school meals is not a satisfactory way of helping poor families. (Davies and Redding, 1978: Field, 1975; 1975: Townsend, 1979). A recent study has shown that there are even wide variations among areas with similar characteristics. 'This type of analysis can help to identify areas where there may be low take-up to inadequate efforts by local authorities and central Government'. (Bradshaw and Weale, November 1978, p 22).

9.64 In our view any reduction in the provision of school meals, or in eligibility for free meals, would mean putting further at risk the development of significant numbers of children. Moreover, from the perspective of this report, it is clear to us that expansion in such provision, elimination in

inequalities of provision, and elimination in the barrier to take-up which means-testing represents, are essential aspects of a policy designed to break the continuing association between social class and health in its broad sense. We are aware that much of what we have said about school meals is very different from current government policy and much orthodox opinion in the teaching profession. Nevertheless, in our view the evidence strongly supports a change of direction.

9.65 We accordingly recommend:

- i. That the provision of nutritionally adequate meals at all schools should be required of local authorities and that the service should be extended in areas where there is under-provision;
- ii. That there should be regular consultations between local authority representatives, community dietitians, and parents and teachers from each school in turn, over the provision and quality of school meals;
- iii. That meals be provided in schools without charge.

5. ACCIDENTS TO CHILDREN

9.66 In chapter 2 of this report we have drawn attention to the fact that the most steep gradients in childhood mortality are found with accidents; a fact which is all the more disturbing now that accidents account for one-third of deaths of children. Moreover there has been little improvement in this class differential over the period 1959-63 to 1970-72 (see table 3.12). It is remarkable given these facts and given that there is a known course of action which could be put into effect rapidly without great cost to the public, that so little has been done.

9.67 Although accidents in the home are not the largest single groups of accidents to children it is probably in the home that major progress could be made most quickly. Regulations could be introduced immediately to produce a safer home environment for children, and these could be applied stringently to public housing. Risks of falls from roofs and staircases can be reduced without great cost by safe design; the positioning of windows being particularly important. Much could also be done to reduce the dangers from household equipment, especially the dangers from fire and burning. There is still a great deal which can be done to reduce the risks of poisoning by the clearer packaging of dangerous substances. Although important work has been done by RoSPA and the Health Education Council in educating the public it is

likely that 'safety devices built in as a constant feature of the environment are more effective than attempts to alter people's behaviour'.

9.68 The problem as elsewhere in preventive health is that there is no focus for government action, and although the new voluntary Joint Committee on Accident Prevention may help, a clear initiative is needed from a powerful Minister if adequate co-operation is to be forthcoming from the Department of Environment, the Department of Trade, and the local authorities.

9.69 The environment outside of the home has become increasingly dangerous to children since the spread of ownership of motor cars, but children who live in the overcrowded industrial areas of our cities are also exposed to the dangers of industrial traffic. Despite the laudable attempts of town planners to separate vehicular traffic from pedestrian ways there are still over 700 children killed on the roads each year. Once again although it is important to give due recognition to the accident prevention campaign in schools and elsewhere the reliable answer is to give children safe areas in which to play. Moreover if there is a need to step up safety education it is the motorists (especially the young driver) who should be the target. Motorists need to be made more sensitive to the presence of children in the areas they drive through, and conscious of the way in which children behave on the roads.

9.70 Apart from the specific dangers of road traffic it is likely that the working class child lives in a more dangerous physical environment than middle class children. Derelict slum housing about to be cleared, deserted canals, mine-shafts and factories, railway lines, rubbish tips; all these present potential dangers to the child in the urban-industrial area. Given the ingenuity and sense of adventure of children it is difficult to conceive of such areas ever being made danger free, but more could be done by environmental health authorities to monitor the risks and keep the owners of such properties up to the required standards of safety production.

9.71 When accidents happen there is no lack of concern for the child to see he gets the best treatment possible, but unfortunately public attitudes soon return to their normal complacency. If childhood accidents are to be reduced and the gradients between social classes minimised, the issues must be kept before the public gaze. The voluntary organisations both local and national have the important role here in stimulating the political will for action.

9.72 We recommend that the Health Education Council should be provided with sufficient funds to mount child accident prevention programmes in conjunction with the Royal Society for the Prevention of Accidents. These programmes should be particularly directed at local authority planners, engineers, and architects.

6. POLICY FOR FAMILIES AND CHILDREN - COSTS AND A POSSIBLE SOURCE OF REVENUE

9.73 We have outlined a 5 part policy designed to improve the standard of living of families in ways which we feel will particularly aid the healthy development of children born into disadvantageous circumstances. These include: an increase in child benefit, in the short-term relation to earnings to £5.70 per week (as at November 1979); the introduction over a period of 5 years of an infant care allowance to mothers looking after small children, together with an increase in the maternity grant to £100; an expansion in day provision for pre-school children; and the free provision of school meals to all pupils.

9.74 The annual costs of our proposals might be roughly as follows:

1. increase in child benefit from £4 to £5.70 for each child	£970 million ⁽¹⁾
2. infant care allowance (on assumption that there are 600,000 births per annum).	£180 million in first full year (rising to £870 million after 5 years)
3. expansion of day provision	£150 million ⁽²⁾
4. free school meals	£200 million ⁽³⁾

9.75 Clearly resources on this scale cannot at present be found without at least substantial offset from savings elsewhere. We have already called attention to the discussion in 1972-3 of the possible substitution of a tax credit for married man's tax allowance (Cmd 5116 and Report of the Select Committee on Tax Credit 1973). More specific proposals to substitute a home responsibilities cash allowance for married women with dependent children have also been made

(1) The cost of a 50p increase is estimated at £285 million (Secretary of State for Social Services).

(2) This is the annual expenditure recommended by the CPRS for a programme of expansion directed at similar objectives to our own (Services for Young Children with Working Mothers, p 27)

(3) On the assumption of 4 million meals per day served on payment (1977 figure 3,929) of 25p over 40 5 day weeks annually.

(Meade Report, 1978; CPAG Evidence to Select Committee on Tax Credit, 1973).

We would point out that the estimated cost of the married man's tax allowance in 1979-80 was £7,800 million of which some £2,800 million represents the excess over the single person's allowance. At any one time some 50% of married couples do not have dependent children, although of course some will be caring for other dependent relatives or will themselves be elderly. We do not regard it as our function, and nor are we technically equipped, to make specific recommendations as to how the costs of our proposals might best be met. We would suggest, however, that the additional tax allowance now made to married couples without dependents be considered as a source of savings to be set against the proposals we have made for increasing the well-being of families and children.

B. POLICY MEASURES AFFECTING HOUSEHOLDS WITHOUT AS WELL AS WITH CHILDREN

1. A Comprehensive Disablement Allowance

9.76 We will now turn to measures directed principally at others than families with young children. Policies affecting disabled people must also be given priority. We have called attention to the importance of understanding "disability" in terms of restriction of activity relative to what is normal (Chapter 1, p11) and we see this as a major means of achieving a more equitable distribution of income and services among people of different age and with different types of impairment (including mentally and not only physically handicapped people).

9.77 There is evidence that proportionately more disabled than non-disabled people of different ages are living in poverty or the margins of poverty (Table 9.5). There are also indications that among the disabled income is inversely related to severity of disablement. In Harris' study it is stated that "Nearly one in 10 of the very severely handicapped has, by our estimation, an income at least £1 below requirements, compared with nearly one in 20 of those with minor or no handicap" (Harris: p 12). Another national study found a relationship between both decreasing income and decreasing total resources and increasing severity of disablement (Townsend, 1979, Chapter 20). During the late 1960s and early 1970s a strong case was developed publicly for the introduction of a comprehensive allowance scheme for disabled people. It was felt that equally severely disabled people were very unequally treated under different income security schemes. While there were fairly elaborate provisions for the war disabled and those disabled in industry those who

were injured in home accidents, people who were congenitally handicapped, disabled housewives and disabled elderly people had little or no entitlement to additional income. But in 1974, while adopting different positive proposals for improvement of income benefit, both major political parties failed to commit themselves in principle to the phased introduction of a comprehensive scheme. Major anomalies exist and have been documented at length (Royal Commission on the Distribution of Income and Wealth, Report No 6 (1978): Chapter 4; pp 115-119; 152) The Snowdon Working Party (1976): "The evidence clearly demonstrates the need for the fundamental methodical reforms advocated (by DIG and the Disability Alliance) to rectify the anomalous structure of disablement benefits whereby 2 people with equal handicaps and needs may end up with widely differing financial help to meet them" (p 9).

TABLE 9.5

Numbers and percentage of total and disabled population living in poverty or on the margins of poverty (1977)

Level of income	Total population			Disabled over pensionable age (000s)	Sick and disabled under pensionable age (000s)	Disabled of all ages (000s)
	Over pensionable age (000s)	Under pensionable age (000s)	All ages (000s)			
Below supplementary benefit level	760	1,270	2,020	250	70	320
Receiving supplementary benefit	2,000	2,160	4,160	790	240	1,030
At or up to 40 per cent above supplementary benefit level	3,010	4,830	7,840	860	400	1,260
More than 40 per cent above supplementary benefit level	2,750	35,960	38,720	690	1,380	2,070
Total	8,520	44,220	52,740	2,590	2,090	4,680
Below supplementary benefit level	8.9	2.9	3.8	9.7	3.3	6.8
Receiving supplementary benefit	23.5	4.9	7.9	30.5	11.5	22.0
At or up to 40 per cent above supplementary benefit level	35.3	10.9	14.9	33.2	19.1	26.9
More than 40 per cent above supplementary benefit level	32.3	81.3	73.4	26.6	66.0	44.2
Total	100	100	100	100	100	100

Note: The estimate of sick and disabled persons under pension age applies to those sick or disabled for three months or more and includes dependants in the income unit.

Source: DHSS (SR3) Analysis of FES 1977 for columns 1, 2, 3 and 5. The distribution of col. 4 is based on evidence about those of pensionable age who were "appreciably or severely incapacitated" in Townsend P., 1979, p. 712 (and survey and printout).

9.78

After allowing for savings because of existing schemes, the introduction of a disablement allowance by stages has been costed at a little under £500 m. (Disability Alliance, 1978) Included in this estimate of costs are disabled elderly people. We believe that the establishment of such an allowance represents a major means of reducing inequalities of health and restoring equity between disabled and non-disabled people and we recommend accordingly that a comprehensive disablement allowance for people of all ages should be introduced by stages at the earliest possible date. There are of course other supporting measures, especially in improving the employment of disabled people and wage-rates, which are important. We believe that the first step must be to establish equity for the most severely disabled people of all. At the present time there is a choice between introducing an allowance at a low rate, say £6, for all severely disabled children and adults in supplementation of other income benefits and developing a scheme parallel to the main features of the war pensions and industrial injuries disablement pension schemes (into which the mobility allowance might be merged), introducing first a 100 per cent rate of payment (equivalent to the rate of £38 per week payable from November 1979 under the war and industrial injury disablement pension schemes). Even if the aggregate national sum available under either option were the same we believe the latter would be the right option. The net cost of establishing an allowance for 100 per cent disablement (ie the first stage) for people of all ages and causes of disablement would be approximately £24 m at November 1979. (At November 1978 the cost was estimated by the Disability Alliance at £20 m).

2. WORKING CONDITIONS

9.79

In our studies of inequalities in health we have been struck by the ill-developed nature of conceptions of and deprivation at work. Although the hazards of working in particular industries have been carefully documented in the past, and detailed studies made of hours of work and conditions in which strikes and other conflicts between management and labour have occurred, generalizations of working conditions or work situations across industries have not been pursued very far. The point can be made by analogy. Generalization about diets, clothing, leisure time pursuits, housing conditions and even environmental conditions are readily made. Thus, standards of overcrowding, facilities and amenities are defined nationally for housing and are commonly understood and discussed. As a consequence, discussion about remedial measures is based upon statistics about the numbers

who live in overcrowded or slum housing and lack particular amenities. Such standards do not really exist for the world of work. There are no measures of the number in employment who have bad or deprived conditions of work, the industries or areas in which they are to be found and the degree to which they also experience bad housing conditions and low incomes.

- 9.80 So far as health is concerned the emphasis has been on safety and specific identifiable risks of accident or of contamination by toxic substances. For example, the Robens Committee did not attempt to collect evidence about safety and health in relation to general working conditions. Neither did they attempt to pursue the inter-relationship between fatal accidents, deaths and injuries arising from prescribed industrial diseases and occupational mortality and morbidity - for each of which independent sets of statistics exist. The importance of reports on occupational mortality to a better understanding of the work situation as well as to the circumstances outside work remains to be plumbed.
- 9.81 Elsewhere we have called attention to the inequalities in death rates between people belonging to different occupational classes. We have referred only briefly to inequalities between people following particular occupations. In Table 9.6 the wide differences between some occupations are illustrated. The marked gradient from sedentary non-manual to heavy unskilled manual work, which with some exceptions the Table shows, is accompanied by wide variations between the mortality rates for specific occupations within each occupational class. Specific and well known work hazards, characteristic of many manual occupations, and differing from one to another, are one factor here. In the light of the analysis of this report, we consider that in addition to these hazards, and associated risks of accidents and of certain occupational injuries and diseases, a wider variety of job characteristics may be implicated. These would include security and material rewards of employment, patterns of work (eg shift-work), conditions of work and welfare and other amenities. The extent to which work conditions, interpreted in this broad fashion, are responsible for differences in rates of occupational mortality remains uncertain and requires further research, (although see for example Fox and Adelstein, 1978).
- 9.82 Nevertheless, reduction in inequalities between occupations in their work conditions may be of importance in reducing inequalities in health. We recommend that representatives of the DHSS, the Department of Employment, the Health and Safety Commission, together with representatives of the

trade unions and CBI should draw up minimally acceptable and desirable standards of work; security; conditions and amenities; pay; and welfare or fringe benefits. A national study found that in 1968 20 per cent of the employed population, representing over 4½ million people, had poor conditions of work (Townsend, 1979, p 453). A list of individual examples from a random sample called attention "both to the diverse hazards and frequent poor conditions of manual work". They also suggest uncertainty or ignorance on the part of many about the hazards involved with dust, noise and chemicals. For whatever motives, doctors as well as employers may withhold information, and the importance of the role of union safety representatives (the legal right to which workers have enjoyed since October 1978) is clear. There is still a tendency to accept poor working conditions as an inevitable accompaniment of particular jobs, and attention needs to be devoted to the question of enlightened standards which can be introduced, as in public housing and town planning. Among the matters which we hope will attract more attention are facilities for meals, warmth and shelter from bad weather, a dry and secure place for outer clothes and other belongings, access to a telephone, availability of first aid and first aid equipment, "unsocial" hours, warmth, humidity, light, noise, availability of machinery to avoid or reduce the physical stress of the work, washing and toilet facilities, and facilities for changing clothes. In many of these instances regulations under current legislation are non-existent, or partial, or complex and confused (TUC 1978).

- 9.83 We are calling for more preventive work by Government departments, employers and unions and would hope to see a shift of emphasis in the work and functions (as defined by legislation) of the Health and Safety Commission and Executive, and the Employment Medical Advisory Service. It is fair to say that although there are provisions for both bodies to follow positive policies they are at present apologetic for restricting their activities to specific hazards and general questions of safety. (See for example the references by the Chairman of the Health and Safety Commission to its work on the "preventive aspect of occupational health" and of his office to the preventive functions of the occupational health services in Occupational Health Services, 1977, ppv and 15-16). The need for legislation defining acceptable working conditions and basic employer welfare benefits is urgent.

TABLE 9.6
Mortality by Occupation Unit: Men aged 15-64
(Selected examples)

Occupations units	Direct age-standardised death rate (per 100,000)	SMR
<u>Relatively low death-rate</u>		
University teachers	287	49
Physiotherapists	297	55
Paper products makers	302	50
Managers in building and contracting	319	54
Local authority senior officers	342	57
Company secretaries and registrars	362	60
Ministers of the Crown, MPs, Senior Government Officials	371	61
Office managers	377	64
Primary and secondary school teachers	396	66
Sales managers	421	70
Architects, town planners	443	74
Civil service executive officers	467	78
Post men	484	81
Medical practitioners	494	81
<u>Relatively high death-rate</u>		
Coal miners (underground)	822	141
Shoemakers, and shoe repairers	898	156
Leather products makers (rec)	895	147
Machine tool operators	934	156
Watch repairers	946	154
Coal miners (above ground)	972	160
Steel erectors, riggers	992	164
Fishermen	1028	171
Deck, Engineering officers and pilots, ship	1040	175
Labourers and unskilled workers, all industries, nec.	1247	201
Policemen	1270	109
Deck and Engine room ratings	1385	233
Bricklayers' labourers, nec.	1644	274
Electrical engineers (so described)	1904	317

3. HOUSING

9.84 Housing conditions are associated with health status in a variety of ways. Inadequate heating (or a form of heating which is too expensive for a resident) can give rise to hypothermia in old People (Wicks, 1978). Overcrowding can produce respiratory and other diseases (some of the studies are reviewed by Benjamin, 1965 who, however, pointed out that class explained more of the inter-area variance than housing). It can also produce adverse psychological responses and may give rise to mental illness.

High rise living is known to have deleterious consequences for children. In some areas (eg Tower Hamlets) TB is common among the homeless vagrants and represents a real problem for the health authorities. The consequences, and importance, of housing policies for other areas of social policy, including health policies, have received increasing recognition in recent years - as have the problems of co-ordination deriving in part from the location of responsibilities for housing and personal social services (outside London and the Metropolitan Counties) and Health services. These interactions, and organisational problems, have recently been discussed in a report of the Central Policy Review Staff, (CPRS, 1978b).

9.85 Earlier in our report we have presented evidence for the association of poor housing (and particularly overcrowding) with a number of indicators of mortality and morbidity. Brennan and Lancashire, for example, found a high statistically significant ecological correlation between proportion of population living at one or more persons per room and mortality rate among 0-4 year olds (Brennan and Lancashire, 1978). Correlations with mortality among 5-15 year olds, and between each of these mortality indicators and proportion of the population living at a density of $1\frac{1}{2}$ or more persons per room were also significant, though smaller. Moreover, these correlations persisted when the effects of the class compositions of the areas (county boroughs) were held constant. A regression analysis of data relating to the Dutch city of Rotterdam also found a significant relationship between density of occupation (persons per room) and age adjusted death rate (though in this case not with perinatal or infant death rates) (Herzog, Levy and Verdonk, 1976). That overcrowding has some causal relationship with health (through, for example, increased risk of infection of younger by school age siblings) seems certain. It is families with children, and especially large poor families with many children who are most likely to be living in overcrowded conditions. This is shown by Table 9.7, taken from the 1971 census. Of 5 person households (which includes 3 children 2 parent families),

20 per cent of those in privately rented furnished accommodation were living at more than $1\frac{1}{2}$ persons per room, compared with less than one per cent of owner-occupiers, of 6 person households (ie including 2 parent families with 4 children) 20 per cent of furnished tenants were living at more than $1\frac{1}{2}$ persons per room and 57 per cent at more than one person per room. Among larger households, in both private furnished and council tenancies, the degree of overcrowding rises rapidly. Overcrowding adds to the health risk under which working class children labour, and the extent to which such children, and especially those born into larger families, are being brought up in overcrowded conditions is unacceptable.

9.86 Bone's survey of pre-school children found that 10% of the children inhabited dwellings inadequate on at least one of 4 criteria: overcrowding; no separate unshared bathroom; shared WC; no sole use of permanent fixed but water supply (Bone, 1977: p 26). But this percentage was highly class-related: 3% in class I increasing to 29% in classes IVM and V.

9.87 The adequate housing of families with children must be a priority if class inequalities in health are to be eliminated. Clearly the situation is worst in the private rented furnished sector, but it would seem that there is also a need for the construction of many more Council dwellings which can adequately accommodate families with several children (or a combination of children and other dependants). Medically acknowledged ill-health which is clearly exacerbated by poor housing conditions does generally establish priority on housing lists, and this is as it should be. But the risk of ill health - in the case of children a lifetime of ill-health, for chronic respiratory disorder (for example) in childhood is an all too effective predictor of adult suffering - is established on socio-medical rather than clinical grounds. Such considerations tend not to weigh as heavily with housing departments as they should.

9.88 We showed, in Chapter 2 (on the basis of the new OPCS longitudinal study), that there is an association between tenure and SMR, independent of the occupational class of the household head. Of course, this does not demonstrate that being a tenant causes ill-health. But we wish to stress that the rights and privileges which are so unequally associated with housing tenures are associated also with health in its positive sense (of welfare). Fear of eviction is the sort of situation which Brown has shown to be related to clinical depression in women. Security in housing does have health benefits and should be equally available for all. Accessible

TABLE 9.7
OVERCROWDING
Proportions of Households of Different Sizes (living in permanent dwellings)
living in overcrowded conditions, for three tenure groups (1971)

Number of persons in household	TENURE							
	owner-occupiers		renting from council or New Town		private furnished tenant		All tenure groups	
	persons per room (% households)	persons per room (% households)	persons per room (% households)	persons per room (% households)	persons per room (% households)	persons per room (numbers and percentages of households)	persons per room (numbers and percentages of households)	
	> 1½	1-1½	> 1½	1-1½	> 1½	1-1½	> 1½	1-1½
3	0.0	0.2	0.0	0.5	6.9	16.0	No. 9225	No. 39015
4	0.1	0.9	0.3	4.2	12.8	12.4	19490	79545
5	0.9	7.1	2.5	13.4	20.4	14.4	34125	142415
6	1.3	31.2	1.7	63.5	19.2	37.9	13655	269395
7	7.6	54.7	10.3	80.9	28.8	46.9	21945	144180
8	29.2	47.2	51.9	46.1	45.3	39.9	40720	43160
9	29.9	57.9	45.3	53.9	48.0	44.1	16355	22400
10	67.4	27.1	83.1	16.5	71.4	18.4	25595	6930
							% 0.3	% 0.7
							% 2.6	% 2.4
							% 10.4	% 43.3
							% 40.0	% 76.5
							% 1.2	% 2.9
							% 10.7	% 46.4
							% 68.3	% 45.9
							% 54.7	% 20.7

Source: 1971 Census - Housing Tables Part IV (Note: 1 and 2 person households have been omitted).

play areas for young children are vital and owner-occupation often meets this need, by virtue of garden space available. Gardening is one of the most popular outdoor leisure pursuits for men in Britain who have access to a garden, and we have already indicated the health benefits attaching to active outdoor recreation. We believe that there must be a much greater extension of the rights and privileges associated with owner occupation to the tenants both of local authorities and private landlords. Health considerations are certainly among the factors which justify such extension.

9.89 In order to allow good housing policy to play its part in promoting health we consider the most essential step is to co-ordinate policies in the council and owner-occupied sectors. The changing pattern of housing tenure, has been leading to problems of access to housing for the poor and mobile, which have gradually become more acute in recent years. Only in part has that been due to the decline of the privately tenanted sector. In part has been due to rigidities in the management of council housing, together with a very uneven flow of new housing. There needs to be a more vigorous programme of rehabilitating rented housing which is becoming obsolescent. This includes many thousands of council housing units. Comparisons need to be made between the tenures so that priorities in improvement policies and the allocation of resources, but also new standards of space, amenities and access to play areas, including gardens, can be determined. We therefore recommend a substantial increase in local authority improvement spending under the 1974 Housing Act.

9.90 But broad equity between the sectors must be achieved in other ways as well. The previous administration tended over-optimistically to reiterate the view that there was no longer any overall shortage of housing, while allowing local authorities to refuse housing to such groups as homeless single and childless couples. Secondly, the rights and opportunities of tenants need to be reviewed in the light of conditions enjoyed by owner-occupiers. The previous administration experimented with a "Tenants Charter" but in some respects this was half-hearted and among the most important measures to be introduced are freedom of movement, freedom to carry out minor improvements and repairs (and benefit from them in the terms under which the tenancy may be passed on subsequently), greater freedom in the rules of residence and more effective representation in the management of housing estates.

Consideration of council house sales badly needs to be placed in the context of the relationship between the sectors. If, in the long run, a better balance could be struck in the conditions enjoyed in the 2 sectors, objections in principle to interchange of stock could be minimised. But indiscriminate sales may worsen housing opportunities for families needing to rent; they may reduce the quality and attractiveness of the council housing stock; and, introduce a new basis to the relationships in many estates they may affect the cohesion of existing communities.

9.91 The Housing (Homeless Persons) Act, 1977, gave local authorities a statutory duty to house the homeless. A step was taken towards making council housing a right rather than a privilege for homeless people, to widen the categories eligible for re-housing. "The Act required even authorities which had pursued fairly liberal policies to accept people they had not previously regarded as priority cases: pregnant women, people homeless after family disputes, the mentally handicapped". (McIntosh, 1978, p 516). It is still a little early to judge the full effects of the Act and though there has been a significant increase in the number of households for which councils have accepted responsibility to re-house, there remains some controversy about the extent to which the categories intended to be helped, are helped. For example, one Director of Housing (Camden) has stated that "What the Act has done is to transfer a large number of families with a housing need for an authority's housing waiting list [ie separate families, families living in overcrowded conditions, and families without security of tenure living with relations or friends, or in hotels or hostels, or squatting] to its homeless persons section". (Barnes, New Society, 1978). A number of housing charities have argued that councils are too free to place their own interpretation on the Act; that some councils are exploiting the loop-hole of "intentional" homelessness; that the Act and the code impose no standard for homeless accommodation and that the single homeless are not sufficiently covered by the legislation.

9.92 We believe the legislation on homelessness deserves strengthening along the lines recommended by the housing charities. With the dwindling of the private rented sector, local authorities must provide rented accommodation for a wider range of households, including the single and childless, who are unable to enter owner-occupation. We recommend, therefore, that local councils should increasingly be encouraged to fulfil their responsibilities to provide for ALL types of housing need which arise in their localities.

A further aspect of the relationship of housing to health to which we wish to refer concerns the housing of the disabled. Here in particular is demonstrated the need to consider factors other than over-crowding in assessing the adequacy of housing for an individual or family. If the unnecessary institutionalisation of disabled people is to be avoided (as we have recommended) then clearly there must be sufficient provision of sheltered and adapted housing. It is necessary for there to be much better working relationships than is frequently the case today between social service and medical authorities and housing departments, so that necessary adaptations to dwellings can be obtained easily. We have elsewhere recommended that serious consideration should be given to the possibility that social service departments assume responsibility for the management of sheltered housing. A second aspect of such collaboration concerns policy over the re-housing of disabled people, which seems generally to be inadequate. The Working Party on Housing of the Central Council for the Disabled wrote in its (1976) Report, of local authority policy:

" unless the disabled person also happens to be living in over-crowded accommodation with few amenities, his position on the waiting list is likely to be low indeed, even if he has the maximum medical points possible But the housing difficulties that are peculiarly associated with disability require a separate type of solution the priority given to disabled people should not be decided at an individual level - as tends to happen at present - but should be decided within an overall strategy of priorities within the housing policies of the authority as a whole.

..... [T]he existing system means that a disabled person may not be rehoused until the situation has reached a desperate pitch. By that time the move may really be too late: his physical condition may have deteriorated too rapidly - possibly aggravated by his inadequate housing - so that he is not in a position to settle into a new environment Where a disabled child is concerned, to move the family to suitable housing when the child is grown and the situation has reached breaking point, may work against the educational development of the child and his ability to learn to cope independently."

(Working Party on Housing of the Central Council for the Disabled, Towards a Housing Policy for Disabled People (1976), pp 58-60)

9.94 We therefore recommend that special funding on the lines of joint funding for health and local authorities should be developed by the Government to encourage better planning and management of housing, including adaptations and provision of necessary facilities and services for disabled people of all ages by social service and housing departments. This recommendation is on the same lines as that made by the Snowdon Committee which argued that one immediate priority was "to develop a real choice of life-style for the severely disabled through joint planning and financing by the Department of Environment and the Department of Health and Social Security". We also endorse that Committee's plea for the "urgent establishment of schemes for non-institutional accommodation for severely disabled people living in every area of the country". (Report of the Snowdon Working Party, 1976, p 32).

C. TOWARDS A CO-ORDINATED POLICY IN GOVERNMENT FOR REDUCING HEALTH INEQUALITIES

9.95 We believe that improvement in the nation's health should be a priority for government. The evidence of various indicators of mortality shows that in this respect Britain's record in recent years has not compared well with other countries. We should like to see drastic reduction in rates not only of perinatal and infant death, but of the extent of chronic and acute sickness and of physical and mental handicap (much of which develops in the period around birth), as well as promotion of health in its positive sense of "well-being".

9.96 The costs of sickness - the direct costs of the National Health Service, of supporting care, and of sickness benefits, as well as the indirect costs of sickness for productivity - though not easily calculated in toto, are very great. Acute care provided in hospitals demands an increasing share of national resources. The financial costs of bouts of ill-health, chronic sickness and handicap to individuals and families - especially poor families - are frequently immense. These private costs are not fully captured in financial terms. The alarming prevalence of depressive illness, especially among working class women, cannot be without profound effect on family life and child-rearing, irrespective of the misery the women themselves suffer.

9.97 It is also our view that the attempt to reduce, and ultimately eliminate, the social inequalities in health which we have documented, offers the

greatest opportunity for achieving this overall improvement. It is surely no accident that (as we showed in Chapter 5) those countries, such as Sweden and Norway, which have particularly low mortality rates, also seem to have greatly reduced inequalities in health. This argument - that reduction in the burden of sickness on working class families offers the greatest scope for overall improvement in the nation's health - is quite separate from the argument (to which we also attach great weight) that simple justice demands that this attempt be made. Part of what is required involves attention to those regions and small areas (for example in the inner cities) where concentrations of sickness are high and levels of service provision low. But part involves attention to improvements that can be made and new measures that can be introduced for families in all areas of the country. And part involves attention to the vicious cycle by which (through a variety of mechanisms) poor families are locked into material, educational, environmental and social disadvantage for a lifetime and even sometimes for generations, with all that this implies for their health.

9.98 Our analysis has shown that inequalities in health have complex, multi-causal explanations. They are rooted in the general nature and conditions of activity, both in work and outside work, and in the styles and standards of living of different social classes. Some factors have a clear causal association with ill-health: inadequate access to and use of (particularly preventive) health services; the hazards attaching to certain occupations; overcrowded and damp housing; smoking, and so on. But there remains much that is probably not explicable in any direct fashion, and must be attributed to the pervasive effects of the class structure.

9.99 It follows, and our recommendations reflect this fact, that reduction in health inequalities depends upon contributions from within many policy areas. Our recommendations have involved reference to community and preventive health services; to the personal social services; to health education in a very broad sense (including the promotion of physical recreation); to social security measures; up-take of school meals; to improvement in working conditions; housing; and to measures directed specifically at minority groups and notably in inner city areas. Clearly such a range of services and policies involves many departments of central government: DHSS, DOE, DES, DE (and the Health and Safety Executive) MAFF, Department of Transport and the Home Office, as well as the Welsh Office and the Scottish and Northern Ireland Offices. Our objectives will be

achieved only if each department makes its appropriate contribution and this in turn, we believe, requires a better degree of co-ordination than presently exists. The fact is of course that housing, leisure, education and other relevant policies have important objectives traditionally associated with them: there is always the danger that this potential contribution to the reduction of health inequalities will receive little attention in departmental decision-making.

- 9.100 For this reason, we propose recourse to Cabinet Office machinery, in order to ensure that this does not happen. A broadly based programme of work needs to be explicitly adopted, and seen to be adopted. Our analysis is very much within the spirit of the Joint Approach to Social Policy (JASP), and Ministerial and Official Committees corresponding to those established under JASP would provide appropriate fora: we would certainly wish the Central Policy Review Staff to be involved. It would then be for these Committees regularly to consider developments and to propose developments in relevant policies from the perspective of health inequalities. Major initiatory responsibility would be vested in the Department of Health and Social Security, and we envisage the Committees being chaired by a Minister and by a senior DHSS official having major responsibilities for Health and Prevention. They should have before them relevant statistical material, provided by government statisticians, and relating to changes in uptake and provision of relevant services, changes in distributional aspects, and evaluation of policies. New methods of transmitting the information reviewed would have to be adopted, not least because it would need to reach a wider, public audience.
- 9.101 There would have to be local counterparts of national co-ordinating machinery, and a joint approach to health policies would be necessary at local level to a greater extent than at present. This might take a number of forms - inter-departmental action, for example, to reduce environmental pollution and squalor and redistribute skilled manpower to communities where the risk to health was high, acceleration of joint funding schemes, and the establishment of joint committees for planning and for the monitoring and supervision of hazards to health.
- 9.102 The need for a joint framework for social policies has been increasingly acknowledged in recent years. Of course, a co-ordinated approach could achieve a variety of objectives. One would be simply to warn central Departments earlier than at present of forthcoming plans of individual departments. Another would be to work out more smoothly than at present

the overlapping functions of 2 or more departments (a good example is nursery education and day nurseries - in the interests of child health). But others would include large-scale reallocation of priorities - as by taking a major decision to reduce the rate of expansion in expenditure of one major social service, such as education, and greatly increase the rate of expansion of another, such as health. For this, however, support independent of central administration may be required, as we argue below. We appreciate that there are a wide range of possibilities, and that a joint approach could mean a great deal or very little. But considering that the Government accepted, in the early 1960s, the need for plans for hospitals and for community care and that since then there have been a stream of plans of wider and lesser scope, developments in the co-ordination of social policies, as distinct from the reorganisation of individual services, has been slow. (The progress since the JASP initiative has been traced by Plowden, 1977). No doubt this slowness is attributable to the precedence currently given not only by the Government but by other bodies to economic over social objectives in policy, to a failure to appreciate the inter-relatedness of policies but above all to the stultifying effects of public expenditure control which has dominated all attempts of planning during the mid and late 1970s. In the last 15 years social planning has been, for the central government, predominately one of control of public expenditure (Glennerster, H, 1975, Diamond, J. 1975, Glennerster, H. 1976, Heclo and Wildavsky, 1976). It would be wrong to suppose that this form of control could be changed overnight, because it has penetrated administrative practice at every level, or that there will not be financial and institutional constraints on more imaginative social planning. But the formulation of new social objectives by the Government can only be sustained if certain changes are also made in the mechanisms of planning and administration.

A Health Development Council

9.103 Finally, and distinct from this machinery, although with the same objective in mind, we propose the establishment of a Health Development Council. This would be an independent body, with a small staff of seconded civil servants. Strictly its functions would be advisory but the Council would, we recommend, play a key role in social planning. It would be invited to consider and spell out longer term strategies to reduce inequalities of health and improve general family living standards, evaluate progress in relation to this aim, with particular reference to the roles of particular

Government and local authority departments and services, marshal a range of outside expertise, consult the public at every stage and play a major part in explaining the need for certain developments. Opportunities should be afforded to it of commenting on, and contributing to, plans, including expenditure programmes, which are to be published by the Government on matters relevant to its concerns.

- 9.104 Although we are aware of the arguments against proliferation of such standing advisory bodies, we make this proposal for 3 particular reasons. First, the existence of the Council would provide some guarantee that, when initial enthusiasm had abated, the attempt at inter-departmental co-ordination through a Cabinet sub-committee did not "run out of steam", as some would say happened with the original JASP initiative. Second, by virtue of its public existence such a body could serve both to keep the issue of health inequalities in the public eye, and enlist widespread support. This is essential, and the development of comparable machinery at the local level (perhaps based on existing AHA - Local Authority Joint Consultative Committees) could be invaluable. Third, the Council would be in a position to assist Ministers in formulating longer-term strategies.

CONCLUSION AND SUMMARY OF RECOMMENDATIONS

- 9.105 In discussing actions outside the Health Care system which need to be taken to diminish inequalities of health we have been necessarily selective in this chapter. We have attempted to pay heed to those factors which are correlated with the degree of inequalities. Secondly, we have tried to confine ourselves to matters which are immediately practicable, in political, economic and administrative terms, which will nonetheless, properly maintained, exert a long-term structural effect. And thirdly, we have continued to feel it right to give priority to young children and mothers, disabled people and measures concerned with prevention. Above all we consider that the abolition of child poverty should be adopted as a national goal for the 1980s. We recognise that this requires a redistribution of financial resources far beyond anything achieved by past programmes, and is likely to be very costly. Our recommendations here are presented as a modest first step which might be taken towards this objective.

- i. As an immediate goal the level of child benefit should be increased to $5\frac{1}{2}\%$ of average gross male industrial earnings, or £5.70 at November 1979 prices.

ii. Larger child benefits should be progressively introduced for older children, after further examination of the needs of children and consideration of the practice in some other countries.

iii. The maternity grant should be increased to £100.

iv. We recommend the introduction of an infant care allowance over a 5 year period, beginning with all babies born in the year following a date to be chosen by the Government.

Beyond these initial elements of an anti-poverty strategy, a number of other steps need to be taken.

v. Provision of meals at school should be regarded as a right. Representatives of local authorities and community dietitians should be invited to meet representatives of parents and teachers of particular schools at regular intervals during the year to seek agreement to the provision and quality of meals. Meals in schools should be provided without charge.

vi. The Health Education Council should be provided with sufficient funds to mount child accident prevention programmes in conjunction with the Royal Society for the Prevention of Accidents. These programmes should be particularly directed at local authority planners, engineers, and architects.

vii. A comprehensive disablement allowance for people of all ages should be introduced by stages at the earliest possible date beginning with people with 100 per cent disablement.

viii. Representatives of the DHSS and DE, HSE, together with representatives of the trade unions and CBI, should draw up minimally acceptable and desirable conditions of work.

ix. Government Departments, employers and unions should devote more attention to preventive health through work organisation, conditions and amenities, and in other ways. There should be a similar shift of emphasis in the work and functions of the Health and Safety Commission and Executive, and the Employment Medical Advisory Service.

x. Local Authority spending on housing improvements under the 1974 Housing Act should be substantially increased.

xi. Local authorities should increasingly be encouraged to widen their responsibilities to provide for all types of housing need which arise in their localities.

xii. Policies directed towards the public and private housing sectors need to be better co-ordinated.

xiii. Special funding, on the lines of joint funding, for health and local authorities should be developed by the Government to encourage better planning and management of housing, including adaptations and provision of necessary facilities and services for disabled people of all ages by social service and housing departments.

Our recommendations reflect the fact that the reduction of health inequalities depends upon contributions from within many policy areas, and necessarily involving a number of government departments. Our objectives will be achieved only if each department makes it appropriate contribution. This in turn requires a greater degree of co-ordination than exists at present.

xiv. Greater co-ordination between Government Departments in the administration of health related policies is required, by establishing inter-departmental machinery in the Cabinet Office under a Cabinet sub-committee along the lines of that established under the Joint Approach to Social Policy (JASP), with the Central Policy Review staff also involved. Local counterparts of national co-ordinating bodies also need to be established.

xv. A Health Development Council should be established with an independent membership to play a key advisory and planning role in relation to a collaborative national policy to reduce inequalities in health.

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SUMMARY OF REPORT AND RECOMMENDATIONS

1. We were appointed in April 1977, at the then Secretary of State's request, by the Department's Chief Scientist, and with the following broad objectives:-
 - i. to assemble available information about the differences in health status among the social classes and about factors which might contribute to these, including relevant data from other industrial countries;
 - ii. to analyze this material in order to identify possible causal relationships, to examine the hypotheses that have been formulated and the testing of them, and to assess the implications for policy; and
 - iii. to suggest what further research should be initiated.

2. In our report we concentrate most attention upon differences in mortality rates: data on morbidity (ill-health) and on health in its more positive sense, as reflected for example in child development, are less generally available. Similarly we have had to make use largely of occupational status as an indicator of social inequality. For the majority of the population, though not for many groups at particular health risk, such as the elderly retired, this reasonably reflects such other aspects of social inequality as differences in financial resources, housing, and education. Whilst, as we shall argue, such other variables may have greater importance in explaining health inequality than occupation (alone), few data permitting examination of their relationships to health are available.

3. Most recent data show marked differences in mortality rates between the occupational classes, for both sexes and at all ages. At birth and in the first month of life, twice as many babies of "unskilled manual" parents (class V) die as do babies of professional class parents (class I) and in the next 11 months 4 times as many girls and 5 times as many boys. In later childhood the ratio of deaths in class V to deaths in class I falls to 1.5-2.0, but increases again in early adultlife, before falling again in middle and old age. A class gradient can be observed for most causes of death, being particularly steep in the case of diseases of the respiratory system. Available data on chronic sickness tend to parallel those on mortality. Thus self-reported rates of long-standing illness (as defined in the General Household Survey) are twice as high among unskilled manual males and $2\frac{1}{2}$ times as high among their wives as among the professional classes. In the case of acute

sickness (short-term ill health, also as defined in the General Household Survey) the gradients are less clear.

4. The extent of the problem may be illustrated by the fact that if the mortality rate of class I had applied to classes IV and V during 1970-72 (the dates of the latest review of mortality experience) 74,000 lives of people aged under 75 would not have been lost. This estimate includes nearly 10,000 children, and 32,000 men of working age.
5. The lack of improvement, and in some respects deterioration, of the health experience of the unskilled and semi-skilled manual classes (class V and IV), relative to class I, throughout the 1960s and early 1970s is striking. Despite the decline in the rate of infant mortality (death within the first year of life) in each class, the difference in rate between the lowest classes (IV and V combined) and the highest (I and II combined) actually increased between 1959-63 and 1970-72. Among children aged 1-4 there was a small reduction in the class differential; for children aged 5-9 little or no change; for children aged 10-14 the class differential increased. Among men of economically active age there was a greater gap in mortality between class I and class V in both 1970-72 and 1959-63 than in 1949-53. For women aged 15-64 the mortality rates of classes IV and V combined actually rose between 1959-63 and 1970-72.
6. Inequalities exist also in the utilization of health services, particularly and most worryingly of the preventive services. Here, severe underutilization by the working classes is a complex resultant of under-provision in working class areas, and of costs (financial and psychological) of attendance which are not, in this case, outweighed by disruption of normal activities by sickness. In the case of GP, and hospital in-patient and out-patient attendance, the situation is less clear. Moreover it becomes more difficult to interpret such data as exist, notably because of the (as yet unresolved) problem of relating utilization to need. Broadly speaking, the evidence suggests that working class people make more use of GP services for themselves (though not for their children) than do middle class people, but that they may receive less good care. Moreover, it is possible that this extra usage does not fully reflect the true differences in need for care, as shown by mortality and morbidity figures. Similar increases in the use of hospital services, both in-patient and out-patient, with declining occupational class are found, though data are scanty, and possible explanations complex.

7. Comparison of the British experience with that of other industrial countries, on the basis of overall mortality rates, shows that British perinatal and infant mortality rates have been distinctly higher and are still somewhat higher than those of the 4 Nordic countries and of the Netherlands, and comparable with those of the Federal Republic of Germany. Adult mortality patterns, especially for men in the younger age-groups, compare reasonably with other western industrialized countries: the comparison for women is less satisfactory. The rate of improvement in perinatal mortality experienced by Britain over the period since 1960 has been comparable to that of most other countries. In the case of infant mortality (which is generally held to reflect social conditions more than does perinatal mortality) all comparable countries - especially France - have shown a greater improvement than has Britain. France, like Britain and most other countries considered (though apparently not Sweden), shows significant class and regional inequalities in health experience. It is noteworthy that through the 1960s the ratio of the post-neonatal death rate (between 4 weeks and one year) in the least favoured social group to that in the most favoured fell substantially in France. Also important probably has been a major French effort to improve both attendance rates for ante-natal care and the quality of such care. Very high rates of early attendance are also characteristic of the Nordic countries; so too are high rates of attendance at child welfare clinics, combined with extensive 'outreach' capacity. In Finland, for example, whenever an appointment at a Health Centre is missed, a health visitor makes a domiciliary call. We regard it as significant also that in Finland health authorities report not on the volume of services provided, but on the proportion of all pregnant women and of all children of appropriate ages who register with Health Centres.
8. We do not believe there to be any single and simple explanation of the complex data we have assembled. Whilst there are a number of quite distinct theoretical approaches to explanation we wish to stress the importance of differences in material conditions of life. In our view much of the evidence on social inequalities in health can be adequately understood in terms of specific features of the socio-economic environment: features (such as work accidents, overcrowding, cigarette smoking) which are strongly class-related in Britain and also have clear causal significance. Other aspects of the evidence indicate the importance of the health services and particularly preventive services. Ante-natal care is probably important in preventing perinatal death, and the international evidence suggests that much can be done to improve ante-natal care and its uptake. But beyond this there is undoubtedly

much which cannot be understood in terms of the impact of so specific factors, but only in terms of the more diffuse consequences of the class structure: poverty, working conditions, and deprivation in its various forms. It is this acknowledgement of the multicausal nature of health inequalities, within which inequalities in the material conditions of living loom large, which informs and structures our policy recommendations. These draw also upon another aspect of our interpretation of the evidence. We have concluded that early childhood is the period of life at which intervention could most hopefully weaken the continuing association between health and class. There is, for example, abundant evidence that inadequately treated bouts of childhood illness "cast long shadows forward", as the Court Committee put it.

9. We have been able to draw upon national statistics relating to health and mortality of exceptional quality and scope, as well as upon a broad range of research studies. We have, however, been conscious of certain inadequacies in the statistics and of major lacunae in the research. For example it is extremely difficult to examine health experience and health service utilisation, in relation to income and wealth.
10. Moreover, we consider that the form of administrative statistics may both reflect and determine (as the Finnish example quoted above suggests) the way in which the adequacy and the performance of a service is understood: hence it acquires considerable importance. We also consider systematic knowledge of the use made of the various health services by different social groups to be inadequate: though this is less the case in Scotland than in England and Wales. Whilst conscious of the difficulties in collecting and reporting of occupational characteristics within the context of administrative returns, we feel that further thought must be given to how such difficulties might be overcome. We argue that the monitoring of ill-health (itself so imperfect) should evolve into a system also of monitoring health in relation to social and environmental conditions. One area in which progress could be made is in relation to the development of children, and we propose certain modifications to community health statistics.

We recommend that school health statistics should routinely provide, in relation to occupational class, the results of tests of hearing, vision, and measures of height and weight. As a first step we

- (1) recommend that health authorities, in consultation with educational authorities, select a representative sample of schools in which assessments on a routine basis be initiated. (Chapter 7, p 204)

11. Accidents are not only responsible for fully one-third of child deaths, but show (with respiratory disease) the steepest of class gradients.
12. We should like to see progress towards routine collection and reporting of accidents to children indicating the circumstances, the age, and the occupational class of the parents. In relation to traffic accidents there should be better liaison between the NHS and the police, both centrally and locally.

We therefore recommend that representatives of appropriate government departments (Health and Social Security, Education and Science, Home (2) Office, Environment, Trade, Transport), as well as the NHS and the police, should consider how progress might rapidly be made in improving the information on accidents to children. (Chapter 7, p 205).

13. The Child Accident Prevention Committee, if suitably constituted and supported, might provide a suitable forum for such discussions, to be followed by appropriate action by government departments. Further,

We recommend that the Health Education Council should be provided with sufficient funds to mount child accident prevention programmes in (3) conjunction with the Royal Society for the Prevention of Accidents. These programmes should be particularly directed at local authority planners, engineers, and architects. (Chapter 9, p 329).

14. Whilst drawing attention to the importance of the National Food Survey as the major source of information on the food purchase (and hence diet) of the population, we are conscious of the scope for its improvement.

We recommend that consideration be given (drawing upon epidemiological expertise within the OPCS and elsewhere) to development of the (4) National Food Survey into a more effective instrument of nutritional surveillance in relation to health, through which various 'at risk' groups could also be identified and studied. (Chapter 7, p 213).

15. We have already referred to the difficulties in examining health experience in relation to income and wealth. In principle this can be done through the General Household Survey in which the measure of income now (since 1979) corresponds to the more satisfactory measure employed in the Family Expenditure Survey. However,

We recommend that in the General Household Survey steps should be taken (not necessarily in every year) to develop a more comprehensive measure
(5) of income, or command over resources, through either (a) a means of modifying such a measure with estimates of total wealth or at least some of the more prevalent forms of wealth, such as housing and savings, or (b) the integration of income and wealth, employing a method of, for example, annuitization. (Chapter 1, p 20).

16. Beyond this, we feel that a comprehensive research strategy is needed. This is best regarded as implying the need for careful studies of a wide range of variables implicated in ill-health, in their interaction overtime, and conducted in a small number of places. Such variables will necessarily include social conditions (and the interactions of a variety of social policies) as well as individual and behavioural factors. Any major advance in our understanding of the nature of health inequalities, and of the reason for their perpetuation, will require complex research of a multidisciplinary kind.

The importance of the problem of social inequalities in health, and their causes, as an area for further research needs to be emphasized.

We recommend that it be adopted as a research priority by the DHSS

(6) and that steps be taken to enlist the expertise of the Medical Research Council (MRC), as well as the Social Science Research Council (SSRC), in the initiation of a programme of research. Such research represents a particularly appropriate area for Departmental commissioning of research from the MRC. (Chapter 7, p 214).

17. We turn now to our recommendations for policy, which we have divided into those relating to the health and personal social services, and those relating to a range of other social policies. Three objectives underpin our recommendations, and we recommend their adoption by the Secretary of State:

1. To give children a better start in life.

2. To encourage good health among a larger proportion of the population by preventive and educational action.

3. For disabled people, to reduce the risks of early death, to improve the quality of life whether in the community or in institutions, and as far as possible to reduce the need for the latter.

Thirty years of the Welfare State and of the National Health Service have achieved little in reducing social inequalities in health. But we believe that if these 3 objectives are pursued vigorously inequalities in health can now be reduced.

18. We believe that allocation of resources should be based on need. We recognise that there are difficulties in assessing need, but we agree that standardised mortality ratios (SMRs) are a useful basis for broad allocation at regional level. At district level, further indicators of health care and social needs are called for. These should be developed as a matter of urgency, and used appropriately to reinforce, supplement or modify allocation according to SMRs. However, a shift of resources is not enough: it must be combined with an imaginative (and in part necessarily experimental) approach to health care and its delivery.

Resources within the National Health Service and the Personal Social Services should be shifted more sharply than so far accomplished towards community care particularly towards ante-natal, post-natal and
(7) child health services, and home help and nursing services for disabled people. We see this as an important part of a strategy to break the links between social class or poverty and health. (Chapter 8, p 242).

The professional associations as well as the Secretary of State and the Health Authorities should accept responsibility for making improvements in the quality and geographical coverage of general practice, especially in areas of high prevalence of ill-health and poor social
(8) conditions. Where the number or scope of work of general practitioners is inadequate in such areas we recommend Health Authorities to deploy or redeploy an above-average number of community nurses attached where possible to family practice. The distribution of general practitioners should be related not only to population but to medical need, as indicated by SMRs, supplemented by other indicators, and the per capita basis of remuneration should be modified accordingly. (Chapter 8, p 268).

19. Moreover we consider that greater integration between the planning process (and the establishment of priorities) and resource allocation is needed. In particular, the establishment of revenue targets should be based not upon the current distribution of expenditure between services, but that distribution

which it is sought to bring about through planning guidelines: including a greater share for community health.

We recommend that the resources to be allocated should be based upon
(9) the future planned share for different services, including a higher share for community health. (Chapter 8, p 264).

20. Our further health service-related recommendations, designed to implement the 3 objectives set out above, fall into 2 groups.
21. We first outline the elements of what we have called a District Action Programme. By this we mean a general programme for the health and personal social services to be adopted nationwide, and involving necessary modifications to the structure of care.
22. Second, we recommend an experimental programme, involving provision of certain services on an experimental basis in 10 areas of particularly high mortality and adverse social conditions, and for which special funds are sought.

District Action Programme

Health and Welfare of mothers and pre-school and schoolchildren

A non-means-tested scheme for free milk should now be introduced
(10) beginning with couples with their first infant child and infant children in large families. (Chapter 8, p 239).

Areas and districts should review the accessibility and facilities
(11) of all ante-natal and child health clinics in their areas and take steps to increase utilisation by mothers, particularly in the early months of pregnancy. (Chapter 8, p 265).

Savings from the current decline in the school population should be used to finance new services for children under 5. A statutory obligation should be placed on local authorities to ensure adequate
(12) day-care in their area for children under 5, and a minimum number of places (the number being raised after regular intervals) should be laid down centrally. Further steps should be taken to reorganise day nurseries and nursery schools so that both meet the needs of children for education and care. (Chapter 8, p 269 and Chapter 9, p 321).

Every opportunity should be taken to link revitalised school health care
(13) with general practice, and intensify surveillance and follow-up both in
areas of special need and for certain types of family. (Chapter 8,
p 270).

23. Some necessary developments apply to other groups as well as children and mothers.

An assessment which determines severity of disablement should be
adopted as a guide to health and personal social service priorities
(14) of the individual, and this should be related to the limitation of
activities rather than loss of faculty or type of handicap.
(Chapter 8, p 270).

24. Though we attach priority to the implementation of this recommendation in the care of disabled children, we believe that it must ultimately apply to all disabled people. We recognise that such assessments are now an acknowledged part of "good practice" in providing for the disabled - we are anxious that they should become standard practice.

The Care of Elderly and Disabled People in their Own Homes

25. The meaning of community care should be clarified and much greater emphasis given to tendencies favoured (but insufficiently specified) in recent government planning documents. (See Recommendation 7).

(15) A Working Group should be set up to consider:

i. the present functions and structure of hospital, residential
and domiciliary care for the disabled elderly in relation to
their needs, in order to determine the best and most economical
balance of future services; (Chapter 8, p 277).

and

ii. whether sheltered housing should be a responsibility of
social service or of housing departments, and to make recom-
mendations; (Chapter 8, p 273).

- Joint funding should be developed and further funding of a more specific kind should be introduced, if necessary within the existing NHS budget, to encourage joint care programmes. A further sum should be reserved
- (16) for payment to authorities putting forward joint programmes to give continuing care to disabled people - for example, post-hospital follow-up schemes, pre-hospital support programmes for families, and support programmes for the severely incapacitated and terminally ill.
(Chapter 8, p 277).

- Criteria for admission to or continuing residence in residential care should be agreed between the DHSS and the local authority associations, and steps taken to encourage rehabilitation, and in particular to
- (17) prevent homeless elderly people from being offered accommodation only in residential homes. Priority should be given to expansion of domiciliary care for those who are severely disabled in their own homes. (Chapter 8, p 275).

- The functions of home helps should be extended to permit a lot more work on behalf of disabled people; short courses of training,
- (18) specialisation of functions and the availability of mini-bus transport, especially to day centres, should be encouraged (Chapter 8, p 278).

Prevention: the role of Government

26. Effective prevention requires not only individual initiative but a real commitment by DHSS and other government departments. Our analysis has shown the many ways in which people's behaviour is constrained by structural and environmental factors over which they have no control. Physical recreation, for example, is hardly possible in inner city areas unless steps are taken to ensure that facilities are provided. Similarly, government initiatives are required in relation to diet and to the consumption of alcohol. Legislation and fiscal and other financial measures may be required and a wide range of social and economic policies involved. We see the time as now opportune for a major step forwards in the field of Health and Prevention.

- National health goals should be established and stated by government after wide consultation and debate. Measures that might encourage
- (19) the desirable changes in people's diet, exercise and smoking and drinking behaviour should be agreed among relevant agencies.
(Chapter 8, p 280).

An enlarged programme of health education should be sponsored by the Government, and necessary arrangements made for optimal use of the mass media, especially television. Health education in schools should become the joint responsibility of LEAs and health authorities.
(Chapter 8, p 279).

27. The following recommendation should be seen not only as a priority in itself but as illustrative of the determined action by government necessary in relation to many elements of a strategy for prevention:

(21) Stronger measures should be adopted to reduce cigarette smoking.
These would include:-

a. legislation rapidly to phase out all advertising of tobacco products (except at place of purchase);

b. sponsorship of sporting and artistic activities by tobacco companies should be banned over a period of a few years, and meanwhile there should be stricter control of advertisement through sponsorship;

c. regular annual increases in duty on cigarettes in line with rises in income should be imposed, to ensure lower consumption;

d. tobacco companies should be required to submit plans in consultation with Trades Unions for the diversification of their products over a period of 10 years with a view to the eventual phasing out of sales of harmful tobacco products at home and abroad;

e. a stronger well-presented health warning should appear on all cigarette-packets and such advertisements as remain, together with information on the harmful constituents of cigarettes;

f. the provision of non-smoking areas in public places should steadily be extended, and

g. a counselling service should be made available in all health districts, and experiment encouraged in methods to help people reduce cigarette smoking. (Chapter 8, p 281).

We have already recommended that steps be taken to increase utilisation of ante-natal clinics, particularly in the early months of pregnancy (Recommendation 11). Given early attendance there are practical programmes for screening for Down's Syndrome and for neural tube defects in the fetus. In relation to adult disease, screening for severe hypertension is practicable, and effective treatment is available.

- (22) In the light of the present stage of knowledge we recommend that screening for neural tube defects (especially in high risk areas) and Down's Syndrome on the one hand, and for severe hypertension in adults on the other, should be made generally available. (Chapter 8, p 283).

Additional Funding for 10 Special Areas

- (23) We recommend that the Government should finance a special health and social development programme in a small number of selected areas, costing about £30m in 1981-82. (Chapter 8, p 283).

28. At least £2m of this sum should be reserved for evaluation research and statistical and information units. The object would be both to provide special help to redress the undeniable disadvantages of people living in those areas but also to permit special experiments to reduce ill-health and mortality, and provide better support for disabled people. Some elements of such a programme are illustrated, particularly in connection with the development of more effective ante-natal services, (Chapter 8, p 283-288).

Measures to be Taken Outside the Health Services

29. In discussing actions outside the Health Care system which need to be taken to diminish inequalities of health we have been necessarily selective. We have attempted to pay heed to those factors which are correlated with the degree of inequalities. Secondly, we have tried to confine ourselves to matters which are practicable now, in political, economic and administrative terms, and which will nonetheless, properly maintained, exert a long-term structural effect. Third, we have continued to feel it right to give priority to young children and mothers, disabled people, and measures concerned with prevention.
30. Above all, we consider that the abolition of child poverty should be adopted as a national goal for the 1980s. We recognise that this requires a redistribution of financial resources far beyond anything achieved by past

programmes, and is likely to be very costly. Recommendations 24-27 are presented as a modest first step which might be taken towards this objective.

As an immediate goal the level of child benefit should be increased
(24) to 5 $\frac{1}{2}$ % of average gross male industrial earnings, or £5.70 at
November 1979 prices. (Chapter 9, p 316).

Larger child benefits should be progressively introduced for older
(25) children, after further examination of the needs of children and
consideration of the practice in some other countries. (Chapter 9,
p 314-316)

(26) The maternity grant should be increased to £100. (Chapter 9, p 317).

An infant care allowance should be introduced over a 5 year period,
(27) beginning with all babies born in a year following a date to be
chosen by the government. (Chapter 9, p 318).

31. Beyond these initial elements of an anti-poverty strategy, a number of other steps need to be taken. These include steps to reduce accidents to children, to which we have referred above (Recommendation 4). Further,

Provision of meals at school should be regarded as a right.
Representatives of local authorities and community dietitians should be
(28) invited to meet representatives of parents and teachers of particular
schools at regular intervals during the year to seek agreement
to the provision and quality of meals. Meals in schools should be
provided without charge. (Chapter 9, p 328).

A comprehensive disablement allowance for people of all ages should
(29) be introduced by stages at the earliest possible date beginning with
people with 100 per cent disablement. (Chapter 9, p 334).

Representatives of the DHSS and DE, HSE, together with representatives
(30) of the Trade Unions and CBI, should draw up minimally acceptable and
desirable conditions of work. (Chapter 9, p 335).

Government Departments, employers and unions should devote more
attention to preventive health through work organisation, conditions
(31) and amenities, and in other ways. There should be a similar shift.

of emphasis in the work and functions of the Health and Safety Commission and Executive, and the Employment Medical Advisory Service. (Chapter 9, p.336).

- (32) Local Authority spending on housing improvements under the 1974 Housing Act should be substantially increased. (Chapter 9, p 341).

- (33) Local authorities should increasingly be encouraged to widen their responsibilities to provide for all types of housing need which arise in their localities. (Chapter 9, p 342).

- (34) Policies directed towards the public and private housing sectors need to be better co-ordinated. (Chapter 9, p 341).

- (35) Special funding on the lines of joint funding for health and local authorities should be developed by the Government to encourage better planning and management of housing, including adaptations and provision of necessary facilities and services for disabled people of all ages by social services and housing departments. (Chapter 9, p 344).

32. Our recommendations reflect the fact that reduction in health inequalities depends upon contributions from within many policy areas, and necessarily involves a number of government departments. Our objectives will be achieved only if each department makes its appropriate contribution. This in turn requires a greater degree of co-ordination than exists at present.

- (36) Greater co-ordination between Government Departments in the administration of health related policies is required, by establishing inter-departmental machinery in the Cabinet Office under a Cabinet sub-committee along the lines of that established under the Joint Approach to Social Policy (JASP), with the Central Policy Review Staff also involved. Local counterparts of national co-ordinating bodies also need to be established. (Chapter 9, p 346).

- (37) A Health Development Council should be established with an independent membership to play a key advisory and planning role in relation to a collaborative national policy to reduce inequalities in health. (Chapter 9, p 347).

33. Within such co-ordinating machinery major initiatory responsibility will be vested in the Department of Health and Social Security, and we recommend that the Cabinet Committees we have proposed be chaired by a Minister, and by a senior DESS official respectively, having major responsibility for Health and Prevention. Similarly it will be an important obligation upon the DESS to ensure the effective operation of the Health Development Council.

The General Assembly of the United States has passed a law which...

The Secretary of the Army has reported that...

The report also indicates that...

APPENDICES

1. The first appendix...

The second appendix...

The third appendix...

1871

APPENDIX 1

USE OF THE GENERAL HOUSEHOLD SURVEY FOR THE ANALYSIS OF INEQUALITIES IN HEALTH

1. Introduction

1. The General Household Survey is a multi-purpose household survey of Great Britain with a sample size of about 30,000 persons. It has been carried out annually since 1971 and collects a variety of socio-economic as well as health data.
2. The health section of the survey has each year collected data on GP consultations, outpatient visits and illness both of a long standing nature and also acute recent illness. It should always be borne in mind when using GHS data on ill-health that the data is both self-reported and self-perceived. The wording of questions on ill-health has varied to some extent over the years. To provide a consistent basis for analysis therefore, and also to give reasonably up-to-date information this paper is based on data for the years 1974 to 1976 inclusive except in section 5 where only the first quarter's data for 1976 was available so the years 1973 to 1975 and the first quarter of 1976 have been used. Separate years have been combined to increase the sample size.

2. Methodology

3. The paper concentrates on 3 main health variables:-

- a) long standing illness
- b) restricted activity (a measure of recent acute illness)
- c) GP consultations (a measure of service use)

GP consultations are measured as the number of people per 1000 population consulting a GP in a 2-week reference period. All forms of consultation including telephone conversations are counted. Long standing illness and restricted activity (again measured as rates per 1000 population) are best described by the questions in the GHS which elicit this information. It should be noted that restricted activity includes aggravated long standing illness as well as recent acute illness. The questions concerned are as follows:-

Long standing illness

CODE

Do you have any long-standing illness, disability or infirmity? (By long-standing I mean anything which has troubled you over a period of time or which is likely to affect you over a period of time.)

Yes	1
No	2

Restricted activity

CODE

Now I'd like you to think about all the things you usually do. For example, the things you do every day (at work/school), about the house, during your free time, etc. During the 2 weeks ending last Sunday, did you have to cut down on any of the things you usually do because of (this illness/disability or some other) illness or injury?

Yes 1
No 2

4. These measures of health and service use have been analysed against two of the most important socio-economic variables viz (collapsed) socio-economic groups (SEG) and economic planning region. The 6 socio-economic groupings are as follows:-

- I Professional
- II Employers and managers
- III NM Intermediate and junior non-manual
- III M Skilled manual and own account non-professional
- IV Semi-skilled manual and personal service
- V Unskilled manual

5. This classification of occupation differs slightly from the Registrar General's definition of social class.
6. The analyses by these variables are presented in sections 3 and 4 of the paper. In section 5 of the paper some further analysis by SEG is presented. This is a somewhat experimental analysis which attempts to relate more closely consultation with a GP to the cause of the consultation (ie long standing or acute illness). It was hoped in this paper to present some analysis by colour and country of birth but at the time of writing the data had not become available. When these data are to hand, any significant findings will be incorporated in a supplementary note.
7. GHS data on income has not in the past been of high quality and so no analysis by income band has so far been attempted. However there is some evidence on the relationship between income and SEG available from the 1975 and 1976 GHS annual reports. The relevant data is contained in tables A1.1 to A1.4. Tables A1.1 and A1.2 show that gross household income is fairly closely related to SEG of head of household though there are some groups such as farmers, employers and managers of small establishments, junior non-manual and people in personal service who do not fall in the expected order in the table. Employers and professional people at the one end of the scale and unskilled manual and personal service occupations at the other end, stand out as having respectively much higher and much lower household income than the rest. Tables A1.3 and A1.4 which show figures for grouped SEG classified by age for male employees tend to confirm this pattern. It is also clear from these latter tables that the income differences between the socio-economic groups increase with age, at least

up to 60, the differences for earners under the age of 30 being comparatively small.

Results

3. Socio-Economic Group

8. Figures Al.1 to Al.6 show the incidence of long-standing illness, restricted activity and GP consultations, for the grouped SEGs. The greatest differences between SEGs were found for long-standing illness. Results for both males and females were similar in pattern, with apart from a slight kink in SEG III, a clear upward trend in the incidence of long-standing illness from SEG I to SEG V. The X^2 test for trend showed that these increases were highly significant in all age ranges except the 0-14 group. There was a particularly steep increase with SEG for men in the 45-64 age group, the incidence of long-standing illness in SEG V being more than twice that in SEG I. This is possibly due to some extent to the difference in working conditions of men in different SEGs - women, who tend to work either in the home or in relatively healthy forms of employment, showed a smaller increase with SEG. Patterns for women by SEG are also likely in general to be less clear than those for men as they are classified in different ways - unmarried women by their own occupation and married women by their husband's occupation.
9. The data on restricted activity and GP consultations did not show such clear patterns within the individual age-groups, although several groups showed significant increases in incidence from SEG I to SEG V. It was therefore decided to combine the age-groups to obtain an overall measure of the level of acute sickness and GP consultations within each SEG. This was done using the method of direct standardisation, to remove the biasing effect of the different age distributions of the SEGs. These standardised rates are shown in figures Al.3 to Al.6. They show slightly increasing proportions from SEG I to SEG V. The X^2 test for trend confirms that these increases are significant.

4. Regions

Regional breakdowns of the data are shown in figures Al.7 to Al.12. The X^2 test was used to assess whether significant differences in the incidence of long-standing illness, restricted activity and GP consultations existed between England, Scotland and Wales, and between the different English regions. It was found that in every case, highly significant differences existed between England, Scotland and Wales. For both long-standing illness and restricted activity, the incidence was highest in Wales and lowest in Scotland. These differences were particularly marked in the case of long-standing illness. Within the English regions, both types of illness showed highly significant regional differences, but no such difference was found for GP consultations. Finally, the more northern regions of England (North, Yorkshire and Humberside, North West, East and West Midlands) were compared with the southern regions. Once again the differences were highly significant in both males and females for long-standing illness, with higher rates in the north than in the south. The same pattern was evident in the 45-64 age group for restricted activity and GP consultations for males. A comparison of the rates for the northern and southern regions is shown in figure Al.7.

5. Relation between GP Consultations and Illness

11. It is of interest to investigate whether there is any difference in the extent to which people in different SEGs visit GPs when they are ill. Figures A1.3 to A1.6 show that the incidence of GP consultations increases over SEG at about the same rate as restricted activity, indicating that there is little or no difference in the proportion of people in different SEGs who visit their GP when they are ill. However any differences are likely to be masked by the fact that many of those with restricted activity may not visit a GP and conversely, that people may visit a GP for reasons other than restricted activity.
12. This problem can be overcome by looking at those people with restricted activity or a long-standing illness who go to a GP specifically for that illness. In this analysis it was necessary to combine SEGs I and II and IV and V, as the sample numbers were small. Direct standardised rates were then produced for each SEG group. Figures A1.3 and A1.4 show the percentage of people who reported restricted activity during a 2-week period and who visited a GP because of that restricted activity, during the same period. For both males and females significant upward trends were found in the numbers of people seeing a GP between SEGs I and II and SEGs IV and V. This suggests that those in the manual SEGs are making more use of GP services when they are ill than those in non-manual SEGs. An alternative explanation, however, could be that people in manual SEGs either perceive or report their illnesses less readily than others. GP visits are not self-perceived and are less likely to be under-reported than illnesses and so the net result would be an upward trend between SEGs I and II and IV and V. If this is the true explanation, it means that the trends in the incidence of restricted activity are in reality steeper than appears from figures A1.4 and A1.6.
13. The same analysis was carried out for those who had a long-standing illness and visited a GP for it. As respondents are only asked about GP consultations during a 2-week period, the proportion of such people who are recorded as visiting a GP is low - around 13%. The results obtained are shown in figures A1.5 and A1.6 and do not show any significant trend.

Table A1.1 Households by socio-economic group of head of household by gross annual household income: cumulative percentages

Great Britain: 1975

Households	Socio-economic Group of Head of Household* (in descending order of median income)	Gross Annual Household Income (£) †											BASE (-100%)	Mean income §	
		500 or more	1000 or more	1500 or more	2000 or more	2500 or more	3000 or more	3500 or more	4000 or more	4500 or more	5000 or more	6000 or more			7500 or more
I	Professionals	100	100	97	96	92	88	80	70	57	48	31	18	391	5260
II	Employers and managers (large establishments)	100	98	95	92	89	83	74	64	54	47	30	16	578	5030
III/M	Foremen and supervisors	100	95	87	81	72	60	48	34	25	16	7	2	474	3500
III/M	Intermediate non-manual	100	91	83	74	67	59	46	37	25	19	10	4	642	3510
II	Employers and managers (small establishments and farmers)	99	91	84	75	66	58	48	39	30	24	14	6	650	3680
III/M	Skilled manual	100	91	82	75	64	49	35	23	14	10	4	1	2234	3070
III/M	Own account non-professional	99	86	77	67	56	41	29	20	14	9	3	2	356	2840
IV	Semi-skilled manual and agricultural	99	80	68	58	47	34	24	16	10	7	4	1	1446	2540
III/M	Junior non-manual	99	81	69	58	44	35	25	20	12	8	4	1	1225	2590
V	Unskilled manual	98	67	49	38	29	21	14	10	6	5	3	1	546	2000
IV	Personal service	97	38	24	17	13	10	7	4	2	1	0	0	402	1340
	TOTAL	99	85	75	67	58	47	36	27	19	14	8	4	5944	3090

* Full-time students are classified according to their present or most recent job, or omitted from the table if they have never worked. In 1975 there were 64 full-time student heads of household.

† For each socio-economic group, the highest quoted income range to contain the median is boxed.

§ Rounded to the nearest £10.

Table A1.2 Households by socio-economic group of head of household by gross annual household income: cumulative percentages

Households		Gross Annual Household Income (£)†											BASE (=100%)	Mean income §	
		500 or more	1000 or more	1500 or more	2000 or more	2500 or more	3000 or more	3500 or more	4000 or more	4500 or more	5000 or more	6000 or more			7500 or more
I	Professionals	100	100	98	96	94	91	87	81	73	66	49	28	394	6010
II	Employers and managers (large establishments)	100	99	97	94	91	88	83	76	66	55	43	25	519	5670
III MM	Intermediate non-manual	100	94	88	82	75	70	63	53	44	35	21	8	675	4280
II	Employers and managers (small establishments and farmers)	100	95	89	82	75	67	59	50	42	35	21	11	648	4290
III MM	Foremen and supervisors	100	97	90	84	78	70	61	50	40	30	15	5	426	4140
III M	Skilled manual	100	94	85	80	73	62	50	37	28	21	10	3	2102	3640
III M	Own account non- professional	99	91	80	72	64	53	41	32	24	18	13	6	358	3460
IV	Semi-skilled manual and agricultural	100	87	73	63	54	43	33	26	18	13	7	2	1404	2950
III MM	Junior non-manual	100	87	73	62	52	43	36	28	21	16	9	3	1218	3040
V	Unskilled manual	99	74	52	39	30	23	17	13	9	6	3	2	593	2150
IV	Personal service	99	56	34	23	18	12	8	6	4	3	1	NIL	358	1590
	TOTAL	100	90	79	71	64	55	47	38	30	24	14	6	8695	3600

* Full-time students are classified according to their present or most recent job, or omitted from the tables if they have never worked. In 1976 there were 69 full-time student heads of household.

† For each socio-economic group, the highest quoted range to contain the median is boxed.

§ Rounded to the nearest £10.

Table A1.3 Average gross annual earnings* of male employees by socio-economic group and age

Full-time male employees who have received earnings for 48 weeks or more during previous 12 months

Great Britain: 1975

Socio-economic Group	Age							TOTAL
	16-24	25-29	30-34	35-39	40-49	50-59	60+	
	£	£	£	£	£	£	£	£
Professional workers (employees) and Managers	2010	3450	3950	4640	4550	4650	3900	4130
Intermediate and junior non-manual	1870	2700	3020	3160	3020	2900	2520	2720
Skilled manual	1980	2750	2870	2810	2760	2590	2420	2580
Semi-skilled and unskilled manual, and personal service	1960	2390	2530	2550	2330	2230	2070	2280
TOTAL	1950	2750	3080	3220	3120	2950	2590	2830
BASES (=100%)	No.	No.	No.	No.	No.	No.	No.	No.
Professional workers (employees) and Managers	78	156	169	141	287	238	88	1157
Intermediate and junior non-manual	200	185	151	106	222	221	114	1199
Skilled manual	448	329	304	281	535	518	229	2644
Semi-skilled and unskilled manual, and personal service	171	154	133	118	244	288	135	1243
TOTAL	897	824	757	646	1288	1265	566	6243

* Rounded to the nearest £10.

Table A1.4 Average gross annual earnings* of male employees by socio-economic group and age

Full-time male employees who have received earnings for 48 weeks or more during previous 12 months

Great Britain: 1976

Socio-economic Group	Age							TOTAL
	16-24	25-29	30-34	35-39	40-49	50-59	60+	
	£	£	£	£	£	£	£	
Professional workers (employees) and Managers	2540	3880	4840	4900	5310	5280	4490	4730
Intermediate and junior non-manual	2250	3210	3720	3920	3790	3410	2880	3320
Skilled manual	2300	3220	3400	3310	3230	3170	2760	3040
Semi-skilled and unskilled manual, and personal service	2180	2720	2940	2970	2740	2680	2380	2670
TOTAL	2290	3300	3780	3750	3710	3490	2880	3350
BASES (=100%)	No.	No.	No.	No.	No.	No.	No.	No.
Professional workers (employees) and Managers	93	151	197	166	291	237	64	1199
Intermediate and junior non-manual	186	180	150	113	231	240	86	1186
Skilled manual	442	282	289	269	510	509	179	2480
Semi-skilled and unskilled manual, and personal service	168	137	104	116	244	295	162	1226
TOTAL	889	750	740	664	1276	1281	491	6091

* Rounded to the nearest £10.

FIGURE A1.1 LONG-STANDING ILLNESS: MALES 1974-76

RATE PER 1000

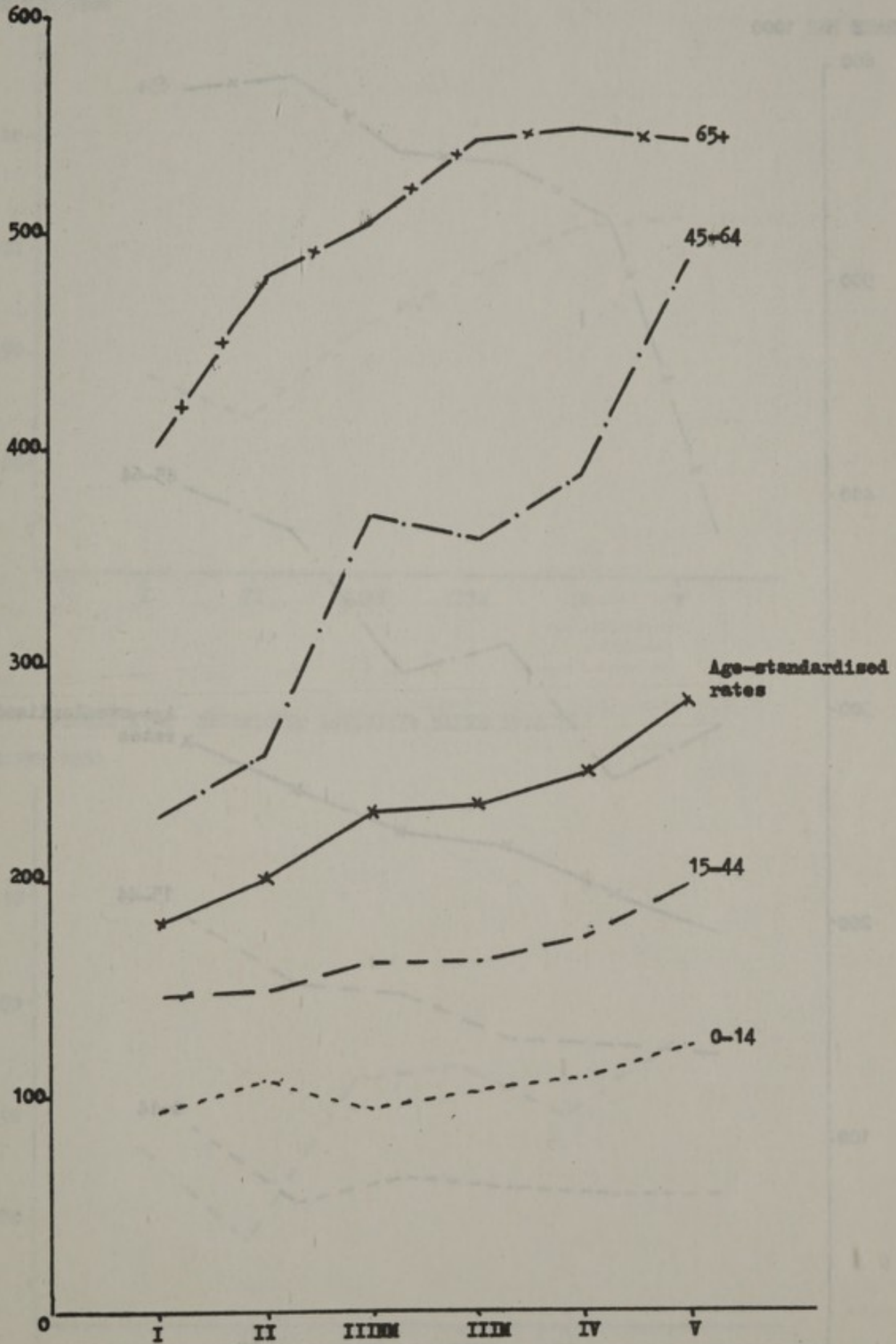


FIGURE A1.2 LONG-STANDING ILLNESS: FEMALES 1974-76

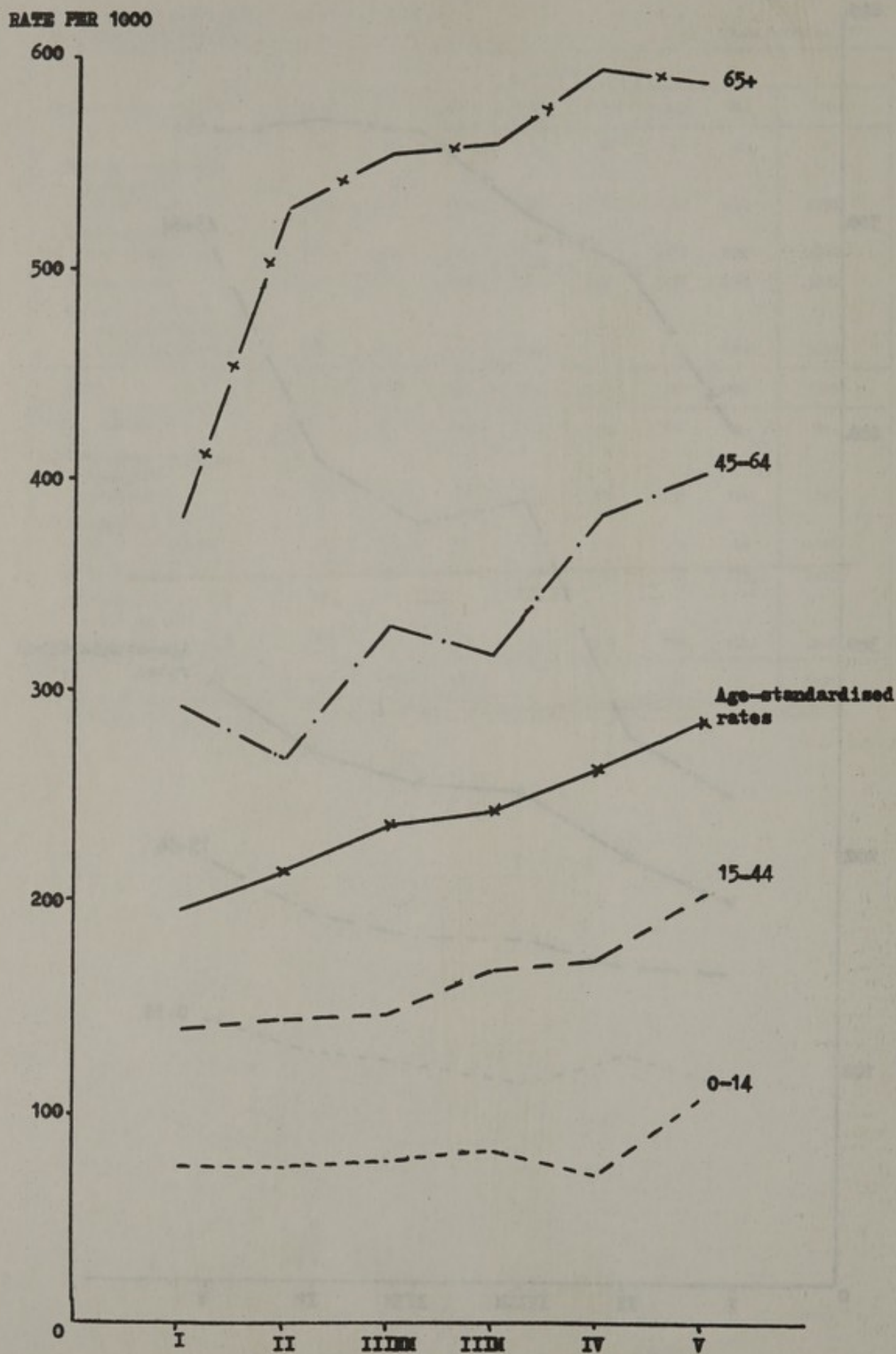


FIGURE A1.3 GP CONSULTATIONS: MALES 1974-76

RATE PER 1000

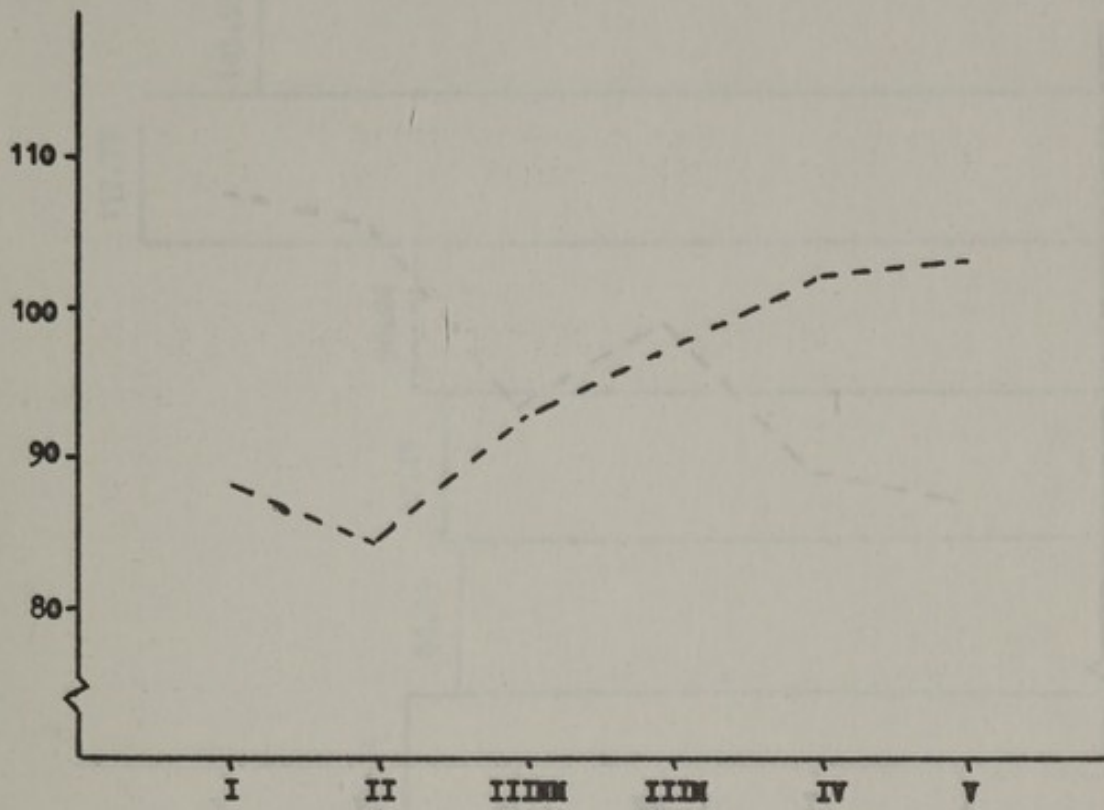


FIGURE A1.4 RESTRICTED ACTIVITY: MALES 1974-76

RATE PER 1000

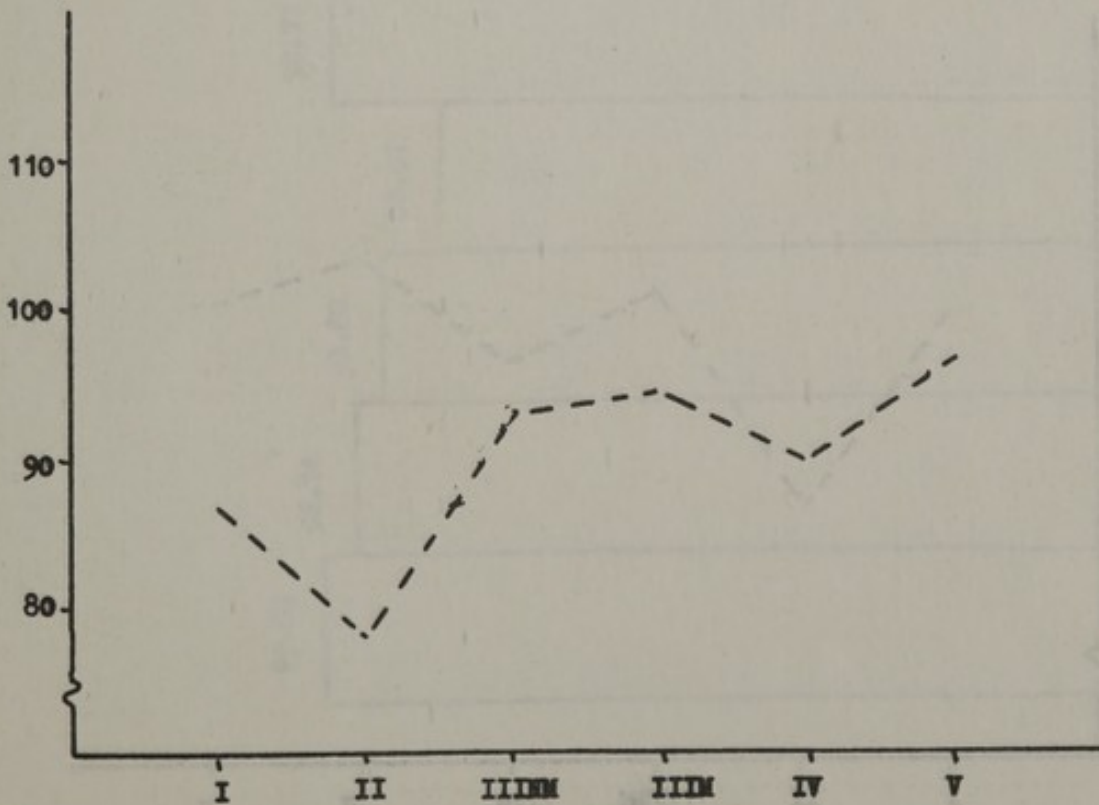


FIGURE A1.5 GP CONSULTATIONS: FEMALES 1974-76

RATE PER 1000

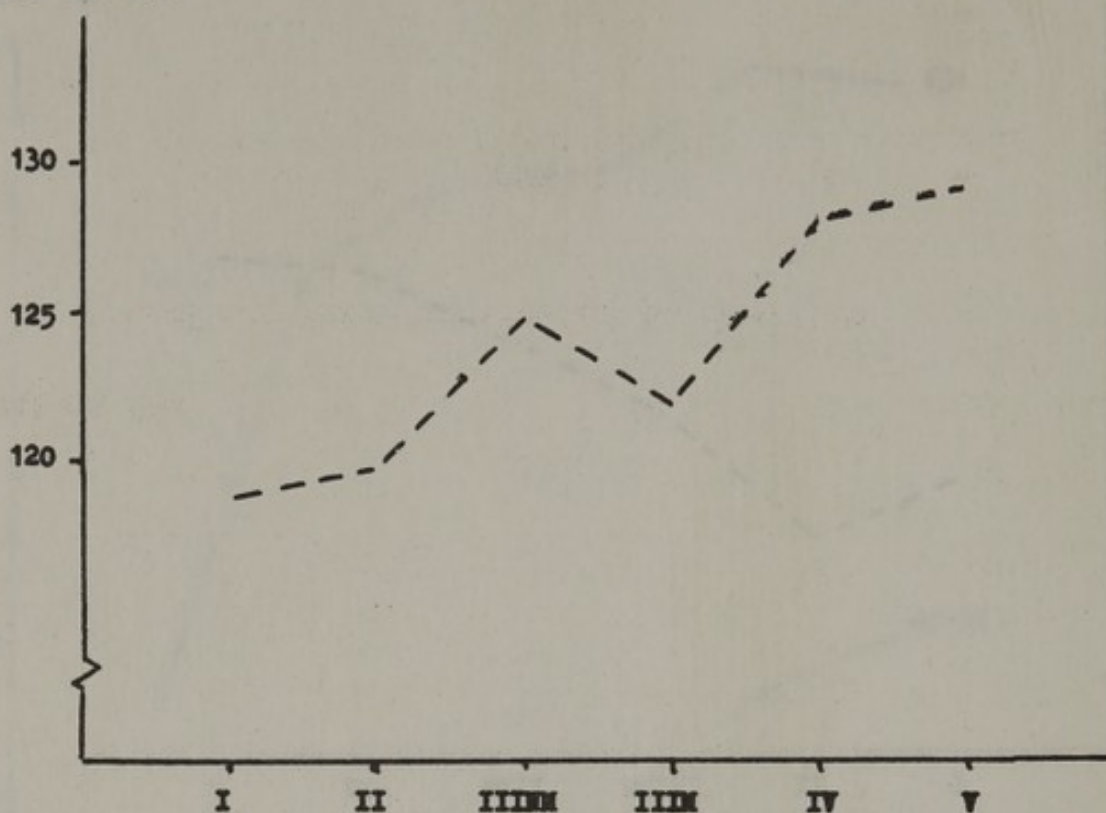


FIGURE A1.6 RESTRICTED ACTIVITY: FEMALES 1974-76

RATE PER 1000

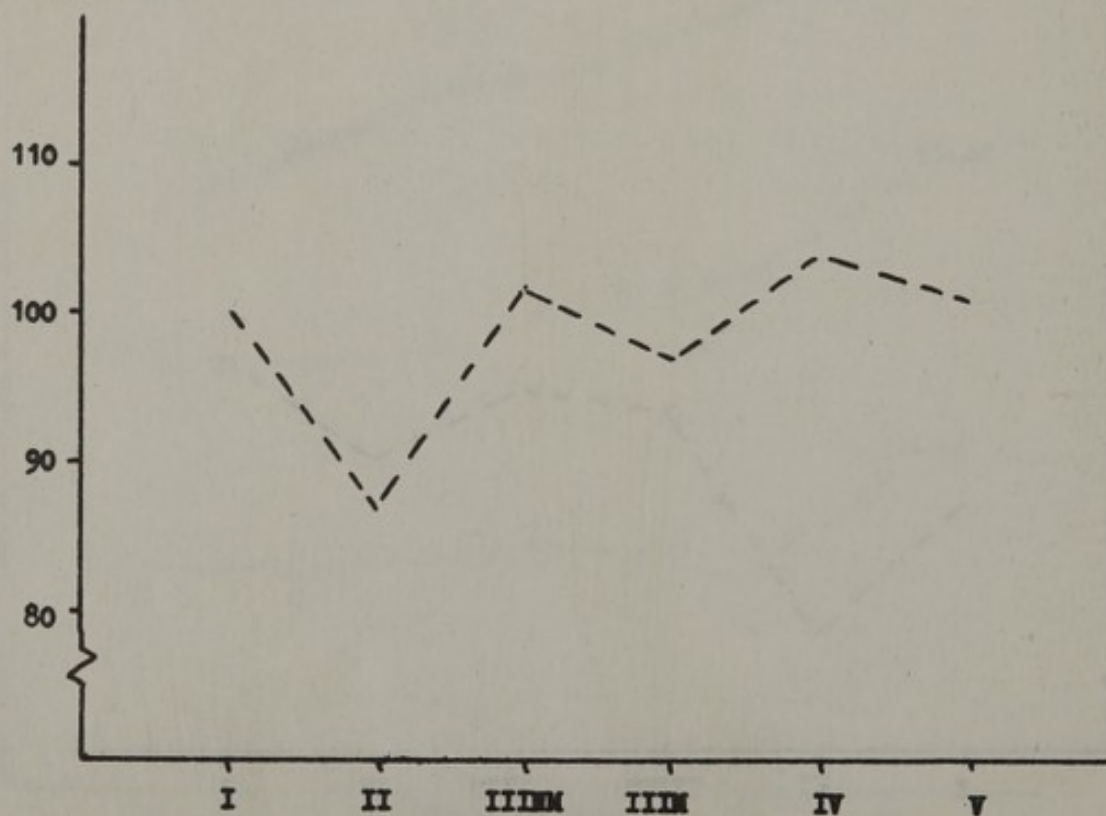


FIGURE A1.7 GP CONSULTATIONS RATES PER 1000 MALES 1974-76

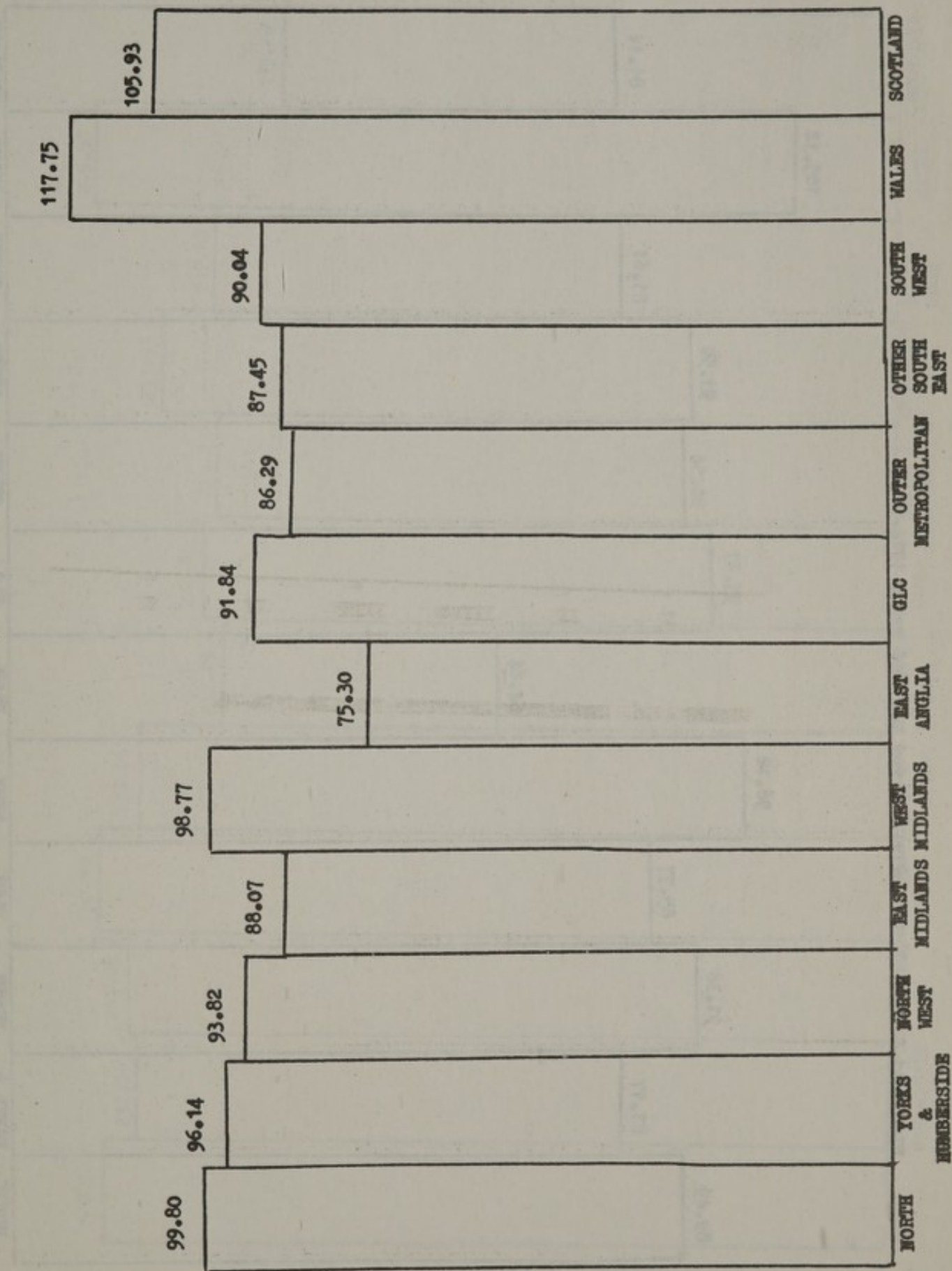


FIGURE A1.8 RESTRICTED ACTIVITY RATES PER 1000 MALES 1974-76

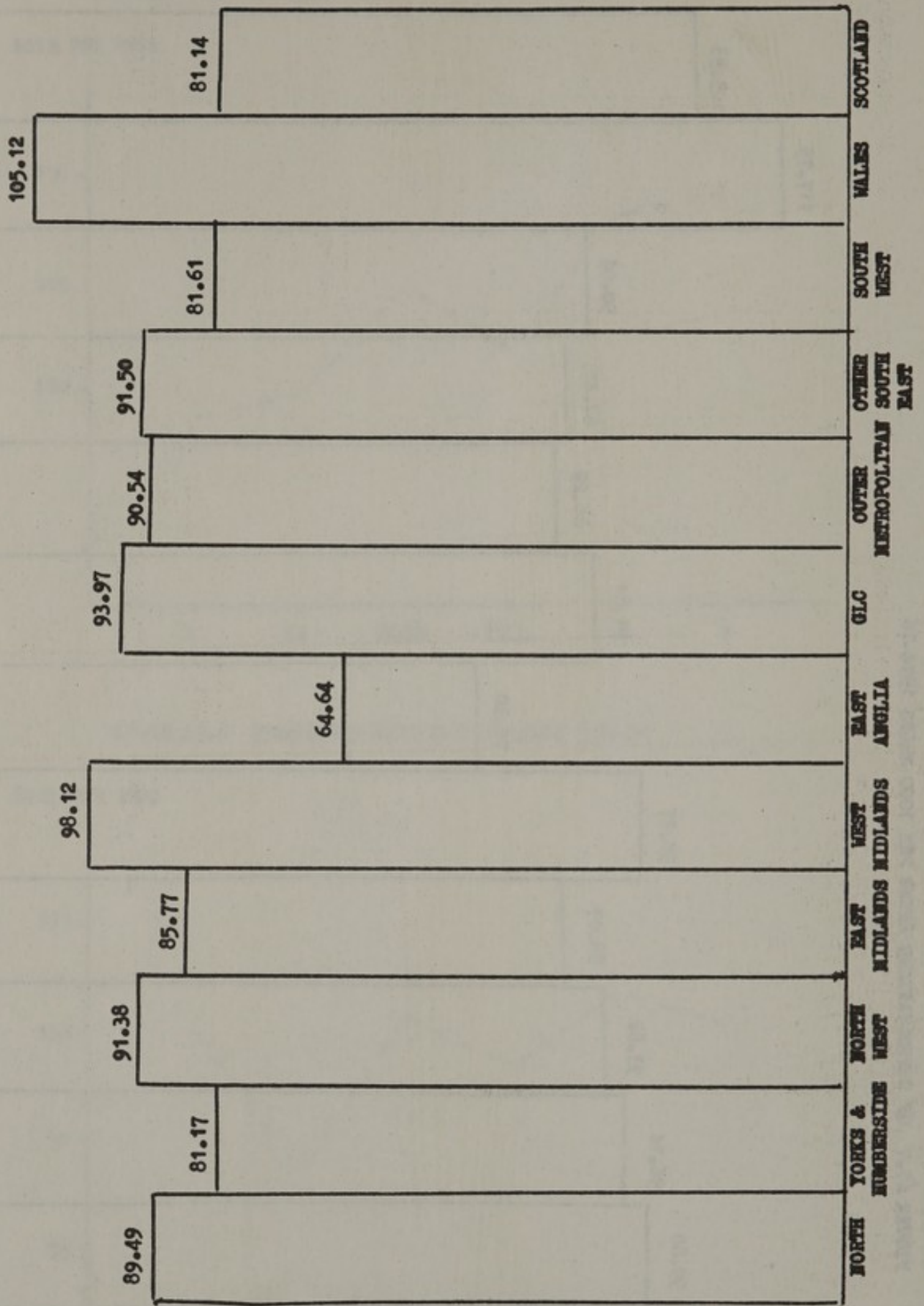


FIGURE A1.9 LONG-STANDING ILLNESS RATES PER 1000 MALES 1974-76

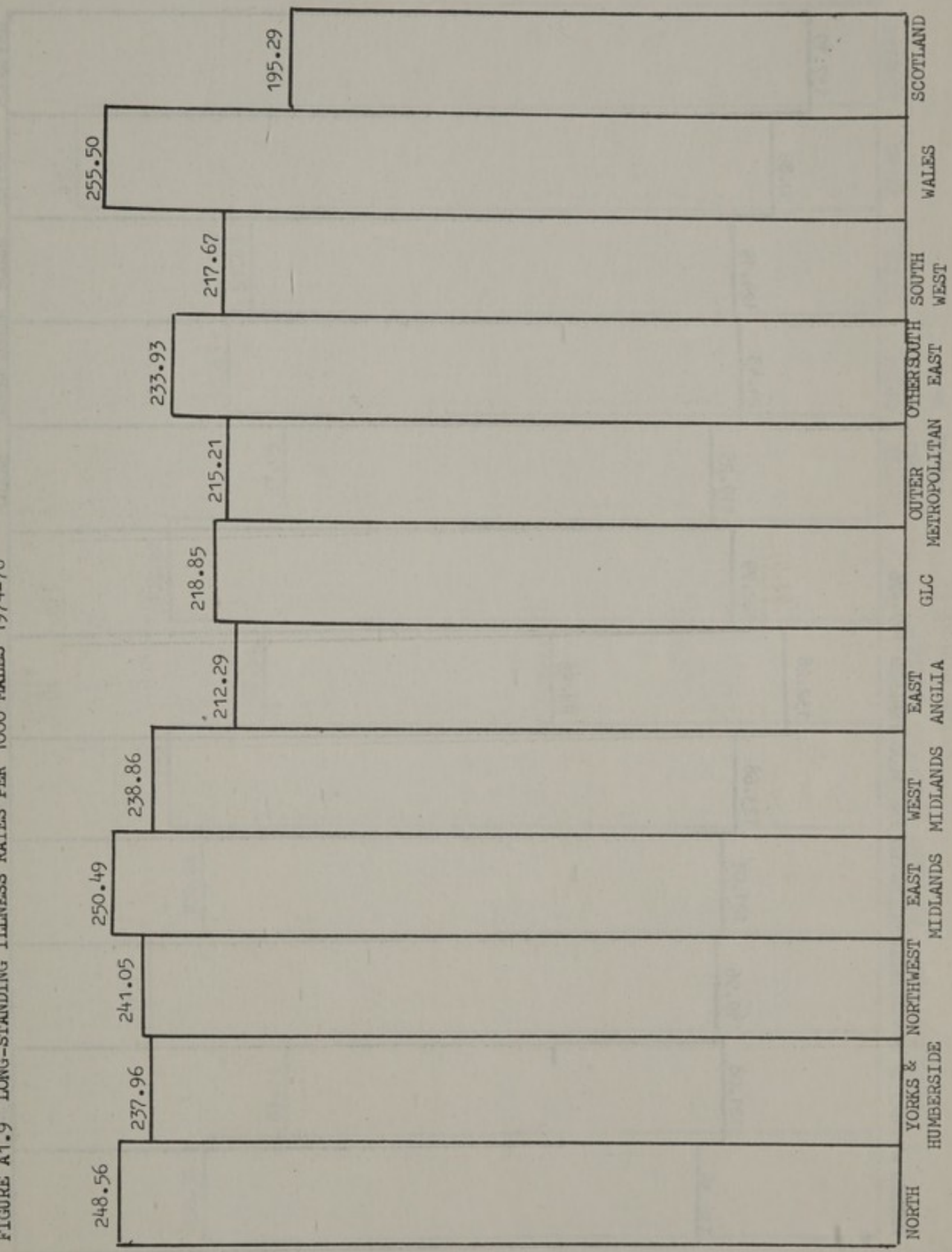


FIGURE A 1.10 GP CONSULTATIONS RATES PER 1000 FEMALES 1974-76

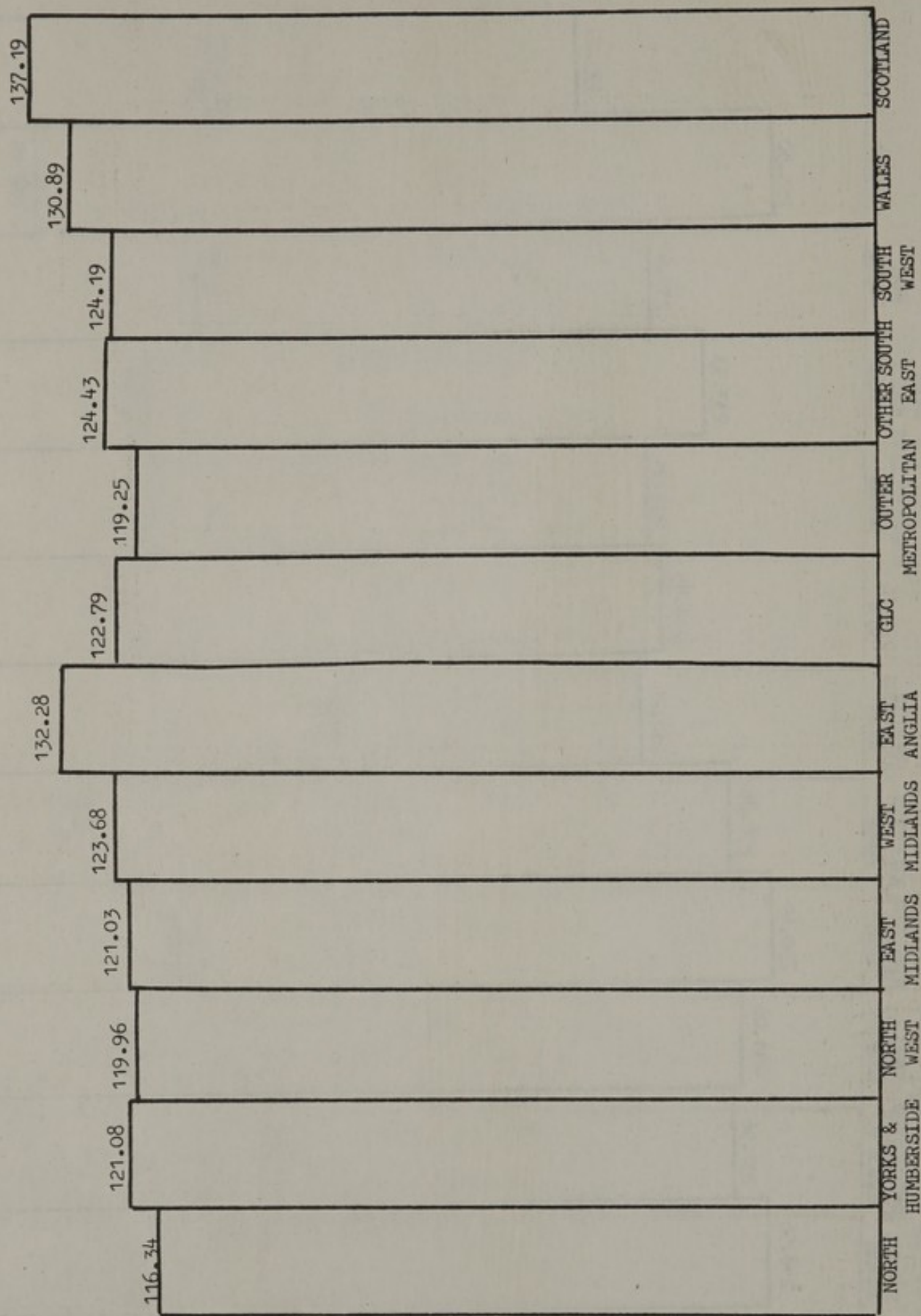


FIGURE A 1.11 RESTRICTED ACTIVITY RATES PER 1000 FEMALES 1974-76

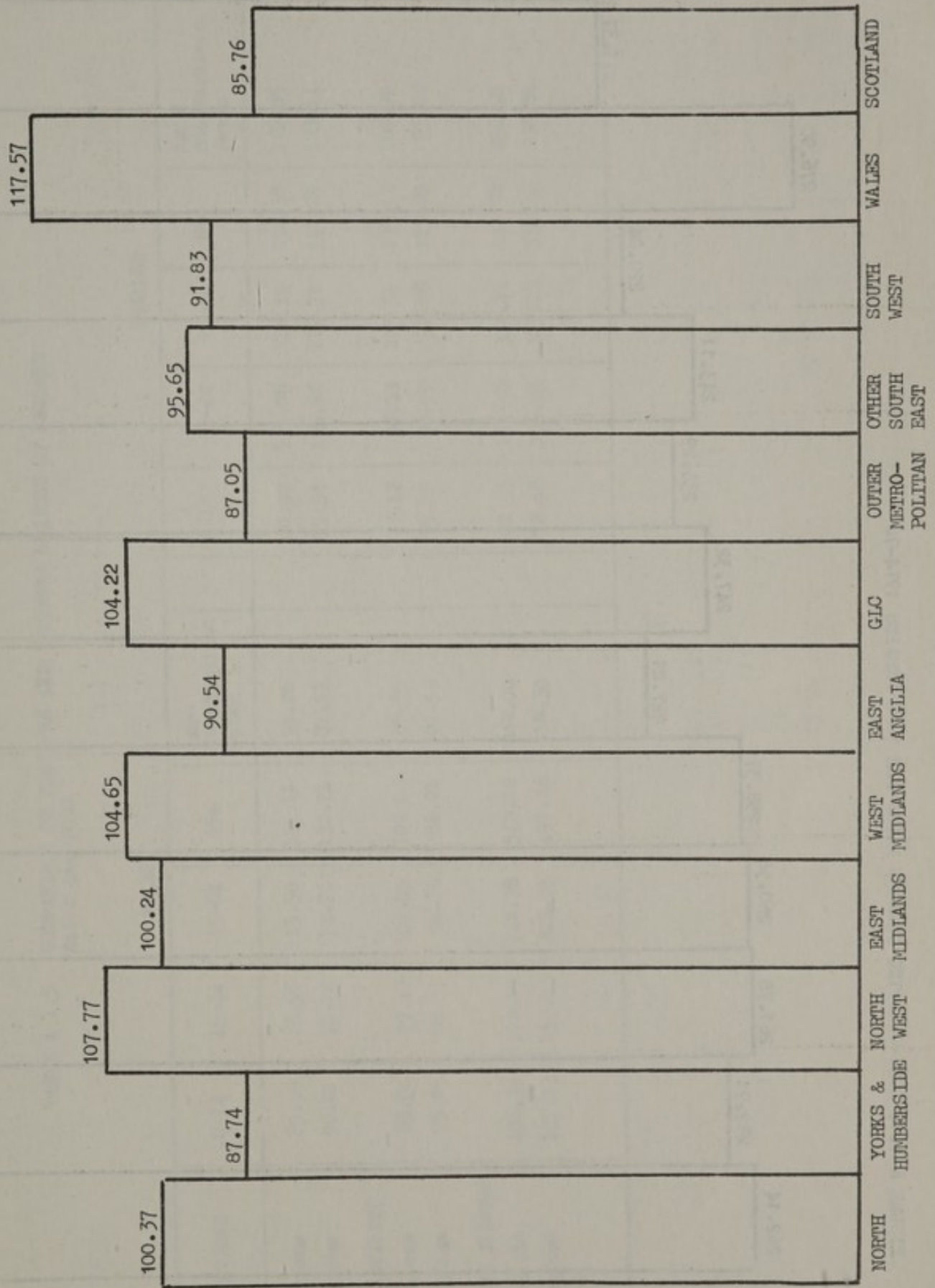


FIGURE A 1.12 LONG-STANDING ILLNESS RATES PER 1000 FEMALES 1974-76

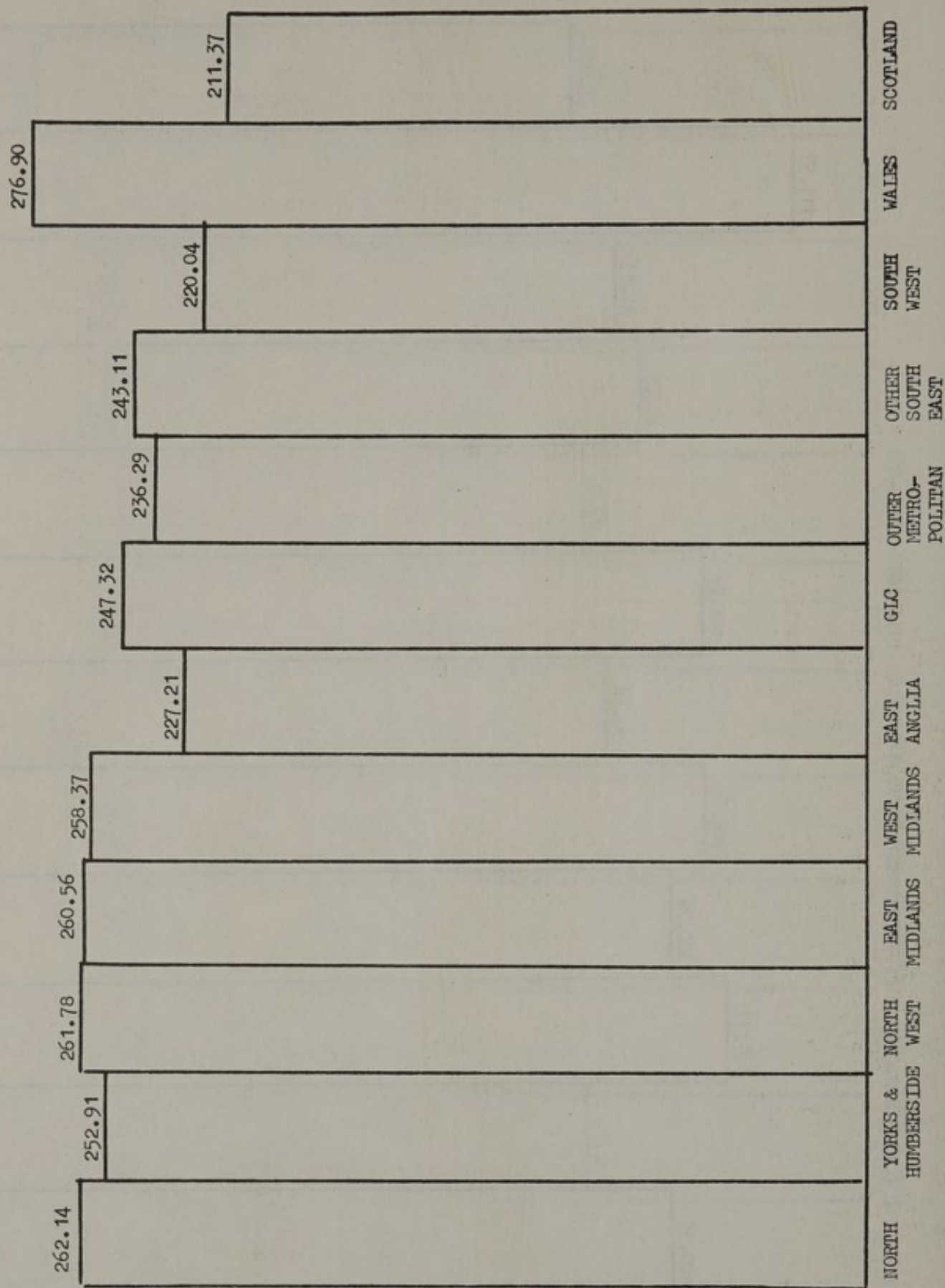


TABLE A 1.5 COMPARISON OF NORTHERN AND SOUTHERN REGIONS OF ENGLAND
Rates per 1000

	MALES						FEMALES							
	0-14	15-44	45-64	65+	Age- Standardised rates	0-14	15-44	45-64	65+	Age- Standardised rates				
GP CONSULTATIONS														
Northern Regions	89.58	76.96	115.50	131.11	95.26	80.97	135.08	112.19	156.38	120.65				
Southern Regions	90.01	70.74	92.76	130.71	87.63	95.54	135.86	112.71	148.25	123.11				
RESTRICTED ACTIVITY														
Northern Regions	88.86	79.17	102.05	102.02	89.55	77.12	98.03	105.51	133.92	100.79				
Southern Regions	95.65	84.53	84.86	88.21	87.92	79.12	98.99	91.28	115.20	95.22				
LONG-STANDING ILLNESS														
Northern Regions	106.34	172.79	366.38	542.16	242.00	81.55	164.46	356.42	586.58	258.98				
Southern Regions	107.13	155.13	315.05	497.26	218.30	78.48	155.25	303.73	552.34	236.88				

FIGURE A1.13 MALES SEEING A GP FOR THEIR RESTRICTED ACTIVITY

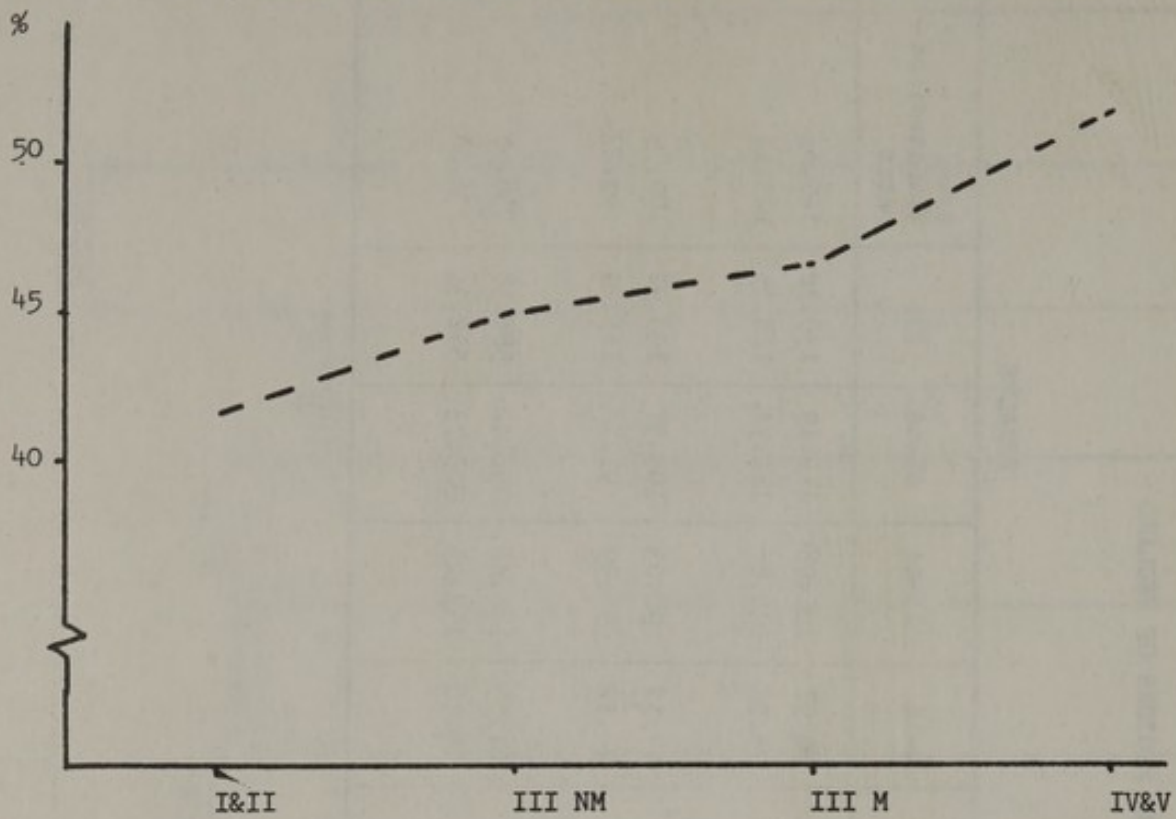


FIGURE A1.14 FEMALES SEEING A GP FOR THEIR RESTRICTED ACTIVITY

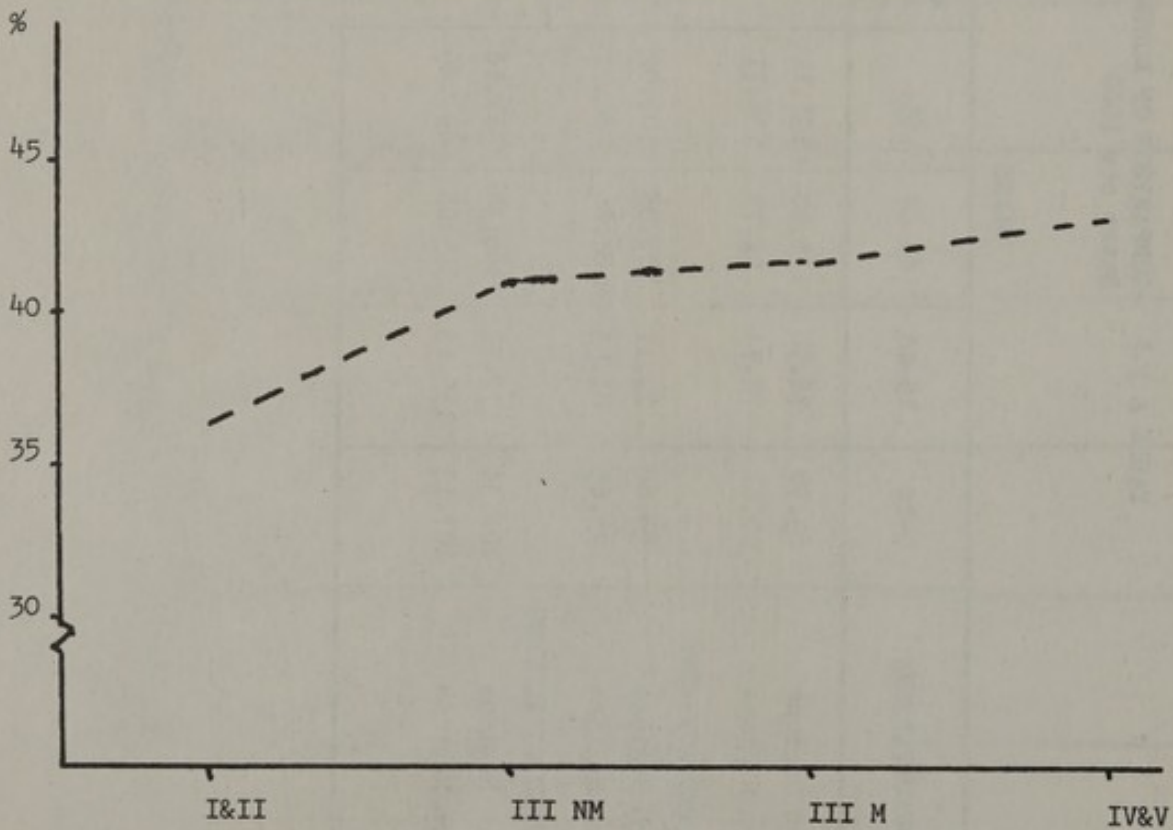


FIGURE A1.15 MALES SEEING A GP FOR THEIR LONG-STANDING ILLNESS

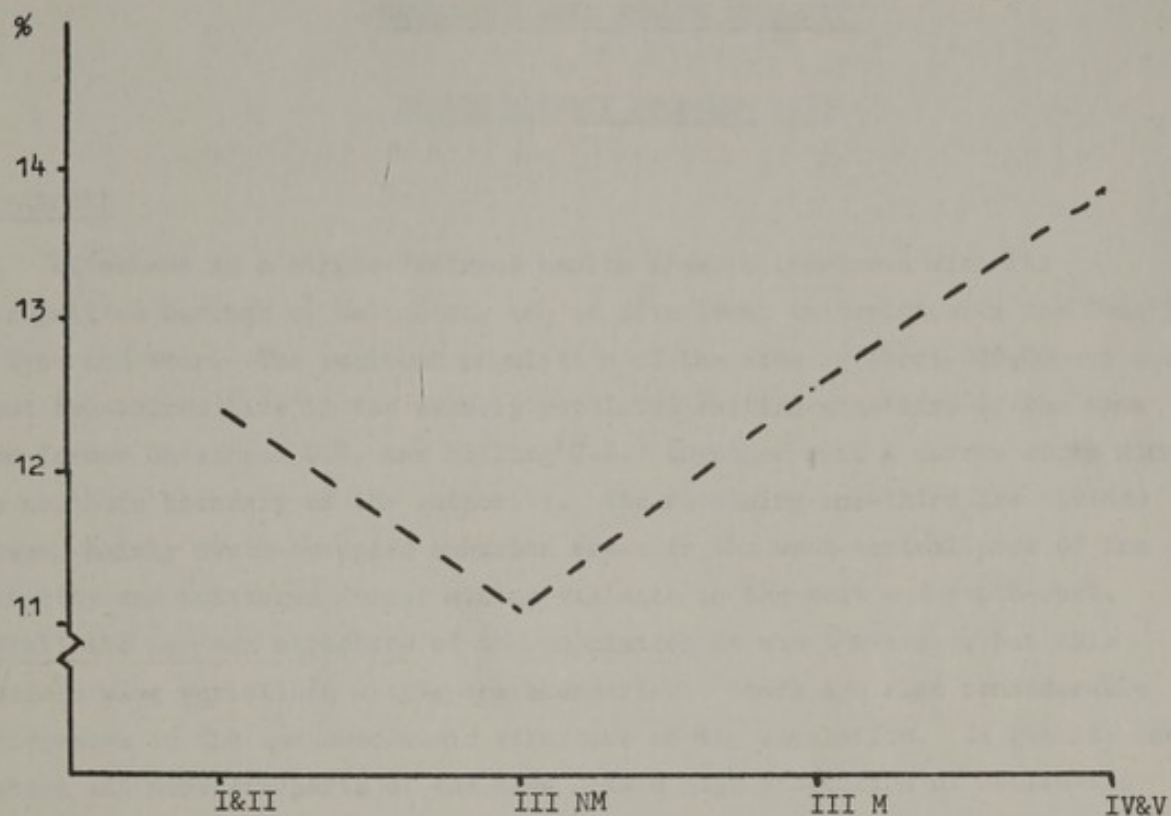


FIGURE A1.16 FEMALES SEEING A GP FOR THEIR LONG-STANDING ILLNESS

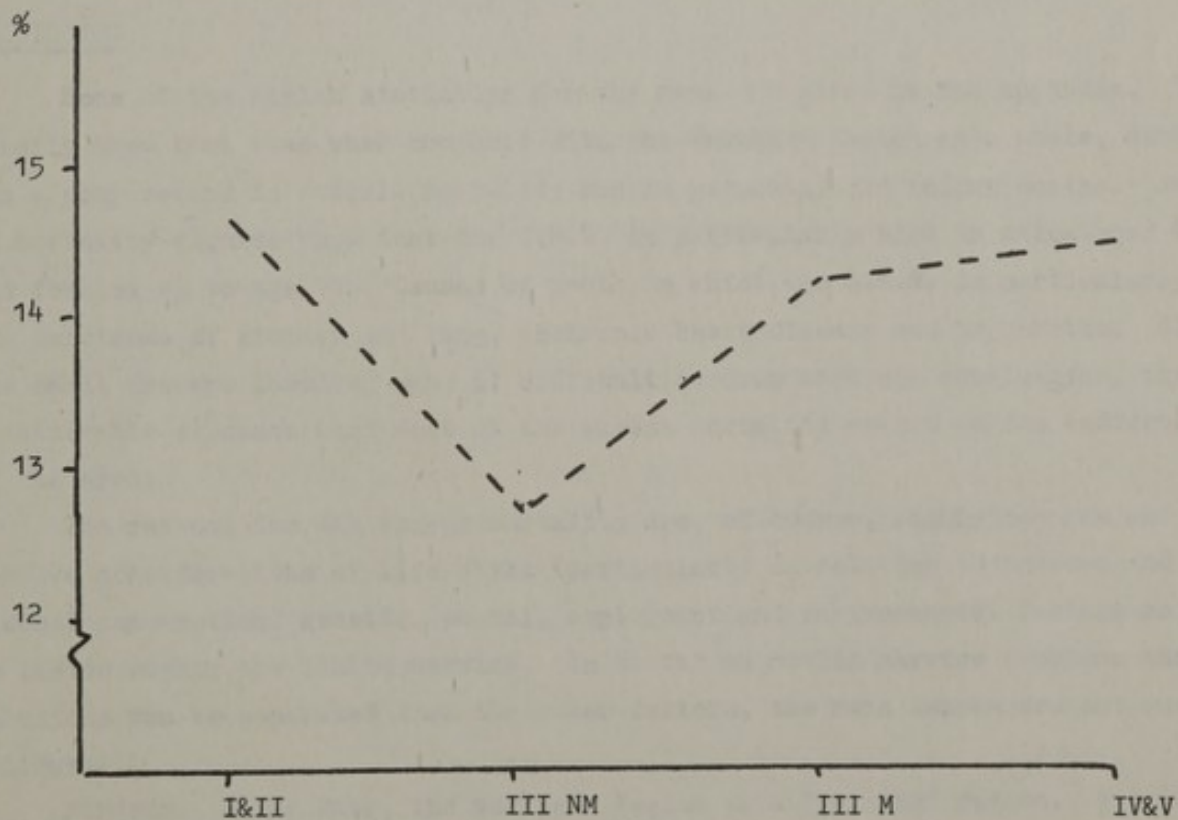


Figure 1: Plot of $\ln(\text{rate})$ versus $1/T$ for the reaction of H_2 with NO at various pressures.

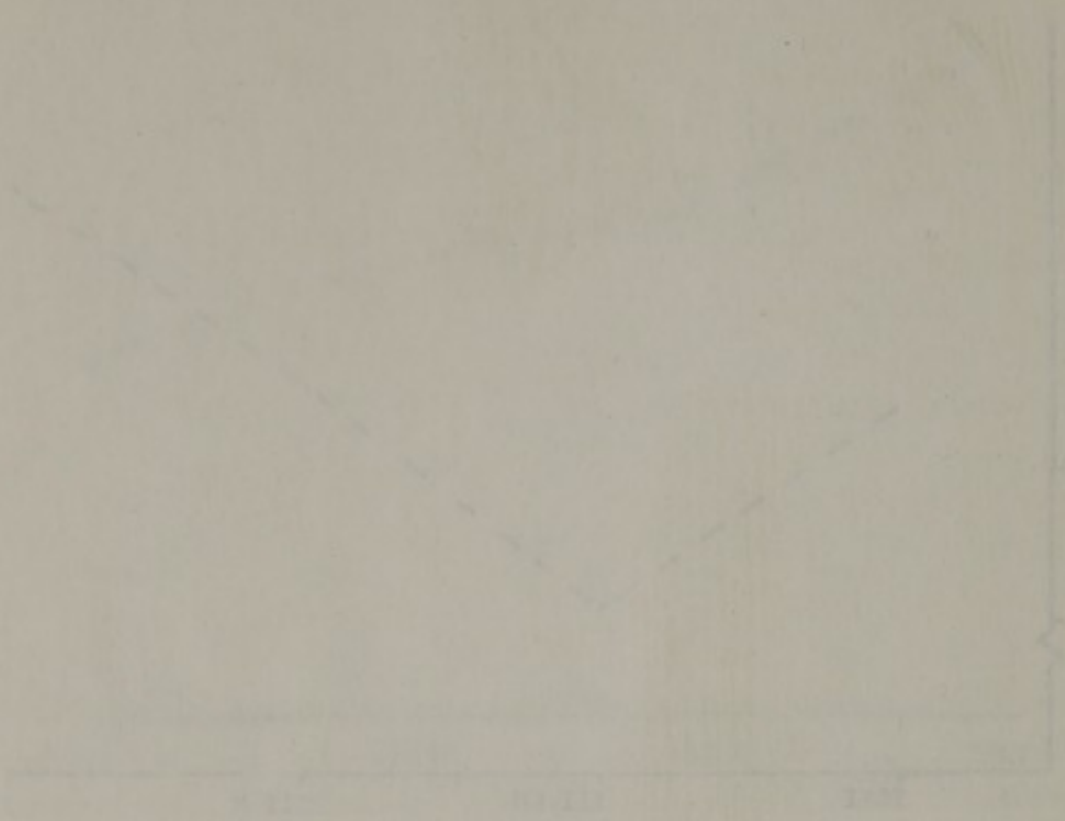
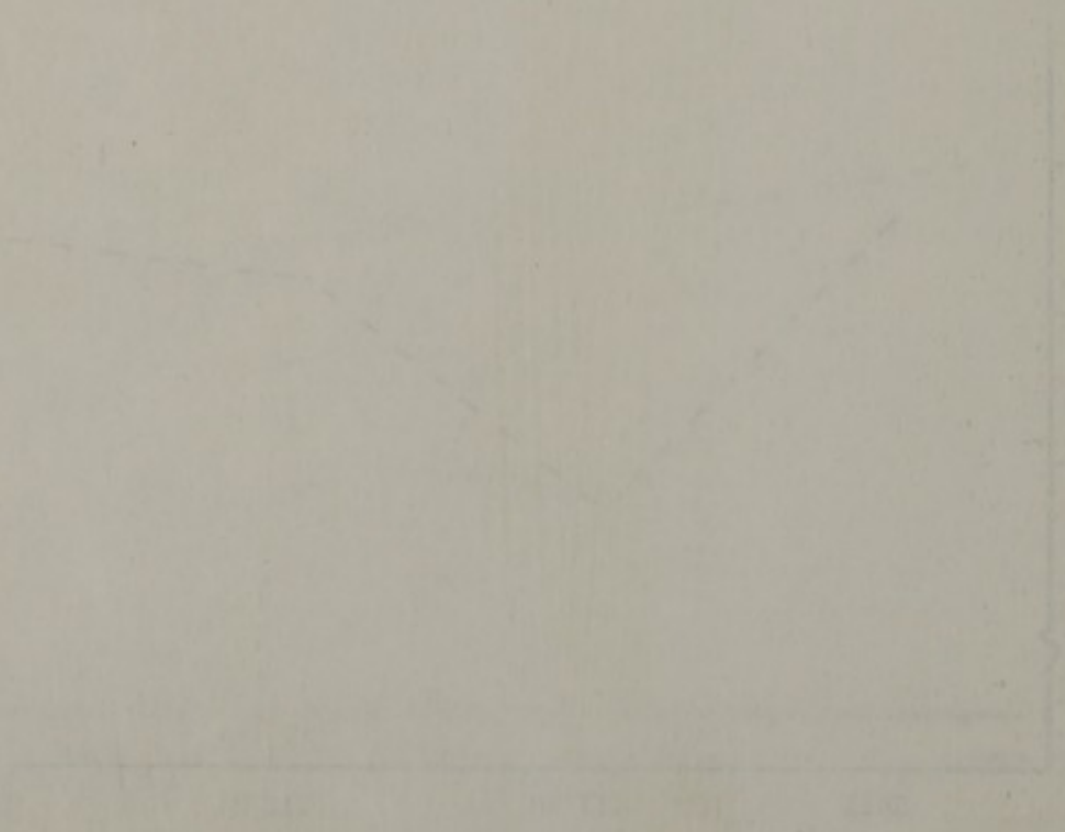


Figure 2: Plot of $\ln(\text{rate})$ versus $1/T$ for the reaction of H_2 with NO at various pressures.



GATESHEAD AREA HEALTH AUTHORITYHEALTH SERVICE PROBLEMS 1979BACKGROUND

Gateshead is a single-district health area, coterminous with the Metropolitan Borough of Gateshead, one of five local authorities in the County of Tyne and Wear. The resident population of the area is about 220,000 of whom about two-thirds live in the densely populated eastern one-third of the area (the former Gateshead C.B. and Felling U.D.) together with a narrow strip along the northern boundary of the authority. The remaining one-third are divided between mainly owner-occupied suburban areas in the west-central part of the authority and scattered former mining villages in the west and south-west. Overall the age/sex structure of the population is about average, but this conceals wide variations within the boundaries; there are also considerable differences in the socio-economic structure of the population. In general the eastern and northern parts of the area have a high proportion of health and social problems than the remainder. These discrepancies are further accentuated by the fact that the general hospitals in Gateshead serve a catchment population of about 170,000, the vast majority from the eastern half of the area. Our "exported" patients are mainly from the west and south of the area, where health problems are less intense.

STATISTICS

Some of the health statistics for the area are given in the appendix. They clearly show that even when compared with the Northern Region as a whole, Gateshead has a poor record in overall mortality and in perinatal and infant deaths. Analysis of mortality figures show that the S.M.R. is particularly high in males aged 45 - 64 and females up to age 74. Causes of death in which the S.M.R. is particularly high are carcinoma of stomach and lung, ischaemic heart disease and bronchitis. Although the small numbers involved make it difficult to draw absolute conclusions, there is considerable evidence that most of the excess mortality occurs in the eastern half of the area.

The reasons for the excess mortality are, of course, highly complex and involve considerations of life-style (particularly in relation to tobacco and alcohol consumption) genetic, social, employment and environmental factors as well as issues within the health service. In so far as health service problems and solutions can be separated from the other factors, the main issues are set out as follows:-

1. FINANCE. Under RAWP, the Northern Region is a "gaining" region. Within the region, applying the allocation formula used by the R.H.A., Gateshead is,

for 1979/80 funded to only 90.7% of its target allocation, representing a shortfall of about £1.3 million. The average distance from target for the nine areas in the region was 92.67%. This year, general development funds for the area of £219,000 represent an increase of 1.72% and at that rate of change it will be many years before Gateshead reaches its target allocation.

2. STAFF. There are major problems in recruiting and retaining almost all groups of qualified staff. The region as a whole fares badly and Gateshead has worse problems than much of the region. Particular difficulties are:-

(a) Hospital Medical Staff. Some consultant posts, even in the popular specialties have been difficult to fill, but the main deficiencies are at senior registrar and registrar level where the establishment is very low and improvements are restricted by central manpower policies. This puts a particular burden on consultants and means that senior house officers are having to do work which would, in many places, be done by more senior staff. The facts that there is no registrar or senior registrar in paediatrics and only one registrar for a busy obstetric/gynaecological service spread among three hospitals are examples of this problem.

(b) Nurses. Recruitment of qualified nurses for hospital and community services is very difficult. There are specially severe problems in attracting trained staff for the psychiatric service, but worst of all is the shortage of health visitors. Despite recent increases in the number of student health visitors being sent for training, the area is still very short of qualified staff.

(c) Para-medical Staff. There are shortages in physiotherapy, occupational therapy, speech therapy and chiropody. Although recruitment to the latter two has been a little easier in the last year, overall staffing levels mean that rehabilitation services are poor.

These staff shortages are not wholly due to the authority's financial situation; a major factor is the general shortage of trained staff within the region. Where there is intense local competition for scarce skills, authorities who are able to offer professionally rewarding work in pleasant surroundings have clear advantages. In Gateshead staff shortages mean high work-loads, while lack of money means relatively poor facilities. Although the latter are being improved and the image of the authority as being lively and active in applying new ideas is helping to compensate for the former, there is a long way to go.

Because few staff are attracted into the Northern Region from other parts of the country, training facilities need to be improved to ensure that the region becomes self-sufficient for professional staff. We are not able to offer any incentive payments to encourage staff to work in this difficult area and this is a matter which needs urgent consideration at national level.

3. ACUTE HOSPITAL SERVICES. These are scattered among three hospitals, each in the 200-260 bed range. Specialties spread over three units are difficult to run efficiently and are expensive, so taking a relatively high proportion of available finance. Waiting lists for general surgery are excessively long. Improvements should occur when a major hospital development, planned to start building in 1980/81, is completed.
4. MENTAL ILLNESS. In-patient beds for the mentally ill adults in most of Gateshead are in a hospital 15 miles away in rural Northumberland. There are plans to build an in-patient unit in Gateshead but completion will not be before 1987 and meantime the problems of staffing the existing hospital are considerable, particularly in view of doubt about its future after the new unit is built. Meantime a Day Hospital has been established in central Gateshead and is providing a base for rapidly developing community services. Particular attention is being given to the care and rehabilitation of chronic schizophrenics and to alcohol related problems. Alcohol has a large place in Tyneside culture and the medical and social problems stemming from its abuse are many and varied. Special efforts in preventive health are needed.
5. RESPIRATORY DISEASE. Chronic respiratory disease is a long-standing problem. After a slow start, local authority smoke control programmes have been rapidly accelerated and the long term benefits will be considerable. Industrial pollution is less marked as the old heavy industries decline, but there are still pockets of atmospheric pollution which cause concern. At a personal level, cigarette smoking plays its usual major role in causing chronic respiratory and other diseases.
5. ELDERLY. Health services for the elderly are not fully developed. Particular deficiencies are in Day Hospital provision (where the one small unit is unable to operate fully because of a long-running industrial dispute in the ambulance service) and in rehabilitation facilities, where the shortage of physiotherapists and occupational therapists is badly felt. There are tentative plans for further development of all these aspects of the service but shortage of funds and staff will need to be overcome before really effective improvements can occur. It is by no means certain that deficiencies in the health service, undeniably present, are the main problem in services for the elderly. Housing and social services are far from ideal and the A.H.A. and the local authority are undertaking joint studies funded from Joint Financing.

7. MATERNAL AND CHILD HEALTH. High perinatal and infant mortality rates are statistical evidence of a considerable amount of child ill-health and deprivation.

Maternity beds are divided at present between two small units, but will be centralised as a result of a building scheme which is about to start. In the maternity and child health services the main problem is, however, the inability of those most in need to make full use of the services available. Plans for improving medical and nursing support for families with deprived children are under active discussion. Particular interest is being given to improving the accessibility and uptake of ante-natal care and to developing links between general practice, the A.H.A. child health services and the education and social services. Evaluation of improvements in the service funded from the Inner City Partnership is being considered as a joint D.H.S.S./Gateshead A.H.A./Newcastle A.H.A.(T) study.

CERTAIN VITAL STATISTICS 1974-76 (1977 IN BRACKETS)

	<u>ENGLAND</u>	<u>NORTHERN REGION</u>	<u>GATESHEAD</u>
S.M.R. Male	100	112	116
Female	100	109	106
Persons	100	110 (112)	111 (117)
STILLBIRTH RATE	10.4 (9.4)	11.4 (11.0)	14.1 (15.0)
INFANT MORTALITY RATE	15.4 (13.8)	15.8 (14.9)	15.2 (17.2)
PERINATAL MORTALITY RATE	19.2 (17.0)	20.0 (19.2)	24.2 (23.3)

DEATHS AND STANDARDISED MORTALITY RATIO BY AGE AND SEX, GATESHEAD 1974-76

<u>AGE</u>	<u>MALES</u>		<u>FEMALES</u>	
	<u>DEATHS</u>	<u>S.M.R.</u>	<u>DEATHS</u>	<u>S.M.R.</u>
0 - 14	97	91	88	114
15 - 44	160	97	124	127
45 - 64	1,229	120	717	118
65 - 74	1,540	123	1,056	116
75+	1,388	114	1,959	97
TOTAL	4,414	117	3,944	106

DEATHS AND STANDARDISED MORTALITY RATIOS BY CERTAIN CAUSES, GATESHEAD 1974-76

PERSONS AGED 45 - 74

	<u>DEATHS</u>	<u>S.M.R.</u>
CARCINOMA OF STOMACH	150	152
CARCINOMA OF LUNG	476	138
ISCHAEMIC HEART DISEASE	1,429	125
BRONCHITIS	267	148
ALL OTHER CAUSES	2,220	110
TOTAL	4,542	120

GATESHEAD METROPOLITAN BOROUGH

PERINATAL MORTALITY RATES

<u>Area</u>	<u>75-76</u>	<u>76-77</u>	<u>77-78</u>	<u>Average</u>
1	11.8	18.2	13.5	14.5
2	20.0	65.2	0	28.4
3	10.9	28.1	12.3	17.1
4	31.9	18.2	0	16.7
5	27.4	19.4	0	15.6
6	9.6	4.4	17.5	10.3
7	68.4	90	0	52.8
8	20.0	25	17.2	20.7
9	10.2	40	17.4	22.5
10	32.2	18	23.9	24.7
11	15.3	49	0	21.4
12	30.3	47	22.3	33.2
13	27.0	25	0	17.3
14	0	36	0	12.0
15	0	0	41	14
16	0	11.9	0	3.9
GATESHEAD	19.19	26.7	16.9	21.16

GATESHEAD METROPOLITAN BOROUGH

% babies under 2,500 g.

<u>Area</u>	<u>1975/76</u>	<u>1976/77</u>
1	6.5	6.7
2	12.24	15.2
3	4.39	5.63
4	7.30	8.53
5	9.89	6.49
6	6.76	6.60
7	9.09	2.94
8	8.48	6.58
9	7.53	9.29
10	7.52	2.48
11	9.23	19.75
12	7.57	9.34
13	4.0	2.5
14	5.6	8.0
15	0	0
16	4.0	4.7
Average	7.56	7.29

PLANS AND PRIORITIES FOR TOWER HAMLETS 1979-1984

INTRODUCTION

The severe socio-economic deprivation of this part of London makes major demands upon the health services. The metropolitan districts of London are having financial resources reduced as a consequence of RAWP; hospital beds and hospital provision is being cut; the population of the East End is increasingly made up of the elderly, the handicapped, the immigrant and the unemployed. The problems are the problems of poverty in the widest sense. To make change a realistic possibility there will have to be major programmes of social change and effective development in the health service must be part of that programme. Nevertheless there is justification in making the Community Health Service of the East End a 'Health Priority Development' now. The load on the community service is increasing while inadequate buildings, a poor environment, scant supporting staff, expensive travel combine to make for rapid staff turnover and recruitment a recurrent nightmare.

The community service can offer a realistic option to the high technology drive of hospital medicine. The community service can offer prevention and care. The community service can support and enhance general medical practice, work together with local health, educational and housing services, enable the acute and long stay hospital to function effectively and efficiently. A strong community health service is good value for money and provides care in the home of the patient. It is responsive to the voice of the consumer.

AREAS FOR FUNDING

General Medical Practice

- a. Medical records - Age/sex Register
A4 Records
- b. Communications - Interpreter service for the GP.
- c. Community beds - The developments of the Community Hospital model
- d. GP Status - Support to provide a Department of General Practice at the London Hospital.

Health Education

- a. Premises - Need for a properly housed unit with library, information resources etc.
- b. Staffing - Adequate trained staff with statistical, epidemiological and public relations backup.

Community Staffing

- a. Premises - Urgent need for attractive and adequate premises to recruit and keep staff and to maintain morale.
- b. Staffing - More District Nurses and Health Visitors to allow us to build a team approach to General Practice and to provide at least the level of service available in less deprived areas.

Screening

- a. General Practice - Support for the detection and treatment of early disease in the elderly.
- b. Ante-Natal - A 1 : 10 sample of all births to monitor ante-natal and post-natal care using the methods of the Aberdeen Survey.
- c. The Handicapped - Set up an outset-type survey to define the handicapped of this district.
- d. The Deaf - The provision of special clinics and aids for the newly diagnosed deaf.

Paramedical Services

- a. Physiotherapy
 - b. Speech Therapy
 - c. Occupational Therapy
- } Increase staffing-level to allow a domiciliary service as well as an input to Day Nurseries/ Day Centres and Residential homes for the young child, the disabled and the handicapped.
- d. Premises - For the District Handicap Team
 - e. Chiropody - To provide a service that gives foot care every 2/12 to all people over 60 years.

Evaluation

If central government money is to be used to develop services in community health then the resource allocation must be judged against routine health data. It will be necessary to identify both measurable objectives and appropriate indicators among existing data. It is possible that the Department of Epidemiology at London Hospital's Medical College and the Department of Medical Geography Queen Mary College could be involved in the design, setting up, monitoring and evaluation of an experiment on the 'grandest scale'.

APPENDIX 4

DEATHS 1970-72 IN CLASSES IV AND V AND
 DEATHS IF RATES FOR CLASS I HAD APPLIED
 (1970-72) ENGLAND AND WALES

	Class IV			Class V		
	Observed	Estimated number if class 1 mortality rates had applied	"excess" deaths	Observed	Estimated number if class 1 mortality rates had applied	"excess" deaths
Stillbirths	5,158	3,571	1,587	2,316	1,192	1,124
infant deaths	7,627	4,700	2,927	4,001	1,550	2,451
deaths children 1-14	2,513	1,748	765	1,416	712	704
" men 15-64	56,295	37,915	18,380	31,077	17,378	13,699
" married women 15-64	21,811	15,135	6,676	10,322	6,294	4,028
" single women 15-64	4,027	3,884	143	790	629	161
" persons aged 65-74	82,919	67,897	15,022	44,532	38,133	6,399
Total	180,350	134,850	45,500	94,454	65,888	28,566

NOTE: Deaths of persons 75 and over not included

SOURCE: OPCS Occupational Mortality, 1970-72, England and Wales,
 London, HMSO, 1978 (for no of observed deaths)

TABLE A5.1

LONG-STANDING ILLNESS (LIMITING LONG-STANDING ILLNESS IN BRACKETS)
(RATES PER 1000) CB 1971-1976

MALES

	1970 ^a	1972 ^b	1973	1974	1975	1976	
Professional	(90)	153 (72)	133 (57)	141 (82)	163 (93)	176 (80)	
Employers and managers	(165)	173 (94)	187 (92)	185 (113)	216 (131)	215 (121)	
Intermediate	(187)	185 (101)	224 (122)	226 (147)	229 (150)	245 (149)	
Skilled manual	(188)	198 (114)	195 (109)	202 (132)	227 (143)	249 (160)	
Semi-skilled manual	(245)	241 (146)	217 (133)	222 (147)	268 (162)	276 (178)	
Unskilled manual	(334)	300 (209)	283 (190)	308 (225)	331 (227)	345 (234)	
	(190)	197 (115)	201 (113)	206 (134)	231 (144)	245 (153)	
			FEMALES				
Professional	(114)	104 (58)	117 (61)	154 (93)	149 (76)	177 (86)	
Employers and managers	(155)	163 (86)	162 (82)	176 (115)	212 (124)	206 (131)	
Intermediate	(157)	198 (106)	212 (119)	222 (143)	244 (152)	266 (163)	
Skilled manual	(192)	185 (111)	180 (103)	198 (124)	216 (139)	228 (143)	
Semi-skilled manual	(279)	285 (176)	250 (157)	280 (193)	293 (197)	312 (213)	
Unskilled manual	(340)	333 (206)	323 (203)	314 (229)	377 (263)	435 (299)	
	(206)	215 (215)	210 (123)	224 (150)	246 (159)	264 (170)	

NOTE: a. England and Wales, those aged 15 or over only, limiting long-standing illness only.

b. England and Wales

SOURCE: Reports of the GHS

TABLE A5.2

ACUTE SICKNESS* BY SEX AND SOCIO-ECONOMIC GROUP:

RATES PER 1000, 1971-1976

All persons	Great Britain					
	1971 [‡]	1972	1973	1974	1975	1976
<u>Males</u>						
Professional	66	63	78	74	91	98
Employers and managers	69	70	69	83	75	79
Intermediate and junior non-manual	74	69	79	99	87	92
Skilled manual (incl foremen and supervisors) and own account non-professional	78	76	86	96	90	95
Semi-skilled manual and personal service	83	84	86	99	93	78
Unskilled manual	102	114	101	111	77	100
<u>Females</u>						
Professional	86	74	89	94	83	109
Employers and managers	81	71	93	88	87	80
Intermediate and junior non-manual	85	81	97	104	99	106
Skilled manual (incl foremen and supervisors) and own account non-professional	75	80	81	96	95	91
Semi-skilled manual and personal service	90	95	102	108	111	104
Unskilled manual	92	104	101	115	106	103

* Persons reporting restricted activity in a 2-week reference period.

‡ England and Wales only.

SOURCE: Report of the GHS, 1976, London, HMSO, 1978, p.76

TABLE A5.3

OP(IHS) CONSULTATIONS* BY SEX AND SOCIO-ECONOMIC GROUP: 1971-1976

(a) PERSONS CONSULTING: RATES PER 1000

All persons	Great Britain					
	1971 [†]	1972 [†]	1973	1974	1975	1976
<u>Males</u>						
Professional	86	87	84	82	85	96
Employers and managers	100	96	82	85	83	89
Intermediate and junior non-manual	93	91	97	96	96	92
Skilled manual (incl foremen and supervisors) and own account non-professional	97	95	100	100	95	94
Semi-skilled and manual and personal service	105	115	102	120	104	87
Unskilled manual	110	137	122	116	94	107
<u>Females</u>						
Professional	..	119	90	120	114	110
Employers and managers	..	109	105	118	119	111
Intermediate and junior non-manual	..	134	123	124	126	131
Skilled manual (incl foremen and supervisors) and own account non-professional	..	133	117	129	115	113
Semi-skilled manual and personal service	..	134	132	132	135	128
Unskilled manual	..	133	127	148	126	127

(b) CONSULTATIONS: RATES PER 1000

All persons	Great Britain					
	1971 [†]	1972 [†]	1973	1974	1975	1976
<u>Males</u>						
Professional	100	110	100	101	104	114
Employers and managers	124	123	107	104	103	118
Intermediate and junior non-manual	115	113	121	116	119	112
Skilled manual (incl foremen and supervisors) and own account non-professional	122	126	132	126	117	118
Semi-skilled manual and personal service	133	145	125	147	134	104
Unskilled manual	143	193	164	148	126	142
<u>Females</u>						
Professional	..	151	107	145	136	131
Employers and managers	..	141	128	149	136	130
Intermediate and junior non-manual	..	166	150	148	160	152
Skilled manual (incl foremen and supervisors) and own account non-professional	..	170	140	149	137	139
Semi-skilled manual and personal service	..	163	161	160	167	149
Unskilled manual	..	177	161	174	145	133

* Consultants in a 2-week reference period.

† England and Wales only.

SOURCE: CES, 1976, p.78

TABLE A6.1
Two versions of trends in the distribution of wealth (Britain)

YEAR	Inland Revenue data series ^a				Atkinson and Harrison (assumption B3) ^b			
	Top 1%	Top 5%	Top 10%	Top 20%	Top 1%	Top 5%	Top 10%	Top 20%
1960	38.2	64.3	76.7	89.8	34.4	60.0	72.1	83.6
1964	34.4	59.3	73.5	88.4	34.7	59.2	72.0	85.2
1966	31.8	56.7	71.8	87.8	31.0	56.1	69.9	84.2
1968	32.7	59.0	73.8	89.4	33.6	58.6	72.0	85.4
1970	29.0	56.3	70.1	89.0	30.1	54.3	69.4	84.9
1972	29.9	56.3	71.9	89.2	32.0	57.2	71.7	85.3

Notes:

- a Assuming that persons not covered by the Inland Revenue estimates have no wealth.
- b Assuming that the value of certain property not accounted for by estate data but estimated by means of the balance-sheet method is distributed between the population included in the estate data and the population excluded. This is their "central estimate".

Sources:

Royal Commission on the Distribution of Income and Wealth, Report No. 5, Third Report on the Standing Reference, Cmd. 6939, HMSO, London, 1977, p.76; Atkinson, A.B., and Harrison, A.J., Distribution of Personal Wealth in Britain, Cambridge University Press, 1978, p.159.

TABLE A6.2

Distribution of Personal Income - Study of the Incidence
of Taxes and Benefits: 1961 to 1975, UK.

Percentage shares of final income received by given quantile groups,
and supplementary statistics; 1961 to 1975

Income unit: households

Quantile group	Final income			
	1961	1965	1971	1975
Top 10 per cent	23.7	23.3	23.7	22.4
11 - 20 per cent	15.1	15.2	15.6	15.4
21 - 30 per cent	12.8	12.8	12.8	13.0
31 - 40 per cent	11.1	11.1	11.0	11.2
41 - 50 per cent	9.8	9.8	9.6	9.7
51 - 60 per cent	8.6	8.5	8.3	8.4
61 - 70 per cent	7.2	7.1	6.9	7.0
71 - 80 per cent	5.8	5.7	5.4	5.7
81 - 90 per cent	4.3	4.3	4.1	4.3
91 - 100 per cent	1.7	2.3	2.5	2.9
Difference as a percentage of the median between highest and lowest Deciles	149	149	158	149
upper and lower quartiles	75	77	83	81
Median £ pw	15	18	26	52 ^{1/2}
GINI coefficient %	32.9	32.2	33.0	31.1

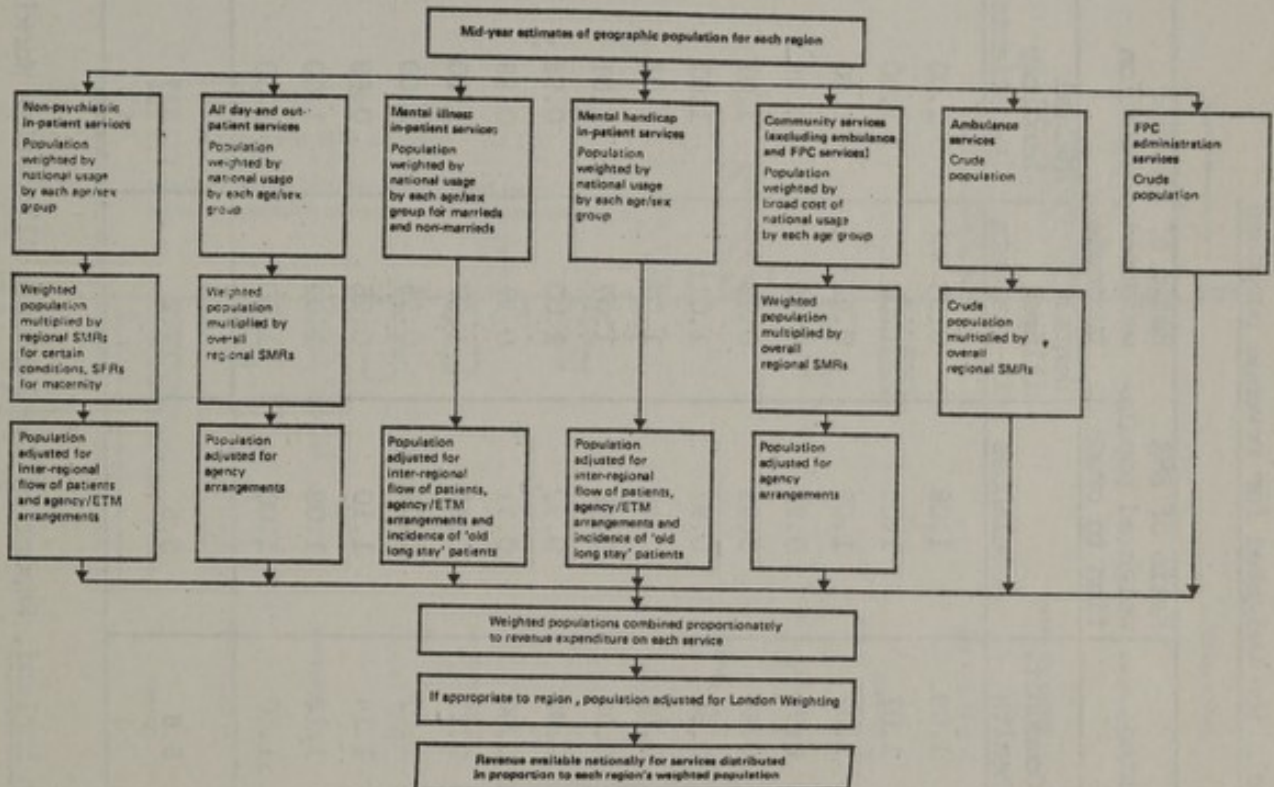
source: Royal Commission on the Distribution of Income
& Wealth

While this Table shows no pronounced trend in the distribution of final income, it is also true that fringe benefits (employer welfare and public sector subsidies) have grown in importance, and probably this has been to the relative advantage of higher income groups. (See for example Royal Commission on Distribution of Income and Wealth Report No 13 Chapter 4 and Appendix H, 1975)

APPENDIX 7

Figure A7.1

The Build-Up of a Revenue Target



source: Sharing Resources for Health in England (Report of the Resource Allocation Working Party, HMSO 1976) page 26

TABLE A7.1

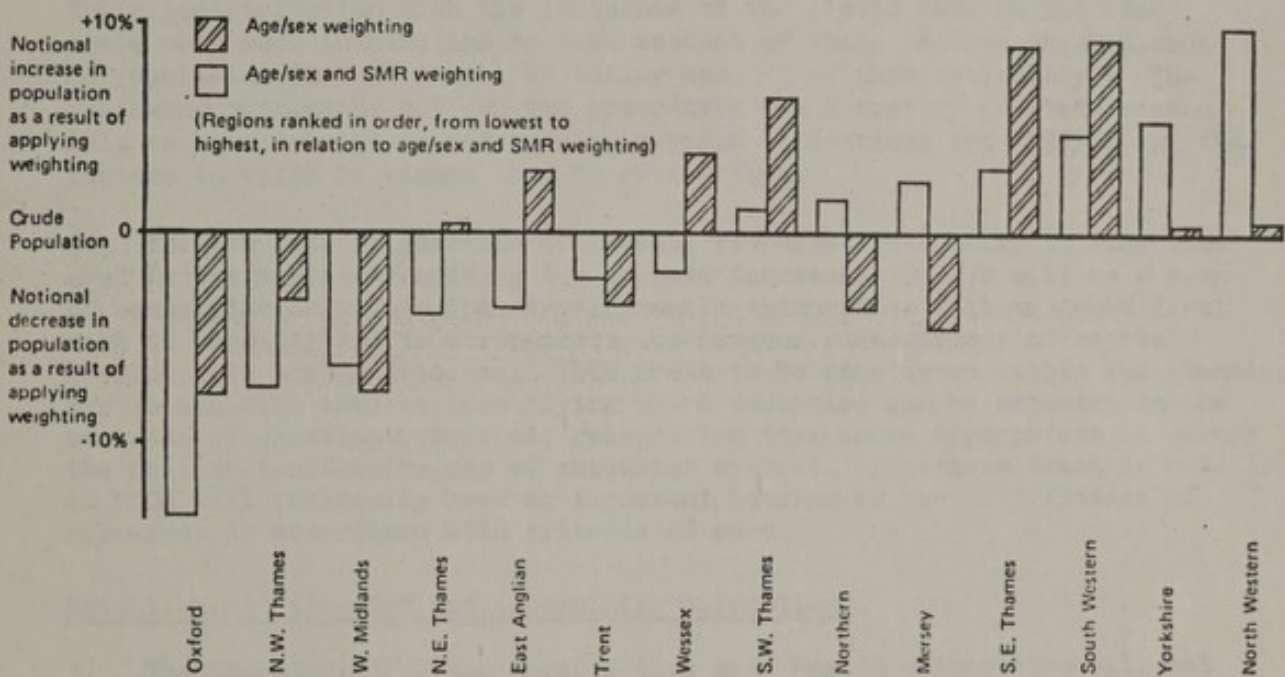
1975 Population weighted for revenue purposes

Region	Ratio of age/sex/SMR weighted population to crude			Ratio of SMR weighted population to crude		Ratio of age/sex weighted population to crude		FPC Administration	Aggregated weighted population to crude
	Non-psychiatric in-patients	All day and out patients	Community health	Ambulances	Mental illness in-patients	Mental handicap in-patients			
Northern	1.02	1.09	1.09	1.08	0.98	1.00		1.00	1.03
Yorkshire	1.05	1.05	1.07	1.05	1.00	1.00		1.00	1.05
Trent	0.98	1.01	1.02	1.02	0.98	1.00		1.00	0.99
East Anglia	0.96	0.91	0.92	0.92	0.99	0.98		1.00	0.96
NW Thames	0.93	0.95	0.89	0.95	0.98	1.01		1.00	0.94
NE Thames	0.96	0.97	0.95	0.97	1.01	1.01		1.00	0.97
SE Thames	1.03	0.96	0.96	0.96	1.07	1.01		1.00	1.02
SW Thames	1.01	0.97	0.93	0.96	1.07	1.01		1.00	1.01
Wessex	0.98	0.90	0.93	0.92	1.00	0.98		1.00	0.97
Oxford	0.86	0.89	0.90	0.91	0.91	0.98		1.00	0.88
South Western	1.05	0.97	0.97	0.96	1.07	1.00		1.00	1.03
West Midlands	0.94	1.01	1.02	1.02	0.95	1.00		1.00	0.97
Mersey	1.03	1.11	1.14	1.10	0.96	0.99		1.00	1.04
North Western	1.10	1.11	1.13	1.09	1.02	1.00		1.00	1.09
England	1.00	1.00	1.00	1.00	1.00	1.00		1.00	1.00
Total per cent of revenue expenditure	55.9	13.4	8.8	3.5	12.2	5.7		0.5	100

Source: DHSS, *Sharing Resources for Health in England*, Report of the Resource Allocation Working Party, London, HMSO, 1976, pp.100, 109-116.

FIGURE A7.2

Chart illustrating the effects of age/sex weighting and age/sex/SMR weighting (applied to each region's crude population) (based on figures contained in Table C7)



Source: Sharing Resources for Health in England, Report of the Resource Allocation Working Party, Department of Health and Social Security, London, HMSO, 1976.

Figure 1

Figure 1 shows the results of the analysis of variance for the effect of treatment on the response variable. The analysis was conducted using a two-way ANOVA with treatment and block as factors. The results are presented in the following table.

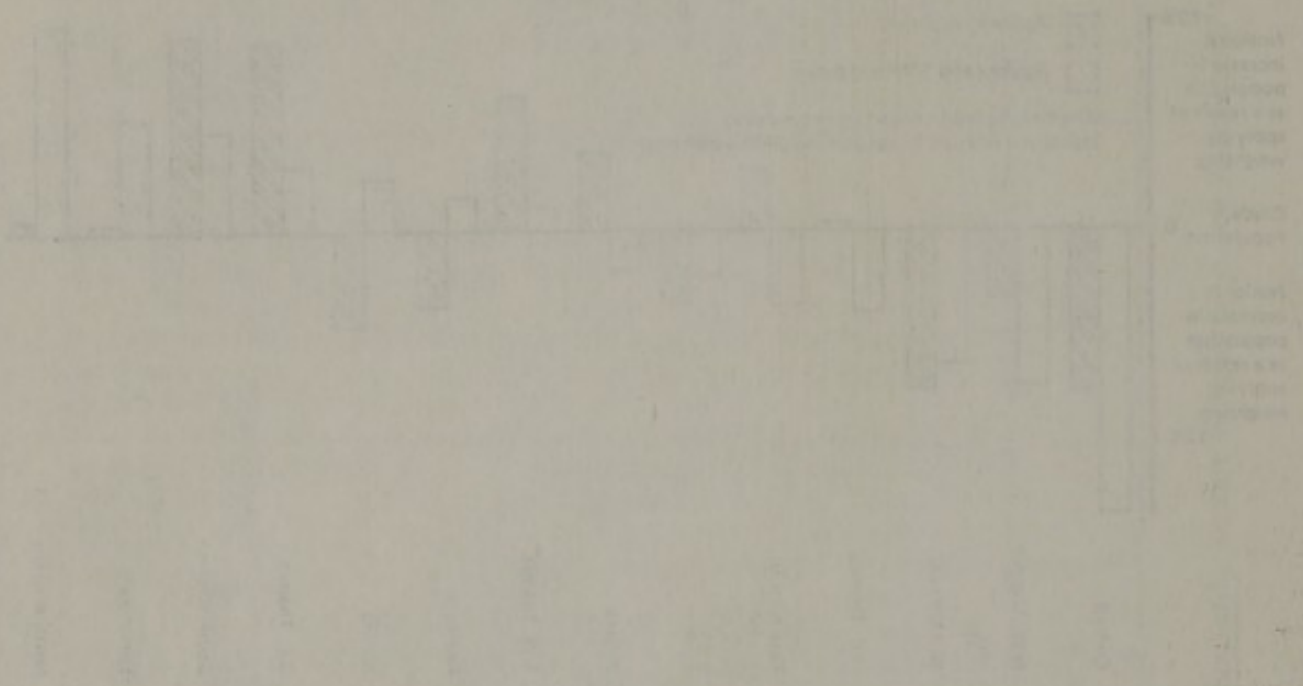


Figure 1. Results of the analysis of variance for the effect of treatment on the response variable. The analysis was conducted using a two-way ANOVA with treatment and block as factors. The results are presented in the following table.

APPENDIX 8

Resource Allocation : Secretary of State's Instructions to RHA's

Letter of 21 February 1977

Dear Sir

REVENUE ALLOCATIONS FOR HOSPITAL AND COMMUNITY HEALTH SERVICES 1977-78] ALLOCATIONS WITHIN REGIONS

1. The Secretary of State in his statement on resource allocation issued on 21 December 1976 said "I shall be telling health authorities to plan their redistribution with the influence of the growth rate on the time scale very much in mind and to take account of those factors which cannot be quantified just as I will be taking account of them nationally". The following paragraphs set out the procedures the Secretary of State wishes RHAs to bear in mind in determining revenue allocations for 1977/78 and the factors to which he wishes them to give weight.

2. The low rate of increase of revenue resources nationally implies that even in the Regions receiving the biggest increases 1977/78 will be a year of consolidation rather than development. Authorities will no doubt first wish to consider how to accommodate the revenue consequences of capital developments coming into use. This needs to be considered within the planning system and will involve identifying where economies can be expected in the use made of existing resources, redeploying them where appropriate to secure the most cost-effective use of resources overall. Decisions taken in relation to RCCS will frequently have an important bearing on the distribution of resources in accordance with criteria of need.

Establishing "targets" and determining allocations

3. The Secretary of State accepts that some health authorities will not find it possible to work through in full for 1977/78 the procedure recommended by the Resource Allocation Working Party and he knows that some authorities have already reached substantial agreement in consultation with the interests concerned on a basis of allocation following more or less closely that procedures. He recognises that, as regards some elements of the process of calculating targets on a uniform basis, the necessary information may not be available for health districts, or, if available, may not be regarded by all concerned as sufficiently reliable. Nevertheless, the Secretary of State believes that there is value in RHAs' and AHAs' jointly developing a "target" for each district, wherever possible, following the methods described in Chapter 3 of the second report of the Working Party but basing the calculation on the Regional "target" for 1977/78 (excluding SIFT) notified in the revenue allocation letter. Where this is not possible before decisions have to be taken on allocations to AHAs for 1977/78, cruder calculations may be carried out, if necessary for Areas as a whole instead of for their constituent districts, to establish measures of relative need. These calculations will include a weighting of managed population according to age and sex structure and by SMRs applied to national service utilisation rates on the general lines recommended by the Working Party to the extent considered by the Authority practicable and credible. (At Area or district level the available SMRs - for the period April 1974 to December 1975 - may show unexpectedly high

or low values. Nevertheless authorities should if possible use the cause-specific SMRs in weighting the population for non-psychiatric in-patient services because, although they may differ considerably from overall SMRs in their effect on the "targets", these differences will, except in the case of small Health Districts, more often reflect real differences in the pattern of relative needs than be caused by the lower reliability of the cause-specific SMRs. Allowance will then be made for measured or estimated cross-boundary flows. Authorities should during the course of the year review the data available to them for use in calculating allocations. It will be important to improve the basis on which future decisions on resource allocation are taken.

4. Revenue allocations to each district or Area for 1976/77 may then be compared with the district or Area target, however crudely calculated, and the reasons for the difference (including any apparent anomaly that may be identified in the level of the target) and the scope for change analysed. For this purpose the revenue allocations must be enhanced by an apportionment of 1976/77 allocations to RHA managed services and RHA administration, and, as regards districts, AHA managed services and administration, and revalued to 1977/78 cash limit levels but reduced by the amount of the 1977/78 Service Increment for Teaching (see paragraph 6 below). In comparing allocations and targets full regard needs to be paid to all the following:

- a. uneven distribution between Areas and districts of national, regional or sub-regional specialties (if not already reflected in patient flow adjustments) and centres of development and excellence; of provision for teaching of nurses and professions supplementary to medicine; and of capital schemes coming into use earlier than corresponding savings can be found locally by closures and rationalisation (or where such savings are, as a matter of policy, not proposed);
- b. any identified disparities in the effect of local market forces on the cost of providing services;
- c. any identified disparities in the level of provision of family practitioner or local authority services affecting the need for hospital or community health services;
- d. any services (including research or development activities) provided, other than on a repayment basis or taken into account in calculating targets by patient flow adjustments to weighted population, by one Area or district for the benefit of populations of other Areas or districts;
- e. other relevant local circumstances (eg. projected population changes, abnormal workloads, the presence of a dental hospital).

Certain of these factors have influenced the Secretary of State's own decisions on regional allocations for 1977/78; others may be ignored between Regions (as capable of being absorbed within a RHA's resources) but they are of such a weight at Area or district level that deliberate allowance must be made for them.

5. While some limited movement towards "target" allocations will generally be possible, the Secretary of State accepts that there may be circumstances which will make it inappropriate in 1977/78 to reduce the difference between current allocation and target and, exceptionally, appropriate actually to increase it. It is essential in such instances that the reason for the decision should be spelled out and the weight attached to particular considerations stated, that is, among those listed in paragraph 4(a. to e.) above.

Teaching facilities

6. The purpose of SIFT and its relationship with the main service allocation should be clearly understood. SIFT is distinguished from the main service allocation in order to ensure that a specific sum will be protected from redistribution in recognition of the additional costs arising from the provision of facilities for clinical teaching of medical and dental students. Decisions on the degree of redistribution which is sensible and practicable in any particular year need, however, to take into account the total resources to be made available to a Region, Area or district. Hence, as the Working Party recommended and as the Secretary of State made clear in his statement of 21 December, after emphasising the vital importance of medical education for the future of the NHS and of health standards, "Where the increment differs from the amount of the so-called "Teaching and Research Allowance" which it supersedes, this is not of itself to be a reason for changing the amount of the total allocation to a particular Area, or district, or teaching hospital". If regard were not paid to this principle, the change in the value of SIFT as compared with that of the 1976/77 Teaching and Research Allowance would lead to automatic increases or decreases in the total resources allocated to a Region, Area or district the scale and timing of which would not necessarily be justified or appropriate to the immediate circumstances. University Liaison Committees ought accordingly to discuss, as an integral part of the process leading to decisions on allocation of resources, not the SIFT alone but the total level of resources (of which SIFT will be but a part) to be made available to units providing facilities for clinical teaching and especially the major teaching hospitals. This must be a matter of informed judgement, having regard to all the circumstances both in teaching and non-teaching Areas and districts, and not of any prescriptive right. Where medical schools are expanding, the increasing service needs of the teaching hospitals should be taken into consideration as an important claim upon available resources. And the Secretary of State accepts that funds should be available to sustain a high standard in centres where students are taught. But there is no reason to suppose that savings cannot be made in teaching units generally both in the cost of support services, eg. catering and ancillary services, and in clinical costs, eg. number and nature of routine investigations, just as they can in non-teaching units (and because costs in teaching hospitals tend to be higher than elsewhere the absolute value of possible savings may be greater). Authorities should take account of the above considerations in determining, in consultation with their University Liaison Committees, the level of total allocations to teaching Areas, districts and units.

7. In these determinations, in addition to the considerations mentioned in paragraph 4 above, Authorities will need to bear in mind the scale of facilities required to support the agreed student intakes for clinical teaching. This scale of provision may, in some instances and in some specialties, particularly in London, exceed that required to meet the needs of the district populations served by the hospitals. Adjustments to target allocations for cross boundary flows of hospital inpatients are designed to compensate for patient's drawn from outside the district population, but authorities may need to make use of local information to ensure that such adjustments are sufficiently sensitive. Allowance should also be made for out-patient (including commuter) flows but, in the probable absence of reliable statistics, this may need to be a matter for judgement in the light of the best information available locally. Imbalances between the levels of provision required for service and teaching purposes respectively will no doubt be subject to longer term studies by all the interests concerned as part of the strategic planning process. It is important that short term resource allocation should not seek to pre-empt longer term planning decision.

8. As noted in paragraph 4(e) above, a particular issue arises in relation to dental education, exemplifying the fact that SIFT relates to a fraction only of the total cost of teaching hospitals. At Area or district level, special allowance will need to be made for the service costs of dental hospitals which relate for the most part to work more generally undertaken not in hospitals but by family practitioners. Cost information will be available to Authorities and should be taken into account in determining allocations.

Unquantified factors

9. It was implicit in the RAWP report that when it became possible to quantify objectively for formula purposes the various unquantified factors referred to above and to weight the population basis of the target calculation to allow for them, existing relationships between allocations and targets of districts, Areas and Regions would be significantly altered. At regional level it is clear that the targets of the Thames Regions, for example, would be significantly higher, so that their existing allocations would appear much closer to their targets than under the illustrative calculation in the second report of the Resource Allocation Working Party or the calculation underlying the 1977/78 revenue allocations to RHAs. Because "targets" are simply shares of the total resources available, this would mean at the other extreme that other Regions' targets would be reduced so that they also were brought closer to their existing allocations. Within Regions there would be similar effects on the relationship between targets and allocations. It would accordingly be misleading to assume that targets calculated on the basis of those factors which can at this stage be quantified represent a level of allocation at which it would be appropriate to aim. They are indications of direction of change but not indicators of the amount of change which will be necessary. This needs to be kept closely in view when decisions are taken on the pace of change. There is clearly a maximum rate at which resources can sensibly be increased or can be diminished without damage to important services and insupportable organisational strain. As the Secretary of State said in his statement of 21 December 1976, while he is determined that resources should be more fairly shared, he does not think it practicable or reasonable to seek to achieve a rapid and mechanical equalisation of resources over a period of a few years. He wishes authorities to be guided by this

view in deciding on page of change. The Secretary of State agrees with the Working Party that further studies should be conducted for the purpose of arriving at means, wherever possible, of quantifying relevant factors which cannot at present be brought within the target calculation.

Monitoring

10. To enable the Secretary of State to fulfil his responsibility for monitoring the scale of provision of resources, generally and in particular for facilities for clinical teaching of medical and dental students, he requests RHAs to notify to the Department (Regional Liaison Principal) their proposed revenue allocations to AHAs for 1977/78, together with an explanation of the method used for determining these allocations and recording for comparison the allocations made to the AHAs for 1976/77. Similarly, he wishes AHA(T)s to notify to their RHAs their proposed allocation to each of their districts, recording for comparison the allocation made for 1976/77, and enclosing a second copy for the RHA to send to the Department. In addition, the Secretary of State wishes all AHAs of multi-district areas to give their RHAs information about the methods they have used in making allocations below Area level, with a second copy for the RHA to send to the Department to assist the Department in understanding how the application of the principles established by the Resource Allocation Working Party is developing generally.

Distribution of the letter

11. Copies of this letter are being sent to Regional Treasurers and Area Administrators and Treasurers and also to District Administrators and District Finance Officers. The contents of the letter should be brought to the attention of other members of Teams of Officers and Management Teams and of the advisory and liaison committees concerned.

Yours faithfully

R S KING

Letter of 28 February 1978

Dear Administrator

REVENUE ALLOCATIONS FOR HOSPITAL AND COMMUNITY HEALTH SERVICES 1978-79

ALLOCATIONS WITHIN REGIONS

Guidance for 1977/78 still valid

1. The Secretary of State's guidance on allocations within regions set out in the Department's letter of 21 February 1977 remains generally valid and should be followed by Regional and Area Health Authorities in determining revenue allocations to areas, districts and individual hospitals for 1978/79.

Calculation of "targets"

2. Paragraph 3 of the letter of 21 February 1977 recognised that it might not be possible to calculate area and district "targets" for 1977/78 using the methods recommended in chapter 3 of "Sharing resources for health in England". It is now possible to calculate such "targets" for 1978/79 using the regional "target" for 1977/78 as the base. If, however, an authority has been unable to bring together the information needed in time to calculate such "targets" for 1978/79, every effort should be made to carry out the recommended calculation for 1979/80. Only by comparing current allocations with "targets" which are generally comparable (even between districts and areas in different regions) can allocating authorities take well-founded decisions on the direction and pace of redistribution of resources and on the appropriateness of existing patterns of provision of services (see paragraph 6 below).

Pace of change

3. But authorities should not seek to apply mechanistically a predetermined rate of change from existing allocations towards "targets". The Secretary of State's decision on the pace of change as between regions took account of a range of unquantified factors and of special local pressures affecting the service. The weight to be attached to such factors and pressures at area or district level will generally be markedly greater than that the Secretary of State has judged appropriate centrally.

4. The guidance given in the earlier letter about factors to be taken into account still stands, but authorities should give particular weight to

a) provision to bring major capital works into use (including where necessary non-recurrent provision for a period when use of old and new premises must overlap) on the basis that all proper economies will be secured in running costs;

b. the total provision required to enable clinical teaching to be maintained (or, where expansion of student numbers has been agreed; extended);

c) the uneven distribution between areas, districts and individual hospitals of national, regional or sub-regional specialties and specialised laboratory services, to the extent that these are not picked up by adjustments to targets based on patient flows.

It is a health authority's duty to plan its affairs so as to make good use of capital investment in its region or area, and to provide not only the normal run of services for its own people but also to make such contribution as it can both to medical education and also to the specialised work of the NHS in centres of development or excellence so that the skills and experience of its staff may further extend the frontiers of medical knowledge and be put to the service of people from beyond its boundaries. The Secretary of State wishes authorities to bring newly-built facilities into use with the least delay possible and to discuss with the Department steps needed to achieve this where it presents any difficulty. RHAs and AHA(T)s should discuss with Regional and Area University Liaison Committees their proposed total allocations to teaching areas, districts and hospitals, including dental hospitals.

5. As in 1977/78, the additional funds available nationally are unlikely to permit a uniform pace of change towards "target" for every area within a regional or every district within an area. The scale of a new major project, for example, may make it necessary to give one area or district an addition which is out of proportion to its distance from "target" and which may take it above, or further above, its "target". To do this may imply that other areas or districts must be given allocations which leave them further below their "targets" than in the previous year. Reductions or stand-stills in allocations, whether temporary or longer-term, should however be carefully assessed so as to avoid damage to important services.

6. Even where there is no capital development to bring into use, there may be a good case for giving one area or district a disproportionate addition to its resources to enable substantial progress to be made in improving a particular service rather than giving several areas or districts small increases with which little can be achieved. The process of redistribution must take a period of years: and where developments can only be funded in one place or a limited number of places in one year, plans must be made so that the "inequity" of one year will be remedied as the turn of others comes in later years. Nor is it to be forgotten that in some instances the most effective way of providing some services in the long term for the population of a particular district may include a reliance (which should be planned in agreement with all the authorities concerned and may not be fully reflected in the calculation of "targets") on facilities in a neighbouring district.

7. Nevertheless the Secretary of State expects to see a significant redistribution of revenue resources achieved generally in 1978/79, and he wishes authorities to make clear the reasons why it is not practicable in particular instances. RHAs should accordingly notify to the Department (the Regional Liaison Principal) their proposed revenue allocations to AHAs for 1978/79, explaining how they have been determined and what the resulting relationships are between allocations and "targets". The extent to which the calculation of "targets" within the regions may depart from the recommendations in Chapter 3 of the RAWP Report should also be shown. AHAs should notify to their RHAs (with a second copy for the RHA to send to the

Department) their proposed allocations to districts, explaining similarly how they have been determined and the resulting relationships to "targets". AHA(T)s should add details of the allocations to their individual teaching hospitals and how these compare with their allocations for 1977/78. The Secretary of State wishes to have this information in the Department not later than the end of June, together with the remainder of the regional annual planning report (on which further guidance will be given later).

Joint finance

8. RHAs' allocations for joint financing of local authority social services projects have been calculated on the same basis as last year - population weighted by numbers of elderly persons and usage by various age groups of hospital facilities for mental illness and mental handicap. RHAs should use their discretion to modify this basis for determining allocations to AHAs where there are local reasons for doing so. They should also consider the desirability of operating a voluntary "brokerage" system year on year if an AHA and their corresponding local authority wish to defer, or to bring forward, use of these funds to make a bigger sum available than a single year's allocation allows or because of practical or programming difficulties. The object should be to achieve, by agreement with the authorities affected, full use of the funds available to the region as a whole within the year of allocation.

Distribution of this letter

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Yours sincerely

R S KING



APPENDIX 9: ILLUSTRATION OF VARIATION IN MORTALITY AND HOSPITAL ADMISSIONS IN RELATION TO OCCUPATIONAL CLASS

<u>CENTRAL BIRMINGHAM HEALTH DISTRICT WARDS</u>		POPULATION (mid-1974 est)	POPULATION AGE 0-14 (1971 Census)	POPULATION AGE 65+ (1971 Census)	% POP CLASS I + II (1971 Census)	% POP CLASS III (1971 Census)	% POP CLASS IV + V (1971 Census)	NUMBER OF BIRTHS (1974)	INFANT MORTALITY per 1,000 live births (Average 1970-4)	PAEDIATRIC HOSPITAL ADMISSIONS per 1,000 aged 0-14 (1974)	GEN MED & GEN SURG ADMISSIONS per 1,000 pop (1974)	% GEN MED & GEN SURG ADMISSIONS TO CBHD HOSPITALS	% TRAUMA & CASUALTY ADMISSIONS TO CBHD HOSPITALS
ACOCKS GREEN	27,200	6,180	3,861	23	48	26	399	21.9	15.8	54.4	37	14	
DELTEND	15,700	5,839	1,577	10	38	44	329	23.2	24.1	40.2	49	18	
DUDESTON	13,400	6,103	1,508	13	40	42	207	28.8	18.0	44.5	48	35	
EDGBASTON	27,300	4,874	3,150	47	22	22	344	19.1	20.8	60.9	37	13	
FOX HOLLIES	24,200	5,167	4,303	22	42	30	214	20.0	11.4	32.6	43	18	
HALL GREEN	28,200	5,516	4,674	50	36	12	272	8.9	14.0	45.4	48	18	
HARBORNE	24,700	4,231	3,859	41	35	17	288	20.1	22.6	50.8	44	9	
QUINTON	28,600	4,871	3,484	44	33	17	281	16.3	19.4	46.1	52	14	
SMALL HEATH	23,300	8,201	2,540	13	42	34	460	25.4	33.9	65.7	26	6	
SPARKBROOK	21,600	6,859	2,201	13	42	38	531	24.9	27.4	50.2	47	12	
SPARKHILL	28,500	8,049	3,030	16	43	32	581	22.3	43.5	65.0	41	9	
DISTRICT	262,700	65,890	34,187	27	38	28	3,906	21.6	21.5	51.3	42	13	
AREA	1,086,500						14,459	18.6					
ENGLAND & WALES									17.5 approx				

