[Report 1971] / Medical Officer of Health, Buckinghamshire County Council.

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BUCKINGHAMSHIRE

THE HEALTH OF THE COMMUNITY

1971

HEALTH EDUCATION

Discussion was stimulated by this poster competition entry by Geraldine Morris of Beaconsfield High School

COMMUNITY HEALTH TEAM AT WORK

General practitioner, district nurse, psychogeriatric nurse and health visitor consider how best to help an elderly patient

BUCKINGHAMSHIRE COUNTY COUNCIL

ANNUAL REPORTS

OF THE

COUNTY MEDICAL OFFICER OF HEALTH

AND

PRINCIPAL SCHOOL MEDICAL OFFICER

FOR THE YEAR

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COMMUNITY HEALTH TEAM AT WORK

Queen Charlotte's Obstetric Hospital, Goldhawk Road, and Health Visitor calling from house to house in a deprived district

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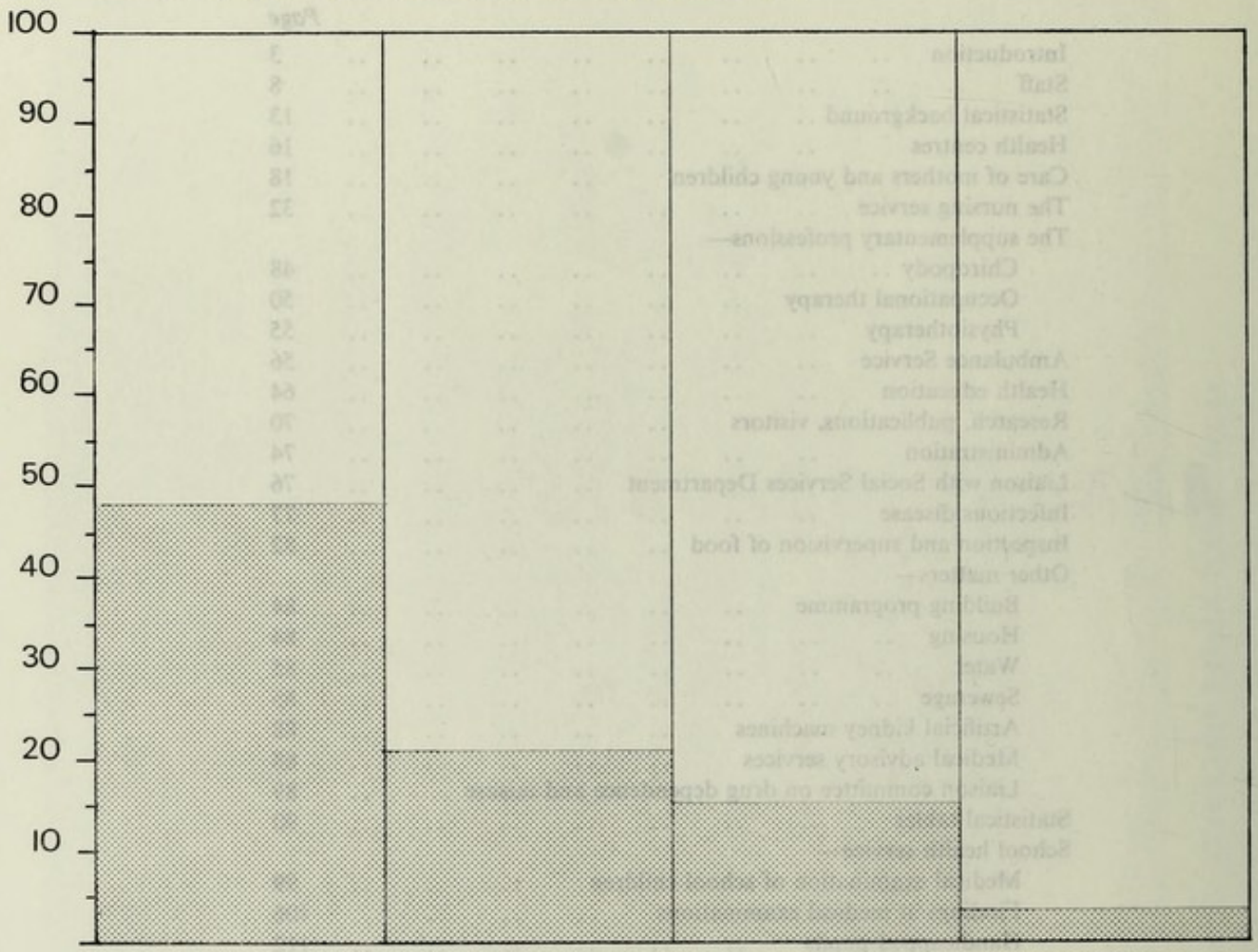
Principal Causes of Death 1971



CARDIOVASCULAR DISEASE	MALIGNANT DISEASE	RESPIRATORY DISEASE	ACCIDENTS (including motor vehicle accidents)
Total 2491	Total 1099	Total 780	Total 163
Percentage 48·3	Percentage 21·1	Percentage 15·1	Percentage 3·2

BUCKINGHAMSHIRE COUNTY COUNCIL

August, 1972.

To the Chairman and Members of Buckinghamshire County Council

MR. CHAIRMAN, MY LORD, LADIES AND GENTLEMEN,

I have the honour to present my fifth annual report, which describes the work of the County Health Department and of the School Health Service during 1971. The report is, as usual, a compilation of the work of many people but, unlike its four predecessors, does not include reference to various services which, on 1st April 1971, were transferred to the new Social Services Department. Many changes and developments are recorded in the report, and I hope that these will be of interest both to members of the Council and also to a wider readership throughout Buckinghamshire.

Health of the Community

The growth of the county continued, with an increase in population of 7,190. The birth rate of 16.9 per 1,000 was unchanged, as was the national figure of 16.0; whilst the crude death rate of 8.7 per 1,000 was 0.2 less than in 1970. There was, regrettably, an increase in the infant mortality rate to 16.0 per 1,000 live births which, although 2.0 below the national rate, was higher than the corresponding figure for 1970. Turning to maternal mortality, three deaths occurred, but all were of an unusual nature and such a pattern is most unlikely to repeat itself.

The main problems of mortality will be found in the statistical tables which appear on pages 90 and 91, and they are summarised in the histogram which appears on the opposite page. Having repeatedly made the point in my prefatory letters to previous annual reports, I do not propose to belabour it this year, but I nevertheless have a duty to emphasise to all members of the public that their health lies predominantly in their own hands. They have the ability, and the duty, to decide what to do about such health hazards as smoking and over-eating, and my staff and I have continued our efforts to present them with the facts on which to base their personal decisions.

It is fashionable to decry "pollution" in terms so wide that the word has become almost devoid of meaning. As a member of the public health branch of medicine, I require no convincing of the importance of controlling the physical and biological environments in the interests of the human race, but there is a lamentable tendency for "pollution" to be equated with "them". To put it another way, many members of the public are rightly concerned with toxicological and other problems stemming from industrial processes; but too many of them are unwilling to apply the same criteria when looking at their own ways of life.

Retrospect

As this is the fifth annual report for which I have been responsible, it might be helpful to try to summarise some of the developments and trends which have occurred during the past quinquennium.

Probably the most important aspect of public health work during the period in question has been its integrative role towards the entire National Health Service. This is first and foremost a matter of

cooperation between health service personnel, and numerous examples of such developments are to be found in this as in previous annual reports. One aid to cooperation in the case of primary care teams has been the provision of health centres, which must not be looked upon merely as re-housing operations for general practitioners but as premises specially designed, and large enough, to allow full teams of doctors, nurses, administrative staff and others to supply as comprehensive a health care service as possible for their local communities. In the case of the larger health centres, the possibility also presents of providing certain consultant out-patient facilities, thus bringing those nearer to the grass-roots level and facilitating closer cooperation between hospital consultants and members of primary care teams. In 1967 there were no health centres in Buckinghamshire; now there are three open, six under construction, five due for building to be commenced during the current financial year, and nine in the provisional future programme. In addition, the replacement of the highly unsatisfactory clinic premises at Pebble Lane, Aylesbury, is at last in sight.

On the nursing side, the process of attaching staff to general practices instead of working on a geographical basis, has been completed, and constitutes one of the most significant developments of recent years, allowing patients to be cared for by teams rather than by doctors and nurses who, all too often, had little idea of each others' precise roles and objectives. Similarly a variety of links have been forged with hospitals in order to create more closely integrated systems of care. These are well exemplified by joint approaches to the provision of midwifery services; by several liaison schemes for the care of particular types of patients; and by the recently developed psychogeriatric scheme in conjunction with the Royal Buckinghamshire and St. John's Hospital group. The growing amount and standard of nursing care supplied in the domiciliary and health centre settings has made increasing demands on staff, but the level of recruitment has kept pace with these. A major development, with the object of making the best use of nursing resources in the care of patients, has lain in the establishment of a new (Mayston) structure of nurse management which should increasingly demonstrate its value during the months which lie ahead.

Local authority health services have always had a particular responsibility towards children and here, too, a process of reorientation has been taking place. A start has been made towards the increasing involvement of family doctors in the running of clinics for children in their practices, and cooperation with the hospital paediatric services has likewise been strengthened by the participation of local authority doctors in assessment and other clinics. Large numbers of children are still seen by local authority medical and nursing staff at child health clinics and, during the past five years, there has been a strong move towards an approach based on developmental paediatrics. The statistics of children protected by various forms of immunisation have greatly improved as a result of the introduction of a computer controlled system for calling them forward to their family doctors or to local authority clinics when injections are due. Both in the pre-school and school health services selective systems of working have been introduced so that more attention can be concentrated on children who, as a result of their histories or other factors, are thought to be at greater risk of physical or mental disability than their peers. On the dental side, the level of service has risen despite difficulties in securing the requisite staff; and it should shortly be possible to begin to implement the County Council's long-standing policy of fluoridation of water supplies. Particular attention has been given, within the school health service, to the development of health education, and a valuable and continuing dialogue between health department and teaching staff has assisted in this process.

With the growing emphasis on out-patient, day-patient and domiciliary care, the work of the ambulance service has expanded as, indeed, has been the case ever since the advent of the National Health Service in 1948. A major development of the past five years, both nationally and locally, has been much greater emphasis on the training of ambulance personnel. In addition, in Buckinghamshire, a clear policy governing the equipment and replacement of vehicles has been adopted and is now producing dividends in terms of reliability and efficiency. The scheme for dealing with major disasters

has been revised and tested in several practice exercises, as well as in the course of backing up neighbouring ambulance services in recent multiple collisions in fog on the M1 motorway and in an air disaster near London airport.

There have been steady developments in other services to meet the needs of the expanding population of the county and to provide better facilities for particular groups of the community. Occupational therapy has been reorganised and expanded and a programme for the construction of new premises throughout the county has been initiated. The provision of chiropody has likewise been reviewed and the service developed in order to provide more help for the elderly, the handicapped and, with emphasis on the preventive side, for children. The speech therapy facilities of the school health service have, despite a severe national shortage of therapists, been increased to the highest level ever attained in the county.

All these reorganisations, developments and expansions have called for substantial adjustments on the part of the staff concerned, and I am grateful to my colleagues, drawn from many disciplines, for all that they have done. The provision of effective services to members of the public depends upon an efficient administrative machine to support the work of those who actually provide these services and, here again, the past five years have seen a major reorganisation in the central Department. The administrative staff are now organised into two broad divisions, covering health and administrative services respectively, together with a forward planning unit. Research, with its corollary of the publication of results, has been fostered by the establishment of a research panel, and the report records some of the outcomes of this.

A major change came in 1971 with the end of the combined Department of Health and Welfare and the setting up of the Social Services Department. In particular, the new Health Department ceased to be responsible for mental health, social work, home helps and a wide range of welfare services for the elderly and the disabled. I am particularly glad that, following the potentially traumatic separation, the two Departments rapidly settled down to work in cooperation with one another, as neither can hope, without the help of the other, to provide adequate help for the many people of Buckinghamshire who require it.

Prospect

It will be for my successor to write about the future in detail, but there are some points I would like to make in my valedictory report. I have always been a firm believer in the importance of the National Health Service as a social institution and, in an appendix to my annual report for 1968, I tried to trace some of the major trends during the first twenty years of its existence. It was then clear that the Service was outgrowing its administrative skeleton and I have since recorded the issuing by the previous Government of two Green Papers and by the present one of a Consultative Document on its reorganisation.

The basic need for administrative reorganisation stems from the absence of a synoptic view of health services at local level, as the present tripartite structure of hospital, executive council and local authority health services militates against the most effective use of scarce resources of skilled personnel and of money to meet the health needs of the community. Much has, of course, been done towards functional integration within the present system, but more radical action is needed, and the Government has just produced a White Paper describing the changes which will come about on 1st April, 1974.

This change will take place simultaneously with the reorganisation of local government and, although responsibility for the revised health services will rest, at local level, on ad hoc area health authorities, it will be essential for these to work in the closest possible co-operation with the new local authorities with which they will be co-terminous. The new Buckinghamshire local authority and the new Buckinghamshire area health authority will have overlapping interests, particularly in the wide

fields covered by the Social Services and Education Departments of the former, and each will be substantially dependent on the other if adequate services are to be supplied to the people of the county. Thus, although the County Council will lose its health functions, its interest in health matters will remain substantial, and it will have direct representation on the new area health authorities.

For the staff of the present local health authorites it is understandable that there should be current feelings of insecurity, and maintaining morale during the interregnum will be of great importance. Despite the fact that the public health service is a comparatively small part of the tripartite National Health Service, I believe that it has made the biggest contribution towards the functional integration of that Service and that those who work in it have a future contribution to make which will be disproportionate to their numbers. They will be particularly aware of the need for close links with the new local authorities, and their fundamental interest in prevention will be enabled to expand into wider fields.

As I have already indicated in this and in previous annual reports, much has already been done in Buckinghamshire to draw components of the National Health Service together, and it will be essential to ensure that this process continues unabated in preparation for 1st April 1974, when responsibility (including financial responsibility) will pass to the new area health authority. Perhaps I should mention one particular step which has recently been taken in preparation for integration. An arrangement has been made whereby the administrative staffs of the County Health Department, the Local Executive Council, the High Wycombe and District Hospital Management Committee and the Royal Buckinghamshire and St. John's Hospital Management Committee are being given the opportunity of gaining experience in each other's fields of work. Following a pilot experiment in which senior staff from each of the four authorities spent periods of attachment in order to familiarise themselves with the work of the other branches of the National Health Service, arrangements have been made for the scheme to be available to all appropriate administrative staff during the next eighteen months.

No attempt at viewing the future would be complete without reference to the current state of health service development at Milton Keynes. A successful symposium on "Problems and opportunities in new towns", with particular reference to Milton Keynes, was organised at the Stoke Mandeville Postgraduate Medical Centre last February by Update Publications Limited, and my introductory paper is reproduced as Appendix A (page 133) by kind permission of the editor. The planning of an integrated system of health care for the new city has been proceeding for the past few years and this has, indeed, now passed into the initial stages of implementation both in terms of the appointment of staff and of the erection of health service premises. The symposium took stock of the situation and also looked at some of the implications of Milton Keynes for the future. Much has already been learned, and the health service planning structure for the new city has implications for the organisation of the revised National Health Service at district level.

Finally, at the behest of the Department of Health and Social Security, a Buckinghamshire Joint Liaison Committee, of which I was elected chairman, was established in July 1972 to begin the vast task of preparing for the reorganisation of the National Health Service. This committee will have to work rapidly and thoroughly if the all too short time available before the establishment of shadow area health authorities in 1973 is to be put to good use, and it is already clear that the staff of the County Health Department will be stretched to the limit in making a full contribution towards this vital work, whilst at the same time maintaining the existing local authority health services.

Personalia

Buckinghamshire has been fortunate during 1971 in being able to retain staff who have been adequate both in quality and in quantity to cope with the many tasks which have had to be carried out, and I am grateful to them all for the help and support which they have given to me. I have hitherto

considered it invidious to try to single out individuals but I must express my especial gratitude to Dr. I. G. Yule who, as Deputy County Medical Officer of Health, has carried a particularly heavy load, and without whose constant and efficient help my work would have been extremely difficult to accomplish. I must also thank Mr. D. E. Small who has, for the first time, taken on the demanding task of assembling and editing the material, drawn from many sources, which goes to make up this report.

In addition to their immediate commitments, many members of staff have been involved in regional and national activities. Miss Esmé Few, Director of Nursing Services, has continued as a member of the Secretary of State's steering committee on managemant arrangements in the future reorganised National Health Service; and Dr. Dulcie Gooding, Principal Medical Officer, of his committee on nursing. Mr. I. H. Maddick, formerly Area Dental Officer for the Wycombe division, must likewise be congratulated on his appointment as Chief Dental Officer to the County Borough of Southampton. For my part, I have continued as a member of the Secretary of State's Standing Medical Advisory Committee and working party on the future of medical administrators, the latter of which has recently published its report. I have also had the pleasure of being appointed Consultant in Community Medicine to the Army, and Vice Chairman of Council of the Queen's Institute of District Nursing.

This is my last annual report as County Medical Officer of Health of Buckinghamshire, for I have been appointed a Deputy Chief Medical Officer in the Department of Health and Social Security and will be taking up my new post in October. Before going, I would like to thank the Chairmen and members of the County Council committees which I have served for their help in what has been a joint endeavour to continue the development of the local health authority services of Buckinghamshire. Much teamwork has been involved with other departments of the County Council, with the hospital and general practitioner services of the National Health Service, with central Government departments and with a wide range of voluntary organisations, to all of which I extend my gratitude.

I believe that, collectively, we have managed to make progress during the past five years of working together but, as in all things which affect the health of human beings, much will always remain to be done. Whilst I will therefore often look back on my days in Buckinghamshire, I will also look forward with keen interest to hearing of the continuing development of its health services both under the present County Council and other statutory authorities, and under the area health authority which will succeed them in 1974.

I have the honour to be,

Your obedient servant,

J. J. A. REID

County Medical Officer of Health and

Principal School Medical Officer

STAFF

County Medical Officer of Health and Principal School Medical Officer:

J. J. A. Reid, T.D., M.D., B.Sc., F.R.C.P., F.R.C.P.E., D.P.H.

Deputy County Medical Officer of Health and Deputy Principal School Medical Officer:

I. G. Yule, M.B., Ch.B., D.C.H., D.P.H.

Principal Medical Officers:

Dulcie G. Gooding, M.B., B.S., D.P.H.
Patricia Herdman, M.B., B.S., D.P.H.
J. P. Hutchby, M.B., B.Ch., B.A.O., D.P.H., D.I.H.

Area Medical Officers and Divisional School Medical Officers:

M. A. Charrett, M.R.C.S., L.R.C.P., D.P.H. (also Medical Officer of Health, Borough of Slough, Urban District of Eton and Rural District of Eton).

P. Lavis, M.B., Ch.B., D.P.H. (also Medical Officer of Health, Borough of Buckingham, Urban Districts of Bletchley, Newport Pagnell and Wolverton, Rural Districts of Buckingham, Newport Pagnell and Winslow).

A. J. Muir, M.B., Ch.B., B.Hy., D.P.H. (also Medical Officer of Health, Borough of High Wycombe, Urban District of Marlow and Rural District of Wycombe).

A. W. Pringle, B.A., M.B., B.Ch., D.P.H. (also Medical Officer of Health, Borough of Aylesbury, Rural Districts of Aylesbury and Wing).

Deputy Divisional School Medical Officer:

B. H. Burne, M.R.C.S., L.R.C.P., D.P.H. (also Medical Officer of Health, Urban Districts of Beaconsfield and Chesham and Rural District of Amersham).

Senior Departmental Medical Officer:

G. F. Slocombe, M.B., B.S., D.P.H. (also Deputy District Medical Officer of Health).

Departmental Medical Officers:

Full-time:

Lilian F. C. Beattie, M.B., B.S.
J. M. Elliott, M.R.C.S., L.R.C.P., D.Obst. R.C.O.G.
Adrienne E. Evans, M.B., Ch.B., D.Obst. R.C.O.G., F.P.A.
A. V. Gillespie, M.B., B.Ch.
Erina M. Herrick, M.B., B.S.
Susan Hetherington, M.B., Ch.B., D.P.H. (also Deputy District Medical Officer of Health).
Christine M. Maxwell, M.B., B.Ch.
Mary I. McArthur, M.B., Ch.B., D.P.H.
D. P. B. Miles, M.B., B.S., D.P.H.
Audrey Myant, M.B., B.S., M.R.C.P., D.P.H. (also Deputy District Medical Officer of Health).
J. M. Reed, M.R.C.S., L.R.C.P.
Winifred J. Risk, M.B., Ch.B. (also Deputy District Medical Officer of Health).
R. L. Walmsley, M.A., L.M.S.S.A.

Part-time:

Elinor W. Adam, M.B., Ch.B.
Daphne M. Allen, M.B., Ch.B.
Frances E. Anderson, M.B., B.Chir., D.Obst. R.C.O.G.
Elizabeth O. Aston, L.M.S.S.A.
Susan F. Barnes, M.B., B.Ch.
Anne D. T. Bishop, M.B., B.Ch., D.C.H.
Anne J. Butler, M.B., B.Ch.
C. D. Campbell, M.B., B.S., D.Obst. R.C.O.G.
Brenda M. Clarke, M.B., B.S.
Eleanor M. Clarke, M.B., B.Ch., D.Obst. R.C.O.G.
Davina C. Embleton, M.B., B.S., D.C.H., D.Obst. R.C.O.G.
Isabel M. Gardner, M.B., B.Ch.
Wendy L. Jefferson, M.B., B.S., D.Obst. R.C.O.G.
P. J. Joy, M.B., B.S., D.A.
Sylvia Kingsbury, M.B., B.S.
Patricia M. McCormack, M.B., B.S.
J. J. McMullan, M.D., B.Chir., M.R.C.G.P., D.I.H.
Ursula M. Murphy, M.B., Ch.B.
Helenor F. Pratt, M.B., Ch.B., D.C.H.
Marjorie Reid, M.B., Ch.B.
Daphne M. Scott, M.B., B.S., D.Obst. R.C.O.G.
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W. G. Shakespeare, M.B., B.Ch., D.C.H.
Mary Shephard, M.B., Ch.B.
J. M. Spence, M.B., B.S., D.Obst. R.C.O.G.
Elizabeth M. Standeven, M.B., Ch.B.
Jessie A. R. Stansfield, M.B., Ch.B., D.P.H.
Evelyn E. Summers, M.A., M.B., Ch.B.
Josephine E. Tew, B.M., B.Ch., D.C.H.
Mary R. Venning, B.M., B.Ch., C.P.H.

Consultant Psychiatrists:

C. E. Bagg, M.A., M.R.C.S., L.R.C.P., D.P.M.*
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Janet M. M. Lindsay, M.D., B.Ch., D.P.M.*
Mary K. M. Lindsay, M.B., B.Ch., D.C.H., D.P.M.*
I. Shribman, M.A., M.B., B.Ch., D.P.M.*
D. M. D. White, M.D., D.P.M.*
Vera Wilkinson, M.B., Ch.B., D.P.M.*

County Consultant—Diseases of Chest:

W. T. Bermingham, B.A., M.D., B.Ch.*

Consultant Physicians—Diseases of the Chest:

J. F. Hare, M.B., M.R.C.P.*
A. O. Robson, M.D., M.R.C.P.*
B. C. Thompson, M.A., M.D.*

Consultant Geriatricians:

H. Caplan, B.A., M.B., B.Chir., M.R.C.P.*
Lorna C. Davies, M.B., B.S., M.R.C.P., D.C.H.*
A. T. Sinniah, M.B., B.S., M.R.C.P.*

Ophthalmic Surgeons:

T. S. S. Gregory, M.B., B.Ch., F.R.C.S., D.O.M.S.*
R. C. Jack, M.B., B.Chir., F.R.C.S., D.O.M.S.*
J. Moss, M.B., Ch.B., D.O.*
Nora M. Oughton, M.B., Ch.B., D.O.*

*By arrangement with Regional Hospital Boards.

Chief Dental Officer:

C. H. Griffiths, L.D.S.

Orthodontist:

Audrey M. Blandford, L.D.S., D.Orth.

Area Dental Officers:

B. A. Berrill, L.D.S.
K. R. Dixon, L.D.S.
H. M. Mackintosh, L.D.S.
H. R. Rippon, L.D.S., D.D.P.H.

Dental Officers:

Full-time:

R. J. E. Derwent, L.D.S.
Catherine P. Hurst, L.D.S.
C. W. R. Marston, L.D.S.
P. W. Sewell, L.D.S.
Patricia A. Turner, B.D.S.

Part-time:

F. M. Armour, B.D.S.
Susan M. Brown, B.D.S.
Margaret R. Barrie, L.D.S.
Lise Levy, L.D.S.
L. F. Loewe, M.D.
Lili G. Mason, B.D.S., D. Orth.
Joan W. Paul, L.D.S.
Elizabeth M. Prosser, B.D.S.
Helen A. Renner, B.D.S.
Mavis A. Richardson, B.D.S.

Dental Auxiliaries:

Mrs. E. M. Brown
Miss P. A. Heath

Director of Nursing Services:

Miss E. P. E. Few, S.R.N., H.V.Cert., N.D.N.Cert., Queen's Nurse, R.C.N.Admin. Cert.(P.H.)

Divisional Nursing Officers:

Miss A. M. Borchard, S.R.N., S.C.M., M.T.D., H.V.Cert., Queen's Nurse.
Miss E. L. Martin, S.R.N., S.C.M., H.V.Cert.
Miss H. Thacker, S.R.N., H.V.Cert.

Area Nursing Officers:

Miss S. R. Barter, S.R.N., S.C.M., H.V. Cert., Queen's Nurse
Miss V. G. Chadwell, S.R.N., S.C.M., H.V. Cert., Queen's Nurse
Mrs. P. R. E. Jones, S.R.N., S.C.M., H.V. Cert., Queen's Nurse
Mrs. D. L. P. Marett, S.R.N., H.V. Cert., O.H.N. Cert.
Mrs. H. Sparks, S.R.N., S.C.M., H.V. Cert., Queen's Nurse
Mrs. E. E. C. Thomas, S.R.N., S.C.M., H.V. Cert.
Miss J. G. Wedgwood, S.R.N., S.C.M., H.V. Cert., Queen's Nurse

County Health Inspector and Health Education Organiser:

J. W. Kendall, D.H.E., M.A.P.H.I., M.I.H.E.

Deputy Health Education Organiser:

J. G. Myatt, D.L.C., D.H.E., M.I.H.E.

Health Educators:

Mrs. D. M. Barnes, S.R.N., S.C.M., H.V. Cert., M.I.H.E.
Miss E. Hawley, S.R.N., D.H.E., M.I.H.E.
Miss B. R. Keene, S.R.N., S.C.M., H.V. Cert., M.I.H.E.
Mrs. J. M. McCallan, M.I.H.E.
T. G. Watson, B.T.A., R.N.M.S., S.R.N., H.V. Cert., Queen's Nurse.

Chief Administrative Officer:

E. L. Eyre

Principal Health Services Officer:

F. W. Hedge

Principal Administrative Services Officer:

T. H. Clark

Principal Administrative Officer: (Forward Planning):

A. L. Dickinson, B.A., D.S.A., A.H.A.

County Ambulance and Transport Officer:

W. C. Collett

Deputy County Ambulance and Transport Officer:

D. R. W. Nelson

Chief Clerks—Area Offices:

C. H. Bray
T. A. W. Buchanan
A. G. Hall
D. E. Thompson

County Chiropodist:

J. D. Idris-Evans, M.Ch.S., S.R.Ch.

Area Chiropodists:

Mrs. J. Cotterell, M.Ch.S., S.R.Ch.
J. A. Gurney, M.Ch.S., S.R.Ch.
S. J. Hammett, M.Ch.S., S.R.Ch.
T. G. Phillips, M.Ch.S., S.R.Ch.

Physiotherapists:

E. Hrabak, M.C.S.P. (Spastics Unit)
Miss M. R. Rogers, M.C.S.P. (County Welfare Homes)
R. A. Smith, M.C.S.P. (County Welfare Homes)

Head Occupational Therapist:

J. R. Chick, M.A.O.T.

Deputy Head Occupational Therapist:

Miss D. M. Scott, M.S.A.O.T.

Area Occupational Therapists:

Mrs. M. A. M. Finch, M.A.O.T.

Mrs. M. J. Osborne, M.A.O.T.

County Senior Speech Therapist:

Miss E. K. Bond, L.C.S.T.

Area Senior Speech Therapists:

Mrs. G. M. McCord, L.C.S.T.

Mrs. L. Smith, L.C.S.T.

Mrs. R. B. Swallow, L.C.S.T.

Mrs. J. M. Waterman, L.C.S.T.

Playgroup Advisers:

Part-time:

Mrs. D. Ecclestone

Mrs. J. M. Idris-Evans

STATISTICAL BACKGROUND

1. General

The area of the geographical and administrative county is 477,750 acres (approximately 746 square miles) and the numbers of private households and private dwellings at the 1961 census were 149,053 and 152,525 respectively.

The estimated rateable value of the county at 1st April, 1972, was £36,867,680 as against £35,709,231 at 1st April, 1971, an increase of 3.2 per cent.

The mid-year estimate of the Registrar General and Director of Population Censuses and Surveys refers to the home population, including members of the armed forces stationed in the area, and amounts to 592,750 compared with 585,560 for 1970. This was an increase of 7,190. At the 1961 census the total population of the county was 484,094.

Census populations, estimated populations, birth and mortality rates for individual county districts are quoted on page 94.

2. Vital statistics—childhood and maternal

Live births:

	1971			1970		
	Male	*Female*	*Total*	*Male*	*Female*	*Total*
Legitimate ..	4,781	4,646	9,427	4,831	4,466	9,297
Illegitimate ..	311	289	600	291	296	587
Total ..	5,092	4,935	10,027	5,122	4,762	9,884

	1971	
	Bucks	*England and Wales*
Live birth rate per 1,000 population	16.9	16.0
Illegitimate live births per cent of total live births	6	8
Stillbirths rate per 1,000 total live and stillbirths	10	12
Total live and stillbirths	10,128	793,063
Number of infant deaths (deaths under one year)	158	13,726
Infant mortality rates:		
Total infant deaths per 1,000 live births	16	18
Legitimate infant deaths per 1,000 legitimate live births ..	15	17
Illegitimate infant deaths per 1,000 illegitimate live births ..	30	24
Number of deaths of infants under four weeks	116	9,113

	1971	
	Bucks	*England and Wales*
Neo-natal mortality rate (deaths under four weeks per 1,000 live births)	12	12
Number of deaths of infants under one week	96	7,750
Early neo-natal mortality rate (deaths under one week per 1,000 live births)	10	10
Perinatal mortality rate (stillbirths and deaths under one week combined per 1,000 total live and stillbirths)	19	22
Number of maternal deaths (including abortion)	3	—
Maternal mortality rate per 1,000 live and stillbirths	0·3	—

3. Vital statistics—other

The principal causes of death in the county were:

	Males	*Females*	*Total*
Cardiovascular disease	1,266	1,225	2,491
Malignant disease	602	497	1,099
Respiratory disease	407	373	780
Accidents	97	66	163
Total deaths from all causes	2,697	2,454	5,151

LOCAL HEALTH SERVICES

HEALTH CENTRES

Interest in health centre development has continued throughout the year. The two health centres already open at Winslow and Bedgrove (Aylesbury) are both running successfully. No further centres were opened during the year but centres at Haddenham, Stokenchurch, Water Eaton (Bletchley) and Burnham are all in the late stages of construction.

Regular meetings have been established between members of the County Health Department's forward planning unit and the National Health Service Executive Council to facilitate the planning, opening and management of these health centres. When a health centre opens, it enables the doctors and nurses who move into it to rationalise the health care that they provide for their patients, and a considerable amount of thought has therefore been given to the reorganisation of the health team and also to the administration of the centres. The Department of Health and Social Security has facilitated the negotiations between the County Treasurer's Department and the Executive Council by altering the way in which the County Council is reimbursed the cost of providing the general practitioner element in a health centre. The previous method involved the assessment by the District Valuer of a market rent, which could prove insufficient to cover the outgoings of the providing authority, and was therefore a disincentive to the provision of health centres. Under the new arrangements, the amount reimbursed by the Executive Council is the actual cost, both in respect of capital and revenue, of providing and running the health centres. There is therefore no longer a financial penalty to the county in making provision that greatly improves the standard of service.

Planning for health centres at Langley (Slough), Newport Pagnell, Wendover, Amersham, Chalfont, Woughton and Stony Stratford is now well in hand, with briefs agreed with the users and the Department of Health and Social Security and, in some instances, sketch plans also agreed. The health centre proposed for Chalfont should be of interest, as it is hoped that it will be on the hospital site, and the general practitioners working in the health centre are already responsible for the care of the hospital patients. It is anticipated that this health centre will therefore draw together not just the general practitioner and local authority services, but also those provided by the hospital authority.

A considerable amount of work was undertaken during the year on the drafting of a brief and discussions with sixteen general practitioners for a health centre in High Wycombe. Unfortunately after prolonged negotiations, and immediately prior to the acquisition of the site, the general practitioners withdrew their support for the project.

The health centre at Newport Pagnell will be of importance as the town is on the edge of the designated area of Milton Keynes, and the timing of this project should be such that it will enable the health service staff to cope with any extra pressures that may come their way as the new city develops.

Health centres for the new city of Milton Keynes have presented a challenge in terms of forward thinking and planning. It is intended that the health centres for the new city should all have a hospital element as well as family doctor and local health authority elements contained within them, as it has been felt that the health service for the new city should be community-orientated with such specialties as child health, care of the elderly, mental health and care of the physically handicapped made available as much as is possible within the community rather than the hospital setting.

The health centre at Stony Stratford, which is now under construction, will accommodate not only family doctor and local authority health services but also Regional Hospital Board out-patient facilities. It will also provide a small x-ray and physiotherapy unit. The centre is being built to accommodate

patients from Stony Stratford, from the surrounding rural areas of Buckinghamshire and Northamptonshire, and also for the new Milton Keynes developments of Galley Hill and Fullers Slade to the south of the existing town.

Work is now in hand on planning the health centre to be developed at Woughton on the Milton Keynes hospital site. This centre will make provision for patients from the whole of the Woughton area, extending from the south of the city as far as the existing village of Simpson. The area is at present mainly green fields and the phasing of this centre has been given much thought, as has the need for temporary accommodation while it is being built. The planning has been in association with the Oxford Regional Hospital Board; it has proved a rewarding exercise for all concerned and has provided an opportunity for joint planning in a project that could be a prototype for integrated health service planning after the administrative unification of the National Health Service in 1974.

Initial planning has also commenced on the Wolverton and Stantonbury health centres for Milton Keynes, the former being associated with a day hospital provided by the Oxford Regional Hospital Board and serving both the north of the new city and the surrounding area of north Buckinghamshire.

CARE OF MOTHERS AND YOUNG CHILDREN

1. Child health clinics

Developmental paediatrics has been described as being concerned with maturational processes (from foetal viability to full growth) of normal and abnormal children, for three purposes. Firstly, to promote optimal physical and mental health for children; secondly, to ensure early diagnosis and effective treatment of handicapping conditions of body, mind and personality; and thirdly, to discover the cause, and ultimately the means of preventing these handicapping conditions.

The child health service is particularly concerned with the first two of these purposes and, at child health clinics, emphasis is laid on the early detection of handicapping conditions. Other activities include the giving of general advice to mothers on health matters concerning their children and immunisation against pertussis, diphtheria, tetanus, measles and poliomyelitis. Following the receipt of a circular from the Department of Health and Social Security routine vaccination against smallpox was discontinued during the year.

It is not the intention that these clinics should function as minor ailment clinics. Especially when clinics are held at health centres or at the surgery premises of family doctors, mothers coming to the clinic for the first time are not always certain what to expect and for this reason a printed note is given to each providing information regarding the functions of a child health clinic and pointing out that, for children who are ill, the family doctor should be consulted in the same way as he would be if any other member of the family were ill.

During the year 26,327 children were brought to the clinics, 485 fewer than in 1970, the reduction being mainly in the number of older children. Approximately 80% of those under one year of age in the county attended, this being 278 more children than in 1970.

The graph on page 19 shows the trend of clinic attendances over the last 15 years.

A total of 16 interested family doctors undertake this type of work on behalf of the local health authority for the children in the practices to which they belong—seven more than in 1970. All are interested in developmental paediatrics and have visited child health clinic sessions in operation before starting work in their own practices.

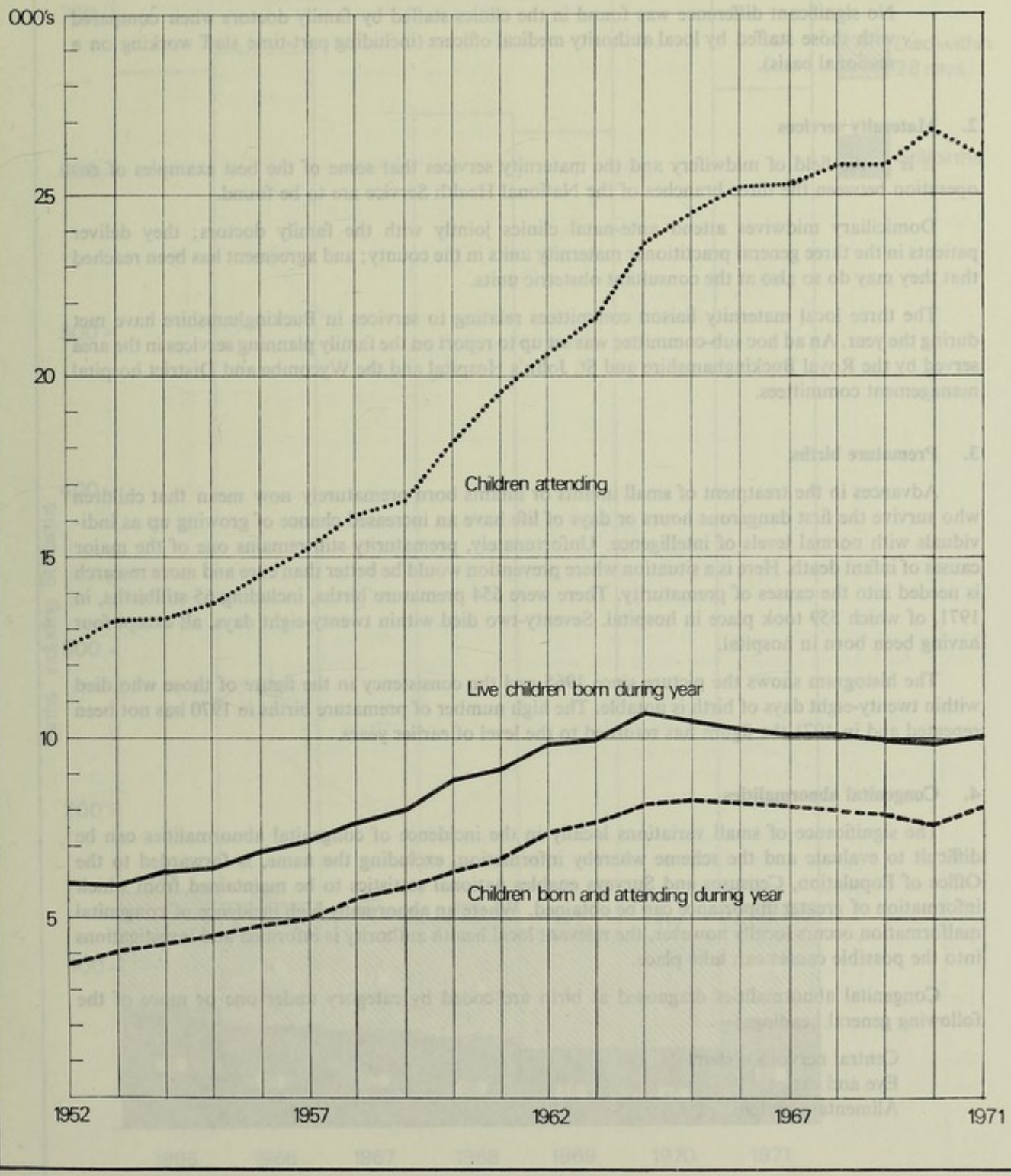
During the year it was decided to look in detail at the work undertaken by professional staff at the child health clinics and a survey covering the Aylesbury and High Wycombe areas took place during one week in January 1972. Forty-nine clinic sessions were involved at which 1,433 children attended; 478 (34%) were examined by the doctor, 680 (47%) were the subject of discussion with the health visitor and 453 (32%) children were seen by the health service assistant.

The findings are available at the time of going to print and the more important points may be summarised as follows:—

Sixty per cent of the medical examinations at the child health clinics are concerned with developmental progress of the children.

Twenty-one per cent are concerned with fitness or otherwise for immunisation. (This figure might be reduced by increasing the practice whereby this decision is made and recorded at the time of the baby's first examination at the clinic).

Attendances at Child Health Clinics



Nineteen per cent of the examinations were for 'other' reasons, seven per cent of the total being for minor ailments which could have been dealt with by a nurse or the family doctor.

An analysis of the findings in the Amersham/Chesham part of the county reveals that selection of cases is taking place, mothers in the majority of cases consulting either the health visitor or the doctor according to need.

No significant difference was found in the clinics staffed by family doctors when compared with those staffed by local authority medical officers (including part-time staff working on a sessional basis).

2. Maternity services

It is in the field of midwifery and the maternity services that some of the best examples of co-operation between the three branches of the National Health Service are to be found.

Domiciliary midwives attend ante-natal clinics jointly with the family doctors; they deliver patients in the three general practitioner maternity units in the county; and agreement has been reached that they may do so also at the consultant obstetric units.

The three local maternity liaison committees relating to services in Buckinghamshire have met during the year. An ad hoc sub-committee was set up to report on the family planning services in the area served by the Royal Buckinghamshire and St. John's Hospital and the Wycombe and District hospital management committees.

3. Premature births

Advances in the treatment of small infants or infants born prematurely now mean that children who survive the first dangerous hours or days of life have an increased chance of growing up as individuals with normal levels of intelligence. Unfortunately, prematurity still remains one of the major causes of infant death. Here is a situation where prevention would be better than cure and more research is needed into the causes of prematurity. There were 654 premature births, including 65 stillbirths, in 1971, of which 559 took place in hospital. Seventy-two died within twenty-eight days, all except four having been born in hospital.

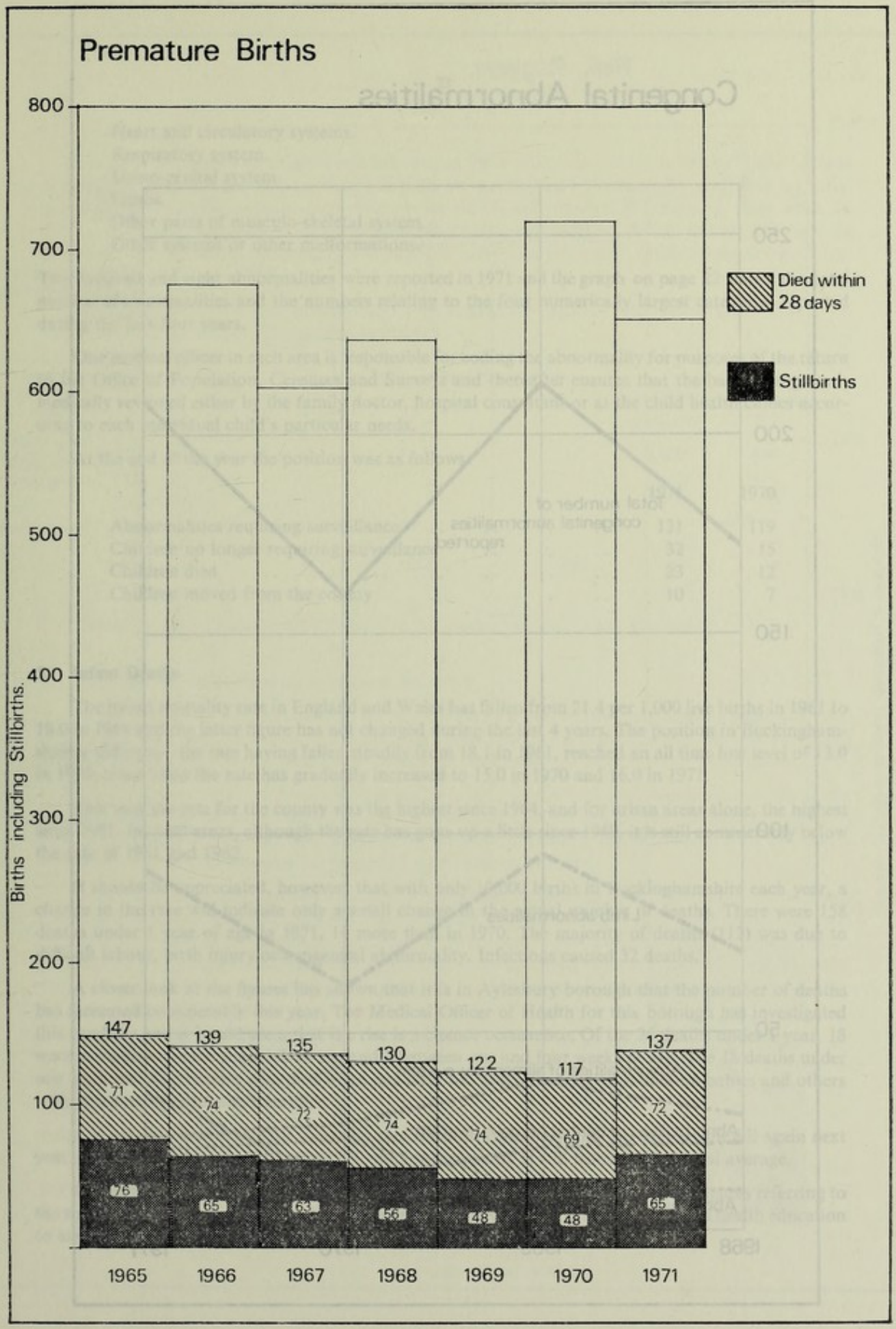
The histogram shows the picture since 1965 and the consistency in the figure of those who died within twenty-eight days of birth is notable. The high number of premature births in 1970 has not been repeated and in 1971 the figure has returned to the level of earlier years.

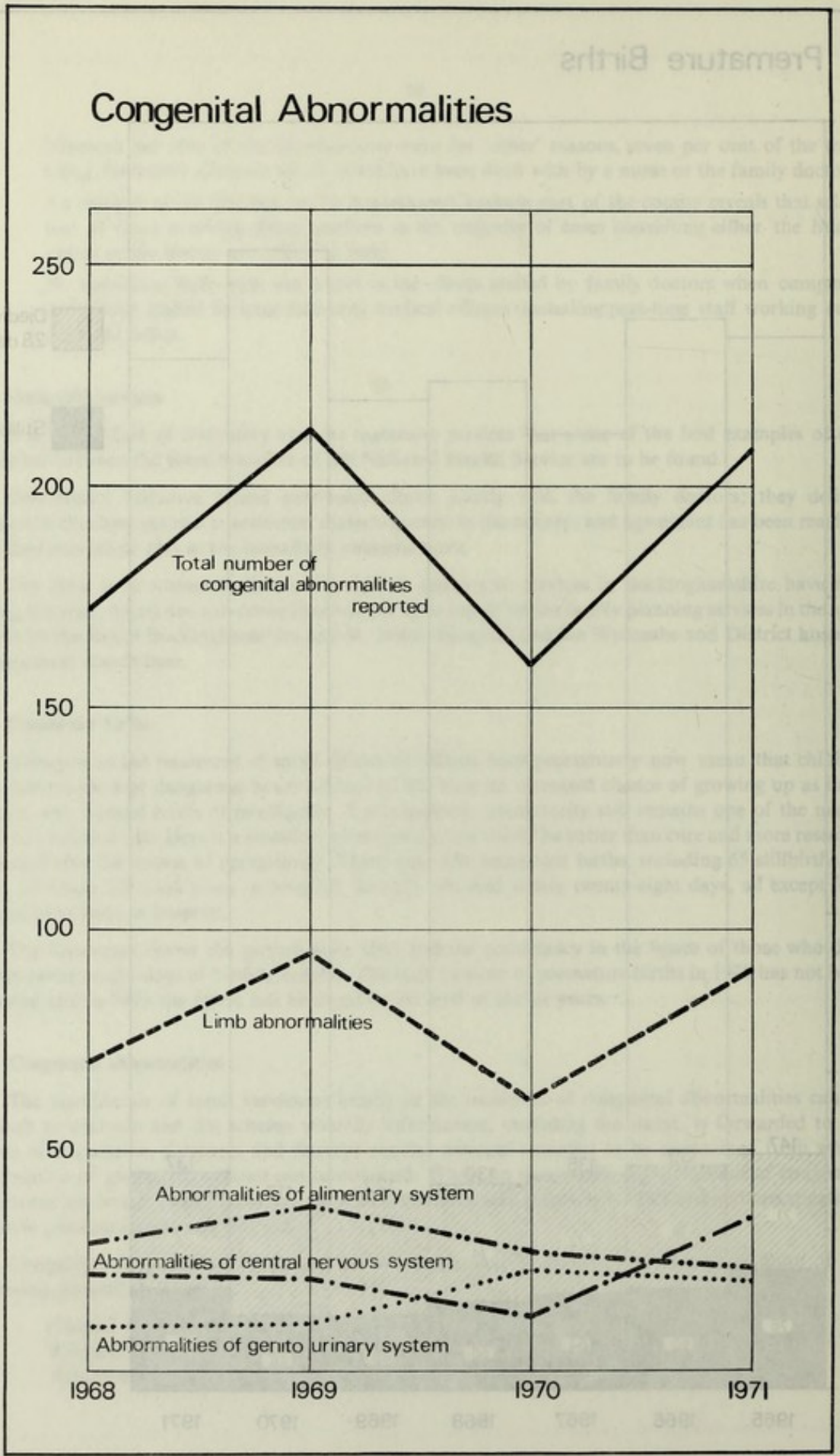
4. Congenital abnormalities

The significance of small variations locally in the incidence of congenital abnormalities can be difficult to evaluate and the scheme whereby information, excluding the name, is forwarded to the Office of Population, Censuses and Surveys enables national statistics to be maintained from which information of greater importance can be obtained. Where an abnormally high incidence of congenital malformation occurs locally however, the relevant local health authority is informed and investigations into the possible causes can take place.

Congenital abnormalities diagnosed at birth are coded by category under one or more of the following general headings:—

Central nervous system.
Eye and ear.
Alimentary system.


Premature Births
800
700
600
500
400
300
200
100
Births including Stillbirths.
Died within 28 days
Stillbirths
147
139
135
130
122
117
137
71
74
72
74
74
69
72
76
65
63
56
48
48
65
1965
1966
1967
1968
1969
1970
1971


Congenital Abnormalities
250
200
150
100
50
Total number of congenital abnormalities reported
Limb abnormalities
Abnormalities of alimentary system
Abnormalities of central nervous system
Abnormalities of genito urinary system
1968
1969
1970
1971

Heart and circulatory systems.
Respiratory system.
Urino-genital system.
Limbs.
Other parts of musculo-skeletal system.
Other systems or other malformations.

Two hundred and eight abnormalities were reported in 1971 and the graph on page 22 shows the total number of abnormalities and the numbers relating to the four numerically largest categories reported during the last four years.

One medical officer in each area is responsible for coding the abnormality for purposes of the return to the Office of Population, Censuses and Surveys and thereafter ensures that the baby's progress is medically reviewed either by the family doctor, hospital consultant or at the child health clinics according to each individual child's particular needs.

At the end of the year the position was as follows:

	1971	1970
Abnormalities requiring surveillance	131	119
Children no longer requiring surveillance	32	15
Children died	23	12
Children moved from the county	10	7

5. Infant Deaths

The infant mortality rate in England and Wales has fallen from 21.4 per 1,000 live births in 1961 to 18.0 in 1968 and the latter figure has not changed during the last 4 years. The position in Buckinghamshire is different—the rate having fallen steadily from 18.1 in 1961, reached an all time low level of 13.0 in 1969, since when the rate has gradually increased to 15.0 in 1970 and 16.0 in 1971.

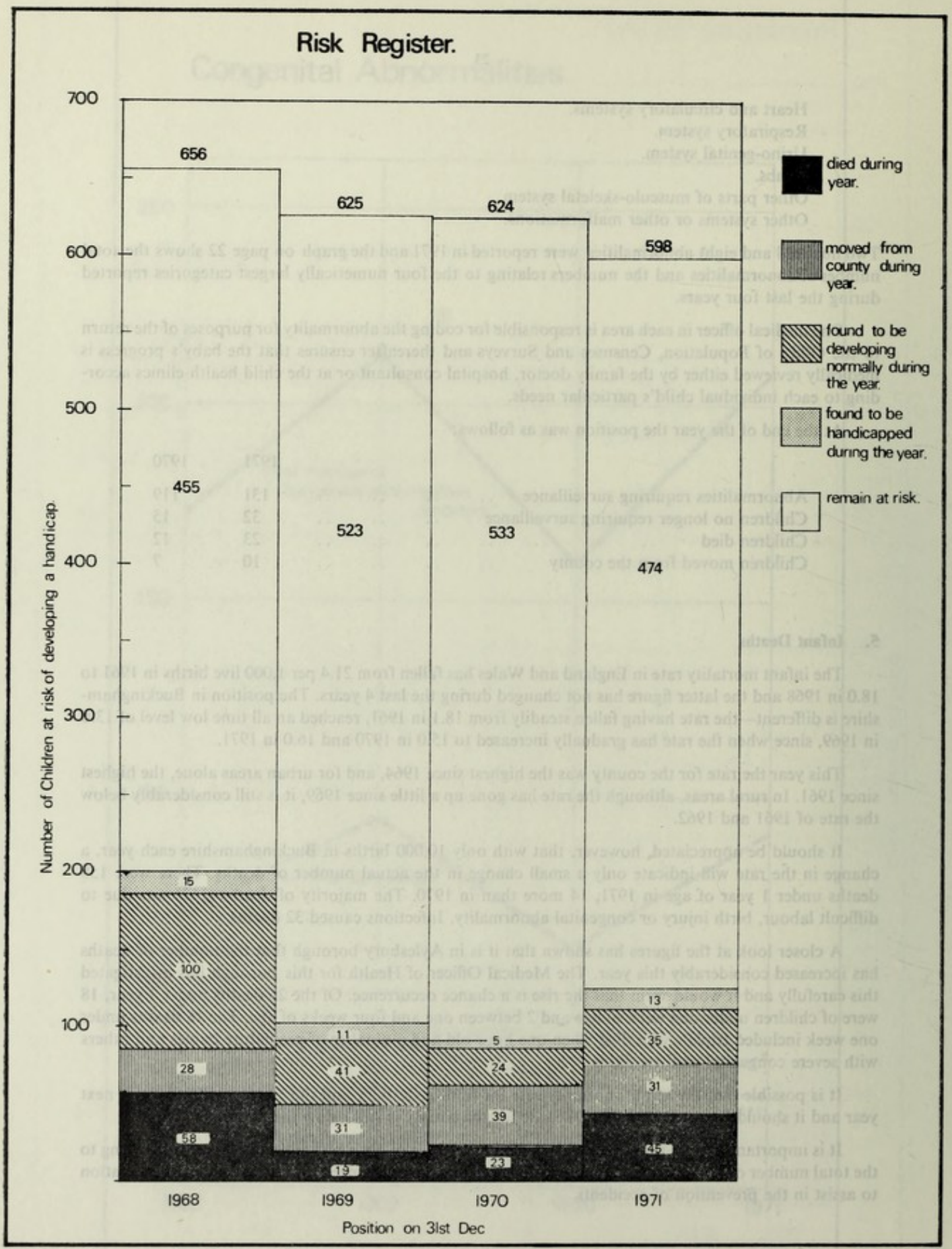
This year the rate for the county was the highest since 1964, and for urban areas alone, the highest since 1961. In rural areas, although the rate has gone up a little since 1969, it is still considerably below the rate of 1961 and 1962.

It should be appreciated, however, that with only 10,000 births in Buckinghamshire each year, a change in the rate will indicate only a small change in the actual number of deaths. There were 158 deaths under 1 year of age in 1971, 14 more than in 1970. The majority of deaths (112) was due to difficult labour, birth injury or congenital abnormality. Infections caused 32 deaths.

A closer look at the figures has shown that it is in Aylesbury borough that the number of deaths has increased considerably this year. The Medical Officer of Health for this borough has investigated this carefully and it would seem that the rise is a chance occurrence. Of the 26 deaths under 1 year, 18 were of children under one week of age and 2 between one and four weeks of age. The 18 deaths under one week included triplets who died when one hour old and a number of premature babies and others with severe congenital abnormalities.

It is possible that the infant mortality rate for both Aylesbury and the county will fall again next year and it should be noted that the 1971 rate for the county is still below the national average.

It is important to note that two children died as a result of accidents and, while figures referring to the total number of non-lethal accidents are not available, there is a need for continued health education to assist in the prevention of accidents.


Risk Register.
700
600
500
400
300
200
100
Number of Children at risk of developing a handicap.
656
625
624
598
455
523
533
474
15
100
28
58
11
41
31
19
5
24
39
23
13
35
31
45
died during year.
moved from county during year.
found to be developing normally during the year.
found to be handicapped during the year.
remain at risk.
1968
1969
1970
1971
Position on 31st Dec

6. Risk register

The need to examine all children regularly during the first few years of life is well recognised. There are some children, however, whose history or progress suggest that a handicapping condition may arise and it is important that under no circumstances should the examinations be omitted in these cases. To enable the relevant statistics to be made available readily, identification details and minimal records have been maintained on the computer, a case file being kept separately which contains the clinical information.

The names of 573 children were placed on the register during 1971—fifty-two fewer than in 1970. The position at the end of the year was as follows:—

Children under observation

	Born 1968/1971 *inclusive*	*Born in* 1971
Total names placed on register	2,609	598
Currently at risk	1,210	474
Handicapped	150	13
Names removed from register because:		
not now at risk	763	35
Died	171	45
Moved from county	315	31

The histogram shows the development of the register during the last four years.

7. Nurseries and Child Minders Regulation Act, 1948

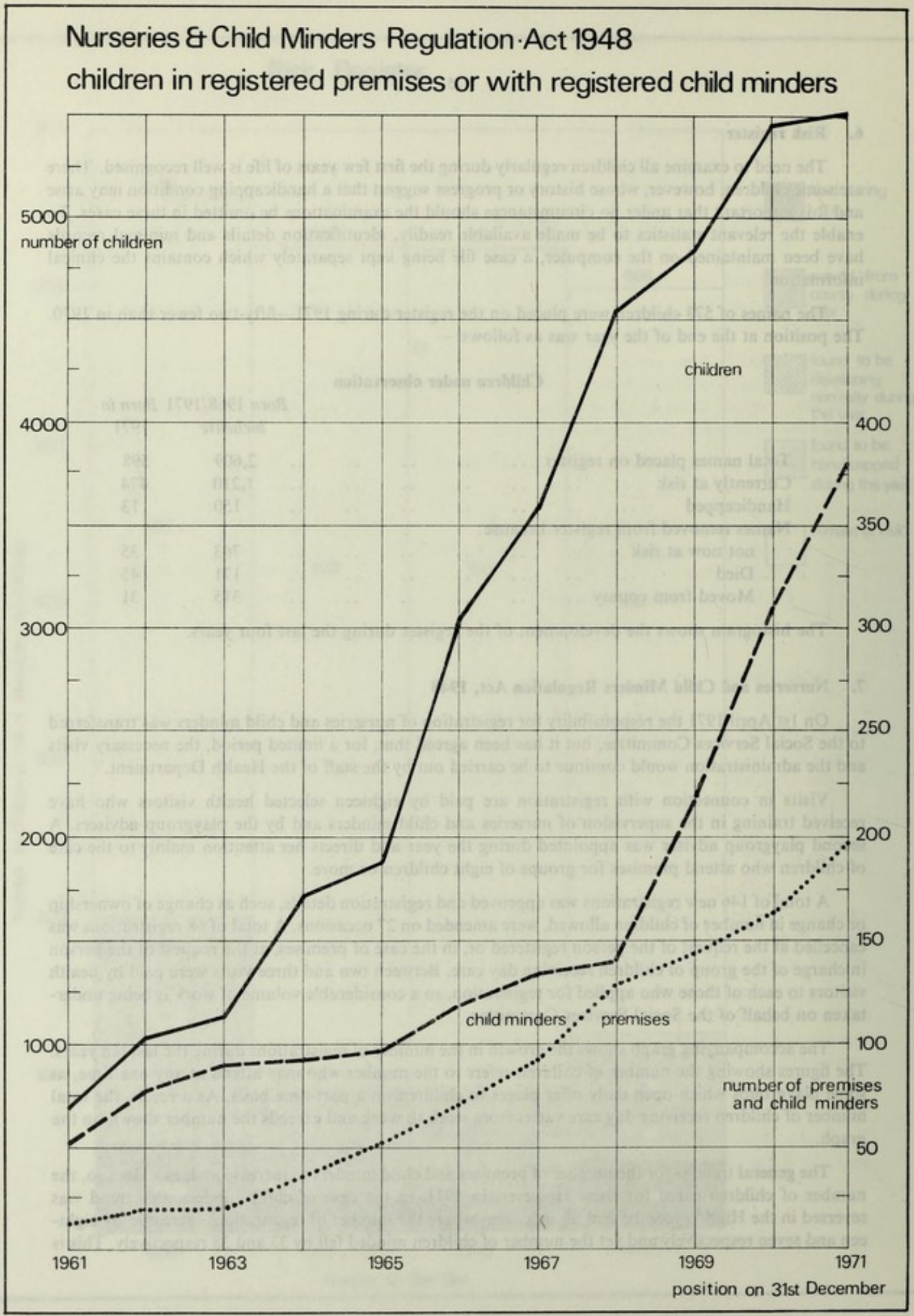
On 1st April 1971 the responsibility for registration of nurseries and child minders was transferred to the Social Services Committee, but it has been agreed that, for a limited period, the necessary visits and the administration would continue to be carried out by the staff of the Health Department.

Visits in connection with registration are paid by eighteen selected health visitors who have received training in the supervision of nurseries and child minders and by the playgroup advisers. A second playgroup adviser was appointed during the year and directs her attention mainly to the care of children who attend premises for groups of eight children or more.

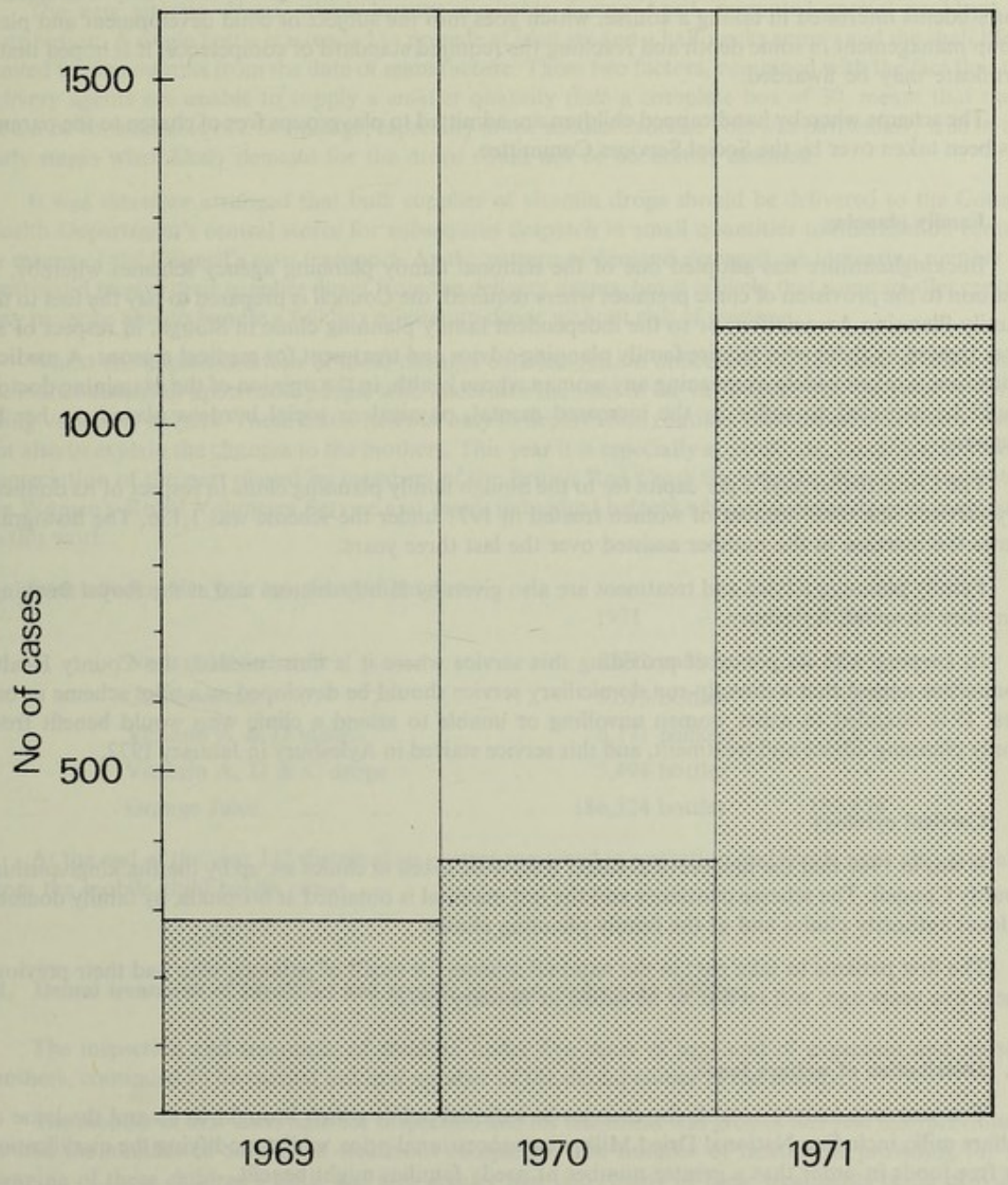
A total of 146 new registrations was approved and registration details, such as change of ownership or change in number of children allowed, were amended on 27 occasions. A total of 68 registrations was cancelled at the request of the person registered or, in the case of premises, at the request of the person in charge of the group of children receiving day care. Between two and three visits were paid by health visitors to each of those who applied for registration, so a considerable volume of work is being undertaken on behalf of the Social Services Committee.

The accompanying graph shows the growth in the number of registrations during the last ten years. The figures showing the number of children refers to the number who may attend at any one time, as some playgroups which open daily offer places to children on a part-time basis. As a result, the total number of children receiving day care varies from week to week and exceeds the number shown on the graph.

The general trend is for the number of premises and child minders to increase and, as it does so, the number of children cared for rises. However, in 1971, in the case of child minders, this trend was reversed in the High Wycombe and Slough areas where the number of registrations increased by eighteen and seven respectively and yet the number of children minded fell by 33 and 38 respectively. This is


Nurseries & Child Minders Regulation Act 1948
children in registered premises or with registered child minders
5000
number of children
4000
3000
2000
1000
children
400
350
300
250
200
150
100
50
child minders
premises
number of premises
and child minders
1961
1963
1965
1967
1969
1971
position on 31st December

Number of women who received family planning treatment paid for by county health committee.



partly accounted for by four child minders caring for 47 children discontinuing in High Wycombe area early in the year, and a similar change taking place in the Slough area during the latter part of the summer. It is understandable that, when the youngest child is ready to go to school, the mother's interest in running a group may wane and she may wish to give up her registration.

The playgroup advisers have been instrumental in developing additional courses for playgroup leaders and helpers. They have also participated in a series of meetings called on their own initiative under the chairmanship of a principal medical officer to discuss with their colleagues in the Education Department and the Colleges of Education a proposed syllabus for the courses given to those interested in the day care of children. Uniformity in the standards of courses throughout the county is necessary. For students interested in taking a course, which goes into the subject of child development and playgroup management in some depth and reaching the required standard of competence, it is hoped that a certificate may be awarded.

The scheme whereby handicapped children are admitted to playgroups free of charge to the parents has been taken over by the Social Services Committee.

8. Family planning

Buckinghamshire has adopted one of the national family planning agency schemes whereby, in addition to the provision of clinic premises where required, the Council is prepared to pay the fees to the Family Planning Association, or to the independent family planning clinic in Slough, in respect of all cases treated by them who require family planning advice and treatment for medical reasons. A medical indication is taken widely as meaning any woman whose health, in the opinion of the examining doctor, would be expected to suffer by the increased mental, physical or social burdens placed on her by pregnancy.

The Council also pays a per capita fee to the Slough family planning clinic in respect of its domiciliary service. The total number of women treated in 1971 under the scheme was 1,136. The histogram shows the increase in the number assisted over the last three years.

Family planning advice and treatment are also given by family doctors and at the Royal Buckinghamshire Hospital, Aylesbury.

In keeping with its policy of providing this service where it is most needed, the County Health Committee agreed that a directly-run domiciliary service should be developed as a pilot scheme in one area. It is intended to assist women unwilling or unable to attend a clinic who would benefit from family planning advice and treatment, and this service started in Aylesbury in January 1972.

9. Cervical cytology

It was in 1966 that the first cervical smear tests were taken in clinics set up by the Buckinghamshire County Council. The scheme continues and the test material is obtained at hospitals, by family doctors, at local authority clinics and at the family planning clinics.

The first patients to take part in the national scheme for recall of patients, who had their previous smear five years ago, will be due to be called in January 1972.

10. Distribution of welfare foods

The year was mainly notable for changes in national policy which brought to an end the issue of welfare milk, including National Dried Milk, at a concessional price, whilst modifying the qualification for free foods in order that a greater number of needy families might benefit.

The new Welfare Foods Order also provided for the withdrawal of cod liver oil and orange juice, entitlement to which ceased on 31st March and 31st December respectively. Residual stocks were, however, permitted to be sold at an unchanged price and cod liver oil was still on sale in Buckinghamshire distribution centres at the end of the year. It is likely, also, that supplies of orange juice will be available from national distribution centres for some time to come.

The vitamins obtained from these two preparations will continue to be available for babies in the form of vitamin A, D & C drops whilst, following the withdrawal of orange juice, expectant and nursing mothers will be able to obtain these vitamins in tablet form.

The new vitamin drops, which became available during April, presented special problems in distribution. A single bottle is intended to provide at least six and a half weeks supply and the shelf life is limited to nine months from the date of manufacture. These two factors, combined with the fact that the delivery agents are unable to supply a smaller quantity than a complete box of 30, meant that there would be considerable risk of wastage, especially in the smaller centres. This was particularly true in the early stages when likely demand for the drops could not be accurately assessed.

It was therefore arranged that bulk supplies of vitamin drops should be delivered to the County Health Department's central stores for subsequent despatch in small quantities to distribution centres by means of the Council's own transport. As the pattern of demand emerged, an increasing number of centres did receive their supplies direct from the delivery agents, but it is likely that some smaller centres may never be able to handle a full box of vitamin drops without risk of wastage.

Whilst the implementation of these changes entailed certain difficulties for the central office staff, the main burden fell upon those people who undertake the sales in the various centres, the great majority being voluntary helpers. These ladies had not only to depart from routines established over many years, but also to explain the changes to the mothers. This year it is especially appropriate, therefore, to record appreciation of the part played by members of the British Red Cross Society, the Women's Institutes, the Women's Royal Voluntary Service and many individual helpers who so generously give their time to this work.

Issues during the year are detailed below:—

	1971	1970
National dried milk	8,892 packets	12,635
Cod liver oil	5,513 bottles	6,852
Vitamin A & D tablets	6,171 packets	9,037
Vitamin A, D & C drops	5,494 bottles	—
Orange Juice	186,324 bottles	189,456

At the end of the year 112 distribution centres remained in operation and foods were also available from the mobile child health clinic.

11. Dental treatment of expectant and nursing mothers and young children

The inspection and treatment of children under five years of age, and of expectant and nursing mothers, continued to be carried out in a number of the dental clinics in the county.

The number of first visits both for inspection and for treatment was greater this year than previously, as was the number of courses of treatment completed. The number of treatments providing for the cleaning of these children's teeth was also greater this year, many of these treatments being provided

by the dental auxiliaries and hygienist, who at the same time gave their patients personal instruction in dental care. The number of treatments carried out for expectant mothers continued to be small, as most sought treatment from dentists in the general dental service.

The importance of good dental health education for the mother concerning dietary and other matters is accepted in all the clinics, and the value of the dental care of the young child is generally realised by those attending ante-natal and other classes held there. Advice is given by both professional dental staff and their auxiliary personnel, and it is felt that this work in the educational field is at last having an important effect on the dental health of the young child. The time spent with these mothers is very rewarding, as at this time they are receptive to advice and are anxious to do all they can for their infants.

The area dental officer for South Buckinghamshire makes reference to this in his report, and also emphasises the protective action of fluoride in the drinking water, especially for the younger age groups. He deplores the fact that the dilution of the local water supply with a satisfactory natural fluoride content, with water with a negligible amount of this protective substance, will have an unfavourable effect on the caries prevalence of the young child. To quote from his report:—

> "It is known that additional water without natural fluoride is being added in ever-increasing quantity to the Slough water which contains natural fluoride. This means the fluoride level is becoming smaller and smaller and therefore less effective in producing strong teeth. By the end of 1971, three-year old children had been without the fluoride protection all their lives and will be liable to increased tooth decay.
>
> An approach was made to all those in charge of nursery schools and playgroups and also child minders, reminding them of the likelihood of increased susceptibility to tooth decay with the lack of protecting fluoride. Some guidance was given on dental health and diet in an attempt to minimise the anticipated deterioration of the dental condition of these young children."

At the sessions on dental health education the possible use of fluoride tablets by the young child is mentioned, as this measure has proved of value in areas where the natural fluoride content of the drinking water is below that capable of protecting the teeth from caries. It is regretted that the fluoridation of the water supply is not universally accepted, as the results of the latest surveys in the Birmingham area show that children there, who have now had the benefits of water fluoridation for some years, have far less dental caries than those lacking this protection.

Dental treatment for mothers and young children 1971

Attendances and treatment

	Children 0-4 (*inclusive*)		*Expectant and nursing mothers*	
Visits for treatment:	1971	1970	1971	1970
First	806	788	57	69
Subsequent	863	936	86	145
Total	1,669	1,724	143	214
Number of additional courses of treatment other than the first course commenced during the year..	98	75	10	5

Number of fillings	1,272	1,360	129	198
Teeth filled	1,104	1,114	128	189
Teeth extracted	423	429	38	44
General anaesthetics given (by consultant anaesthetists)	141	157	3	6
Emergency visits by patients	59	43	23	12
Scaling and/or removal of stains	279	191	32	56
Teeth otherwise conserved	341	292	—	—
Crowns	—	—	—	2
Courses of treatment completed	704	649	51	50
Prosthetics				
Number of dentures supplied	—	—	9	9
Inspections				
First inspections	1,308	1,235	58	66
Patients who required treatment	595	763	57	60
Patients offered treatment	522	712	55	68
Patients re-inspected	128	*	15	*
Equivalent full sessions				
For treatment			302	323
For health education			18	30

*1970 figure not available

THE NURSING SERVICES

1. General

Hospital nursing is a patient-centred service concerned mainly with the care of the sick. Public health nursing is concerned with family health care; with health teaching and prevention of disease; and with supportive care of well families and of those sick people who do not require the special facilities available only in hospital. Recent nursing research carried out on a national scale has suggested that improvements are needed in the communication patterns between hospital and public health nursing services in order to ensure continuity of service for people. During 1971 some progress has been made towards co-operation with the local hospitals.

The nursing staff also have to look towards integrated working patterns with general practitioners; and with each other, appreciating individual skills and the opportunities for team work. In addition, widening horizons open as a result of crossing local authority boundaries. With attachment to general practice, the need for the nursing team to care for the patients of the practice regardless of their domicile has become increasingly apparent. Some progress has been made in this respect with the neighbouring authorities of Oxfordshire, Hertfordshire, Northamptonshire and Surrey.

Another area requiring new measures of co-operation has been the nurse's relationship with social workers. Following the establishment of the Social Services Department in April 1971, adjustment to administrative and personnel changes has meant that nurses and social workers have needed to increase their knowledge and understanding of each other's roles. Between January and June, three members of the nursing staff took part in a joint social services and nursing working party. The report, submitted in June, was accompanied by a recommendation that inter-disciplinary discussions should take place at field-worker level.

The main issues during the year have been concerned therefore with the reorganisation of the nursing services in order to facilitate the multiplicity of opportunities for working together.

2. Management

The main objective of improved nursing management is to ensure better patient care based on sound nursing policies and effective deployment of nursing staff. This in turn enables nurses of all skills and at all levels to cooperate more effectively with each other and to participate in management in partnership with doctors and administrators.

Following discussions held in the autumn of 1970 with the advisory team from the Department of Health and Social Security, a revised management structure, based on the principles contained in the Mayston Report, was prepared. The structure was eventually agreed with the Department in April 1971 and approved by the County Health Committee in June.

Three levels of management are proposed:—

(a) *Top management:* Responsible for the preparation of suggested policies and for decision-making. It will consist of the Director of Nursing Services with responsibility for all nursing services and nursing personnel employed by the local authority, subject to the County Medical Officer of Health's overall responsibility to the County Health Committee for all health services provided by the authority; and three divisional nursing officers each responsible to the Director of Nursing Services for the control of nursing services within a geographical division of the county.

(b) *Middle management:* Responsible for programming policy decisions and for the organisation and coordination of nursing services in an area. This level will be staffed by area nursing officers responsible to the appropriate divisional nursing officer for an area within a division of the county.

(c) *First line management:* Responsible for the control of a nursing unit which will normally comprise some twenty to twenty-five field-workers with a particular professional function (i.e. either health visiting, district nursing or midwifery). The nursing officers in first line management will be responsible to the appropriate area nursing officer.

Three divisions of the county were selected based on the need to link community nursing services with the existing or proposed district general hospitals; the shape and population distribution of the county both at present and as anticipated for the future; and the need to relate the proposed divisions for nursing services to the existing area pattern of administration for other community health services and the plans of the new Social Services Department. In addition, the new city of Milton Keynes will call for special attention as it passes from the phase of planning to that of population growth.

It is at first line level that the supervisory aspects of management and the safeguarding of functional expertise are appropriately placed. Sapiential authority will be delegated to staff at middle and top management posts, utilising the insight that comes from professional experience.

Inevitably the proposed changes brought anxieties and uncertainties to the staff both in management grades and in field-work. However, assimilation of existing management staff and protection of the salaries of all staff involved in the changes had been assured. Implementation was phased and on 1st October the Director of Nursing Services was confirmed in post and the three divisional nursing officers took up their new duties. The area nursing officers for the North Bucks and Aylesbury divisions were appointed from 1st December, and it is proposed that the remaining posts will be filled by the spring of 1972.

Good management is not an end in itself and much hard work will be needed to make the proposals a working reality. A sound management structure is no more than a means to enable the home nursing sisters and charge nurses, the midwifery sisters and health visitors to serve the community with increasing effectiveness.

3. Attachment to general practice

Attachment is now universal throughout the county, and an attempt was made during 1971 to increase nursing management contact with general practitioners. Letters from the director of nursing services containing nursing information were sent from time to time and a practice visiting scheme for the individual nurse managers was begun.

Development of team-work and nursing tasks in relation to group practice requirements has not progressed as rapidly in all areas as was hoped and regretfully, in some practices, attachment must be regarded as nominal although the deployment of field staff other than auxiliaries and relief workers correlates to general practice patient lists.

In many instances however, health visitors have been provided with office accommodation in the practice and treatment rooms have been made available to home nurses. New patterns of working are emerging, with nursing tasks increasingly being undertaken in the surgeries.

Economical deployment of staff and their time usage is difficult within the practice situation and much more work needs to be done regarding this. It is hoped that priority will be given to the development of real partnerships between general practitioners and the nursing teams stimulated by the continuity of 'follow up' visits by the area nursing officers next year. In addition a critical assessment must

be made with the doctors of the nursing needs of the practice and the consequent ratios and skills required amongst the nursing staff.

4. Hospital liaison

(a) Midwifery

The liaison schemes reported last year have been strengthened and some further progress has been made. The local authority midwives continue to participate in the work of the general practitioner maternity units at Stoke Mandeville Hospital and Bletchley. Of the 635 babies born in the Bletchley unit, 247 were delivered by domiciliary midwives, and of the 545 born in the Stoke Mandeville unit, 209 were so delivered. In both instances the mothers and babies were subsequently cared for by the domiciliary midwives after their transfer home.

After prolonged discussions in Slough, agreement was reached with the authorities at Upton Hospital obstetric unit for domiciliary midwives to participate in the work there. The scheme has been finalised and will commence in January 1972. Interest has been expressed and discussions are pending with the Northamptonshire Hospital Management Committee in respect of Westbury Maternity Unit and with Wycombe District General Hospital in respect of an integrated midwifery service and training proposals.

(*b*) Paediatric liaison

This link in Wycombe continues to develop satisfactorily providing an increasingly useful service to mothers, health visitors and ward sisters.

At Stoke Mandeville Hospital there is now daily liaison and the health visitor joins the consultant's ward round two or three times a week. This has brought about a considerable increase in the number of social reports submitted by the health visitors at the request of the consultant and visits to the children's ward by health visitors for case discussions with the medical and nursing staff. In addition the liaison health visitor now pays a weekly visit to the plastic surgery children's ward. Information is sent to health authorities outside Buckinghamshire concerning children undergoing plastic surgery. This link is particularly useful concerning the post operative management and feeding of babies who have undergone cleft palate repairs.

Many parents are now visited by the health visitors whilst their child is in hospital. Support is thus given to the family at a time of anxiety and stress.

(c) Geriatric liaison

The geriatric liaison in Wycombe developed so well that it was decided that a full-time specialist health visitor should be appointed. A similar proposal has been suggested in the South Bucks area but no appointments have yet been made. Further discussions of these proposals could lead to a more closely integrated link with the hospitals concerned.

The link in Aylesbury continues to run smoothly. Regular health visitor liaison meetings continue with Renny Lodge Hospital in the north of the county.

(d) Diabetic liaison

The health visitor link with the out-patient diabetic clinic at Wycombe General Hospital continues. Twenty or thirty patients are seen at every session and a total of twenty-four patients was referred for a home visit by the health visitor concerned.This latter figure relates only to referrals during 1971. Some of the patients may already be receiving home visits as a result of earlier referral. One of the features

of the scheme, however, is that the presence of the health visitor may, on occasion, avoid the need for a specific referral. These arrangements facilitate a link with health visitors attached to general practices in the Wycombe and Marlow areas. The care of children on insulin therapy has been enhanced and the interpreter has again provided invaluable help during out-patient sessions and home visits.

(e) CHEST CLINICS

Due to epidemiological changes in diseases of the chest, it has been necessary to make a re-appraisal of the patient needs and the changing role of the health visitor. In the Aylesbury area a wider field of chest conditions is now covered, including asthma, bronchitis, carcinoma and many heart conditions, as well as tuberculosis. All patients requiring portable oxygen therapy are now visited at home. Many patients are elderly and follow-up home visiting is desirable. The link in the Wycombe area continues to be valuable, especially in regard to the affected immigrant population.

It is hoped that during the next two years priority will be given to the development of hospital liaison in all areas but in particular in the north of the county. Distances here bring particular difficulties but the expected increase in population and the integrated health service proposals for Milton Keynes make liaison imperative.

Friendly relationships exist between the top nursing management of the community and hospital nursing services in the county. This is facilitated by the fact that the three hospital groups are implementing new nursing management structures and communication between respective nursing management levels are therefore made easier.

5. Domiciliary psychiatric nursing service for the elderly

In an experimental scheme started in September 1970 in conjunction with the department of mental health of the elderly at St. John's Hospital, a ward sister from St. John's and a district nursing sister were seconded to explore the needs of the psychogeriatric patient in the community. They established a scheme to give a specialist nursing service working in close liaison with the community health and social services as well as the hospital.

Their work has shown an important need for psychiatric nursing in the community, preventing unnecessary admissions to hospital, enabling patients to be successfully rehabilitated into the community and providing valuable support and advice to relatives. Various schemes for short-term admissions were started and continuity of care for patients improved.

Agreements were reached to increase the service to six domiciliary psychiatric nurses with joint appointments between the County Council and the Royal Buckinghamshire and St. John's Hospital Management Committee, and towards the end of the year the two nursing sisters were joined by three charge nurses, leaving one post to be filled.

The introduction of this service has enabled closer links to be developed with general practices and the attached nursing teams and more referrals to be accepted, particularly from general practitioners and health visitors.

The records of visits paid in respect of this service for 1971 are 231 patients visited with a total of 1,644 home visits paid.

6. Recruitment and staffing

The year under review was not quite so successful in respect of recruitment as 1970. However, the overall number of nurses, midwives and health visitors leaving the service appears to have been constantly exceeded by the numbers taking up new appointments. Staffing has remained at approximately

90% of the establishment figure throughout the year, although particular problems have arisen concerning the shortage of midwifery applicants and of recruits to the south Bucks division.

During the year there was no increase in establishment of health service assistants. Their work is constantly developing, particularly where it has been possible to deploy them into group practice teams. During the coming year more account must be taken of the contribution which these nurses and auxiliary staff can make to the service. Similarly, the need for increased clerical assistance is brought forward.

At 31st December the general staffing position was:—

	Establishment (*Full-time*)	*In-post* *Full-time*	*In-post* *Part-time*
Director of nursing services	1	1	—
Divisional nursing officers	3	3	—
Deputy superintendent nursing officer	1	1	–
Area nursing officers	2	2	–
Area superintendent health visitors	3	3	–
Deputy area superintendent health visitors	3	1	–
Assistant supervisors of midwives and home nurses	4	–	–
Assistant superintendent nursing officers	–	3	–
Assistant superintendent of nurses' home	1	1	–
Health visiting field staff:			
Group advisers	10	2	
Field work instructors	14	–	
Health visitors	95	22	148 / 120 / 24
Tuberculosis visitor	1	–	
Health service assistants	34	9	49
District nursing and midwifery field staff:			
District nurse/midwife/health visitors	4	–	
District nurse/midwives	59	3	
District midwives	25	3	219 / 186 / 32
District nurses	91	12	
Enrolled nurses	4	4	
Nursing auxiliaries	3	10	

Note: The new structure introduced in accordance with the Mayston report was in the course of implementation at the end of the year. Where appointments to the new posts had been made, the title appropriate to the new structure has been used. Some of the administrative nursing staff, however, still held appointments under the previous management structure at the date to which this list relates.

7. Education and training

It is a matter of satisfaction that during 1971 Buckinghamshire was approved by the panel of assessors at the Department of Health and Social Security as a district nursing training centre for both theory and practice. The first course was held during the late autumn and twelve students attended, all from the staff of the county. Sincere gratitude is expressed for the help received from staff, visiting lecturers and all concerned with the course. It is pleasing to report that at the time of writing this report it is known that all twelve of the students were successful in the examination held in January 1972, and have been awarded the National District Nursing Certificate.

A total of twelve members of staff was additionally seconded for district nurse training to centres at Oxford, Reading, Northamptonshire and the North West Polytechnic. All have now achieved the National District Nursing Certificate, including one State Enrolled Nurse.

Six experienced district nursing sisters undertook courses in preparation for becoming practical work instructors. Domiciliary experience was provided for 39 pupil midwives from three training schools in the county. Thirteen midwives attended statutory post-certificate courses at various centres approved by the Central Midwives Board.

During the year discussions continued concerning the mounting of a health visitor training course at the Milton Keynes College of Education. The Council for the Education and Training of Health Visitors gave approval in principle and it is now likely that the course will open in the autumn of 1972.

At the end of the year twenty-two student health visitors were in training under the County Council's arrangements for sponsorship. Four health visitors completed courses to qualify them as field-work instructors.

In January, sixty health visitors and health service assistants attended a course in early detection of hearing loss in young children. This was the first course on the subject planned and run by staff within the county. It was considered successful, and a further thirty staff were similarly trained in October.

Two two-day in-service courses were held in March, each attended by 60-70 health visitors. Entitled "Why can't you snap out of it?", the courses were designed to promote better understanding of depressive illness. In July, a further two-day course was given on modern developments in education for childbearing, which was arranged for midwives and health visitors not already trained in these techniques. Several hospital midwives joined this course. Two county study days for health service assistants were arranged. The subjects studied were the care of the elderly, and the schoolchild with emotional difficulties, school matrons (employed by the Education Department) being invited to attend the second of these.

The Mayston Report recommended that management training should form a necessary complement to the introduction of new management structures and that local authorities should be encouraged to provide suitable courses. Consequently two first-line management courses were held during the spring and autumn at the Aylesbury College of Further Education. Gratitude is recorded for the interest and willing assistance of Mr. D. J. Cairns and his colleagues of the Department of Business and Management Studies in the preparation and conduct of these courses. Twenty-nine members of the Buckinghamshire nursing staff and fifteen from other authorities attended them.

The 1969 syllabus of the General Nursing Council includes community nursing experience as one of the options to be taken by students entering training after 1st January 1972. Discussions have taken place with the principal tutors of the four schools of nursing in the county, and arrangements have been made to offer six-week periods of community nursing experience, including weekly study-days, for groups of students from these hospitals starting in April 1972. Following an approach by St. George's Hospital, London, it has been agreed to accept groups of student nurses for periods of six weeks, also

starting in April 1972, but the hospital in this case is responsible for the study days. Students at St. George's Hospital take a special "2+1" course, completing their examinations after two years, followed by an intern year.

The nursing staff continue to contribute to the education of student and pupil nurses and midwives by providing programmes of observation of community health services and appropriate lectures. Nurse managers have again participated in the education of medical and dental students, home helps and home help cadets, and with hospital and community nurse management courses both nationally and locally.

8. Special items

(a) Slimfit club

Two health visitors have conducted a slimfit club at Whalley Drive Clinic since February. The sessions held every Tuesday evening have helped a total of 126 members, aged from eight to over 60 years. Members weigh-in at each attendance, and participate in group discussions as well as receiving personal counselling from the health visitors. Films are shown and talks are given by visiting speakers.

In November, the two health visitors concerned started a junior slimfit club, held during the early evening for schoolchildren. Parents are encouraged to attend with their children.

(b) Health visitors' assessment clinic (2-5 years old)

Children within this age group are not being seen to any great extent in child health clinics. Two health visitors and one health service assistant started an assessment clinic held at the general practitioners' surgery at the end of 1970 and have continued to conduct one session per month, seeing a total of 150 children. Each child is seen with his mother or father and receives a general health and developmental assessment within the scope of the health visitor's ability.

(c) Link with nursing club

Monthly meetings of former practising nurses have continued with success at Pebble Lane Clinic, Aylesbury. Membership now totals 27.

9. Accommodation

The problems of accommodation for increased nursing and health visiting establishments and expanding services are unresolved. Indeed, they increase with the need to provide office space for the nurse-managers within the new structure. Particular difficulties have again occurred in the Wycombe area and no means have been found of solving the continuing lack of suitable premises in Princes Risborough.

A three-bedroomed house was rented by the County Council on the Lakes Estate, Bletchley, and the health visitor concerned set up a variety of health service activities. From the outset the project was a success, and the property proves to be a most worthwhile temporary base until the anticipated health centre opens next summer.

In some areas, the health visitors are too many for the small rooms available to them, and they are increasingly aware of the lack of interview rooms. Fieldwork instructors have no room available for teaching students. Opportunities for the use of general practitioners' surgeries are taken whenever possible, facilitated by the attachment schemes, but the former are few and far between at the present time. This is a matter of real concern both in the effect on the morale of the health visiting personnel and on the efficiency of the service they give.

A review of nurses' housing was undertaken and presented to the County Health Committee in April. Several recommendations were made, which included arrangements for the up-grading of older properties, an expansion of the building programme and opportunities for staff other than district nursing and midwifery sisters to occupy nurses' houses.

An increase in the rents of nurses' accommodation was made, and the new rates commenced on 1st October.

10. Milton Keynes

A sub-committee of the Milton Keynes nursing working group was set up in September 1970 to determine the principles required for nurse education within the unified health service for Milton Keynes. The report was presented to the Joint Working Party in July 1971, making several recommendations concerning the education of future nurses in the city and for those already in post in the designated area. Gratitude is recorded for the contribution made by all the members who participated, especially those who travelled from outside the county.

In June 1971 the nursing working group was re-convened, when it was agreed that, since many reports in connection with the new city mention nurses and nursing services, members of the group should write papers on the nursing needs implicit in each report and present these for discussion to the group. Nursing working papers would thereby be prepared and presented to the Joint Working Party. In addition, in order to facilitate attendance, meetings would be held every quarter.

Certain changes occurred in the membership due to resignations and retirements. Members now include nurse-managers from the Royal Buckinghamshire and St. John's Hospital Group, Northampton and District Hospital Group, Bucks County Nursing Services, the Regional Nursing Officer and the Principal Nursing Officer of the Slough Industrial Health Service.

Plans are in hand to present a working paper on occupational health nursing services in Milton Keynes, and for a conference to be held in the designated area during the spring of next year.

11. Statistics

	1971		1970	
	Cases	*Visits*	*Cases*	*Visits*
MIDWIFERY				
Home ante-natal visits		13,686		16,125
Ante-natal home assessment visits		5,555		
Home deliveries	749	*	1,045	15,025
Deliveries by domiciliary midwives in hospitals and general practitioner maternity units	457	*	289	*
Hospital discharges	5,460	*	4,559	32,706
All visits during puerperium		54,383		47,731
Supervisory (teaching midwives)		5,065		4,834

* Not recorded

Births

Hospitals	7,985
G.P. Maternity Unit (a) Unit staff	724
(b) Domiciliary midwives	456
Private Nursing Homes	196
Domiciliary	749
Total	10,110

Hospitals Responding to Emergency Calls	*Number of times called*
Royal Bucks Hospital, Aylesbury	7
Stoke Mandeville Hospital, Aylesbury	1
Upton Hospital, Slough	3
Canadian Red Cross Memorial Hospital, Taplow	7
Amersham General Hospital, Amersham	2
Shrubbery Maternity Home, High Wycombe	2

Reasons for emergency calls	
Retained placenta	12
Post partum haemorrhage	4
Ante partum haemorrhage	2
Abnormal presentation	2
Prematurity	1
Low Apgar score	1

Notification by Midwives of intention to practise

Institutional	
(a) Hospital	181
(b) Private nursing homes	4

Midwives employed by nursing agencies	
(a) Employed in hospitals	83
(b) Employed elsewhere	9

Domiciliary	
(a) Employed by local authority	114
(b) Engaged in private practice	2

GENERAL NURSING

	1971		1970	
	Cases	*Visits*	*Cases*	*Visits*
Patients over 65 years	9,153	249,258	7,860	203,772
Patients aged 5 to 65 years	6,363	112,369	6,104	104,605
Patients under 5 years	511	2,736	368	2,296
Total	16,027	364,363	14,332	310,673

Percentages of visits to persons in various age groups

	1971	1970
Over 65 years	68.4%	65.6%
5 to 65 years	30.9%	33.7%
Under 5 years	0.7%	0.7%

Sessions in general practitioners' surgeries

	1971
Ante-natal and post natal	4,289
Cytology and gynaecology	1,273
Treatment	6,784
Work undertaken at treatment sessions:	
Dressings	11,668
Injections	18,455
Others	12,897

Note: These figures were first collected during 1971 in an attempt to relate the statistics more nearly to the changing pattern of work. Comparable figures are not available for earlier years.

HEALTH VISITING

Peaple visited for the first time during 1971

	1971	1970
Children under 5 years		
Children born in 1971	10,008	10,835
Children born in 1970	10,773	8,203
Children born in 1966-69	22,190	17,158
Expectant mothers	3,337	3,008
Care of the aged		
Persons aged 65 or over	5,341	4,265
Number visited at request of general practitioner or hospital	3,024	2,718
Mental health		
Mentally disordered persons	671	728
Number of these visited at special request of general practitioner or hospital	491	399
Infectious Diseases		
Tuberculous households visited	709	622
Other	313	1,080
All others	6,783	4,593
Total visits		
Children under 5 years of age	131,656	122,165
All other visits	58,266	46,168
Other work		
Nurseries and child minders		
(a) Visits concerning registration	561	278
(b) Other visits	1,728	1,398

School Health Service	1971	1970
Sessions	529	420
Pupils' homes visited	4,025	5,385
Consultation in schools	1,936	*
Detection of Deafness		
Screening tests		
(a) Performed	4,714	2,165
(b) Assisted	3,556	1,823
Audiometry tests		
(a) Threshold	60	398
(b) Sweep	26	
Hospital Liaison		
Maternity	415	380
Chest	287	260
Paediatric	540	372
Other	174	76
Geriatric	294	152
Diabetic	107	80
Work in association with general practice:		
Practice meetings attended	1,166	*
Consultations at surgery with general practitioners	9,710	8,359
Consultations at surgery with clients	3,291	*
Child health clinics	918	*
Other sessional work	1,096	956
Regular sessions		
Child health clinics	4,780	5,179
Mothers Clubs	489	609
Group Teaching	3,020	2,853
Chest Clinics	106	37

* Not recorded

Health service assistants

Summary of hours worked

School medical inspections and surveys	8,983	9,211
Clerical work	12,623	10,390
Child health clinics	8,887	8,767
Home visits	11,259	8,195
Vision testing	4,070	4,176
Immunisation and B.C.G. vaccinations	4,856	2,769
Ophthalmic clinics	348	314
Foot inspections	708	454
Chest clinics	372	318
Cervical cytology clinics	431	612

Home visiting work

Children born in 1971	1,054	869
Children born 1966-70	5,109	4,249
Visits to persons aged 65 and over	8,195	4,819
Visits to school children	2,294	1,397
Visits on account of tuberculosis and other infectious diseases	136	198
Visits to expectant mothers	91	108
Visits to all others	1,886	1,378

Detection of Deafness

Screening tests:		
(a) Performed	2,182	930
(b) Assisted	2,727	1,175
Audiometry tests:		
(a) Threshold	2,111	2,264
(b) Sweep	8,986	5,283

For the year 1971, amendments were made to the forms used by staff in order to present returns of work undertaken. It was hoped thereby to show in some detail the amount of care and support given to people in the community. The care given is frequently undramatic and of a routine nature and it is easy to forget the essential need people have for nurses of every skill to care for them following transfer from hospital care to home and also when hospital services are not required.

The following comments are based upon the annual work returns and investigations of the service given.

(a) *Midwifery*

In addition to the figures recorded above for midwifery services in the county, the following table demonstrates the changing pattern of domiciliary midwifery over the past 5 years.

	1967	1968	1969	1970	1971
Institutional deliveries	8,180 (79%)	9,239 (84%)	8,569 (86%)	8,953 (90%)	9,361 (92%)
Domiciliary deliveries	2,112 (21%)	1,785 (16%)	1,443 (14%)	1,045 (10%)	749 (8%)
Deliveries by domiciliary midwives in general practitioner maternity units	27 (0.26%)	117 (1.06%)	136 (1.36%)	289 (2.89%)	456 (4.51%)

Notes: Bletchley general practitioner maternity unit opened 23rd July, 1967.
Stoke Mandeville general practitioner maternity unit opened 1st February, 1970.

(b) *Home Nursing*

A small working group of nurse managers has begun to study the work carried out by home nurses and health visitors, based on the 1971 returns. Their findings will be fully documented elsewhere but some interesting information has been made available. In order to demonstrate the proportion of work done in the various age groups of patients and what types of diseases required the care of home nursing sisters, a sample of 89 registers of cases for 1971 was taken. The following table demonstrates the findings but are not totals for the county as a whole.

Sample survey of nursing

Type of case	*Number of patients*				
	Under 5 years	*5-16 years*	*17-64 years*	*65 and over*	*Total*
E.N.T.	33	18	39	54	144
Ophthalmic diseases	11	—	27	124	162
Carcinoma	1	1	232	472	706
Cardio-vascular	3	2	157	1,214	1,376
Chest diseases	27	16	161	550	754
Diseases of bones and joints	3	6	143	862	1,014
Diseases of digestive system	37	22	115	287	461
Diseases of central nervous system	4	8	193	431	636
Diseases of blood	1	8	341	760	1,110
Diseases of skin	10	7	165	484	666
Diabetes	1	10	73	270	354
Tuberculosis	3	8	59	28	98
Other infections	58	43	175	194	470
Genito urinary	7	7	102	311	427
Endocrine diseases	—	4	55	75	134
Accidents	75	103	245	322	745
Mental illness	—	—	75	201	276
Mental subnormality	4	5	23	65	97
Physical handicap	3	5	141	489	638
Post operative cases requiring treatment	120	165	952	474	1,711
Incontinent patients	2	6	55	537	600
Other	46	31	313	908	1,298
Total number of patients according to case register	437	451	3,160	7,598	11,646

Note: Some patients are included in more than one treatment category. The totals of each column therefore exceed the total number of patients shown at the foot of each.

It is interesting to note that there is a high incidence of patients requiring post-operative treatment. This will increase as planned transfer to home care from hospital surgical units becomes a more generally accepted procedure.

In the oldest age group the most commonly occurring condition is cardiovascular disease, followed by diseases of the bones and joints and then of blood (mostly anaemia). Incontinence occurred in 7% of cases in this age group.

(c) *Health visiting*

A continued increase in the work of health visitors with all age groups has been demonstrated. More visits were made to families with children under five years and more individual children were seen. It is obvious that much time needs to be devoted to certain families and individuals both in home visiting and subsequent work undertaken on their behalf.

Families with multiple problems accounted for one visit in every twenty during the year. Preventive and supportive work in the mental health field is an increasingly important aspect of work, no doubt because of the closer working partnerships between general practitioners and health visitors. In 1971 a total of 7,565 visits was concerned with emotional problems, 3,325 with marital problems and 1,194 visits were made to the bereaved. Health visitors contributed to the care of the handicapped and chronic sick, with 3,354 and 3,315 home visits, respectively.

The telephone is a valuable link with clients and many call to see the health visitor in person. During the year 3,291 client consultations were held at general practitioners' surgeries and a further 5,243 at health visitors' offices.

Links with voluntary agencies and other departments of the local authority accounted for 3,944 visits as well as 4,796 office consultations with people other than clients. This liaison work is important, especially in relation to social services staff.

Health visitors were involved in student training on 1,622 occasions. It is essential for student nurses, student health visitors and others to learn about the community nursing services, but it does place an additional responsibility on staff, and care must be taken to safeguard the interests of and the relationship with clients.

Nursing staff are encouraged to undertake immunisation and vaccination techniques. Appropriate training is given and they then receive a certificate authorising them to carry out these procedures. The following table demonstrates the number of staff undertaking this work and the type of session at which it is carried out:—

	Health Visitors	*Health Assistants*	*District Nurses and Midwives*
1. Number of staff authorised to carry out immunisation and vaccination procedures	64	43	78
2. Number of staff who carried out immunisation and vaccination procedures	26	43	55
3. Number of staff who carried out immunisation and vaccination procedures in the following types of premises:—			
(a) Patient's home	5	11	5
(b) G.P. Surgery (other than Health Centre)	17	31	49
(c) Health Centre	7	21	4
(d) Child Health Clinic (other than (b) or (c) above)	11	26	1
(e) School	2	31	1

12. Marie Curie Nursing Service

The provision of short-term help for families caring for patients at home in the terminal stages of carcinoma has continued. The cost of the service is borne by the Marie Curie Memorial Foundation but the administration of the work remains with the county nursing service. A total expenditure of £1,095 was used to help 33 patients.

Owing to the casual nature of the work, only a small number of nurses is available, and it is a matter of regret that on several occasions it has not been possible to give help due to lack of staff.

13. Provision of nursing equipment on loan

In 1970 reference was made to the attachment of health visitors and district nurses to general practices, resulting in an increased demand for equipment from these officers and less from the social workers. This trend continued in 1971, with referrals by the nursing staff showing a 28% increase over 1970. Requests from occupational therapists have increased by 91%; requests from hospital medical social workers showed little change.

It will be noted that the requests for ripple beds have increased by 148% over the previous year. This reflects the earlier discharge from hospital of patients who, without this equipment, would be prone to bed sores. Ripple beds are either hired for short-term use or purchased for long-term use.

The following table shows details of the aids issued during the year:—

	1971	1970
Walking aids	402	397
Wheelchairs	217	252
Commodes	202	202
Drawsheets	56	18
Ripple beds (hired)	46	21
Ripple beds (purchased)	11	2
Bed cradles	40	36
Lifting poles and chains	38	41
Back rests	38	53
Beds and mattresses	36	48
Air and sorbo rings	33	25
Hoists and attachments	31	29
Rubber sheeting (in lengths)	19	7
Raised toilet seats	19	21
Fracture boards	17	22
Mattresses	9	6
St. Anne's cushions (now discontinued)	4	1
Beds only	3	—
Total	1,221	1,181

The sources of referral during the past two years were as follows:—

District nurses	413	342
Health visitors	334	242
Medical social workers (hospitals)	163	156
Occupational therapists	157	82
Social workers	143	292
Total	1,210	1,114

14. Registration of Nursing Homes

No new homes were registered during 1971 and all of those existing at the beginning of the year remain open. At 31st December, therefore, there were still nine registered homes in the county, as follows:—

Address	*Type*
The Gables, 123 Wendover Road, Aylesbury	Aged and infirm minor surgical
St. Joseph's, Candlemas Lane, Beaconsfield	Maternity, acute surgical, minor surgical, medical, convalescent, aged and infirm

Rosslyn, 46 Ledborough Lane, Beaconsfield	Minor surgical, medical, convalescent, aged and infirm
West Farm, Emberton	Maternity
Withyfield, Green Lane, Farnham Common	Convalescent, aged and infirm
White House, North Park, Gerrards Cross	Medical convalescent, aged and infirm
*The Nuffield Nursing Home, Wexham Street, Slough	Acute surgical, minor surgical, medical
Tyringham Clinic and Institute of Natural Healing, Tyringham House, Tyringham	Medical, convalescent
Oaklands, 60 Station Road, Woburn Sands	Convalescent aged and infirm

* Approved by the Department of Health and Social Security in connection with Section 1 (iii) of the Abortion Act, 1967.

THE SUPPLEMENTARY PROFESSIONS

1. Chiropody

(a) General

With the growing realisation that more and more of the elderly and handicapped are becoming housebound as a result of foot troubles, greater demands are being placed on the chiropody service.

Chiropody is essentially a preventive service and therefore plays an important role in meeting the Council's responsibilities to provide for the prevention of illness, care and after-care. In the elderly and handicapped, chiropodial treatment can often prevent further deterioration in physical well-being and mobility. Equally, the service is placing greater emphasis on the prevention of deformities occurring, all too frequently, in the young. Reference is made later in this report (page 143) to a foot health teaching pack developed by the chiropody and health education sections. This is for use in infant and junior schools and it is hoped that the pack will soon be available on a national basis.

Treatment continued to be available, free of charge, for those pensioners in receipt of supplementary allowances, physically or mentally handicapped persons, those suffering from diabetes, registered blind or partially sighted people and expectant and nursing mothers.

(b) Statistics

The volume of work undertaken by the service continues to increase. During 1970 a total of 37,574 treatments was given, whilst in 1971 the total was 41,423. These figures do not include the treatments of schoolchildren which are referred to on page 108.

The details of treatments are as follows:—

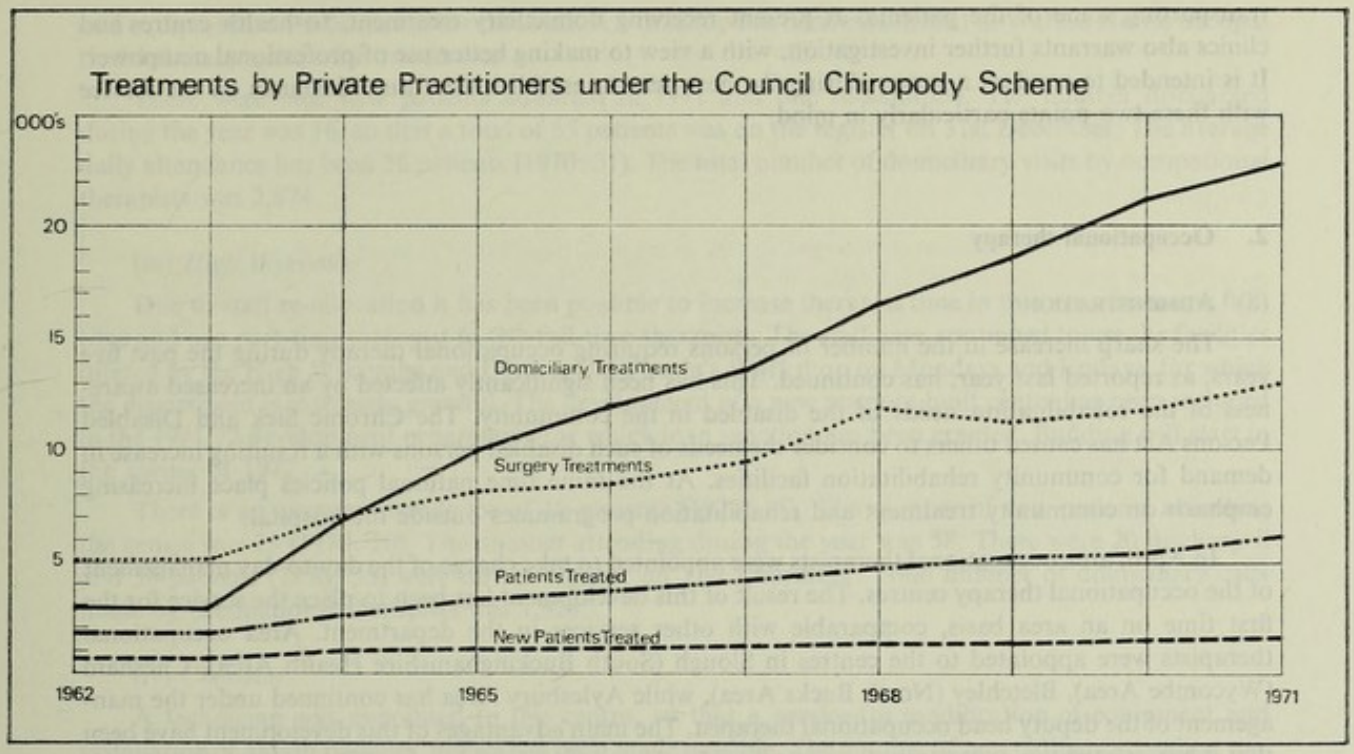
	1971	1970
Patients treated	6,138	5,595
New patients	1,481	1,430
Treatments given in chiropodists' surgeries	12,987	11,918
Treatments given in patients' homes	22,713	21,257
Surgery dressings (where full treatment was not given)	166	122
Domiciliary dressings (full treatment not given)	166	178
Treatments in county welfare homes	5,411	4,099

The graph shows the development of the service over the last nine years.

Whilst it is generally accepted as uneconomical, particularly from the point of view of manpower, to provide domiciliary treatment, the proposal to provide mobile units to improve the service, particularly in rural areas, agreed by the Health Committee in the review of the service in 1969, again could not be implemented owing to financial restrictions. During the year authorisation for home visiting has been more strictly interpreted than in the past, the understanding being that the housebound category would be those confined to the house and garden.

(c) Staffing

The day-to-day administration of the services is the responsibility of the County Chiropodist. In addition, area chiropodists have now been appointed and are responsible for organising treatments in



the county welfare homes, hostels, industrial units and schools, as well as undertaking health education in their areas.

In addition a total of 69 state registered chiropodists was employed on a contractual basis, providing treatment in their own practices on a fee per service basis.

(d) FUTURE OF THE SERVICE

Whilst the service has, up to the present, managed to cope with the demands placed on it, the situation has now been reached where it is becoming increasingly difficult to arrange treatments in some parts of the county. Many of the private practices have reached saturation point and are unable to accept additional patients under the Council's scheme.

There can be no doubt that considerable future expansion will be required in view of the following considerations:—

(i) the realisation that prevention is not only better than cure, but also cheaper both for the individual and the community;

(ii) the increasing development of health centres where the chiropodist is an important member of the health team;

(iii) the development of techniques for the early correction of incipient deformities and the prevention of their later ill-effects;

(iv) the wider use of chiropodial appliances for corrective as well as palliative treatment for the handicapped and elderly.

However, the problem of the acute shortage of qualified chiropodists will have to be overcome. This may well necessitate considering the possibility of training foot hygienists or auxiliaries to undertake some of the more simple treatments under the supervision of the chiropodist. The question of

transporting some of the patients, at present receiving domiciliary treatment, to health centres and clinics also warrants further investigation, with a view to making better use of professional manpower. It is intended to conduct a survey during the next year to establish the future demands on the service with these two points particularly in mind.

2. Occupational therapy

(a) Administration

The sharp increase in the number of persons requiring occupational therapy during the past five years, as reported last year, has continued. This has been significantly affected by an increased awareness of the rehabilitation needs of the disabled in the community. The Chronic Sick and Disabled Persons Act has caused others to consider the needs of such disabled persons with a resulting increase in demand for community rehabilitation facilities. At the same time national policies place increasing emphasis on community treatment and rehabilitation programmes outside the hospital.

In April, area occupational therapists were appointed to take charge of the day-to-day management of the occupational therapy centres. The result of this development has been to place the service for the first time on an area basis, comparable with other services in the department. Area occupational therapists were appointed to the centres in Slough (South Buckinghamshire Health Area), Chesham (Wycombe Area), Bletchley (North Bucks Area), while Aylesbury Area has continued under the management of the deputy head occupational therapist. The main advantages of this development have been that it has created the opportinity for centres to develop according to local conditions so that patients' needs in the community can be met more precisely and according to their individual and local requirements; and it is possible for the head occupational therapist to consider the forward planning needs of the service at a time of radical and rapid change in the field of rehabilitation; in creating a middle management structure it is important that limited professional resources should not be diluted. So far as material resources are concerned, careful control of items such as craft materials is essential to avoid wastage and appropriate administrative procedures have been introduced.

With the development of an area service, a system of referral has been introduced so that referring agents, notably general practitioners, hospital consultants and social workers are aware of the services available for those in need of assistance and will be equally familiar with the means of obtaining the service for patients. At the same time returns systems have been implemented; and a comprehensive occupational therapy assessment profile for patients is currently undergoing field trials.

(b) Centres

(i) *Bletchley*

The brief for the daily living assessment unit has been approved and the extension to this unit, which will be an important part of the Milton Keynes occupational therapy service, is included in the 1971/72 development programme.

There were 29 new patients admitted in 1971 and the number on the register at 31st December 1971 was 52 (1970: 64). Forty-one patients were discharged during the year. The centre is open five days per week and has an average attendance each day of 27 (1970:31). Total number of domiciliary visits made by occupational therapists during the year was 1,961.

(ii) *Aylesbury*

A technician was appointed to this centre so that for the first time an important service is being developed in conjunction with the occupational therapists for alterations and the installation of aids

and equipment in the homes of the disabled. A workshop has been established in Walton House occupational therapy centre for this service.

There were nine new patients admitted in 1971 and one re-admitted. The number discharged during the year was 16, so that a total of 55 patients was on the register on 31st December. The average daily attendance has been 28 patients (1970: 31). The total number of domiciliary visits by occupational therapists was 2,874.

(iii) *High Wycombe*

Due to staff re-allocation it has been possible to increase therapist time in this area from one full-time and one part-time therapist to two full-time therapists. The staff have continued to use the facilities offered by the High Wycombe and District Old People's Workshop on Mondays and Fridays, for which the department is extremely grateful. The development of a new purpose-built centre has been included in the 1971/72 development programme for which loan sanction has been granted. Building will start in the spring of 1972.

There is an average attendance of 18 patients (1970: 15). The number of new patients attending the centre was 23 (1970: 20). The number attending during the year was 58. There were 20 discharged and 38 patients (1970: 35) were on the register on 31st December. Total number of domiciliary calls made by occupational therapists was 1,928.

(iv) *Chesham*

A technician was appointed to this centre, so that a service for modification of equipment and installation of aids in patients' homes has been made possible. The number of new patients attending was 41 (1970: 27) and the number discharged 17. The number of patients on the register on 31st December was 65 (1970: 41); average daily attendance at the centre was 16 (1970: 14). Total number of domiciliary calls by occupational therapists was 2,470.

(v) *Slough*

The total number of domiciliary visits made by occupational therapists was 1,526. Patients discharged from the centre totalled 102 and the average daily attendance was 25 (1970: 22). The number on the register on 31st December was 63 (1970: 56).

(c) Blind and partially-sighted persons

The service to blind and partially-sighted persons has continued to develop. Regular craft classes have been held at Bletchley, Aylesbury, Great Missenden, High Wycombe and Slough, with a total of 380 attendances, while 2,176 visits have been made to blind persons' homes. The mobility instructor for the blind has given instruction to 12 persons.

(d) County welfare homes

The need for an occupational therapy service for the elderly in county welfare homes continues. During the year it has been possible to develop links with the county physiotherapists who visit the homes so that the needs of residents can be met promptly. Occupational therapists have made visits to homes on request to advise regarding the provision of aids to daily living, while at the same time handcraft teachers have expanded the service to the residents. Twenty-two homes are regularly visited by the teachers on a weekly basis. The part III accommodation at Tindal Hospital has been visited regularly while it has also been possible to provide service to the psychogeriatric day hospital at St. John's Hospital. This has afforded a valuable educational facility to staff in the day care of the elderly

and mentally infirm. It is likely that occupational therapy in this area will have an increasing importance in therapeutic terms rather than being purely diversional as has been the case in the past. It is of the greatest importance therefore that all staff are aware of the mental health and physical needs of the elderly in the community.

(e) REHABILITATION

There have been significant changes in the groups of disabilities treated during the past twelve months and the following table shows the number of patients receiving treatment according to the primary disability. Figures for the two preceding years have been included to show how the pattern of service is changing. The impetus of change in this pattern will increase as the occupational therapy service makes a growing contribution to the rehabilitation and resettlement programme of patients leaving hospital who require continuing support in the community.

The implementation of the Chronic Sick and Disabled Persons Act on 1st April 1971 and the publication of "Handicapped and impaired in Great Britain" by Amelia Harris, Office of Population, Censuses and Surveys, Social Survey Division, and "Work and housing of impaired persons in Great Britain" by Judith Buckle, also of that office, have created a greater awareness in both professional and lay sections of the community regarding the rehabilitation requirements of the disabled.

(f) STATISTICS

Table I. Primary disabilities of patients referred for occupational therapy

	1971	1970	1969
Diseases of bones and organs of movement	556	360	267
Diseases of the nervous system	487	392	356
Psychiatric, psychoneurotic and personality disorders	137	93	90
Diseases of the circulatory system	110	99	65
Diseases of the respiratory system	65	58	68
Senility and ill defined conditions	50	34	26
Amputations	36	33	26
Allergic, endocrine, metabolic and emotional disorders	35	20	14
Neoplasms	29	20	19
Disorders of the sense organs	29	18	12
Injuries	19	11	2
Congenital malformations	18	16	13
Diseases of the genito-urinary system	15	4	4
Infective and parasitic diseases	10	12	16
Diseases of the digestive system	13	10	8
Diseases of the blood and blood forming organs	10	4	3
Diseases of the skin and cellular tissue	3	2	1
Total	1,622	1,186	990

The changing pattern is further illustrated in Table II which shows the level of rehabilitation achieved by patients discharged from the centres during the past twelve months. It will be seen that

while there has been an increase in all areas there has been a marked increase in the numbers of patients who have been discharged to total or partial independence in household duties and activities of daily living.

Table II. Circumstances of patients following discharge

	1971	1970
Independence or partial independence in household duties/daily living activities	363	192
Therapy discontinued due to death or deterioration in the patient's condition	164	101
Moved out of Buckinghamshire	29	18
Admitted to hospital for deteriorating condition	26	13
Open employment	25	19
Admitted to a home for physically handicapped or elderly persons	19	18
Admitted to rehabilitation centre or training centre	13	8
Sheltered employment	1	2
Other circumstances	90	52
Total	730	423

The significant increase in the number discharged is largely due to the provision of personal aids, general household aids and household modifications.

Table III shows the number of items issued to disabled persons in the last year. It is of interest to note the large number of patients whose independence is facilitated by aids to personal hygiene and bathing.

Table III. Aids to daily living issued to disabled persons in rehabilitation

1. *Washing, bathing and toilet aids*	
Non-slip mats to be used in the bath	228
Raised toilet seats and toilet frames	212
Rails for use in the bathroom and w.c's	172
Bath boards and sliding boards	170
Bath seats	167
Shower attachments	28
Bath benches	22
Warma seats	6
Over top frames	4
Baths for disabled children	3
Lever tap sets	3
Bath shortener	1
2. *Aids for mobility*	
Ferrules	37
Ramps	20
Stair rails	16
Bed block sets	13

Walking sticks	13
Special chairs	12
Steps	8
Spring poles	4
Rope ladders	3
Walking frames	3
Pairs of crutches	2
Door knob turners	2
Pulley handles	2
Set of hoist straps	1
Leg rest (padded)	1
Platform for chair	1
Swing	1

3. *Feeding aids*

Cutlery	19
Trolleys	16
Egg cups	8
Dishes	7
Beakers	4
Tilting tea pot stands	3
Non-slip table mats	1
Tap turners	1

4. *Aids for picking up and retrieving* 50

5. *Dressing aids*

Stocking aids	28
Pairs of elastic shoe laces	23
Velcro fastening and foam cushions, shoe horns	11
Long handle sponge	1
Long handle comb	1

6. *Miscellaneous household items* 30

(g) TRANSPORT

Due to the times at which transport is required, which coincide with periods of peak demand for ambulance transport, alternative conveyance for patients to the centres has been investigated following recommendations made in "A community occupational therapy service" 1970. The Committee approved the introduction of a pilot scheme in the High Wycombe area to provide transport for patients on contract and, subject to arrangements proving satisfactory, it is hoped that the service will be extended to cover other parts of the county.

Coaches make two journeys to bring patients to the High Wycombe and District Old People's Workshop. Twenty-two patients are carried on Mondays and Fridays. It is hoped that these arrangements will mean a significant reduction in travelling time for the disabled and the elderly. Five patients continue to require specialist ambulance facilities.

(h) PROFESSIONAL EDUCATION AND TRAINING

The course tutor of the Dorset House School of Occupational Therapy, Oxford visited the county occupational therapy service and approval in principle has been given by the college to the seconding of students for clinical practice training. Similarly the principal of the York School of Occupational

Therapy has requested that students be attached to the county service for periods of six weeks so that they are aware of the domiciliary aspects of occupational therapy. This will be possible, subject to satisfactory arrangements being made for accommodation in the area, in the new year.

The head occupational therapist was invited by the occupational therapists board of the Council for the Professions Supplementary to Medicine to represent that Board in giving oral evidence to the committee on the role, education and training of nurses under the chairmanship of Professor Asa Briggs. A paper was also submitted to the Tunbridge Committee investigating the role of the paramedical professions.

Arrangements have been made with the St. Albans School of Art for students to be seconded as part of their practice placement during a twelve months course in the remedial use of artistic media.

Throughout the year, staff have been encouraged to attend conferences and courses and to undertake visits to hospitals and other places of interest. They have thus had the opportunity to keep in touch with the latest developments in occupational therapy and in the aids available to handicapped people.

There has been an excellent opportunity during the year to talk to groups of health visitor trainees and medical students about the occupational therapy service. This has made possible the presentation of occupational therapy for the patient as a team responsibility in rehabilitation. It has also been possible for therapists to attend case conferences in hospital and thereby develop a team concept with hospital colleagues. Regular staff meetings have taken place both in the centres and in the County Offices so that there is altogether a more positive team identity in the service. Staff are most appreciative of the opportunity to keep abreast of educational, managerial and clinical developments in the field of occupational therapy at a time of rapid and constant change.

3. Physiotherapy

There was a slight increase in the number of treatments given to residents of the county welfare homes by the two full-time physiotherapists.

The total number of treatments given during the year amounted to 9,394, compared with 9,239 treatments during 1970. The greater proportion of these were to alleviate arthritic and non-articular rheumatic complaints, (58%). Of the severe disabling conditions amongst elderly people these are most amenable to physiotherapy. Relief was also sought for bronchial conditions, (6%), cerebrovascular accidents, (14%), orthopaedic conditions and fractures, (11%), and neurological and other conditions, (11%).

Treatments were of varying duration to suit the complaints treated, and the usual therapeutic methods, exercise, electrical treatment, and massage were those most commonly used. Progress was followed after the admission of residents into welfare homes, advice given, and measures taken to economise effort and improve comfort.

Liaison was promoted with visiting medical officers, matrons and staff, the occupational therapy and chiropody services, and others concerned with the well-being of the residents. The physiotherapy given by local hospital departments was augmented by the follow-up and after-care of residents discharged from hospital.

To maintain mobility and independence, an increasing number of residents was assessed and referred, when necessary, for the provision of aids to daily living. They were assisted to become more ambulant with walking aids and other rehabilitatory progressions.

Assistance was given with a view to alleviating postural and respiratory defects impeding the well-being of residents.

Due in some measure to increasing longevity, the physical difficulties now encountered seem more varied than formerly, and the therapeutic treatments and supports have been adapted accordingly by the staff.

AMBULANCE SERVICE

1. General

The demands on the ambulance service continued to increase during 1971. A total of 13,136 more patients was conveyed, with an increase of 48,146 miles, as compared with 1970. The total patients carried during the year was 310,229 involving a total mileage of 1,958,229. The resulting average of 6.31 miles per patient represents the lowest figure yet achieved by the service.

In the main, the increase in patients can be attributed to the ever-continuing requests to convey patients to day-care homes and hospitals and psychogeriatric centres.

It is worth mentioning that the total number of emergency cases amounted to 12,350, some 916 less than the previous year.

2. Ambulance car service

This has proved of considerable value to the ambulance service, carrying in the main long distance patients with waiting times for treatment, thus relieving ambulance vehicles and manpower for more appropriate work.

The ambulance car service carried 5,252 patients and travelled 106,618 miles, giving an average of 20.30 miles per patient. These figures show a slight reduction compared with 1970, when 5,779 patients were carried 118, 212 miles, an average of 20.46 miles per patient.

3. Staffing

An improvement in the staffing position has been experienced during the year, particularly in the standard of candidate for appointment in the service, permitting a high degree of selectivity. There were only eight full-time vacancies at the end of the year, the majority of these being in the middle and southern areas of the county, although recruitment has improved in these areas during the period in question.

4. Staff meetings

Regular quarterly meetings continue to be held at the five ambulance stations and are attended by a fair number of ambulance personnel. These meetings have proved an ideal means of communication between management and staff. The meetings are formally conducted and work to an agenda, consisting of items proposed by both management and ambulance personnel. All staff are kept informed of future developments directly affecting them and they, in turn, express their opinions on a variety of subjects, the open discussion of which results in a better understanding throughout the service. Minutes of the meetings are circulated.

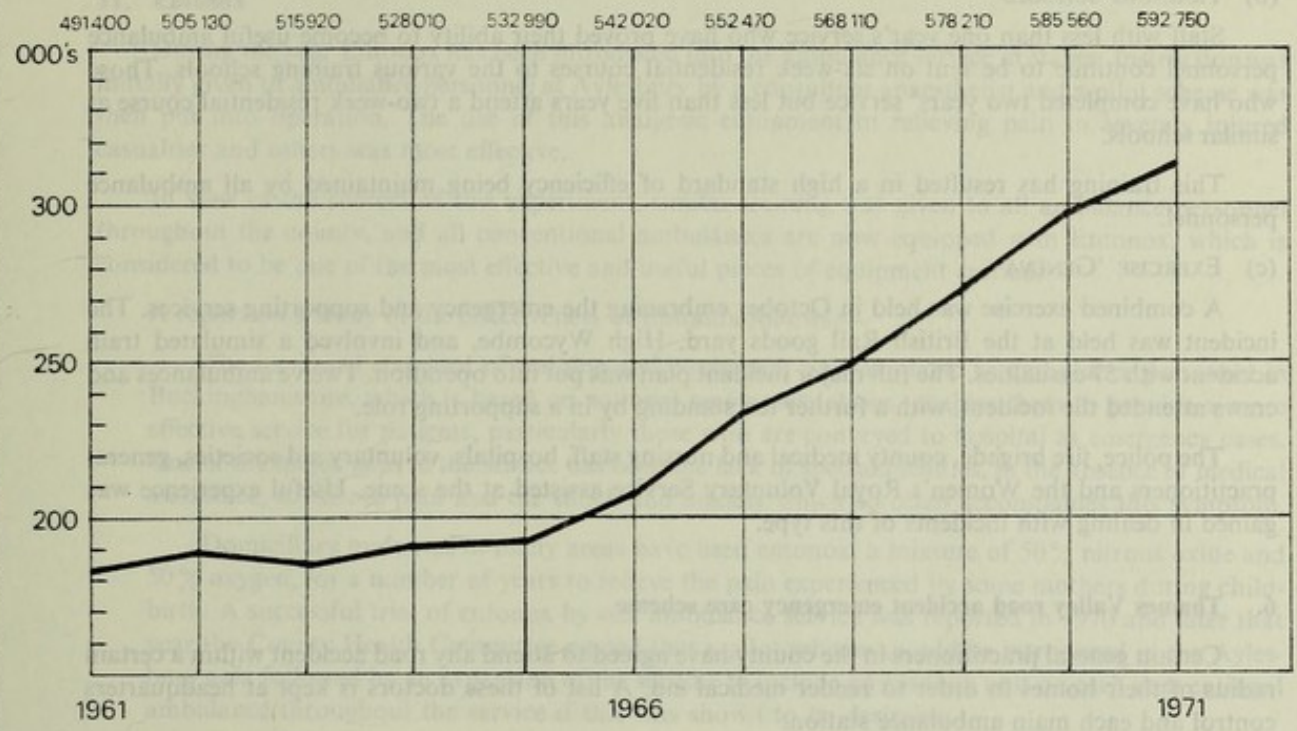
5. Training

(a) Induction courses

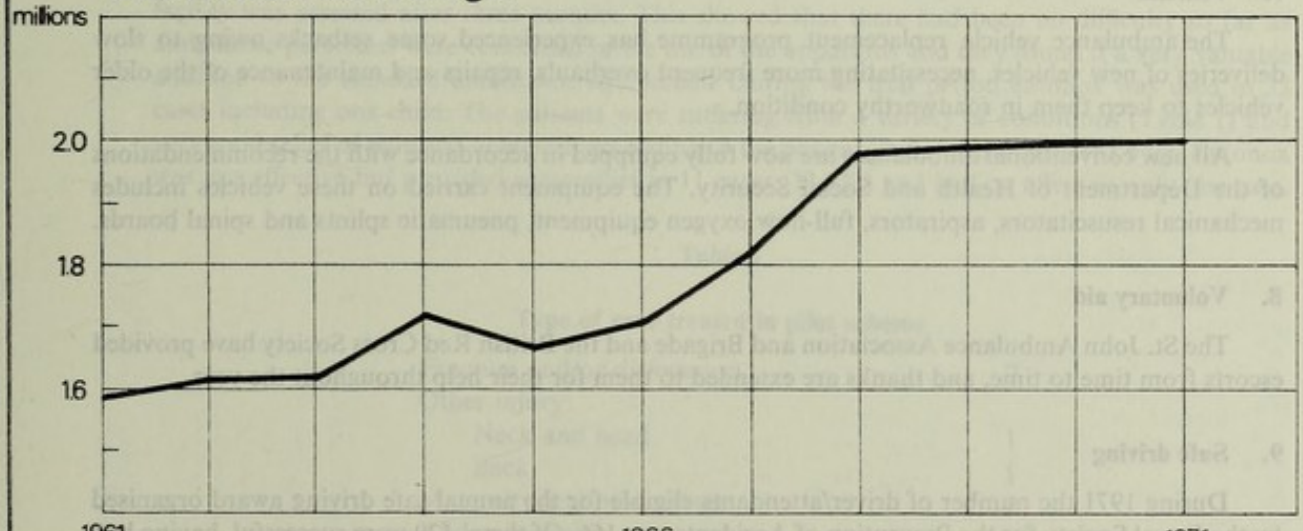
The introduction of induction courses for entrants to the service has proved most beneficial. These are held at the ambulance service headquarters, Aylesbury, and consist of five days of intensive training and instruction in all matters relating to ambulance work. This initial training has proved effective and provides the confidence required before undertaking the work of ambulance personnel.

Patients conveyed by ambulance

Population of Buckinghamshire



Total ambulance mileage



Average miles per patient

8.63	8.54	8.75	8.92	8.64	8.23	7.78	7.57	7.01	6.42	6.31

(b) TRAINING SCHOOLS

Staff with less than one year's service who have proved their ability to become useful ambulance personnel continue to be sent on six-week residential courses to the various training schools. Those who have completed two years' service but less than five years attend a two-week residential course at similar schools.

This training has resulted in a high standard of efficiency being maintained by all ambulance personnel.

(c) EXERCISE 'GENEVA'

A combined exercise was held in October embracing the emergency and supporting services. The incident was held at the British Rail goods yard, High Wycombe, and involved a simulated train accident with 57 casualties. The full major incident plan was put into operation. Twelve ambulances and crews attended the incident, with a further ten standing by in a supporting role.

The police, fire brigade, county medical and nursing staff, hospitals, voluntary aid societies, general practitioners and the Women's Royal Voluntary Service assisted at the scene. Useful experience was gained in dealing with incidents of this type.

6. Thames Valley road accident emergency care scheme

Certain general practitioners in the county have agreed to attend any road accident within a certain radius of their homes in order to render medical aid. A list of these doctors is kept at headquarters control and each main ambulance station.

To provide medical equipment above the scale carried on an ambulance for these, or other doctors who may come across a road or other accident when passing, each conventional ambulance carries a box of medical equipment supplied by the Thames Valley road accident emergency care scheme.

7. Vehicles

The ambulance vehicle replacement programme has experienced some setbacks owing to slow deliveries of new vehicles, necessitating more frequent overhauls, repairs and maintenance of the older vehicles to keep them in roadworthy condition.

All new conventional ambulances are now fully equipped in accordance with the recommendations of the Department of Health and Social Security. The equipment carried on these vehicles includes mechanical resuscitators, aspirators, full-flow oxygen equipment, pneumatic splints and spinal boards.

8. Voluntary aid

The St. John Ambulance Association and Brigade and the British Red Cross Society have provided escorts from time to time, and thanks are extended to them for their help throughout the year.

9. Safe driving

During 1971 the number of driver/attendants eligible for the annual safe driving award organised by the Royal Society for the Prevention of Accidents was 166. Of these, 129 were successful, having had a year of accident-free driving.

10. Air travel

Three patients were transported by air, compared with a total of nine during 1970.

11. Entonox

During the year Entonox has been introduced into the ambulance service in stages. Instruction was initially given to ambulance personnel at Aylesbury by a consultant anaesthetist and a pilot scheme was then put into operation. The use of this analgesic equipment in relieving pain in severely injured casualties and others was most effective.

In view of the success of this experiment, similar training was given to all ambulance personnel throughout the county, and all conventional ambulances are now equipped with Entonox, which is considered to be one of the most effective and useful pieces of equipment carried.

A report on a study of the effectiveness of Entonox follows:—

The increased standard of training and equipment now available to ambulance personnel in Buckinghamshire, which is based on national recommendations, enables them to provide a more effective service for patients, particularly those who are conveyed to hospital as emergency cases. One of the major gaps in the service has been the lack of special facilities, in the absence of medical assistance, to relieve pain and the shock and anxiety which so often accompanies this symptom.

Domiciliary midwives in many areas have used entonox, a mixture of 50% nitrous oxide and 50% oxygen, for a number of years to relieve the pain experienced by some mothers during childbirth. A successful trial of entonox by one ambulance service was reported in 1970 and later that year the County Health Committee agreed that a pilot scheme should be introduced in the Aylesbury area followed by an expansion of the scheme to include an entonox unit on each conventional ambulance throughout the service if this was shown to be desirable.

The pilot scheme

Following initial theoretical and practical training of ambulance personnel by a consultant anaesthetist, every member of staff based at the Aylesbury station received written instructions concerning the use of the apparatus and from 1st January 1971 an entonox unit was provided on five of the conventional ambulance vehicles based at the station. Experience in the use of this new facility was assessed after three months. This showed that there had been no difficulty so far as ambulance personnel were concerned in the use of the apparatus and they found it a very valuable addition to the standard ambulance equipment. During the trial period entonox was used in 33 cases including one child. The patients were suffering from a variety of conditions (Table 1) and very good relief of pain was achieved, according to the patient, in 21 of the cases (63.6%). Entonox was less effective but provided some relief in 11 cases (33.3%) and had no effect in only one case.

Table I

Type of case treated in pilot scheme

Fracture and/or dislocation	7
Other injury:	
Neck and head	1
Back	1
Maternity and miscarriage	9
Abdominal pain	8
Coronary and other chest pain	4
Pain elsewhere	3
Total ..	33

In view of the success of the pilot scheme steps were taken during the remainder of 1971 to train all ambulance personnel in the county in the use of entonox and to provide this equipment on all of the 42 conventional ambulance vehicles. The extension of the scheme was started in the North Bucks area because of the longer ambulance journeys involved and entonox was introduced in this part of the county from August 1971. The scheme was then extended to the High Wycombe area in October and South Bucks in November.

The use of entonox in 1971

A review of the use of entonox in the ambulance service was undertaken at the end of the year based on records completed by ambulance personnel on each occasion the apparatus was used. The figures in each area are not in any way comparable with one another because of the different periods of the year for which the equipment was available. They suggest, however, that entonox may be indicated in 5% to 10% of the emergency cases conveyed by the service and this figure may well rise as a result of greater experience in the use of the equipment.

During 1971 entonox was used successfully by the ambulance service in a wide variety of cases (Table II), and in addition to the well established efficiency of entonox in childbirth, it proved particularly successful in providing relief from coronary and other chest pain and also in certain types of abdominal pain such as that due to appendicitis, perforated peptic ulcers and retention of urine.

Table II

Type of case treated during 1971

Ambulance station at which vehicle is based

	Aylesbury	*Bletchley (including Newport Pagnell & Maids Moreton)*	*Slough (including Chalfont)*	*High Wycombe (including Amersham)*	*Total*	*%*
PRIMARY DIAGNOSIS						
1. Fracture and/or dislocation	28	27	9	11	75	26.2
2. Other injury:						
Neck and head ..	3	5	2	1	11	3.9
Arm	1	3	1	1	6	2.1
Leg	3	5	2	2	12	4.2
Back	4	5	5	5	19	6.6
3. Burns	3	2	—	1	6	2.1
4. Maternity and miscarriage	29	17	2	5	53	18.6
5. Abdominal pain	36	18	6	4	64	22.3
6. Coronary and other chest pain	12	12	8	4	36	12.6
7. Pain elsewhere	3	1	—	—	4	1.4
Total:	122	95	35	34	286	100%

Note: The statistics from the areas are not comparable. Entonox was only available in High Wycombe and South Bucks for a very short time towards the end of 1971.

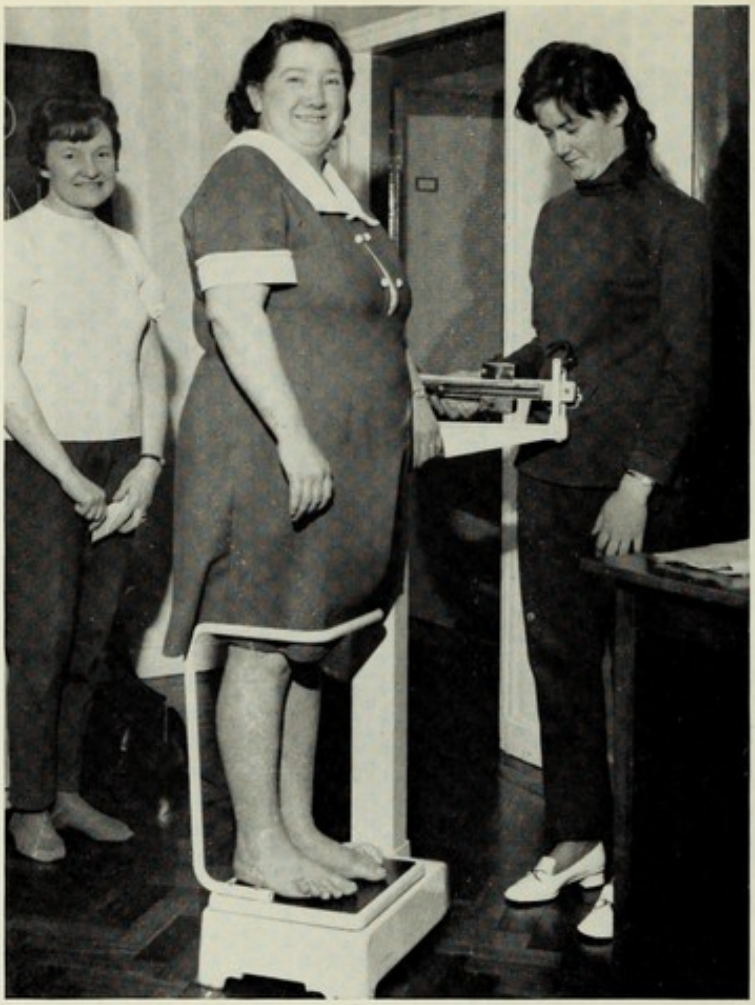
With careful explanation and handling the equipment can be successfully used by children, particularly in cases of burns and fractures, and nine cases in the 1971 series were children. Entonox also proved very helpful where a patient was suffering from a condition in which any movement caused pain and in these circumstances the removal from home or the scene of an accident to the ambulance, particularly when there were difficult obstacles to overcome, was made very much easier and more comfortable.

The subjective assessment by patients of the value of entonox (Table III) indicates that in 57.3% of cases relief of pain was very good and in 28.7% good. There was limited relief in 9.1%

EXERCISE GENEVA A casualty receives aid . . .

. . . whilst ambulances and rescue teams stand by

(Photographs by courtesy of The Chief Constable, Thames Valley Police Authority)



WEIGHING IN AT THE SLIMFIT CLUB

(Photograph by permission of The Chronicle and Echo, Northampton)

OVERCOMING HANDICAP Steven cannot use his arms, so his typewriter is a vital aid in his school work. He operates it with a mouth-stick made by the school dental service

of cases and in 4.9% no relief was experienced by the patient. In the latter group there was a number of patients who did not use the apparatus correctly and in three cases the patient complained of nausea when taking entonox and it was therefore discontinued.

Table III

Patients subjective assessment of relief of pain

	Aylesbury	*Bletchley Maids Moreton & Newport Pagnell*	*Slough and Chalfont*	*High Wycombe and Amersham*	*Total*	*%*
1. Very good .. (complete or very nearly complete relief)	74	53	17	20	164	57.3
2. Good .. .. (considerable but not complete relief)	26	30	15	11	82	28.7
3. Fair .. .. (limited relief)	15	8	1	2	26	9.1
4. No relief ..	7	4	2	1	14	4.9
Total:	122	95	35	34	286	100%

The time for which the equipment was in use was not recorded in all cases but the majority of patients took entonox intermittently for periods varying between two and twenty minutes during the ambulance journey. The longest recorded period during which entonox was used by a patient was 45 minutes.

In addition to the physiological pain-relieving role of entonox, the psychological effect of having this equipment available was evident in a number of cases.

Conclusion

The experience of the ambulance service in the use of entonox has shown that it provides a safe and efficient means of relieving pain due to a wide range of illness and injury. Self administration allows the patient to control the use of entonox and the only side effect noted was a feeling of nausea in 1% of cases which could have been associated with the injury or illness. The equipment can be used successfully by children. The only contraindications to the use of entonox appear to be in certain head and facial injuries, in cases where the patient's level of consciousness or injuries make it difficult for him to administer the gas to himself and in cases of severe chronic bronchitis and emphysema where the oxygen concentration in the mixture may depress respiration.

HEALTH EDUCATION

1. General

In recent years there have been wider and greater demands on the resources of the health education section. This chapter indicates the nature of the services provided by health education personnel as well as their growing complexity. This latter aspect of health education is demanding, as it necessitates a constant endeavour to keep abreast of growing knowledge and changing attitudes. It also requires the section to review its priorities, and towards this end several small research projects were mounted, with the assistance of the research panel, to try to ensure that available resources are achieving the maximum impact.

2. Group teaching

The major part of health education consists of group teaching in a wide variety of situations. The numbers of group sessions undertaken increase steadily year by year, and details of the groups concerned and personnel involved are given in the following table:—

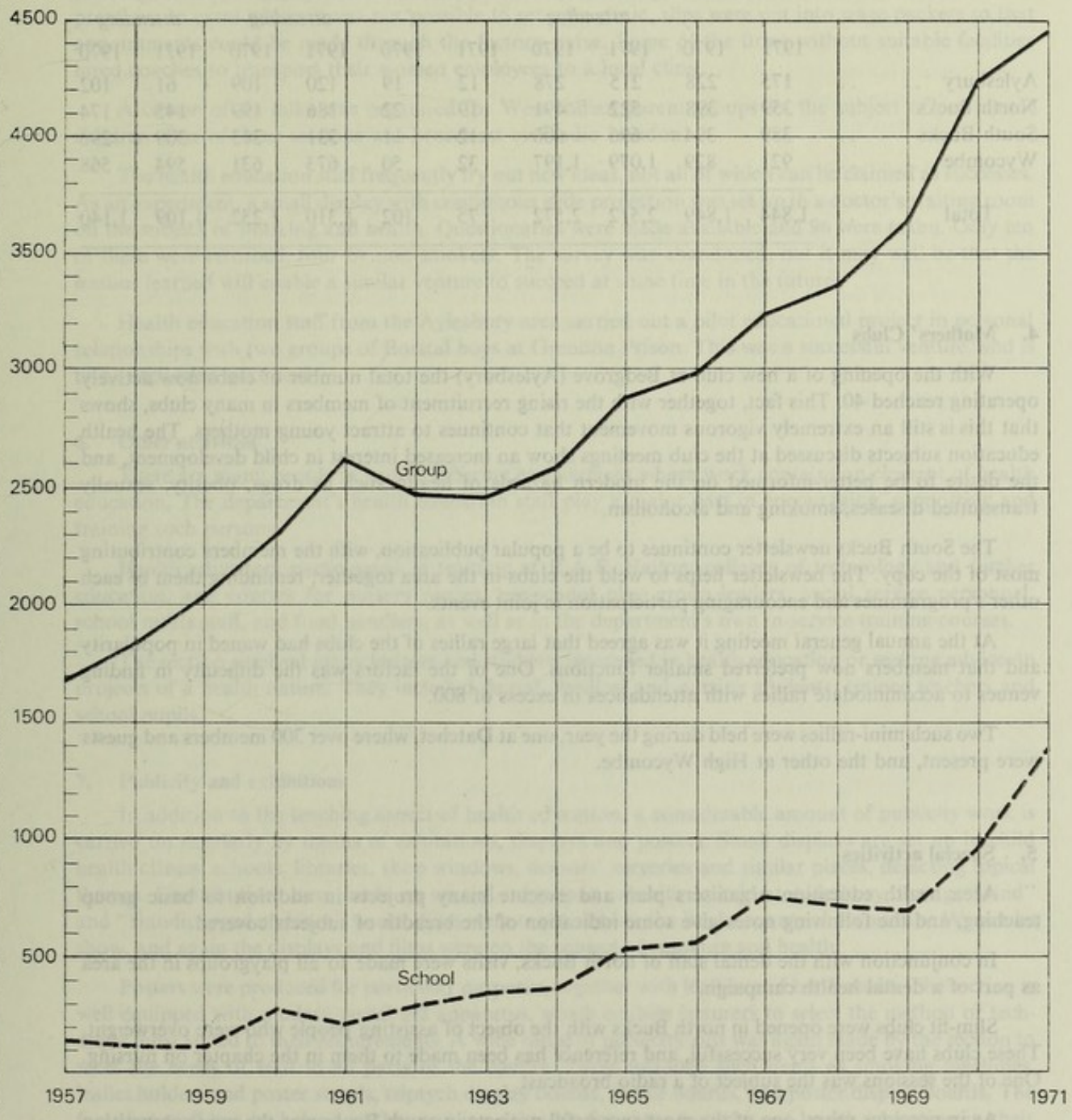
Talks given by	1971	1970	*Talks given to*	1971	1970
Health visiting, nursing, and midwifery staff ..	2,765	2,682	Ante-natal groups ..	1,844	1,849
Health education staff ..	1,047	739	Schoolchildren	1,377	951
Dental staff	234	272	Student groups	295	308
Medical officers	144	153	Mothers' clubs	235	284
Other staff	201	287	County council staff ..	110	239
Outside organisations and lecturers	76	69	Parents' groups	85	58
			Ante-natal groups attended by husbands	75	102
			Youth clubs	47	112
			Old people's clubs.. ..	37	18
			Other groups	362	281
Total ..	4,467	4,202	Total ..	4,467	4,202

3. Ante-natal group activities

The number of sessions held in the various areas fluctuated according to demand. This year there was some reduction, due mainly to a tendency for larger groups to meet in more centralised premises. This is particularly true of sessions to which husbands are invited, at which the average attendance rose to 32, compared with 23 in 1970.

The slight reduction in the total numbers attending may well be associated with the changing pattern of work as the teams based on the general practitioners' surgeries develop. It will be seen on page 41 that

Health Education,
Number of group sessions and sessions held in schools



the Council's nursing staff attended 4,289 ante-natal and post-natal sessions in the surgery. Nevertheless, the figures which follow suggest that, at least for the present, the sessions arranged by the local authority continue to meet a need:—

Area	*Ante-natal classes*				*For husbands and wives*					
	No. of sessions		*No. of women attending*		*No. of sessions*		*No. of women attending*		*No. of men attending*	
	1971	1970	1971	1970	1971	1970	1971	1970	1971	1970
Aylesbury	175	228	215	278	12	19	120	109	61	102
North Bucks ..	359	398	522	491	19	22	186	199	145	174
South Bucks ..	389	394	696	606	12	11	331	313	309	296
Wycombe	921	829	1,079	1,197	32	50	673	631	594	568
Total	1,844	1,849	2,512	2,572	75	102	1,310	1,252	1,109	1,140

4. Mothers' Clubs

With the opening of a new club at Bedgrove (Aylesbury) the total number of clubs now actively operating reached 40. This fact, together with the rising recruitment of members in many clubs, shows that this is still an extremely vigorous movement that continues to attract young mothers. The health education subjects discussed at the club meetings show an increased interest in child development, and the desire to be better-informed on the modern hazards of health such as drugs, obesity, sexually transmitted diseases, smoking and alcoholism.

The South Bucks newsletter continues to be a popular publication, with the members contributing most of the copy. The newsletter helps to weld the clubs in the area together, reminding them of each other's programmes and encouraging participation in joint events.

At the annual general meeting it was agreed that large rallies of the clubs had waned in popularity and that members now preferred smaller functions. One of the factors was the difficulty in finding venues to accommodate rallies with attendances in excess of 800.

Two such mini-rallies were held during the year, one at Datchet, where over 300 members and guests were present, and the other at High Wycombe.

5. Special activities

Area health education organisers plan and execute many projects in addition to basic group teaching, and the following notes give some indication of the breadth of subjects covered.

In conjunction with the dental staff of north Bucks, visits were made to all playgroups in the area as part of a dental health campaign.

Slim-fit clubs were opened in north Bucks with the object of assisting people who were overweight. These clubs have been very successful, and reference has been made to them in the chapter on nursing. One of the sessions was the subject of a radio broadcast.

As in previous years, one of the most successful projects in south Bucks was the quiz competition for old people's clubs, and this year the topics presented were general health and home safety.

Two courses on first aid were arranged for local authority staffs in south Bucks, and these were so well received that such courses are to become a regular feature in the area. Film review evenings were also organised to keep staffs up to date on health subjects.

A campaign was mounted in the Wycombe and Amersham areas to educate women about cervical cytology, and to encourage them to be tested. Personnel officers of factories were approached for facilities to talk to groups of women workers and, where appropriate, to set up a clinic in factory premises. In cases where it was not possible to set up a clinic, slips were put into wage packets so that appointments could be made through the factory nurse. Some of the firms without suitable facilities hired coaches to transport their women employees to a local clinic.

A course of six talks was organised for West Indian parent groups on the subject of pre-school children. One of these sessions was broadcast on Radio London.

The health education staff frequently try out new ideas, not all of which can be claimed as successes. As an experiment, a small display with continuous slide projection was set up in a doctor's waiting room on the subject of smoking and health. Questionaries were made available and 96 were taken. Only ten of these were returned, four by non-smokers. The survey was abandoned, but it may well be that the lessons learned will enable a similar venture to succeed at some time in the future.

Health education staff from the Aylesbury area carried out a pilot educational project in personal relationships with two groups of Borstal boys at Grendon Prison. This was a successful venture, and is to be expanded next year.

6. Other activities

There are many people in widely differing employment whose work contains an element of health education. The department's health education staff play a major part in encouraging, supporting and training such persons.

Health educators participated in training at R.A.F. Halton, colleges of technology and further education, and courses for nursery nurses, pre-school play group leaders, social service personnel, school meals staff, and food handlers, as well as in the department's own in-service training courses.

The section received many visitors and students interested in health education or seeking advice on projects of a health nature. They included dental, medical and nursing students, trainee teachers and school pupils.

7. Publicity and exhibitions

In addition to the teaching aspect of health education, a considerable amount of publicity work is carried on regularly by means of exhibitions, displays and posters. Small displays are set up in child health clinics, schools, libraries, shop windows, doctors' surgeries and similar places, depicting topical themes. Contributions were made on special subjects in exhibitions held at Aylesbury during "Mind" and "Handicapped children" weeks. Sites were taken at both the Bucks county show and the Wycombe show, and again the displays and films were on the subject of smoking and health.

Posters were produced for particular purposes, together with leaflets and bookmarks. The section is well equipped with modern visual aid apparatus, which enables lecturers to select the method or technique most suited to their requirements. A wide range of publicity aids was again made by the section to meet the needs of staff in all parts of the county. These included such items as smoking machines, leaflet holders and poster stands, triptych display boards, notice boards, and poster display boards. The fact that staff can be helped in this way is a stimulus for them to carry out health education in their respective fields.

8. Schools

The number of group sessions conducted in schools by personnel of the health department showed a forty per cent increase over the previous year. In all, 1,732 sessions on health subjects were held with schoolchildren and students. In addition, courses and one-day seminars were held in teachers' centres for the benefit of teaching staff, and these were appreciated.

Although more and more health education is being carried out in schools, it was felt that there should be an assessment of what was taking place for forward planning purposes. A survey was therefore carried out in schools, with the approval of the Chief Education Officer, to find out what health education was taking place, and to ascertain the feelings of teachers on the subject. A preliminary report on the findings appears on page 147.

9. Preventive psychiatry

In view of the nature of this service, it seems appropriate that it should be included in this chapter, and Dr. C. E. Bagg, consultant psychiatrist, has submitted the following report:—

"The greater part of the time devoted to preventive psychiatry in 1971 continued to be in the sphere of the work and training of the health visitors in the Chesham, Amersham, Chalfont and Wycombe areas, but with their increasing familiarity with the basic concepts of psychiatry it was decided to shift the emphasis from general discussion to discussion of a case-history presented each week by a member of the group. The cases, however, were chosen with the object of illustrating general psychiatric concepts by reference to specific current problems, and also for the purpose of providing practical help to the health visitor in coping with the case concerned.

A number of topics was decided on, such as the problems of infancy; the disturbed toddler; childhood autism; the disturbed schoolchild; the disturbed adolescent; schizophrenia; problems of the young married couple with their first child; and problems of middle-age. These problems and their management were always considered in relation to the interactions within the family as well as in terms of the specific difficulties of the child or adult under discussion. Meetings were held weekly. The need for professional confidentiality about patients' problems was always kept very much in mind.

An understanding of all these areas of knowledge is important to the health visitor, since her close involvement with the family during the early stages of a child's life is apt to lead to a relationship resulting in further calls on her understanding of family factors for many years beyond the child's infancy. Her scope for preventive work is therefore wide, and it is useful for her to acquire insight into how to help with difficult situations, and also into how to avoid mishandling them in a manner that might be of little value or even engender resentment.

During 1971 various other forms of preventive psychiatry were undertaken. For example, a number of medical students from University College Hospital visited the Chesham child guidance clinic for discussion of the practice of child psychiatry with members of the staff, and trainee nurses from St. John's Hospital continued to receive instruction from the members of the team in emotional problems of children and the functioning of the child guidance service. There is nowadays a tendency for mental hospital nurses to participate in some specific aspects of the care of discharged mental hospital patients in the community, and some knowledge of child psychiatry can be a valuable asset in helping these nurses to assess clinical situations and advise on various problems arising out of them.

It was also a pleasure to talk to a meeting of the social services department on the work of the child guidance clinic and that of the psychiatric social worker and the health visitor. The reorganisation of social services has entailed the arrival of many new staff in the area, and this occasion provided an opportunity for many of those concerned to meet and discuss problems of mutual interest.

Another welcome development was an invitation to address a gathering of health assistants and school matrons. Unhappy children sometimes approach school matrons with their anxieties. It can obviously be of preventive value for these workers to be familiar with some of the concepts of child guidance.

During the year, talks were given to various groups, such as young wives' and mothers' clubs. There is considerable scope for preventive work outside the National Health Service. Quite a widespread interest in psychological topics seems to exist amongst the general population, particularly in connection with problems of childhood. Mothers are therefore inclined to read many of the excellent books now available to the public, and discussions may often be helpful in furthering their understanding and clarifying their uncertainties on these subjects. Sometimes, in addition, they ask for guidance about difficulties with their children, and they may then gain some help and relief from the information received."

Dr. V. A. Wilkinson, consultant psychiatrist, also submitted the following report:—

"Our aim in preventive work has been to help the workers in the community to recognise early symptoms of mental stress and to identify specific crisis periods, with a view to earlier consultation and referral.

Weekly group discussions have been held with health visitors over periods of three months, and monthly meetings are held with school medical officers for discussion of problems. Dr. Browne has for some years held regular group consultations with probation officers. Clinic staff have visited mothers' groups for discussion of family problems, and we have presented films, such as the one on preparation of young children for hospital admission. These have provoked lively discussion, and I have also had similar informal talks with groups of foster parents.

As a pilot project, the clinic team is visiting one secondary school for talks with the first-year tutors on problems arising at that stage, with the aim of trying to identify and follow up such children within the school. In other schools the clinic team has given talks on adolescent problems to parents at the request of the head teacher.

We have recently arranged for regular sessions with groups of speech therapists. Close contacts are maintained with individual members of the Social Services Department but we have not been able to arrange regular group sessions whilst the service is being reorganised.

More direct preventive work is offered in the crisis service for bereaved families. Families are offered the opportunity of discussing their feelings and given support during the mourning period to help them to adjust to their loss. Such families are referred to us by doctors, teachers, health visitors, or, directly from the family themselves."

RESEARCH, PUBLICATIONS, AND VISITORS

1. Research panel and general research activities

The panel was created at the end of 1970 and the first meeting was held in February 1971. Membership includes representatives of most of the professions working in County Health Department's headquarters and field staff, together with members of the Social Services Department. The panel is served by joint secretaries, one from each department. It has, on the whole, made a good start in attaining the aims outlined in the last annual report.

The panel has organised a health and social services research study day at the Stoke Mandeville Postgraduate Medical Centre, at which contributions from both external and local speakers were heard and discussed. Members of the panel considered some fourteen new projects dealing with operational and clinical research and have offered constructive advice to the initiators of these.

Cross-representation with the Social Services Department has helped to continue co-operation between the two departments on research and development matters. Several projects have been started which involve investigations into the workings of both services. This research is being done by small working groups consisting of representatives of both departments. The projects include investigations into the battered baby syndrome, the need for services for the physically handicapped in a rural area, and the supply of medical aid loan equipment and aids to daily living for the elderly and physically handicapped.

A number of projects, which will be of considerable use in planning the scale and quality of services and buildings required, have been initiated. For example, enquiries into the numbers of chiropody patients who could be transported by various alternative methods to health centres and into the use of district rooms by county nursing staff.

2. Particular research projects

(a) Evaluation of Health Centres

The department now has a considerable health centre building programme and it was considered highly desirable to evaluate the effect of one particular health centre on the quality of community health services.

A medium sized health centre currently being built at Wendover was chosen, with the agreement of the general practitioners concerned. The centre is likely to open in 1973 and it is hoped to do two studies for comparable periods of time; one before the centre opens and one after it becomes operational.

The following information will be collected in each of the two studies:—

(*i*) The work-load of the nursing, health visiting and paramedical staff in relation to the general practitioners.

(*ii*) Patients' opinions of attachments (and, in the second study, of the health centre).

(*iii*) What patients know about health centres and community services.

(*iv*) The effect on the work-load of the community health team, particularly in relation to the hospital service (e.g. follow-up of discharged patients, minor treatments, etc.).

(*v*) The effect of other changes brought about by the move into the health centre.

It is hoped to include some information obtained from the first full study in the next annual report.

(b) Old People's clubs in Buckinghamshire

A survey on this subject was carried out by Dr. S. W. Hinds, Senior Departmental Medical Officer.

(c) Other research projects

A list of projects which have been undertaken in the past year is given below. In addition, a number of small studies of health education subjects have been undertaken and the following brief details may be of interest.

A small survey carried out following an anti-smoking week at a county secondary school showed that approximately 40% of the smokers gave up the habit, but half of these had resumed smoking after a short time.

A small research project carried out in conjunction with a "Smoking and Health" exhibition at an agricultural show attempted to assess the need for an anti-smoking clinic in the area. Of those completing questionaries, 46% thought such a clinic would be useful, although only 9% said they would definitely attend.

A small survey was undertaken in Chesham to determine the impact of an exhibition and slide display set up for one week in a doctor's waiting room, with disappointing results as reported on page 67.

In a follow-up survey of persons who had attended an anti-smoking clinic six months earlier, it was possible to obtain details from 21 of the 52 people who originally attended. All of these had stopped smoking for a short time but only six, all female, were still not smoking at the time of the follow-up. Many of those who had resumed smoking requested that another clinic be arranged.

List of Research Projects

A. Projects under consideration

1. Development project on an experimental approach to social work (task orientated case work).
2. Estimates of the incidence of handicap for the purpose of implementing the Chronic Sick and Disabled Persons Act in the county as a whole. (See section B for mention of an existing project.)
3. Further study of the nurses and health visitors pattern of work.
4. Field study of the problems in using packs of sterile dressings by county nurses.

B. Projects in progress

1. Survey of patients' journeys and activity patterns in relation to visits to general practice surgeries in Bletchley.
2. Study of the content of work undertaken by nursing and health visiting staff.
3. An investigation into the content of work undertaken at child health clinics. (Quarrendon and Marlow).

4. Further work on the dental problems of military families (continuing in Southampton).
5. A baseline study on the effects of defluoridation of the water on the health of children's teeth (Slough area).
6. An evaluation of the procedure for gaining information on discharge of maternity patients into the community in Buckinghamshire and elsewhere leading to the implementation of a new method.
7. A study of work patterns of general practitioners and nurses, and of public opinion, before and after the opening of a health centre.
8. A study of the feasibility of incorporating school medical records with general practitioner family records in health centres (in abeyance at present).
9. A review of the systems for supplying medical aid loan equipment, medical comforts and aids to daily living.
10. An investigation into the advantages and disadvantages of pre-school medicals in the Slough area.
11. Study of the need for and the work load required to provide dental clinics for pre-school children.
12. Research into two projects for day care of patients at two county welfare homes.
13. Research on the feasibility of a group home for the mentally handicapped in Slough.
14. Identification of numbers and demand for services for the physically handicapped in a rural area (scope of project widened, see section A of this list).
15. Investigation of wound infection control.
16. Feasibility study on the sharing of chiropody and dental premises/equipment in health clinics.
17. Survey on sex education in the High Wycombe area.
18. Investigation into breast feeding in North Buckinghamshire area.
19. Enquiry into the ambulance service emergency work.

C. Projects which have been completed

1. Final report on a study of methods for the disposal of nursing dressings, etc. in North Bucks.
2. Further research into the scope and needs of the occupational therapy service.
3. A study on health education in old people's clubs.
4. A study in the use of entonox machines in county ambulances.
5. A study of the use of district rooms by district nurses.

D. Projects under consideration or in progress being undertaken by non-county agencies in Buckinghamshire

1. Survey of childhood illnesses with particular reference to all cases of death by leukaemia.
2. Investigation into a variety of population screening methods by means of cervical smears, (in Aylesbury area).
3. An independent survey into dental anomalies in children at one secondary modern school in Slough.
4. Survey of chest health and growth.
5. The use of state enrolled nurses in the community nursing service.
6. Research on new methods of teaching Braille by tape recorders.
7. Assistance by the Buckinghamshire Social Services Department in a long study of social work practice.
8. Development project in teaching Braille. Based at High Wycombe.
9. Investigation into the possible causes of carcinoma of the cervix.

3. Visitors

Dr. D. K. Martin, Executive Director, Public Health Division, Ontario Department of Health; Dr. L. S. Levin, Yale School of Medicine; Mrs. A. Fonaroff, George Washington School of Medicine, Washington, D.C., and Dr. E. W. Libman, Evanston Hospital, Illinois; visited the department to look at some of the community health services, and particularly to hear about the development of health services for Milton Keynes. Two officers of the Royal Army Medical Corps came to the department for similar reasons.

The arrangements continued whereby undergraduates from the Royal Free Hospital School of Medicine (University of London) came to the county to see as much as possible of the community health and social services.

Visitors to the nursing service included an officer of the Princess Mary's Royal Air Force Nursing Service; the eastern area organiser of the Royal College of Nursing; and Miss Ruth F. Stewart, assistant professor of public health nursing in the University of Texas.

A two-day course for 50 senior students and staff from the Royal Dental Hospital was held.

Publications

BARKER, AUDREY & BLACK, SALLY —"An experiment in integrated psychogeriatric care." *Nursing Times*, 1971, 67, 1395.

BUCKINGHAMSHIRE COUNTY DEPT. OF HEALTH AND WELFARE —"The housing situation of unsupported mothers in North Bucks," 1971, Aylesbury.

GOODING, D. G., & REID, J. J. A. —"Evolving health care. Some transatlantic comparisons." *Medical Officer*, 1971, 126, 201.

HUTCHBY, J. P. —"Occupational therapy patients in their community," 1971. Buckinghamshire working papers, Aylesbury.

MARETT, DAPHNE L. & RILEY, OLWEN, M. —"North Bucks nursing refuse disposal inquiry and effectuation study." Occasional paper, *Nursing Times*, 1971, 67, 113, and occasional paper, *Nursing Times*, 1971, 67, 191.

MILTON KEYNES PAPERS (1971) —Milton Keynes health services working papers, 1970, Aylesbury.

REID, J. J. A. —"The diabetic at school". Published in the *Diabetic's Handbook*, 1971, British Diabetic Association, London.

YULE, I. G. JENKINS, A. C., CATCHPOLE, P. & KEEP, A. G. —"Paper or personnel?" *British Hospital Journal and Social Service Review*, London, 1971, 81, 2545, and also *Community Medicine*, London, 1971, 126, 322.

ADMINISTRATION

1. New forward planning division

(a) Duties

The administrative structure of the central office was reorganised in 1969, and a detailed account of the new structure was given in the annual report for that year (page 85).

With the transfer of certain health and welfare functions to the new Social Services Department in April, it was decided to abolish the post of deputy chief administrative officer and create a new forward planning division responsible for initiating and coordinating the following main activities:—

(i) *Milton Keynes*

The entire coordination of health service planning for the new city. In covering the planning and development of local authority services it is responsible to the County Medical officer. In the wider field of health service planning, including links with the Local Executive Council, Regional Hospital Board, and Education and Social Service Departments, the division acts as the secretariat of, and is responsible to, the Milton Keynes Health Services Joint Working Party.

(ii) *Capital development programme*

The compilation of the department's capital programme in consultation with the other divisions of the department and other branches of the health service.

(iii) *Research*

All research undertaken directly by the department or by other agencies in co-operation with it is processed by the research panel. The division is responsible for secretarial and administrative work associated with the panel, and initiates a number of research projects in cooperation with other members of the department.

(b) Composition and organisation

A principal medical officer provides the professional medical advice required. A principal administrative officer and two administrative assistants are responsible for all administrative aspects of capital programming, Milton Keynes planning and research work.

The volume and complexity of work connected with the development of Milton Keynes services, and the health centre and occupational therapy centre sections of the capital programme have increased considerably during the past year.

(c) Development of the division

Following the appointment last year of a graduate trainee, it was decided this year to second an administrative assistant to the King's Fund College of Hospital Management to undertake a comprehensive training in health service administration.

It was towards the end of the year when the new post of principal administrative officer was filled, and although the division was never fully operational in the year, considerable steps have been taken to introduce procedures for planning services and health centres more rationally and to form links with the other branches of the health service in planning.

2. Internal communication

The monthly staff meetings referred to in last year's report have continued. These are undoubtedly a valuable means of keeping staff informed about the policies and aims of the department, and they provide an opportunity for senior staff from the various divisions and area offices to meet regularly to exchange their views and opinions on matters of mutual interest.

LIAISON WITH SOCIAL SERVICES DEPARTMENT

(a) General

Throughout the year numerous meetings have taken place at all levels between the two departments, both on a regular and ad hoc basis. Health Department staff are available when required for consultations on medical matters, and some services, such as occupational therapy and chiropody are provided routinely in institutions run by the Social Services Department.

Particular areas where close cooperation has taken place are as follows:—

Handicapped persons: The assessment of individual need for aids to daily living is the responsibility of the occupational therapist, but the full cost is borne by the Social Services Department. There is also a two-way flow of information regarding handicapped schoolchildren and school leavers.

Supply of medical advice: The Health Department is responsible both for employing visiting medical officers for the county welfare homes and hostels, and for ensuring that specialist geriatric and psychogeriatric advice is available when required.

Mental health: The functions of medical officers to the industrial units is performed by staff of the County Health Department. Approval of doctors under Section 28 of the Mental Health Act remains the responsibility of the Health Committee.

Joint publicity: Members of the staff of the County Health Department have joined with the Social Services Department in designing a leaflet to carry out the County Council's duty under the Chronically Sick and Disabled Persons Act to publicise services. The group is continuing to meet to produce a document on services for the handicapped for inter-professional use.

Nurseries and child minders: The staff of the County Health Department have continued to undertake this work on a temporary basis on behalf of the Social Services Department and more detailed reference is made to this on pages 25 and 27.

It will be seen from the foregoing that matters of common interest to the two departments are most frequently found in services provided for the adult population, or those where adults form the majority of the group requiring the service. For this reason, the principal medical officer for adult health has accepted special responsibility for developing inter-departmental cooperation wherever appropriate.

(b) Disabled drivers' and passengers' badges

The scheme for the issue of disabled drivers' badges started in 1961 and Section 21 of the Chronically Sick and Disabled Persons Act 1970 extended the scheme to disabled passengers and institutions which received disabled persons. The principal medical officer for adult health, in consultation with the Social Services Department, gives approval for the issue of badges on medical grounds after consideration of medical reports.

INFECTIOUS DISEASE

1. Vaccination and immunisation

(a) Measles

The downward trend in the number of notifications of cases of measles continued during 1971. As may be seen from the accompanying graph, the introduction in 1968 of immunisation against the disease has had a marked effect.

During the year 8,945 children were protected; the majority at one year of age in accordance with the agreed schedule of immunisation.

(b) Smallpox

The Joint Committee on Vaccination and Immunisation recently reviewed the indications for offering vaccination against smallpox in Great Britain. The Committee decided that, because of changes in the prevalence of smallpox in countries overseas and the diminishing likelihood of the occurrence of outbreaks in this country, vaccination against smallpox need no longer be carried out as a routine procedure in early childhood.

It was emphasised, however, that all travellers to and from areas of the world where smallpox is endemic, or countries where eradication programmes are in progress, should be protected by recent vaccination. The Committee also emphasised the importance of the vaccination and regular re-vaccination of all health service staff who come into contact with patients, such as hospital doctors and nurses; public health staff and ambulance workers as long as any risk of importation of smallpox remains.

The Secretary of State accepted the Joint Committee's advice and accordingly since July, children in Buckinghamshire have not been vaccinated against smallpox as a routine measure.

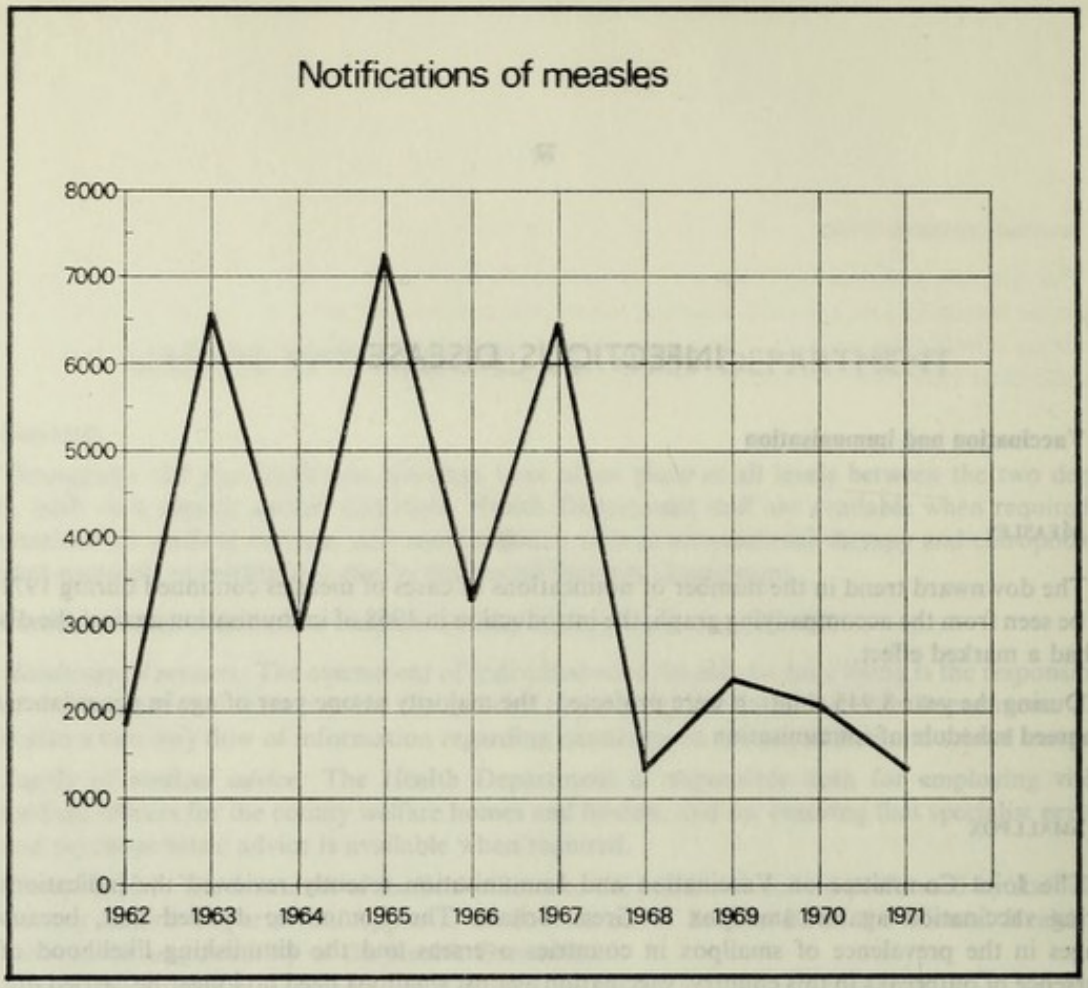
(c) Rubella

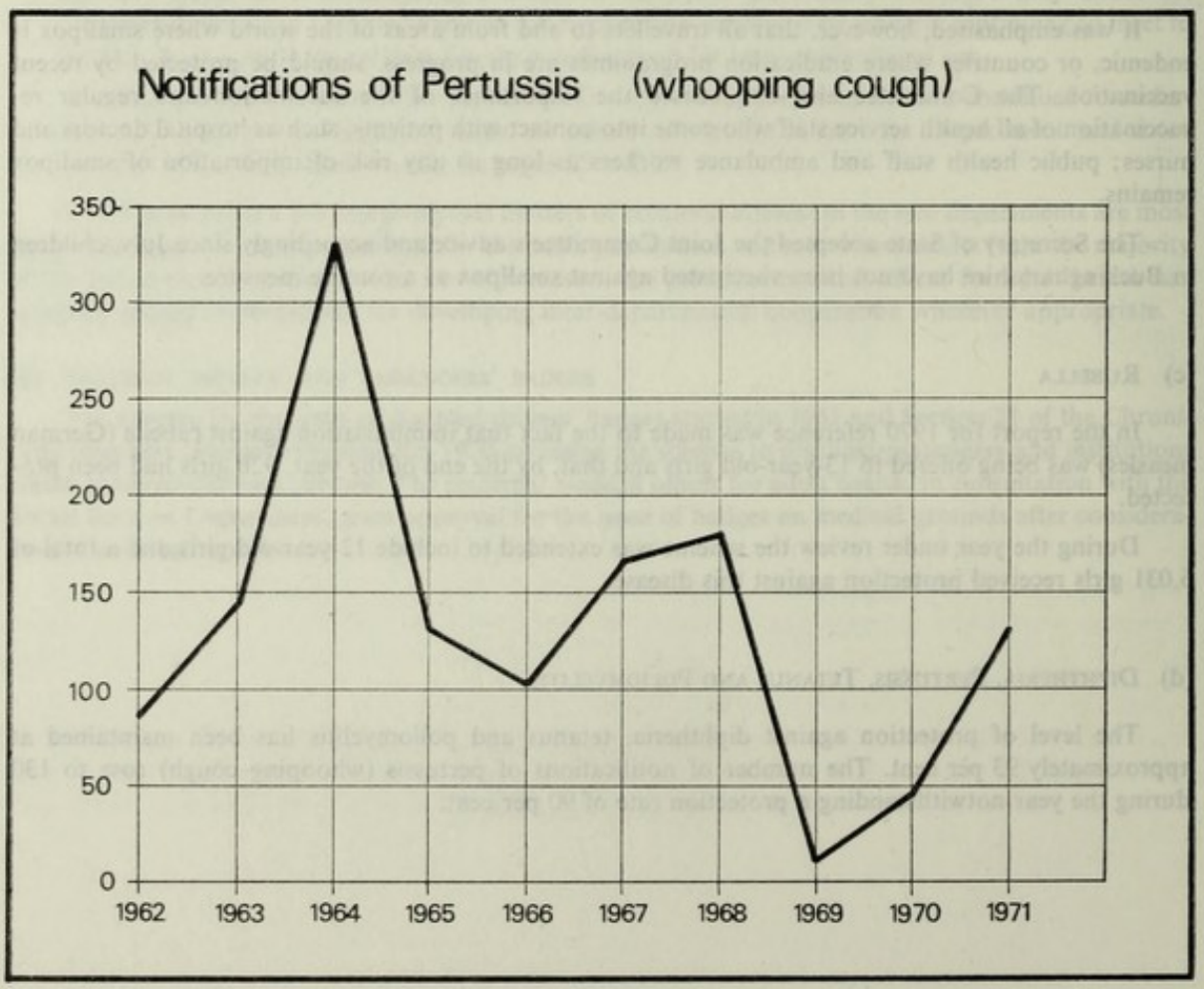
In the report for 1970 reference was made to the fact that immunisation against rubella (German measles) was being offered to 13-year-old girls and that, by the end of the year, 920 girls had been protected.

During the year under review the scheme was extended to include 12-year-old girls and a total of 6,031 girls received protection against this disease.

(d) Diphtheria, Pertussis, Tetanus and Poliomyelitis

The level of protection against diphtheria, tetanus and poliomyelitis has been maintained at approximately 93 per cent. The number of notifications of pertussis (whooping cough) rose to 130 during the year notwithstanding a protection rate of 90 per cent.


Notifications of measles
8000
7000
6000
5000
4000
3000
2000
1000
0
1962
1963
1964
1965
1966
1967
1968
1969
1970
1971


Notifications of Pertussis (whooping cough)
350
300
250
200
150
100
50
0
1962
1963
1964
1965
1966
1967
1968
1969
1970
1971

Number of children under 16 vaccinated with different kinds of vaccine.

	1971	1970
Completed primary courses		
Triple (Diphtheria, tetanus, whooping cough)	8,984	9,380
Diphtheria/tetanus	389	527
Diphtheria	12	30
Tetanus	512	634
Poliomyelitis (Sabin vaccine)	9,254	10,089
Measles	8,945	15,432
Rubella	6,031	920
Re-inforcing doses		
Triple	2,058	1,596
Diphtheria/tetanus	8,838	8,546
Diphtheria	220	202
Tetanus	1,636	1,572
Poliomyelitis	6,839	5,549

2. Notifications

A summary of the notifications of infectious diseases received during 1971 is given in Table I on page 94 of this report.

3. Tuberculosis

Dr. W. T. Bermingham, consultant chest physician, kindly supplied the following report:—

"The situation this year is that there is an overall increase of 7 in the number of notified cases of tuberculosis in County of Buckingham Health Areas. Statistically there is a drop of 7 cases in the Aylesbury/North Bucks area, a rise of 7 cases in the High Wycombe/Amersham area and an increase of 7 cases in the Slough area. There is no significant increase in the non-European tuberculosis notifications as compared with last year.

In the Aylesbury/North Bucks area there were 25 notifications of which 17 were in respect of respiratory tuberculosis and eight non-respiratory. The High Wycombe/Amersham area notified 30 cases of respiratory tuberculosis and 20 non-respiratory. 82 new cases were notified in the Slough area, comprising 52 respiratory and 30 non-respiratory. From the total of the 157 cases notified last year, 41 were bacteriologically confirmed.

Deaths from tuberculosis in the county during 1971 totalled 10, which is four less than last year. With the exception of two cases the average age was over 65, comprising six males and four females. As reported last year, this would appear to be due to the increased expectation of life, the

disease probably having been contracted in early life, remaining dormant and activated in old age perhaps due to general debility. The younger age group, of course, is protected by vaccination, pasteurisation of milk and attestation of herds.

Dr. Elizabeth A. Hills, consultant chest physician in Aylesbury reports that there has been a further fall in the number of notifications, particularly of non-Europeans. Dr. Hills further reports a nurse in the group who developed cavitating pulmonary tuberculosis with a positive sputum while working on the children's wards. As a result 103 children who had been in contact were tested. Of these 12 had positive Heaf tests and three were found to have a primary complex in the lung. The nurse had failed to attend for x-ray when requested. In future all nurses proceeding to the children's wards will be x-rayed before commencing their duties.

Further examination of the number of school positive reactors in north Bucks confirms last year's investigations which demonstrated that the greater number of positive reactors was confined to children who had been abroad in Europe and Asia.

The survey of the relatives of immigrants on arrival in Aylesbury was continued. Thirty-five patients attended and 14 were given B.C.G. vaccination.

Dr. Angus O. Robson, consultant chest physician in High Wycombe/Amersham drew attention to the policy now prevailing over most of the country whereby B.C.G. is given to Grade 1 positive school reactors. Investigations reported in the medical press suggest that Heaf positive Grade 1 does not necessarily indicate tuberculous infection. This being so, the chest physicians are of the opinion that Grade 1 positive school reactors without any history of tuberculosis in the family or illness, could be given B.C.G. This will, of course, reduce the number of children referred to Chest clinics for investigation because of positive Heaf tests in school."

As Dr. Bermingham's report points out, Grade 1 reaction to the Heaf test does not necessarily signify an earlier infection with tuberculosis and children giving this reaction might be at risk of contracting the disease. In some areas of the county, B.C.G. vaccination is given to Grade 1, as well as to negative reactors, and in 1972 it is proposed to adopt this practice throughout the whole of Buckinghamshire.

4. Sexually transmitted diseases

There continues to be widespread national concern at the increasing numbers of patients attending clinics for the treatment of these diseases. In his report for 1970 the Chief Medical Officer of the Department of Health and Social Security says "syphilis still seems under control in Britain compared with the rest of the world, but the incidence of early acquired syphilis in the primary and secondary stages is still at much the same level as in the last four years and therefore remains a menace. Instruction of medical students in the diagnosis of these diseases is as necessary for the next generation of doctors as for their predecessors. Gonorrhoea is not under control, and little comfort can be derived from the fact that the increase in the number of cases this year has been less than in the previous year as the increase for that year was the highest in the last quarter of a century."

In Buckinghamshire the incidence of syphilis is similar to the average for England and Wales. New cases of gonorrhoea reported, however, showed some decline as compared with 1970 and amounted to 31 per 100,000 population, whilst the equivalent figure for the previous year was 37. The latest figures available for England show an incidence of 116 per 100,000 population in 1970 and 108 in 1969.

If this may be seen as some slight encouragement, it should be noted that the year's figures for other sexually transmitted diseases show an increase of 35 per cent over 1970. The details received from the various treatment centres are set out in the following table:

Hospital	*Syphilis*		*Gonorrhoea*		*Other sexually transmitted diseases*	
	1971	1970	1971	1970	1971	1970
Royal Buckinghamshire Hospital (Aylesbury)	—	1	31	20	207	154
Wycombe General Hospital ..	14	17	63	89	435	340
Bedford General Hospital	—	—	3	4	7	4
Hillingdon Hospital	—	—	10	15	84	65
King Edward VII Hospital Windsor	9	7	74	84	417	302
Northampton General Hospital ..	—	—	2	—	18	18
St. Bartholomew's Hospital	—	*	1	*	17	*
St. Thomas's Hospital	—	—	1	3	34	22
Royal Berkshire Hospital	—	*	—	*	4	*
Total	23	25	185	215	1,223	905

* No separate return received.

Contact tracing remains a vital task in attempts to control the spread of infection. Much of this work continues to be done by the hospital social workers, although there is close liaison with the staff of the Department, who are prepared to undertake contact tracing on request.

INSPECTION AND SUPERVISION OF FOOD

Mr. G. L. Davis, the Chief Inspector, has kindly submitted the following report:—

1. Composition and quality

One thousand, three hundred and ninety six samples of food and drugs were taken for analysis, both for composition and the detection of preservatives or other additives at undesirable levels. Five hundred and forty two of these were submitted to the public analyst who commented adversely upon 60 of them. The samples may be classified as follows:—

Aspic jelly, baby foods, beverages, biscuits, blackcurrant crumble, bread and bread mixes, bronchial mixture, butter, cake mixes, cereals and cereal foods, cheeses, chicken, chocolate pudding, coffee, colourings, cream, crystallised acacia, curry, custard powder, dehydrated foods, desserts and dessert toppings, diabetic beer and tinned fruits, dried and glacé fruits, dried vegetables, dumpling mix, edible fats, epsom salts, essences, fish and fish products, flavourings, flour and flour confectionery, fresh fruit, frozen vegetables, fruit drinks, juices and squashes, glycerin, glucose tablets, gravy powder, halibut liver oil capsules, Hedex tablets, honey, ice cream powder, jellies, lemon tea drink, malt drinks, marzipan, mashed potato, mayonnaises, meat and meat products, meat tenderiser, meringue and meringue powder, milk and milk products, minerals, non-dairy cream, non-dairy milk mix, pasties, pastry, pickles, pie fillings, piping jelly, potatoes and potato flour, preserves, rice, rosehip syrup, sauces, sausages, seasonings, soups, spirits, spreads, stuffing, sugaree, sugar confectionery, sun dried bananas, tinned fruit, fish, meat, vegetables and soups, vitaminised iron jelloids and wheat germ.

Seven hundred and ninety five samples of milk were tested in the Department's laboratory; most complied with the standard laid down by the Sale of Milk Regulations. Investigation of 36 unsatisfactory samples confirmed adulteration in 23.

Two hundred samples were taken at schools (under the milk-in-schools scheme), hospitals, children's homes and old persons' homes. All but one were satisfactory.

There were 73 complaints from the public about food products. They concerned alien matter in food, dirty containers and the quality of the food. In 18 cases the samples were examined by the Public Analyst; the remainder were dealt with after examination in the Department's laboratory.

There were four prosecutions during the year. One concerned watered milk and two concerned loaves of bread, one of which contained a metal bolt and the other a piece of glass. The fourth was in respect of sausages which contained a piece of mechanical belting.

2. Liquid egg pasteurisation

There are no egg pasteurisation plants in the administrative county.

3. Testing of milk under the Food and Drugs Act, 1955, and Milk and Dairies Regulations

(a) Disease infection

One hundred and thirty-two samples were examined for brucella infection; 12 were positive and the district medical officers were informed so that human consumption of the milk in its raw state could be prevented.

These samples were also tested biologically for tubercle bacilli and bacteriologically for the presence of penicillin. All were negative for tubercle bacilli but three samples were found to contain penicillin. The level in each case was low, but the farmers confirmed the recent use of penicillin in their herds. All were warned to exercise greater care in the use of antibiotics.

(b) Special designations

At the end of the year the following licences were in operation.

Dealer's (pasteuriser's) licences	7
Dealer's (untreated) licences	3
Dealer's (prepacked milk) licences	264

One pasteurising plant closed during the year and another was licensed keeping the total number in operation at seven. They process 13,000 gallons of milk daily and 276 samples have been taken to check the heat treatment. Thirteen samples failed the methylene blue test but all passed the phosphatase test.

All designations of milk are sold in the county and 303 samples have been taken; seven samples of untreated milk and 6 of pasteurised milk failed the methylene blue test. The dealers were warned and subsequent samples were satisfactory.

All schools and other county council establishments now have pasteurised milk supplies. One hundred and thirty seven samples were taken and all but one were satisfactory.

Specified Area Orders require that only special designations of milk may be sold in Buckinghamshire. Five hundred and thirty five visits were made and 716 samples, all satisfactory, were taken.

OTHER MATTERS

1. Building programme

(a) GENERAL

The penultimate purpose-built child health clinic to be built, at Chiltern Avenue, High Wycombe, was completed in December and came into use early in 1972. The capital programme is now largely devoted to health centre building, and during the year construction of health centres commenced in Water Eaton (Bletchley), Stokenchurch, Burnham (Slough) and Wendover. The first three of these should open in 1972. Up to six health centres, including one large Milton Keynes centre, are included for each year in the three-year rolling capital programme. Planning of the last health clinic for Aylesbury, to replace Pebble Lane, went ahead and a site in Brook Street was acquired.

While no occupational therapy schemes began on site in the year, a great deal of emphasis was placed on the identification of the function of occupational therapy centres, leading to the preparation of a brief for a standard 100-place centre. The county plans to erect three of these, in High Wycombe, Aylesbury and Amersham, in the next three years to meet the additional demands being placed on the occupational therapy service.

Unfortunately, it was not possible to acquire in Amersham a suitable site for the replacement of the ambulance station, and the scheme had to be omitted from the building programme for the year. Provision of a new ambulance station in Amersham is now one of the first priorities in the building programme and it is hoped that current negotiations for a site will be successful.

(b) NURSES' HOUSES

Limitations on the finance available for nurses' housing have led to a new policy under which, wherever possible, houses are rented from district councils. Under this scheme, in 1971 Eton Rural District made available two houses in Iver. Finance was available, however, to permit building to start on three houses in Wooburn Green, at present an area of acute housing difficulty.

Following a review of nurses' housing, a policy of improvements has begun, including the provision of central heating and part of the minor capital allocation for the next few years will be used for this purpose.

2. Housing

The following table shows the progress of provision of permanent housing in the rural districts of the county by local authorities and private builders from April 1945 to 31st December 1971.

	PERMANENT HOUSING				*Total permanent houses completed*
	Local authorities		*Private builders*		
	Under construction	*Completed*	*Under construction*	*Completed*	
RURAL DISTRICTS					
Amersham	113	2,521	379	7,971	10,492
Aylesbury	74	2,084	117	2,813	4,897
Buckingham	36	556	56	697	1,253
Eton	158	3,271	201	5,915	9,186
Newport Pagnell	45	868	203	1,357	2,225
Wing	12	1,019	113	928	1,947
Winslow	29	606	56	1,049	1,655
Wycombe	70	2,796	442	9,775	12,571
Total ..	537	13,721	1,567	30,505	44,226

3. Water and Sewerage

(a) Water Supply—Bucks Water Board

The Engineer and Manager of the Bucks Water Board has supplied the following information:—

"During the year 1971 there has again been steady development in the Board's area as a whole and more particularly in the northern part of their area. After a prolonged period of planning, the Milton Keynes Development Corporation has commenced construction of the new city. The Board had already designed the basic distribution system to match the grid layout of roads and had secured sites upon which this distribution system will rely for day-to-day storage. By the end of 1971 about £250,000 worth of principal feeder mains had been laid and work is in hand on the first site mains for the first housing development. The Board agreed proposals for the extension of its Northern Area Office at Old Stratford to enable the servicing of Milton Keynes to be carried out.

1971 has again shown an increase in demand for water. This, as in previous years, is partly due to the increased population to be supplied and partly due to increase in demand for water per capita. The population within the Board's area of supply rose from 357,000 in September 1970 to 368,000 in September 1971. The last period for which statistics are available is the year 1970/71. The figures of consumption in gallons per head per day are as set out below.

Consumption per head per day:	1970/1971	1969/70
	g.h.d.	g.h.d.
(a) Metered	19.41	19.59
(b) Domestic	37.28	36.63
	56.69	56.22

There were no serious shortages of supply during 1971. The summer of this year will long be remembered for the dry periods, fortunately, from the Water Board's point of view, broken by wet spells in June and August; these wet spells alleviated what would have been record peak demands for water. At the time of writing, the Autumn has been unusually dry—in fact the driest since 1943 and there has, as yet, been no replenishment of the underground sources.

Work has continued throughout the year on the development of the Board's largest chalk source at Medmenham. The new trunk main has been completed and commissioned and up to 1½ million gallons per day can now be taken. Work has started upon the construction of the main pumping station in a disused chalkpit at the bottom of the Hambleden Valley. This source will ultimately yield an average of 8 million gallons per day.

In the northern part of the area, the Board relies largely upon river derived water, some from its own works at Foxcote and some as a bulk supply from the Great Ouse Water Authority's works at Grafham Water in Huntingdonshire. The problems of treating such river waters increase, particularly as far as Foxcote is concerned, in the summertime when algal growths in the storage reservoir are at their peak. These algal growths appear to be increasing in volume as the years go by, no doubt due to the increased amount of nutrients to be found in the raw water.

During 1971 various important publications were issued having a bearing on water supply matters; none was more important than Circular No. 92/71 from the Department of the Environment which came out in December. This Circular set out the Government's intention (soon to be presented to Parliament in the form of a Bill) completely to re-organize the management of water

supplies and other related matters. The proposals include the creation in England and Wales of ten very large multi-purpose authorities known as Regional Water Authorities (R.W.A.). Their duties would include:—

(a) Water supply as now carried out by municipally owned water undertakings and joint Water Boards like the Bucks Water Board. For the time being the existing Water Companies are to remain in being and act as agents for the R.W.A's.

(b) Sewage disposal as now carried out by Local Authorities and/or Joint Sewerage Boards (but not the collection of sewage which will remain with the local authorities).

(c) The duties of the existing River Authorities, including responsibility for the conservation of water, navigation and recreation.

(d) The responsibilities of the British Waterways Board for the existing canal systems.

It is proposed that the date for setting up the new R.W.A's shall be 1st April, 1974. The area of supply of the Bucks Water Board as it exists at present falls partly into each of two of the proposed Regional Water Authority areas, the dividing line being the boundary between the catchment area of the Thames and the catchment area of the Great Ouse, which runs across Buckinghamshire roughly in an east to west direction about five miles to the north of Aylesbury.

The basic reason that has led to these proposals is the overwhelming necessity to co-ordinate all matters affecting water management and to do this on the basis of the natural catchment area of rivers. This is but one further evidence that in our now very crowded island we can no longer afford to disregard the indiscriminate pollution of our natural resources.

Other publications of interest are the Statutory Survey of the Thames Conservancy indicating that Authority's views on the development of resources for the future and the Desk Study on The Wash Proposals published by the Water Resources Board."

(b) FLUORIDATION OF PUBLIC WATER SUPPLIES

The County Council agreed in 1963 to the principle of making arrangements with local water undertakings for the addition of fluoride to water supplies in the county which have a natural deficiency in this respect.

Two firm proposals to implement this policy were adopted during the year. These were proposals by the Borough of Buckingham to instal the necessary equipment at their pumping stations and by the Bucks Water Board to fluoridate the water supplies from their Radnage pumping station.

In the case of the Buckingham project, the introduction of water supplies from a new borehole increased the natural fluoride content of the water, and this rendered fluoridation unnecessary, at least for the time being.

Fluoridation at the Radnage pumping station was delayed pending the confirmation of a legal agreement. This has now been settled and the project will now go ahead during the forthcoming financial year.

(c) WATER SUPPLY AND SEWERAGE SCHEMES

Under the provision of the Rural Water Supplies and Sewerage Acts, the Department of the Environment and the County Council continue to make grants towards the cost of approved schemes of piped water supply and main drainage in the rural areas of the county. By December 1971 the position was as follows:—

77 water supply schemes were submitted and approved at a total estimated cost of £1,609,607, and 63 schemes were completed.

165 main drainage schemes had been submitted and approved at a total estimated cost of £9,725,573, and 154 of these were completed or in progress.

The schemes of water supply completed during 1971 were as follows:—

Bucks Water Board	Wendover Dene, Charcroft Quainton, Doddershall Estate Middle Claydon, Knowlhill Farm

Drainage schemes completed, or in progress, during the year were:—

Amersham Rural District Council	Misbourne Valley relief sewer Knotty Green sewer extension Knotty Green main drainage, stage II
Aylesbury Rural District Council	Stone regional sewerage scheme Chearsley main drainage Ludgershall main drainage
Eton Rural District Council	Burnham, Taplow and Dorney main drainage, stage II. Datchet main drainage.
Newport Pagnell Rural District Council	Newton Blossomville and Clifton Reynes main drainage. Little Brickhill main drainage
Wycombe Rural District Council	Ellesborough and Kimble main drainage, stage II
Winslow Rural District Council	Whaddon and Nash main drainage
Wolverton Urban District Council	Calverton main drainage

A further four water supply schemes and six drainage schemes were submitted and approved during the year, details of which are given below:—

WATER SUPPLY SCHEMES

Bucks Water Board	Loosley Row, Wayside Cottage Northall, Southend Lane Stoke Goldington, Dag Lane Middle Claydon, Knowlhill Farm

DRAINAGE SCHEMES

Amersham Rural District Council	Knotty Green main drainage, stage II Knotty Green sewer extension, Forty Green Lane
Aylesbury Rural District Council	Chearsley main drainage Ludgershall main drainage.
Buckingham Rural District Council	Dadford and Stowe School main drainage
Eton Rural District Council	Fulmer main drainage.

4. Artificial kidney machines

During the year the department arranged structural alterations in two patients' homes to render them suitable for the installation of artificial kidney machines. Three other patients who were recommended and trained for intermittent dialysis in their homes were provided with portable structures, since their homes were not suitable for adaptation. These portable buildings remain the property of the County Council and can be transferred to other sites should the patients to whom they are originally issued cease to require them. These five additional patients were referred from Churchill Hospital, Oxford.

A further seven applications for this service were received during the year. One of the patients was subsequently considered by the consultant to be unsuitable for home dialysis and the application was withdrawn; one died before work commenced; and five applications received late in the year were receiving attention at the end of the year.

In all, fifteen persons were using dialysers in the home with the aid of the Council's arrangements at 31st December.

5. Medical advisory services

(a) General

In addition to the work described in detail elsewhere in the report, the department has a continuing and less well-known role in providing general medical advice and support for the various departments of the Council and for certain other authorities. A considerable volume of work is undertaken each year in ascertaining the medical fitness of staff for the particular posts to which it is proposed to appoint them, or for inclusion in superannuation schemes. Each candidate is required to complete a medical questionary, and it is usually possible to decide upon his fitness from the answers given. Where doubts exist, reports are obtained from the family doctor or hospital best able to advise, with the consent of the candidate. It is rarely necessary for a medical examination to be carried out specifically for this purpose.

So far as County Council staff is concerned, the bulk of this work is undertaken by medical staff in the area health offices. The staff of the Thames Valley Police Authority, since comparatively few of their homes and work places fit in with the department's area administration, are dealt with centrally under the supervision of the principal medical officer for adult health.

In the case of teachers and candidates for admission to colleges of education, the Department of Health and Social Security requires that a full medical examination be undertaken by a school medical officer employed by a local authority. This work is mainly carried out under arrangements made by the divisional school medical officer concerned. A high proportion of those requiring examination, however, are living at the time some distance from the proposed place of employment or training, and reciprocal arrangements exist whereby the various authorities in the country assist each other in arranging examinations at centres convenient for the candidate's home.

Many of the staff of the Bucks Water Board require a blood test in connection with their employment, and these tests are at present undertaken by the department's medical staff.

(b) Fitness to drive

Applicants for driving licences are called upon to answer certain questions relating to their medical history. Where there is reason to doubt the fitness of the applicant to hold a licence the department is required to advise the licensing authority. The Motor Vehicles (Driving Licences) Regulations 1970, allowed driving licences to be granted, in suitable cases, to people with epilepsy who, on the basis of

medical evidence, had been free from attacks for at least three years with or without treatment, or who had a history of attacks only during sleep for more than three years. This change has led to a considerable increase in the number of cases in which the licensing authority has sought advice.

It may occasionally be possible to make a recommendation on the basis of the information contained in the application form. More frequently, however, it is necessary, with the consent of the applicant, to seek reports from his family doctor or a consultant. During 1971 advice was given to the licensing authority, following such investigations, in connection with 108 applications from persons applying for their first licence or who had not previously reported a history which cast doubts on their fitness to drive, and 56 applications from drivers who had already been granted licences for a limited period and whose medical condition needed to be reviewed in connection with the renewal of the licences.

(c) Liaison committee on drug dependence and misuse

The increase in prevalence of drug abuse, particularly among young people, over the past few years has given rise to considerable concern in the county. In view of the lack of contact between professional and voluntary organisations likely to be involved in this problem, a county liaison committee was set up to facilitate communication. The aims of the committee, which held its first meeting on 25th November 1970, are to collate information, to determine action needed, and to coordinate and evaluate action taken.

The following groups are represented: Education, Health and Social Services Departments of the County Council, probation service, psychiatrists, general practitioners, police and pharmacists. A member of the senior medical staff of the health department is responsible for convening meetings and co-ordinating activities. In addition to the county committee, four similarly composed area committees have been formed.

In the early months, attention was concentrated on collecting and disseminating information, particularly by means of a literature list and a system of informal notification of cases of abuse. The latter is for statistical purposes only, and therefore the identity of persons involved is not revealed.

Towards the end of 1971 the general practitioners throughout the county agreed to co-operate in a voluntary ban on the prescription of amphetamines in an effort to reduce the quantity of these drugs in general circulation. The ban, which puts no obligation on an individual practitioner, was introduced at the beginning of 1972.

CAUSES OF DEATH AT DIFFERENT PERIODS OF LIFE IN THE ADMINISTRATIVE COUNTY OF BUCKINGHAM, 1971

	Causes of Death	Sex	Aggregate of Urban Districts													Aggregate of Rural Districts											
			Under 4 wks.	4 wks.–under 1	1—4	5—14	15—24	25—34	35—44	45—54	55—64	65—74	75 and over	Total		Under 4 wks.	4 wks.–under 1	1—4	5—14	15—24	25—34	35—44	45—54	55—64	65—74	75 and over	Total
B.4	Enteritis and other diarrhoeal diseases	M	1	–	–	–	1	–	–	1	1	–	–	4		–	–	–	–	–	–	–	–	–	–	1	1
		F	1	2	–	–	–	–	–	–	–	–	–	3		–	1	1	–	–	–	–	–	–	–	1	3
B.5	Tuberculosis of respiratory system	M	–	–	–	–	–	–	–	–	–	1	1	2		–	–	–	–	–	–	–	–	–	–	–	–
		F	–	–	–	–	–	–	–	–	–	–	1	1		–	–	–	–	–	–	–	–	–	1	–	1
B.6(1)	Late effects of respiratory Tuberculosis	M	–	–	–	–	–	–	–	–	–	–	1	1		–	–	–	–	–	–	1	–	2	–	–	3
		F	–	–	–	–	–	–	–	–	1	–	–	1		–	–	–	–	–	–	–	1	–	–	–	1
B.11	Meningococcal infection	M	–	–	1	–	1	–	–	–	–	–	–	2		–	–	–	–	–	–	–	–	–	–	–	–
		F	–	–	–	–	–	–	–	–	–	–	–	–		–	–	–	–	–	–	–	–	–	–	–	–
B.17	Syphilis and its sequelae	M	–	–	–	–	–	–	–	–	–	–	–	–		–	–	–	–	–	–	–	–	1	–	–	1
		F	–	–	–	–	–	–	–	–	–	1	–	1		–	–	–	–	–	–	–	–	–	–	–	–
B.18	Other infective and parasitic diseases	M	–	–	–	–	–	–	–	–	2	–	1	3		1	–	–	–	–	1	–	1	–	–	–	3
		F	–	1	–	–	–	1	–	1	1	1	–	5		–	–	–	–	–	2	–	–	–	1	–	3
B.19(1)	Malignant neoplasm, Buccal cavity etc.	M	–	–	–	–	–	–	–	–	–	3	1	4		–	–	–	–	–	–	–	–	2	3	–	5
		F	–	–	–	–	–	1	–	1	–	–	–	2		–	–	–	–	–	–	–	1	–	1	1	3
B.19(2)	Malignant neoplasm, oesophagus	M	–	–	–	–	–	–	–	2	3	3	5	13		–	–	–	–	–	–	–	–	3	1	2	6
		F	–	–	–	–	–	–	–	–	2	–	5	7		–	–	–	–	–	–	–	–	3	3	1	7
B.19(3)	Malignant neoplasm, stomach	M	–	–	–	–	–	–	–	1	9	12	12	34		–	–	–	–	–	–	–	2	4	11	10	27
		F	–	–	–	–	–	–	–	–	1	4	8	13		–	–	–	–	–	–	–	1	5	6	10	22
B.19(4)	Malignant neoplasm, intestine	M	–	–	–	–	–	–	–	4	5	7	9	25		–	–	–	–	–	–	2	5	6	12	6	31
		F	–	–	–	–	–	–	2	1	7	13	11	34		–	–	–	–	–	–	1	5	9	3	18	36
B.19(5)	Malignant neoplasm, larynx	M	–	–	–	–	–	–	–	–	–	–	1	1		–	–	–	–	–	–	–	–	1	1	1	3
		F	–	–	–	–	–	–	–	1	–	–	–	1		–	–	–	–	–	–	–	–	1	–	–	1
B.19(6)	Malignant neoplasm, lung, bronchus	M	–	–	–	–	–	–	1	18	40	62	26	147		–	–	–	–	–	–	1	7	42	49	21	120
		F	–	–	–	–	–	–	1	2	8	6	8	25		–	–	–	–	–	–	2	4	15	12	11	44
B.19(7)	Malignant neoplasm, breast	M	–	–	–	–	–	–	–	–	–	–	–	–		–	–	–	–	–	–	–	–	–	–	–	–
		F	–	–	–	–	–	1	3	4	20	15	13	56		–	–	–	–	–	1	7	12	18	11	18	67
B.19(8)	Malignant neoplasm, uterus	M	–	–	–	–	–	–	–	–	–	–	–	–		–	–	–	–	–	–	–	–	–	–	–	–
		F	–	–	–	–	–	–	1	2	3	5	1	12		–	–	–	–	–	–	–	4	4	3	2	13
B.19(9)	Malignant neoplasm, prostate	M	–	–	–	–	–	–	–	–	1	3	7	11		–	–	–	–	–	–	–	–	1	12	6	19
		F	–	–	–	–	–	–	–	–	–	–	–	–		–	–	–	–	–	–	–	–	–	–	–	–
B.19(10)	Leukaemia	M	–	–	–	1	1	–	1	–	3	3	–	9		–	–	–	–	–	–	–	–	1	1	1	3
		F	–	–	–	–	2	–	–	1	1	2	–	6		–	–	–	1	–	–	–	1	1	–	1	4
B.19(11)	Other malignant neoplasms,	M	–	–	–	–	2	2	2	10	18	16	18	68		–	–	–	–	2	2	4	7	22	23	16	76
		F	–	–	1	–	2	–	2	9	13	20	24	71		–	–	–	2	–	1	7	4	18	21	20	73
B.20	Benign and unspecified neoplasms	M	–	–	–	–	–	–	–	–	–	–	–	–		–	–	–	–	–	1	–	–	1	1	–	3
		F	–	1	–	–	–	–	–	1	1	–	–	3		–	–	–	–	–	–	1	–	–	1	–	2
B.21	Diabetes mellitus	M	–	–	–	–	–	1	1	–	1	–	8	11		–	–	–	–	–	–	–	–	–	4	4	8
		F	–	–	–	–	–	–	–	1	–	5	4	10		–	–	–	–	–	–	–	1	–	2	5	8
B.22	Avitaminoses etc.	M	–	–	–	–	–	–	–	–	–	–	–	–		–	–	–	–	–	–	–	–	–	–	–	–
		F	–	–	–	–	–	–	–	–	–	–	1	1		–	–	–	–	–	–	–	–	–	–	–	–
B.46(1)	Other endocrine, etc., diseases	M	–	–	–	–	–	1	–	–	–	–	–	1		–	–	–	1	–	–	–	4	–	1	6	
		F	1	–	–	–	–	–	–	1	1	2	–	5		–	–	–	–	–	–	–	–	2	2	4	
B.23	Anaemias	M	–	–	–	1	–	–	–	–	–	1	2	4		–	–	–	–	–	–	–	–	–	1	1	
		F	–	–	–	–	–	–	1	1	–	–	4	6		–	–	–	–	–	–	–	–	1	2	3	
B.46(2)	Other diseases of blood, etc.	M	–	–	–	–	–	–	–	–	–	–	–	–		–	–	–	–	–	–	1	–	–	–	1	
		F	–	–	–	–	–	–	–	–	–	–	–	–		–	–	–	–	–	–	–	1	–	–	1	
B.46(3)	Mental disorders	M	–	–	–	–	–	–	–	–	–	–	1	1		–	–	–	–	–	–	–	–	2	–	1	3
		F	–	–	–	–	–	–	1	–	1	2	3	7		–	–	–	–	–	–	1	–	2	–	4	7
B.24	Meningitis	M	2	1	2	–	–	–	–	–	–	–	–	5		–	–	–	–	–	–	–	–	–	–	–	–
		F	2	–	–	–	–	–	–	–	–	–	–	2		–	–	–	–	–	–	–	–	–	–	–	–
B.46(4)	Multiple sclerosis	M	–	–	–	–	–	–	–	–	–	–	–	–		–	–	–	–	–	–	–	–	–	–	–	–
		F	–	–	–	–	–	–	–	–	1	–	–	1		–	–	–	–	–	–	–	–	–	–	–	–
B.46(5)	Other diseases of nervous system,	M	1	–	–	–	1	–	–	1	1	4	6	14		–	–	1	–	3	3	–	2	1	3	6	19
		F	–	–	–	–	–	–	1	–	2	1	4	8		–	–	–	–	1	–	–	2	1	1	7	12
B.26	Chronic rheumatic heart disease	M	–	–	–	–	–	–	1	1	4	4	4	14		–	–	–	–	–	–	1	–	1	3	1	6
		F	–	–	–	–	–	–	1	4	3	4	9	21		–	–	–	–	–	–	–	5	–	8	14	27
B.27	Hypertensive disease	M	–	–	–	–	–	–	–	1	3	10	1	15		–	–	–	–	–	–	–	2	4	5	9	20
		F	–	–	–	–	–	–	–	–	1	5	16	22		–	–	–	–	–	–	1	1	–	4	8	14
B.28	Ischaemic heart disease	M	–	–	–	–	–	1	4	41	97	122	116	381		–	–	–	–	–	–	9	48	93	110	130	390
		F	–	–	–	–	–	1	1	5	27	70	133	237		–	–	–	–	–	–	1	5	20	72	181	279
B.29	Other forms of heart disease	M	–	–	–	–	–	2	–	3	6	12	32	55		–	–	–	–	–	–	–	–	7	9	31	47
		F	–	1	–	–	1	–	1	1	–	9	52	65		–	–	–	–	–	–	–	2	5	8	79	94
B.30	Cerebrovascular disease	M	–	–	–	–	–	–	1	6	16	31	38	92		–	–	–	–	–	–	–	4	23	39	77	143
		F	–	–	1	1	–	–	2	3	7	18	105	137		–	–	–	1	–	–	2	5	11	44	141	204
B.46(6)	Other diseases of circulatory system	M	–	–	–	–	–	1	–	–	8	15	18	42		–	–	–	–	–	1	1	3	7	17	32	61
		F	–	–	–	–	–	2	–	5	4	11	41	63		–	–	–	–	–	–	1	4	3	14	40	62
B.31	Influenza	M	–	–	–	–	–	–	–	–	–	–	1	1		–	–	–	–	–	–	–	–	–	–	1	1
		F	–	–	–	–	–	–	–	–	–	–	1	1		–	–	–	–	–	–	–	–	–	2	2	4
B.32	Pneumonia	M	2	3	1	–	–	–	–	3	7	22	75	113		1	1	–	–	–	–	1	–	8	21	58	90
		F	2	2	–	–	1	–	1	3	4	21	96	130		2	–	2	1	–	1	–	2	3	17	122	150
B.33(1)	Bronchitis and emphysema	M	–	–	–	–	–	–	–	1	11	35	38	85		–	–	–	–	–	–	–	2	13	27	38	80
		F	–	–	1	–	–	–	–	2	5	6	17	31		–	–	–	–	–	–	–	–	–	6	16	22
B.33(2)	Asthma	M	–	–	–	–	–	1	–	–	–	1	1	3		–	–	–	–	–	–	1	1	1	–	1	4
		F	–	–	1	–	–	–	–	–	3	1	1	6		–	–	–	1	–	–	1	–	2	1	–	5
B.46(7)	Other diseases of respiratory system	M	–	3	1	–	–	–	–	1	3	2	3	13		–	1	–	1	–	–	–	2	–	1	6	11
		F	–	1	–	–	–	–	–	–	–	–	6	7		–	1	1	1	–	–	–	1	1	2	6	13

CAUSES OF DEATH AT DIFFERENT PERIODS OF LIFE IN THE ADMINISTRATIVE COUNTY OF BUCKINGHAM, 1971—*continued*

	Causes of Death	Sex	Aggregate of Urban Districts												Aggregate of Rural Districts											
			Under 4 wks.	4 wks.-under 1	1—4	5—14	15—24	25—34	35—44	45—54	55—64	65—74	75 and over	Total	Under 4 wks.	4 wks.-under 1	1—4	5—14	15—24	25—34	35—44	45—54	55—64	65—74	75 and over	Total
B.34	Peptic ulcer	M	–	–	–	–	–	–	1	–	1	1	5	8	–	–	–	–	–	–	2	–	4	4	8	18
		F	–	–	–	–	–	–	–	–	–	2	3	5	–	–	–	–	–	–	–	–	–	3	5	8
B.35	Appendicitis	M	–	–	–	–	–	–	–	–	–	–	1	1	–	–	–	–	–	–	–	–	–	–	–	–
		F	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
B.36	Intestinal obstruction and hernia	M	1	–	–	–	–	–	–	–	–	1	2	4	2	–	–	–	–	–	–	–	–	–	3	5
		F	1	–	–	–	–	–	–	–	–	1	1	3	–	–	–	–	–	–	1	–	–	1	–	2
B.37	Cirrhosis of liver	M	–	–	–	–	–	–	–	–	1	2	1	4	–	–	–	–	–	–	–	1	2	3	1	7
		F	–	–	–	–	–	1	–	–	–	1	–	2	–	–	–	–	–	–	–	1	–	1	2	4
B.46(8)	Other diseases of digestive system	M	–	–	–	–	1	1	–	1	1	2	2	8	–	–	–	–	–	–	–	1	–	5	2	8
		F	–	–	–	1	–	–	1	–	1	4	10	17	–	–	–	–	–	–	–	–	1	1	7	9
B.38	Nephritis and nephrosis	M	–	–	–	–	–	–	–	–	–	6	2	8	–	–	–	–	–	–	–	1	1	–	7	9
		F	–	–	–	–	–	–	–	–	–	3	2	5	–	–	–	–	–	–	–	1	1	2	3	7
B.39	Hyperplasia of prostate	M	–	–	–	–	–	–	–	–	–	–	7	7	–	–	–	–	–	–	–	–	1	1	6	8
		F	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
B.46(9)	Other diseases, genito-urinary system	M	–	–	–	–	–	–	–	1	–	1	1	3	–	–	–	–	–	–	–	–	2	4	3	9
		F	–	–	–	–	–	–	–	1	1	3	4	9	–	–	–	–	–	–	–	–	2	–	10	12
B.41	Other complications of pregnancy, etc.	M	–	–	–	–	–	1	2	–	–	–	–	3	–	–	–	–	–	–	–	–	–	–	–	–
		F	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
B.46(10)	Diseases of skin subcutaneous tissue	M	–	–	–	–	–	–	–	–	–	–	1	1	–	–	–	–	–	–	–	–	–	–	–	–
		F	–	–	–	–	–	–	–	–	–	1	1	2	–	–	–	–	–	–	–	–	–	1	1	2
B.46(11)	Diseases of musculo-skeletal system	M	–	–	–	–	–	–	–	1	1	1	2	5	–	–	–	–	–	–	1	2	–	–	–	3
		F	–	–	–	–	–	–	–	2	–	–	3	5	–	–	–	–	–	–	1	–	–	4	6	11
B.42	Congenital anomalies	M	10	7	–	2	–	–	–	–	1	–	–	20	9	2	1	5	–	–	1	1	–	1	1	21
		F	7	4	–	–	–	–	–	–	–	–	–	11	3	2	1	–	–	–	–	–	–	–	–	6
B.43	Birth injury, difficult labour, etc.	M	11	1	–	–	–	–	–	–	–	–	–	12	6	–	–	–	–	–	–	–	–	–	–	6
		F	7	–	–	–	–	–	–	–	–	–	–	7	13	–	–	–	–	–	–	–	–	–	–	13
B.44	Other causes of perinatal mortality	M	10	–	–	–	–	–	–	–	–	–	–	10	7	–	–	–	–	–	–	–	–	–	–	7
		F	9	–	–	–	–	–	–	–	–	–	–	9	4	–	–	–	–	–	–	–	–	–	–	4
B.45	Symptoms and ill-defined conditions	M	–	1	–	–	–	–	–	–	–	–	5	6	–	1	–	–	–	–	–	–	–	–	5	6
		F	–	2	–	–	–	–	1	–	1	–	7	11	–	–	–	–	–	–	–	–	–	–	8	8
BE.47	Motor vehicle accidents	M	–	–	–	1	6	3	3	4	3	4	1	25	–	–	–	2	8	2	1	2	4	3	3	25
		F	–	–	1	–	1	–	–	4	–	2	–	8	–	–	–	–	–	–	1	–	2	1	3	7
BE.48	All other accidents	M	–	1	2	–	1	3	2	3	2	–	5	19	–	–	3	4	2	2	1	1	4	2	9	28
		F	–	1	1	2	–	–	2	–	1	1	19	27	–	–	–	–	1	–	1	–	3	2	17	24
BE.49	Suicide and self-inflicted injuries	M	–	–	–	–	–	1	1	2	3	1	1	9	–	–	–	–	–	1	3	2	1	6	–	13
		F	–	–	–	–	–	–	3	1	1	3	–	8	–	–	–	–	–	–	–	3	2	2	1	8
BE.50	All other external causes	M	–	–	–	–	–	1	–	3	–	–	–	4	–	–	–	–	1	–	1	2	–	–	–	4
		F	–	1	–	–	1	–	–	–	–	–	–	2	–	–	–	–	1	1	1	1	–	1	–	5
All causes total		M	38	17	7	5	14	18	18	109	252	388	462	1328	26	5	5	13	16	13	31	100	269	382	509	1369
		F	30	16	6	4	8	8	27	57	122	243	614	1135	22	4	5	7	3	6	30	67	134	266	775	1319
Total			68	33	13	9	22	36	45	166	374	631	1076	2463	48	9	10	20	19	19	61	167	403	648	1284	2688

CHILD HEALTH CLINICS

CLINICS	ADDRESS	DOCTOR ATTENDS
AMERSHAM (NEW TOWN)	St. John Ambulance H.Q., Chiltern Avenue	Weekly
AMERSHAM (OLD TOWN)	Baptist Church Hall, High Street	Monthly
ASTON CLINTON	Baptist Church Hall	Do.
AYLESBURY	The Clinic, Pebble Lane	Weekly
AYLESBURY—QUARRENDON	Child Welfare Centre, 1 Lay Road	Weekly
,, SOUTHCOURT	Church of the Good Shepherd, Church Square, Southcourt	Twice monthly
,, BEDGROVE	The Health Centre, Jansel Square	Weekly
BLETCHLEY	School Clinic, Whalley Drive	Weekly
,,	Methodist Church, Bletchley Road	Monthly
BOURNE END	The Community Centre	Weekly
BRILL	The Institute	No doctor
BUCKINGHAM	Congregational School Room	Monthly
BURNHAM	British Legion Hall, Gore Road	Twice monthly
,, LENT RISE	Methodist Church Hall, Lent Rise	Weekly
CHALFONT ST. GILES	Scout Hut, Silver Hill	Monthly
CHALFONT ST. PETER	Community Centre, Amersham Road	Twice monthly
CHARTRIDGE	Village Hall	Monthly
CHEDDINGTON	Methodist Schoolroom	Monthly
CHESHAM	The School Clinic, Germain Street	Weekly
,, POND PARK	Community Hall, Windsor Road, Pond Park, Chesham	Twice monthly
DATCHET	Village Hall	Twice monthly
DENHAM	Health Clinic, Oxford Road	Thrice monthly
DORNEY	Village Hall	Monthly
DOWNLEY	Memorial Hall	Weekly
EDLESBOROUGH	Memorial Hall	Monthly
ETON WICK	Village Hall	Twice monthly
FARNHAM COMMON	Village Hall, Victoria Road	Monthly
FARNHAM ROYAL	Village Hall	Twice monthly
FARNHAM ROYAL, BRITWELL ESTATE	Wentworth Avenue, Britwell Estate	Weekly
FLACKWELL HEATH	Community Centre	Weekly
GERRARDS CROSS	Memorial Hall	Monthly
GREAT HAMPDEN	Village Hall	Do.
GREAT KINGSHILL	Village Hall	Do.
GREAT MISSENDEN	Baptist Church Hall	Do.
GRENDON UNDERWOOD	Village Hall	Do.
HADDENHAM	Village Hall	No doctor
HALTON (Voluntary)	R.A.F. Camp, Halton	No doctor
HANSLOPE	Church Institute	Monthly
HAZLEMERE	Penn Road Methodist School Room	Weekly
HIGH WYCOMBE	Health Clinic, Abbey Way	Weekly
,, BOOKER	St. Birinus Church Hall, Sycamore Road	Twice monthly
,, CASTLEFIELD	The Health Clinic, Chiltern Avenue	Twice monthly
,, DEEDS GROVE	Methodist Church, Desborough Avenue	Twice monthly
,, MICKLEFIELD	St. Peter's Church Hall	Weekly
,, SANDS	War Memorial Hall	Do.
,, TOTTERIDGE	St. Andrews Church Hall	Do.
,, WEST WYCOMBE	Community Centre	Monthly
,, WYCOMBE MARSH	St. Anne's Church Room	Do.
HOLMER GREEN	Village Centre	Weekly
HOLTSPUR	Congregational Church Hall, Crabtree Close	Monthly
HORTON	Champneys Hall	Do.
HUGHENDEN VALLEY	Village Hall	No doctor
IVER	Church Institute, Thorney Lane	Monthly
IVER HEATH	New Village Hall	Twice monthly
IVINGHOE	Youth Hostel	Twice monthly
LACEY GREEN	Village Hall	Monthly
LANE END	Memorial Hall	Twice monthly
LEE COMMON	Ballinger War Memorial Hall	Monthly
LITTLE CHALFONT	Little Chalfont Hall	Twice monthly
LONG CRENDON	Sports Pavilion	Monthly
LOUDWATER	St. Peter's Church Hall	Twice monthly
MARLOW	Health Clinic, Victoria Road	Weekly
MARLOW BOTTOM	Village Hall	Twice monthly
MEDMENHAM (Voluntary)	R.A.F. Camp, Medmenham	No doctor

CHILD HEALTH CLINICS—*continued*

Clinics	Address	Doctor Attends
Naphill	Village Hall	Twice monthly
Newport Pagnell	Congregational Schoolroom, High Street	Monthly
New Beaconsfield	Youth Club, Maxwell Road	Twice monthly
Newton Longville	Methodist Church Schoolroom	Monthly
Olney	Church Hall, High Street	Twice monthly
Prestwood	Village Hall	Twice monthly
Princes Risborough	Parish Church Hall	Twice monthly
Quainton	Memorial Hall	Monthly
Radnage	Cricket Pavilion	Monthly
Richings Park, Iver	St. Leonard's Church Hall, Richings Park	Monthly
St. Leonards-cum-Cholesbury	Village Hall, Cholesbury	Do.
Seer Green and Jordans	Baptist School Room, Seer Green	Do.
Slough	Health Clinic, Burlington Road	Weekly
„ Cippenham	Central Hall, Bower Way	Weekly
„ Parlaunt Park	Parlaunt Road	Do.
„ The Merrymakers Hall	Meadow Road, Langley	Do.
„ St. Michael's	Slough Social Centre, Farnham Road	Do.
„ Wexham Court	Wexham Court, Knolton Way, Slough	Do.
Steeple Claydon	Library Hall	Monthly
Stewkley	Village Hall	No Doctor
Stokenchurch	Memorial Hall	Monthly
Stoke Poges	Village Hall	Twice monthly
Stone	Village Hall	Monthly
Stony Stratford	Scouts Hut	Do.
Twyford	Village Hall	Monthly
Tylers Green and Penn	Methodist Church Hall, Coppice Farm Rd., Tylers Green	Twice monthly
Waddesdon	Village Hall	Monthly
Wendover	Memorial Hall	Weekly
Weston Turville	Union Chapel Hall	Monthly
Whitchurch	Methodist Hall	Monthly
Widmer End	Village Hall	Weekly
Wing	Village Hall	Monthly
Wingrave	Temperance Hall	Do.
Winslow	The Health Centre, Avenue Road,	Twice monthly
Woburn Sands	The Institute	Monthly
Wolverton	Scouts' Hall	Monthly
Wooburn Green	St. Mary's Hall	Twice monthly
Wraysbury	Village Hall	Monthly
Child Health Clinics at Family Doctors' Surgeries		
Bradwell	122 Newport Road	Twice monthly
Beaconsfield	Whin Willow, Pennington Road	Monthly
„	51 Wycombe End	Twice monthly
High Wycombe	24 Priory Avenue	Weekly
„	169 West Wycombe Road	Weekly
Penn & Tylers Green	Madryn	Weekly

MOBILE HEALTH CLINICS

(Doctor attends each session)

Monthly Session	Villages Visited
First Monday (afternoon)	Chearsley, Cuddington, Dinton.
Third Monday „	Great Horwood, Little Horwood, Mursley.
Fourth Monday „	Stoke Hammond, Drayton Parslow, Swanbourne.
First Tuesday (morning)	Bierton.
First Tuesday (afternoon)	Slapton, Ivinghoe Aston, Marsworth.
Second Tuesday (morning)	Preston Bissett, Tingewick, Gawcott.
Second Tuesday (afternoon)	Castlethorpe, Haversham.
Third Tuesday „	Loughton, Shenley Church End, Shenley Brook End.
Fourth Tuesday „	Longwick, Great Kimble, Butlers Cross.
Second Thursday „	Adstock, Padbury, Maids Moreton
Third Thursday „	Shabbington, Ickford, Worminghall, Oakley.
First Friday (morning)	Thornborough, Nash, Whaddon.
First Friday (afternoon)	Bow Brickhill, Little Brickhill, Great Brickhill.
Second Friday (morning)	Sherington, Lavendon.
Second Friday (afternoon)	Astwood, North Crawley.
Third Friday (morning)	Lillingstones, Akeley.

SUMMARY OF NOTIFICATIONS OF INFECTIOUS DISEASES RECEIVED DURING THE YEAR 1971

DISTRICT	Tuberculosis		Scarlet fever	Whooping Cough	Infective Hepatitis	Measles	Acute Pneumonia	Meningococcal Infections	Acute Poliomyelitis		Acute Encephalitis		Dysentery	Ophthalmia neonatorum	Puerperal pyrexia	Smallpox	Para-typhoid Fever	Typhoid Fever	Food poisoning	Erysipelas
	Respiratory	Other							Paralytic	Non-paralytic	Infective	Post infectious								
URBAN																				
1. Aylesbury Borough ..	5	2	4	11	5	22	–	–	–	–	–	–	1	–	–	–	–	–	1	–
2. Beaconsfield	1	1	–	3	–	31	–	–	–	–	–	–	–	–	–	–	–	–	–	–
3. Bletchley	1	3	9	6	–	99	–	–	–	–	–	–	10	–	–	–	–	–	8	–
4. Buckingham Borough ..	1	–	–	–	1	1	–	–	–	–	–	–	–	–	–	–	–	–	–	–
5. Chesham	2	1	–	5	3	10	–	–	–	–	–	–	–	–	–	–	–	–	–	–
6. Eton	–	–	–	–	1	7	–	–	–	–	–	–	–	–	–	–	–	–	–	–
7. High Wycombe Borough	17	12	3	–	2	249	–	–	–	–	–	–	–	–	–	–	1	–	2	–
8. Marlow	–	–	–	–	–	1	–	–	–	–	–	–	–	–	–	–	–	–	–	–
9. Newport Pagnell ..	1	1	–	1	–	42	–	–	–	–	–	–	–	–	–	–	–	–	–	–
10. Slough Borough ..	28	21	–	58	2	205	–	1	–	–	–	–	1	–	–	–	1	3	3	–
11. Wolverton	–	–	4	4	–	9	–	–	–	–	–	–	–	–	–	–	–	–	–	–
TOTAL URBAN ..	56	41	20	88	14	676	–	1	–	–	–	–	12	–	–	–	2	3	14	–
RURAL																				
1. Amersham	5	–	25	14	16	81	–	–	–	–	–	–	1	–	–	–	–	–	15	–
2. Aylesbury	1	–	–	6	1	10	–	1	–	–	–	–	–	–	–	–	–	–	2	–
3. Buckingham	1	–	1	5	4	21	–	–	–	–	–	–	–	–	–	–	–	–	1	–
4. Eton	9	2	5	11	6	140	–	–	–	–	–	–	–	–	–	–	1	–	–	–
5. Newport Pagnell ..	1	1	1	–	4	55	–	–	–	–	–	–	–	–	–	–	–	–	–	–
6. Wing	3	2	1	–	–	29	–	1	–	–	–	–	3	–	–	–	–	–	–	–
7. Winslow	–	–	–	–	–	23	–	–	–	–	–	–	–	–	–	–	–	–	–	–
8. Wycombe	7	–	5	6	13	301	–	–	–	–	–	–	–	–	–	–	–	3	10	–
TOTAL RURAL ..	27	5	38	42	44	660	–	2	–	–	–	–	4	–	–	–	1	3	28	–
TOTAL FOR COUNTY ..	83	46	58	130	58	1,336	–	3	–	–	–	–	16	–	–	–	3	6	42	–

POPULATIONS, BIRTH AND DEATH RATES FOR THE YEAR 1971

District	Population Census 1971	Registrar-General's estimated population mid 1971	Births		Deaths	
			Number	Rate per 1,000 population	Number	Rate per 1,000 population
URBAN						
Aylesbury	41,288	41,100	731	17.8	332	8.1
Beaconsfield	11,861	11,930	129	10.8	86	7.2
Bletchley	30,608	30,820	735	23.8	193	6.3
Buckingham	5,075	5,180	73	14.1	49	9.5
Chesham	20,416	20,480	417	20.4	165	8.1
Eton	3,954	5,180	35	6.8	30	5.8
High Wycombe ..	59,298	59,930	1,092	18.2	469	7.8
Marlow	11,706	11,740	183	15.6	95	8.1
Newport Pagnell ..	6,337	6,360	137	21.5	103	16.2
Slough	86,757	87,660	1,683	19.2	781	8.9
Wolverton	13,891	13,800	216	15.7	164	11.9
TOTAL URBAN ..	291,119	294,180	5,431	18.5	2,467	8.4
RURAL						
Amersham	68,413	68,550	916	13.4	630	9.2
Aylesbury	38,499	38,740	624	16.1	376	9.7
Buckingham	9,557	10,160	154	15.2	95	9.4
Eton	71,656	72,680	994	13.7	612	8.4
Newport Pagnell ..	15,803	16,020	260	16.2	167	10.4
Wing	10,739	10,770	181	16.8	111	10.3
Winslow	10,126	10,220	172	16.8	147	14.4
Wycombe	70,299	71,430	1,295	18.1	547	7.7
TOTAL RURAL ..	295,092	298,570	4,596	15.4	2,685	9.0
TOTAL COUNTY ..	586,211	592,750	10,027	16.9	5,152	8.7
ENGLAND AND WALES		48,815,000	783,165	16.0	567,345	11.6

COMPARATIVE TABLE OF BIRTH, DEATH AND INFANT MORTALITY RATES FOR TEN YEAR PERIOD, 1962-1971

YEAR	BIRTH RATE per 1,000 population				DEATH RATE per 1,000 population				INFANT MORTALITY RATE per 1,000 births			
	Urban	Rural	County	England and Wales	Urban	Rural	County	England and Wales	Urban	Rural	County	England and Wales
1962	20.3	18.2	19.2	18.0	9.1	10.1	9.6	11.9	16.5	19.5	17.9	21.4
1963	20.8	17.6	19.2	18.2	9.3	10.5	9.9	12.2	17.7	17.6	17.7	20.9
1964	21.8	18.5	20.1	18.4	8.4	9.1	8.7	11.3	16.5	17.1	16.7	20.0
1965	20.9	18.4	19.6	18.1	8.4	9.3	8.9	11.5	13.2	16.9	14.9	19.0
1966	20.6	17.3	18.9	17.7	8.9	9.5	9.2	11.7	15.0	16.9	15.9	19.0
1967	19.6	16.6	18.1	17.2	8.6	9.2	8.9	11.2	14.7	16.9	15.7	18.3
1968	19.2	16.5	17.9	16.9	8.8	9.4	9.1	11.9	15.0	12.0	14.0	18.0
1969	18.8	15.6	17.2	16.3	8.5	9.3	8.9	11.9	16.0	10.0	13.0	18.0
1970	17.9	15.7	16.9	16.0	8.3	9.5	8.9	11.7	17.0	11.0	15.0	18.0
1971	18.5	15.4	16.9	16.0	8.4	9.0	8.7	11.6	19.0	12.0	16.0	18.0

SCHOOL HEALTH SERVICE

NUMBER OF CHILDREN ON SCHOOL ROLLS

Nursery schools	1,075
Primary schools (including nursery classes)	65,589
Secondary modern schools	24,846
Selective secondary schools	13,397
Comprehensive schools	3,011
Special schools	1,361
Total ..	109,279

MEDICAL EXAMINATION OF SCHOOL CHILDREN

1. Selective medical examination

Medical examinations take place at about the time when pupils enter school—a few are examined before admission, some during their first term at school, and the majority during their second term. All schools are visited by medical staff every term on at least one occasion. The selective system of medical examination has now been adopted throughout the county for pupils in their eleventh and fifteenth years, and this was described in some detail in the report for 1970. Under these arrangements 41.8 per cent of eleven-year old children were selected for examination.

2. General

A total of 19,971 who attended maintained schools was given periodic medical inspections during 1971. This compares with 23,037 in the previous year. Only 40 children were found, on examination, to be in an unsatisfactory physical condition. Of the remainder, 1,722 (8.6%) were found to have defects, other than dental disease and infestation, which required treatment.

The table which follows shows the number of children who received medical examination each year since 1962 and the percentage of those children found to have defects requiring treatment:

Year	*Total school population*	*Total no. of children examined*	*% of children with defects requiring treatment*
1962	77,429	22,802	8.7
1963	80,833	24,860	10.6
1964	82,285	26,111	11.3
1965	84,024	22,284	10.2
1966	87,831	25,552	10.5
1967	92,132	24,478	9.2
1968	96,985	22,780	8.9
1969	100,884	24,997	9.5
1970	105,196	23,037	11.2
1971	109,279	19,971	8.6

Table I (page 129) gives a full summary of the results of the examinations undertaken during 1971. This shows that only six children, of those aged 14 years or more examined during the year, were found to be in an unsatisfactory physical condition. Disappointment was expressed in last year's report that so many pupils in their last year of school life were found to have defects which required treatment. During the year under review, 239 children (7.9%) were found to have such defects, compared with 448 (9.0%) in 1970. It is encouraging to note this continuing downward trend, but it seems reasonable to hope that further significant improvement can be made.

Amongst those beginning their school career there was also a reduction in the number found to have defects which required treatment, the total being 459 (5.7%), compared with 600 (8.2%) in 1970.

3. Experimental pre-school examinations

During the year some pre-school medical examinations were undertaken in an attempt to assess their value and, if they were considered to warrant further trials, the manner in which this might most successfully be organised.

The first study involved 28 children who were due to start attendance at Chalvey infant school in the summer term. The examinations took place at the school in April and formed part of an introductory visit to which 22 children were invited. The remaining six were enrolled too late to be included and were therefore examined routinely in the school during the summer term. Two children had been fully examined during the spring term at a nursery school they then attended and were not re-examined. One child failed to respond to the invitation and was also absent from the medical inspection during the summer term. This left 19 children to have pre-school medical inspections, two of whom had previously been seen at nursery schools.

Two full sessions were devoted to these examinations and it was possible to make available to the medical officer the child health clinic and/or health visiting records of twelve of the children. Vision tests were carried out at these sessions, audiometry being left until later.

Eight children were found to have defects as detailed below:—

One congenital heart defect (no action considered necessary regarding school activities after considering hospital report);

One with scarred eardrums resulting from otitis media (to be seen again following audiometry);

One slight visual defect and minor lisp (to be kept under observation for six months);

One defect of gait in a child who was also under treatment from the general practitioner for nocturnal enuresis (to be seen again in one year);

Two with flat feet (recommended for exercise class in school);

One with very waxy ears (referred for treatment) and slight visual defect (to be kept under observation for six months);

One with slight squint due to external rectus palsy for which she had had no treatment (referred to hospital).

Both of the children examined in nursery school were recommended for further examination, one for a diminishing speech defect and one because of a nose and throat condition and hearing loss for which the medical officer had already referred him to hospital.

Of the six children who enrolled too late, three had been examined during the past year at nursery schools and two had no parent present. The remaining child is to be kept under observation by teaching and medical staff, as he was thought to be a possible slow learner.

Dr. Audrey Myant, who undertook this study and supplied the details given above, reported that the head teacher felt that being examined was not a good introduction to the school; and that both the school and nursing staff found that a lot of extra work was required of them. She therefore decided that the next step should be to try to study all those due to enter school from two general practitioners' lists. This would involve the help of health visitors and should provide a more representative example than if clinic attenders were selected. It should also increase liaison between general practitioners and school medical officers.

Dr. Myant reports on this second experiment as follows:—

"*Introduction, objectives and method*

The object of the exercise was to assess the value of a pre-school medical examination at $4\frac{3}{4}$ to 5 years, replacing the routine five-year old entrants' examination in school, and it was decided to

use as a survey group the children from one general practice list whose birthdays fell between 2nd September, 1971 and 4th January, 1972, and to examine them at the doctor's surgery.

The cooperation of Drs. L. D. M. Gavin, R. L. Bourne and C. O. Lister was sought. Their practice surgery is just north of the centre of the town in a residential area, partly owner-occupied or privately rented, and partly council-owned property. Several of the patients, however, were found to live at least three miles away.

The practice was chosen for several reasons:—

1. It was thought to serve a fairly general cross-section of the present population of the town.
2. The medical officer carrying out the examination also visits the two infant schools nearest to the practice surgery.
3. The practice is one in which health visitor and district nurse attachment is fully established and working satisfactorily.
4. An excellent relationship exists between the general practitioners and members of the local authority staff.

Every possible help was given by the practice staff. A large comfortable consulting room and adjoining treatment room and waiting room were made available for four afternoons. Access was given to the children's medical notes. One of the doctors was present every week during the latter part of the session and could be called on for consultation.

Vision testing was performed by the health service assistant in the waiting room before the examination, and immunisation in the treatment room afterwards.

Results

In all, 39 children were examined. Six did not attend when invited, although most were given two appointments.

Of those who failed:—

one attends nursery school and was examined there in July 1971. Her parents had indicated on the returned form that she would attend;

one was a Pakistani child. The invitation was returned indicating that he had left the address;

one was an Indian child, whose parents rang up and apologised for having mistaken the time;

one was a West Indian child, accompanied by an elder sister, who arrived at the wrong place;

one lives in an area several miles from the surgery;

one comes from a large family. His mother rarely attends school medical examinations. Since one of his brothers attends the local school for educationally sub-normal pupils this was thought to be a serious failure, and the health visitor will be visiting the home.

The 39 children who attended were found to be divided between 14 county infant schools and three independent schools.

Council schools

James Elliman	8
Godolphin infants ..	6
Thomas Gray	4
Wexham Court infants ..	4
St. Ethelbert's R.C. infants	3
Cippenham infants ..	2
Chalvey infants	1
Evelyn Fox (special) ..	1
Marish infants	1
Parlaunt Park infants ..	1
St. Mary's C.E. primary	1
Stoke Poges infants ..	1
William Penn infants ..	1
Uncertain	1

Independent schools

St. Bernard's Convent ..	2
La Roche School of Dancing	1
Little Turret, Gerrards Cross	1

(These four children had all started school at 4 years of age).

Of the 35 children entering state schools, 19 were attending nursery school, one had attended for a short while and had been withdrawn, and one of those failing her appointment was also in a nursery.

At least three children were attending private playgroups.

James Elliman nursery school	8
Baylis Court nursery school	5
Cippenham nursery school	2
Slough Centre nursery school	2
Chalvey nursery school	1
Western House nursery school	1
William Penn nursery school	1

and 1 withdrawn 6 months ago.

In this respect, the group must be somewhat atypical and favoured. It so happens that this part of the town has a disproportionate number of nursery school places available.

Four sessions were held. Fourteen or fifteen appointments were made for each session but cancellations and failures resulted in only ten children being seen. This allowed time for more thorough examinations and assessments than is routinely required when using form 1OM.

Thirty-two booster diphtheria/tetanus and poliomyelitis immunisations were given and one first injection.

Two children had already received booster doses and four were deferred because of acute infection. Arrangements were made for them to be immunised later.

After all the examinations were completed a further discussion session was held with one of the general practitioners. This afforded an opportunity for discussion of other cases of mutual interest.

The defects noted were three cases of developmental delay:—

Case A:

This child required full assessment and completion of form 2HP. recommending special school for educationally sub-normal pupils. He also needed referral again to hospital

for treatment of squint. He has been under the supervision of the health department for several years and had been in nursery school for a short while, but his mother had withdrawn him because of domestic difficulties. His progress would, in any event, have been reviewed prior to school entry.

Cases B and C:

Both these children were known as slow developers from infancy and had been in nursery school for two years. They were both referred to the educational psychologist following this examination. One was already receiving speech therapy and the other was referred for this after examination.

There were:—

four cases of nocturnal enuresis, and a definite programme of treatment for these children was worked out through discussion with the general practitioner;

one case of undescended testicles. It was arranged that this child should be kept under review;

one case of asthma. This child's attendance at nursery school had been poor, and the fact was brought to the notice of the general practitioner;

one case of inadequately treated eczema was seen immediately by the general practitioner;

one case of mildly defective vision was referred to the eye clinic and five others were noted for re-testing in school in a year's time; two cases of possibly defective hearing following otitis media were referred for full audiometry;

one case of flat feet was referred to the remedial exercise class; three cases of otitis media and tonsillitis, one child with a dental abscess and one with impacted wax in the auditory meatus were seen at once by the general practitioner, after which treatment was given.

It can be seen from this list that no defect of educational importance which had not been known about before was found, except for possible minor defects of sight and hearing. This may have been because of the high proportion of the survey group attending nursery schools and the adequate child health clinic and hospital follow-up of "at risk" cases and slow developers.

Discussion

It cannot be said that this study has demonstrated any advantage in pre-school five-year old medical examinations as such, but it did show that much is to be gained from a routine examination at the family doctor's surgery.

The advantages can be summed up as follows:—

1. It was possible to work out a concerted policy on such long-standing defects as nocturnal enuresis. Hospital referrals could be discussed.
2. Immediate referral for treatment of acute conditions was possible.
3. Medical records and hospital reports were available at the surgery and could be combined with the child health clinic and health visitors' notes.
4. The consulting rooms were far more comfortable and allowed for greater privacy than the rooms used for medical inspections in infant schools.
5. The parents seemed pleased to find that their general practitioner and school medical officer were working together.

The disadvantages should also be noted:—

1. There is always the possibility of appointments not being kept, but in this particular survey the eventual coverage was good.
2. In a town area, the number of schools attended by children from one practice is very great, and if the examinations are to be done by the family doctor himself this might necessitate his contacting several head teachers.
3. If this method is generally used, it might lead to less contact between medical officers and the teaching staff. This is less likely to occur with well established members of the school health staff than with newly appointed medical officers, who might become too general practice rather than school orientated.

Conclusions

A five-year medical examination by a member of the local authority staff at the family doctor's surgery can be successful and useful, when the help and co-operation of the practice staff are obtained.

The increased medical cooperation might justify running the risk of a less close contact with the infant schools.

Acknowledgement

My thanks are due to Drs. Gavin, Lister and Bourne for their help and hospitality."

General practitioners' opinions

The general practitioners who cooperated in this study were given advance copies of the report. In general they agreed with Dr. Myant, but Dr. Lister felt that the absence of defects of educational importance could well be a reflection of the adequacy of general practitioners generally, since not all the children were 'born' into the practice, as well as the good doctor/patient relationship and consulting habits developed in the practice. So far as the advantages indicated in the report are concerned, he felt that special stress should be given to the fifth one. Too often, he felt, liaison between school medical officers and general practitioners leaves much to be desired and parents are often sensitive to conflicting opinions which they interpret or misinterpret with a resulting loss of confidence in one or both of the doctors concerned. He considered that working on the same premises with resulting ease of inter-professional discussion would go a long way to eliminate this difficulty.

With regard to the suggested disadvantages, he acknowledged that the second would involve communication with a number of headmasters, but considered the resulting improved liaison between teachers and family doctors to be very desirable. He also questioned whether it would in fact be disadvantageous to the service if newly appointed school medical officers became "too general practice orientated".

Dr. Lister suggested that routine urine testing might be included in future examinations, as might selective screening audiometry. He also considered that appointments for booster immunisations might usefully be harnessed to an appointments system for pre-school medical examinations. His observations conclude "I feel that this report must surely pose the question of whether these pre-school examinations might not be more appropriately carried out by the family doctor with advantages to all concerned, thus releasing a medical officer of health for other duties—particularly in respect of mentally subnormal and handicapped children, whose condition requires special experience . . . "

Dr. Gavin stressed the value to the family doctor who attends the session for treatment of any acute cases found and to discuss defects; and to the parents who have the school and family doctor at hand to confirm future plans for their child. Several parents expressed appreciation following the survey.

He also stressed that quite a different pattern of results might be found in other practices, even those nearby and concludes: "That the screening of the children in this age group in our practice has been very satisfactory reflects on the efficiency of Health Department doctors who have been long enough in the area to get to know the school staffs, the family doctors and some of the parents and who, in many cases, know more about the child and its 'milestones' than the general practitioner".

Future plans

The study is continuing during 1972 and it is intended that the children of the practice who are due to start school in the spring and summer terms should be examined under broadly similar arrangements to those described above.

FINDINGS AT MEDICAL EXAMINATIONS

1. General

Detailed information regarding the defects found at periodic, special and re-examinations during the year is given in Table IV (page 130). Since the 1971 figures became available, a particular look has been taken at the more commonly occurring defects found amongst school entrants. A summary of such defects noted during the period 1967-1971 is given below. It is interesting to note the increase in the number of auditory defects found in these children, which is probably due to improved methods of screening.

Numbers of entrants found with defects requiring observation or treatment

(% figures are of total entrants examined)

	1967	1968	1969	1970	1971
5a Eyes—vision	235	427	588	693	562
	2.8%	3.8%	5.3%	5.9%	4.8%
6a Ears—hearing	379	674	910	893	1,004
	4.6%	6.0%	8.2%	7.5%	8.8%
7. Nose and Throat	401	380	463	314	361
	4.8%	3.4%	4.2%	2.6%	3.1%
8. Speech	242	291	319	364	368
	2.8%	2.6%	2.9%	3.0%	3.1%
10. Heart	63	114	102	123	109
	0.75%	1%	0.9%	1%	1%
11. Lungs	113	118	148	138	130
	1.4%	1%	1.3%	1.2%	1.1%
12b. Developmental (other)	114	181	288	314	193
	1.4%	1.6%	2.6%	2.6%	1.8%
13b. Orthopaedic—feet	147	155	198	200	218
	1.8%	1.4%	1.8%	1.7%	1.9%
15a. Psychological—	142	245	251	348	286
—development	1.8%	2.2%	2.3%	3.0%	2.4%
15b. —stability	155	133	211	140	182
	1.8%	1.2%	1.9%	1.2%	1.8%
Total entrants examined ..	8,204	11,161	11,133	11,812	11,629

Note: These figures will not coincide with those in the following paragraphs since the table deals with conditions requiring both observation and treatment, whereas the discussion is concerned mainly with those requiring treatment.

2. Eye defects

In all, 839 children were found to have squint, visual defects or other conditions which required treatment, 373 fewer than last year. A further 1,174 were recommended for observation because of such defects.

A total of 217 of these children was discovered to be in need of treatment at special examinations. Of those found in the course of routine examinations 254 were entrants, 147 were school leavers, the remaining 221 being at various other stages of their school careers. Of 93 children who were found at routine examinations to need treatment for squint, 67 were entrants. The diagnosis of squint should take place long before the child reaches school age, although it is likely that the majority of pupils reported to require treatment was, in fact, already having it.

The number of children needing treatment for errors of refraction, including squint, was 527 less than in 1970. Of the 2,845 children found to have such errors, 1,205 were known to have been prescribed spectacles. This figure is not, however, comprehensive since details of many children prescribed spectacles by hospitals and private opticians are not known to the education authority.

3. Auditory defects

It is important that children with these defects should be identified and treated as early as possible, not only because many conditions are more responsive to early treatment but also because of the severe effects which defective hearing can have on a child's scholastic achievements. The figures for 1971 indicate that a high proportion of these defects are being detected at an early stage, 100 school entrants being found to require treatment, compared with 17 school leavers and 34 others. A further 142 children were found at special inspections to be in need of treatment.

A total of 2,539 children was found to have hearing defects which, whilst not requiring referral for treatment, warranted their being kept under observation.

The numbers of children needing treatment for infection of the middle-ear has remained almost constant in recent years. The 1971 figure of 49 compares with 48 and 47 respectively in the two previous years. Examination of school entrants revealed 26 of these children, whilst nine were detected at special examinations and four were found amongst the school leavers. The number requiring observation as a result of this condition was 123, compared with 166 in 1970.

4. Nose and throat defects

As with many other conditions, the majority of children found to be in need of treatment was among the school entrants. Of the 95 children discovered at routine examinations, 66 were entrants and eight were school leavers. A further 43 were found to be in need of treatment when seen at special inspections. A total of 662 children who did not require treatment needed to be kept under observation as a result of such defects.

5. Lung defects

A total of 56 children was recommended for treatment for such defects, as compared with 88 in 1970. A further 418 were kept under observation. Of those recommended for treatment, 16 were entrants, four were school leavers and 20 others were found at special examinations to be in need of treatment.

6. Orthopaedic defects

Postural defects requiring treatment were found in 36 children, nine of whom were entrants and 15 seen at special examinations. Children requiring observation numbered 119.

Defects of the feet accounted for 171 recommendations for treatment, and 282 children were kept under observation. Other orthopaedic defects led to recommendations for treatment in 41 cases (19 entrants, five school leavers, nine seen at special inspections and eight others), with 154 requiring further observation.

Children recommended for treatment on account of defects of the foot were made up of 88 entrants, 12 school leavers, 36 seen at special inspections and 35 others. Reference was made last year to the surprising number of foot defects among new entrants. Whilst this year's figure shows a small reduction it represents a very high proportion of the total recommended for treatment—51% compared with 44% in 1970. Some of the defects are, of course, unavoidable, but it seems that a long-term programme of education in foot health is needed to reduce the number of young children whose feet are defective as a result of ill-fitting and inappropriate footwear.

The county chiropodist, Mr. J. D. Idris-Evans, reports as follows:—

"The foot is a complex structure consisting of 26 joints moving in three dimensions. Civilisation dictates that we must cover this structure to protect it from the hazards of the pavements. Unfortunately these covers, both shoes and socks, often bear little relation to the size and shape of the foot. In young children the bones of the feet are soft and malleable. Children, particularly girls, are becoming fashion conscious and are demanding fashion shoes earlier, sometimes as young as six years of age.

The school chiropody service is divided into three basic functions:—

(a) Treatment service—for those acute conditions, e.g. verruca, ingrowing toe-nails, fungus infection, that require prompt treatment.

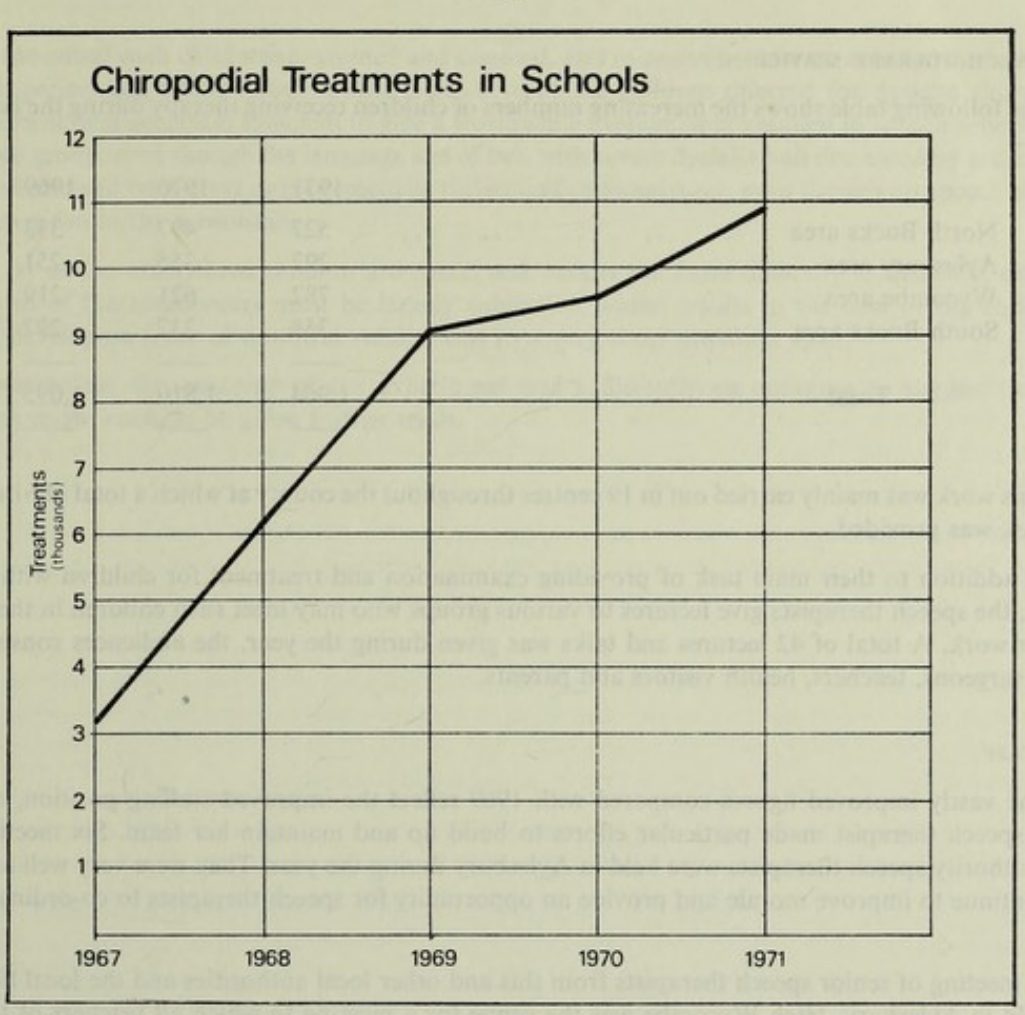
(b) Preventive service—aimed at preventing and curing such conditions as hammer toes, mallet toes, burrowing toes and valgus deformities, thus preventing greater deformities and discomfort at a later age.

(c) Foot health education—to educate both the children and their parents on correct footwear and how best to look after feet. One important new project related to this aspect of the work is reported in greater detail in appendix B on page 143.

The appointment of area chiropodists to each of the health areas has resulted in a much greater school coverage. In all, 52 of the 68 secondary schools and seven special schools in the county have been visited by chiropodists on a weekly basis. A total of 10,919 treatments was given in 1971 compared with 9,551 in 1970. The graph on page 109 gives an indication of the expansion of the service over the last five years.

In the case of primary schools, unfortunately the present staffing situation does not allow regular treatments and inspections to be carried out. However, when requested by the head teacher or school medical officer arrangements have been made for a chiropodist to carry out a foot inspection. It is becoming increasingly apparent that the service is essential for children in primary schools. Two such schools have been visited throughout the year as a pilot scheme, and the chiropodist's reports confirm the necessity of the service for this age group, even for the new entrants at the age of five years.

The school chiropodists are very concerned at the number of deformities found in young feet, particularly as most of these are attributed to ill-fitting or badly shaped footwear. Socks



are manufactured to "fit" either foot, yet one would never consider buying gloves to fit either hand. So many children's shoes are bought in shops where little or no attempt is made by the retailer to ensure good fitting. Some multiple stores, now selling shoes, provide no fitting service whatsoever. Some parents buy shoes for their children without the child being present at all, and others purchase shoes on "mail order", where it is very rare to find half sizes and a range of fittings being offered. It is hardly surprising therefore that many young feet are being unnecessarily deformed. Encouragement and support should be given to those few manufacturers and retailers who try to provide acomprehensive range of fittings and a fitting service.

During the year, members of the staff have given talks in schools and to parent associations, stressing the importance of foot health. It is hoped that a much greater impact in foot health education will be made when the teaching pack mentioned on page 143 is generally available."

7. Speech Defects

Pupils with defective speech or language may be referred to the speech therapy service for assessment of the speech disability and, where necessary, the provision of treatment.

(a) SPEECH THERAPY SERVICE

The following table shows the increasing numbers of children receiving therapy during the last three years:—

	1971	1970	1969
North Bucks area	527	497	333
Aylesbury area	297	355	251
Wycombe area	782	621	219
South Bucks area	358	337	292
Total	1,964	1,810	1,095

This work was mainly carried out in 19 centres throughout the county at which a total of 61 sessions per week was provided.

In addition to their main task of providing examination and treatment for children with speech defects, the speech therapists give lectures to various groups who may meet such children in the course of their work. A total of 42 lectures and talks was given during the year, the audiences consisting of dental surgeons, teachers, health visitors and parents.

(b) STAFF

The vastly improved figures compared with 1969 reflect the improved staffing position, and the senior speech therapist made particular efforts to build up and maintain her team. Six meetings for local authority speech therapists were held in Aylesbury during the year. They were very well attended and continue to improve morale and provide an opportunity for speech therapists to co-ordinate their work.

A meeting of senior speech therapists from this and other local authorities and the local hospitals was held in Aylesbury. High Wycombe was the venue for a meeting to which all teachers of the deaf working in Buckinghamshire were invited, together with the Council's area speech therapists and therapists from local hospitals. Three one-day in-service training courses were held and eight speech therapists attended courses outside the county. Eight students from three of the speech therapy training schools came to the county during the year to learn about local authority services.

(c) MOBILE UNIT

The mobile unit operated in Aylesbury area in the early part of the year, but frequent staff changes prevented it being used to full capacity. In October it was taken to Slough for use in connection with the pilot intensive therapy scheme described below.

(d) INTENSIVE THERAPY

An experiment was carried out at Ryvers Infants and Junior schools during November and early December. Ten children were involved with ages ranging from 5½ to 11 years. Seven of these were referred for dyslalia, two for stammer and the last for delayed development. All the children had previously had therapy for periods ranging from two months to five years.

The children were seen daily over a period of six weeks, in which time each had an average of 35 sessions, both group and individual, lasting approximately fifteen minutes each. This would be equivalent to about one year's therapy for children following the traditional pattern.

At the outset each child was examined and assessed, and re-assessments were made at the end of the six-week period and again three months later. Five of the children referred for dyslalia showed an improvement in articulation sufficient to give a worthwhile average improvement in speech generally for the whole group, even though the language age of two with severe dyslalia had decreased by six months. These five showed continued improvement at the second re-assessment, even though no speech therapy had been given in the meantime.

So far as the other three children are concerned, results are more difficulty to quantify, since the assessment of the stammerers must be largely subjective, whilst results in the case of the child with delayed development are of doubtful validity due to a very short attention span.

Nevertheless, the outcome of the experiment was sufficiently encouraging to suggest that this approach might usefully be given further trials.

HANDICAPPED PUPILS

1. Special schools

The most important event during 1971 took place on 1st April, when the schools for the severely mentally handicapped children, hitherto the responsibility of the health department, were formally transferred to the mainstream of education provision. It brought about changes in the conditions of service for members of the staffs of these schools but for the pupils, 1st April did not differ from any other day of the year. The school doctors who attended these schools prior to that date continued to go there afterwards and were able, with the staff, to provide continuity of care for the children.

At the time of change there were seven schools catering for 309 pupils. An extensive building programme for future development of services for severely retarded children had been agreed with the Department of Health and Social Security and was transferred to the Education Committee at the same time.

In addition, the cerebral palsy unit in Slough, which had been administered as a joint health and education project, was transferred on the same date. A voluntary unit catering for severely handicapped children with cerebral palsy applied for registration as a school, which has since been granted, and these pupils have also come within the jurisdiction of the education department.

All the children at the Manor House Hospital, Aylesbury, the only hospital for severely mentally subnormal children in the county, were assessed to determine those who might benefit from education.

Partly as a result of these changes, the total number of pupils requiring education in special schools, units or at home, has risen from 1,760 in 1970 to 2,243 in 1971. The graph shows the increases during the last six years. There are, in addition, children handicapped to a lesser degree who are able to attend the ordinary schools.

During the year 386 pupils were ascertained as requiring special education in their classes at ordinary schools, and this number is included in the following description of the various categories of handicapped pupils. The headings used are those of the amended Handicapped Pupils Regulation 1953, but children often have more than one handicap.

2. Specific handicaps

Blind

There are 13 blind children in the county, four of whom were newly assessed during the year and were awaiting placement in special schools.

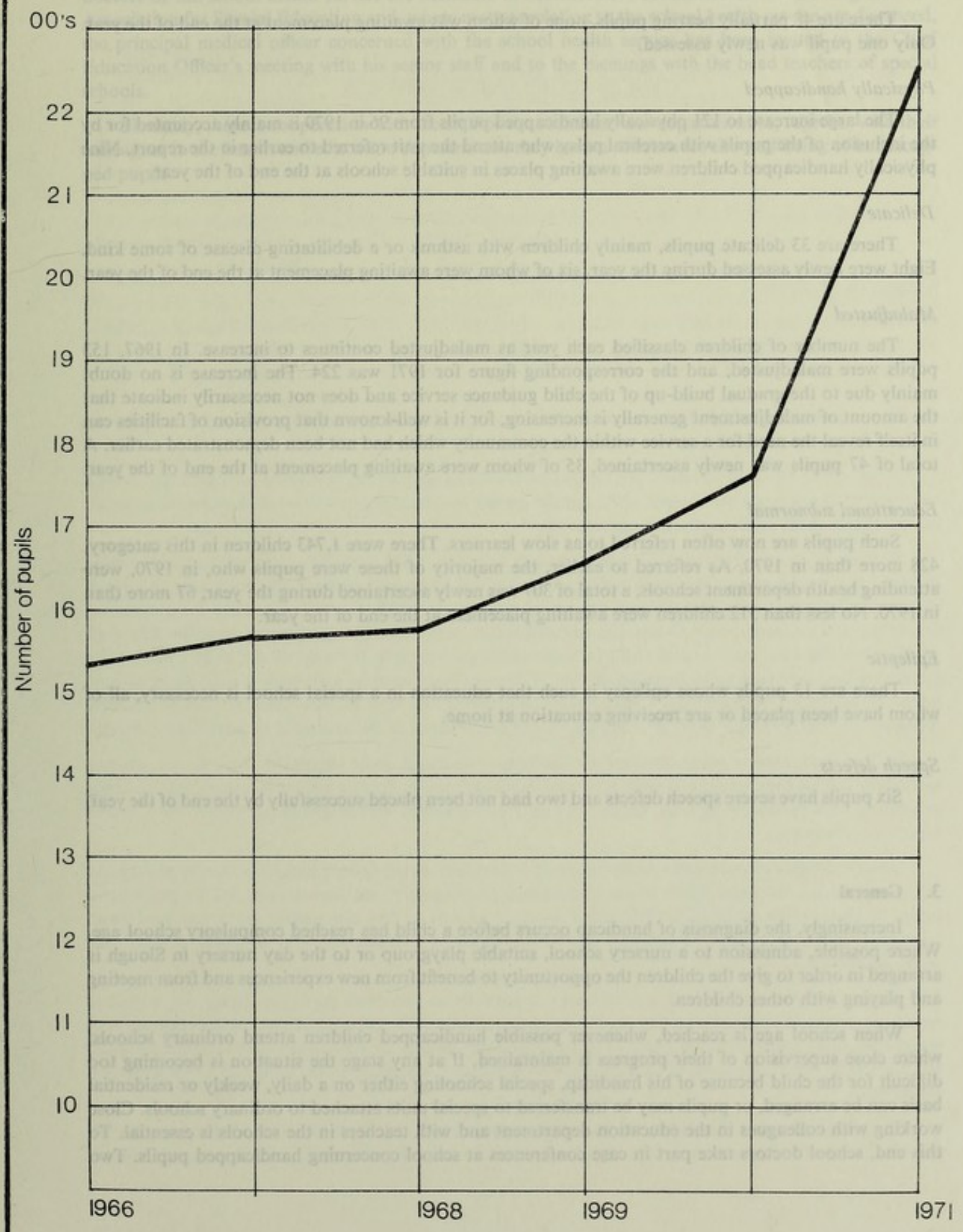
Partially sighted

There are 19 partially sighted pupils, nine of whom were newly assessed during the year. Eight were awaiting placement at the end of the year.

Deaf

The 23 deaf pupils have all been placed in special schools except one, who was newly assessed towards the end of the year.

Handicapped pupils requiring special education in special schools, units or at home.



Partially hearing

There are 48 partially hearing pupils, none of whom was awaiting placement at the end of the year. Only one pupil was newly assessed.

Physically handicapped

The large increase to 121 physically handicapped pupils from 96 in 1970 is mainly accounted for by the inclusion of the pupils with cerebral palsy who attend the unit referred to earlier in the report. Nine physically handicapped children were awaiting places in suitable schools at the end of the year.

Delicate

There are 33 delicate pupils, mainly children with asthma or a debilitating disease of some kind. Eight were newly assessed during the year, six of whom were awaiting placement at the end of the year.

Maladjusted

The number of children classified each year as maladjusted continues to increase. In 1967, 153 pupils were maladjusted, and the corresponding figure for 1971 was 224. The increase is no doubt mainly due to the gradual build-up of the child guidance service and does not necessarily indicate that the amount of maladjustment generally is increasing, for it is well-known that provision of facilities can in itself reveal the need for a service within the community which had not been demonstrated earlier. A total of 47 pupils was newly ascertained, 35 of whom were awaiting placement at the end of the year.

Educational subnormal

Such pupils are now often referred to as slow learners. There were 1,743 children in this category, 428 more than in 1970. As referred to earlier, the majority of these were pupils who, in 1970, were attending health department schools, a total of 307 was newly ascertained during the year, 67 more than in 1970. No less than 312 children were awaiting placement at the end of the year.

Epileptic

There are 13 pupils whose epilepsy is such that education in a special school is necessary, all of whom have been placed or are receiving education at home.

Speech defects

Six pupils have severe speech defects and two had not been placed successfully by the end of the year.

3. General

Increasingly, the diagnosis of handicap occurs before a child has reached compulsory school age. Where possible, admission to a nursery school, suitable playgroup or to the day nursery in Slough is arranged in order to give the children the opportunity to benefit from new experiences and from meeting and playing with other children.

When school age is reached, whenever possible handicapped children attend ordinary schools, where close supervision of their progress is maintained. If at any stage the situation is becoming too difficult for the child because of his handicap, special schooling either on a daily, weekly or residential basis can be arranged, or pupils may be transferred to special units attached to ordinary schools. Close working with colleagues in the education department and with teachers in the schools is essential. To this end, school doctors take part in case conferences at school concerning handicapped pupils. Two

doctors of the school health service are members of the executive committee of the Buckinghamshire Association for Special Education and, where matters relating to the school health service are discussed, the principal medical officer concerned with the school health service has been invited to the Chief Education Officer's meeting with his senior staff and to the meetings with the head teachers of special schools.

Similarly, there is cooperation with the staff of the social services department as, together with their colleagues in the health and education departments, they have a concern for the well-being of handicapped pupils.

CHILD GUIDANCE SERVICE

A total of 1,024 pupils received treatment at the clinics during the year, compared with 1,106 in 1971. Details of referrals and waiting lists are as follows:—

	Clinic					
	Aylesbury	Bletchley	Chesham	High Wycombe	Slough	Total
Number of Children—						
On waiting list 1st January	14	33	17	74	13	151
Newly referred during the year ..	102	81	79	246	210	718
On waiting list 31st December ..	25	49	11	61	34	180

The comments which follow are based upon reports submitted by the Consultant Psychiatrists in charge of the various clinics.

A feature of the year has been the increasing emphasis on preventive aspects of the service, which was evident throughout the county, although the means by which preventive work is undertaken varies in accordance with local needs and opportunities.

In High Wycombe, for instance, general practitioners have for some time been encouraged to refer children at the first sign of developing difficulties and an increasing number of very young disturbed children was seen at the clinic. Several groups of mothers and children were receiving the services of the child guidance team, some of the children being under twelve years of age. It seems that the disturbed relationship between mother and child in some cases goes back to the time of the child's birth. The possibility had therefore to be considered that, if the mothers could be seen even earlier, the problems might be prevented. Accordingly, arrangements have been made with the local maternity home whereby the team sees mothers who show marked emotional disturbance in the pre-natal or post-natal period.

In Slough an experimental arrangement has been introduced under which the clinic team visits one secondary school for discussions with tutors of first-year pupils. In this way it is hoped that children presenting with problems in their initial year may be identified and followed up earlier than would otherwise be possible.

Other examples of preventive work currently undertaken in the county include a weekly pre-school playgroup under the supervision of an educational psychologist; mothers groups led by psychiatric social workers; visits by clinic staff to other mothers groups to lead discussions on family problems; talks to parents, frequently in schools, on the problems of adolescence; and a "crisis service" for bereaved families.

Whilst children and parents are still seen separately in the child guidance clinic, the accent is increasingly placed on consultations involving both children and parents and, where appropriate and practicable, the complete family group. This approach can usually be maintained only for short periods, but the results have been such as to encourage its extension, especially so far as the older children are concerned.

Work with complete families often includes discussion of marital problems and it has been found that the insight thus gained may often enable parents to help the disturbed child in ways which no

outside agency could hope to achieve. Work with parents is now, therefore, regarded as an essential part of the child's treatment.

Increasingly it is appreciated that help for disturbed children depends on many factors outside the environment of the family or the clinic and that close links must be established with other agencies providing for family needs. A recent development in this respect is the introduction of regular sessions with speech therapists. Some school medical officers visit child guidance clinics monthly, whilst one clinic has established a training scheme for social workers and junior doctors. Social work students from a local technical college have visited the clinics and contributed to the discussions. Every opportunity is taken to strengthen the close co-operation between the clinic staffs and the county schools, paediatric departments, adjustment units and remedial centres and the vital links with the health visiting service and the social services department.

So far as staff is concerned, the teams were strengthened by the appointment of a teacher at High Wycombe to work with children whose perceptual difficulties lead to problems in learning, a remedial teacher in Aylesbury and an art therapist in Slough. A particular disappointment was the departure of the Department's only full-time child psycho-therapist. This vacancy has not been filled due to the extreme scarcity of persons with the necessary skills and training.

HEALTH EDUCATION

The year saw a marked expansion in health education throughout schools in general. Staff of the health department were responsible for 1,377 sessions with schoolchildren at various levels, and 362 sessions with students participating in some specific course of study.

These figures show an increase of 40% on those for the previous year, and this is a satisfying trend in an important aspect of the school health service. In addition to conducting group sessions, the health education officers are devoting more and more time to assisting teachers to increase their activities in this sphere.

Despite the encouraging growth of health education subjects in school curricula over the past years, it was felt that much was incidental in nature and only applied to certain groups of schoolchildren. In order to determine more precisely the extent of health education in schools, and thereby to offer a more acceptable and efficient service to teachers in this direction, a survey was carried out and a preliminary report will be found on page 147.

Assistance to teaching staffs takes a variety of forms in order to meet the individual needs of schools. Courses of instruction have been carried out at teachers' centres on health subjects, chosen after consultation, to help with the more general approach; whilst on the other hand one-day seminars have been arranged to help teachers with more specific problems of a health nature that are being encountered in schools. Many schools carry out their own programmes and much help and advice is sought in the structuring of such syllabuses and in the selection of visual aids.

Whilst the approach to health education in general is designed to help children to understand the working of their own minds and bodies, and have a greater awareness of how to take their place in society, a considerable number of programmes are planned for older children dealing with health hazards such as smoking, sexually transmitted diseases and drug abuse.

Several schools planned special project weeks on the subject of smoking. Special efforts are made to enlighten schoolchildren on this particular health threat, including guidance in the production of smoking machines for pupils to carry out their own research, the setting up of exhibitions in schools, and a poster competition offered to both primary and secondary schools throughout the county. (See illustration at frontispiece).

Although it is only partly concerned with health education, it may be appropriate here to refer to the medical consultative service which is now well established at the Aylesbury College of Further Education. During the year 34 sessions were held, at which 202 students sought advice on a wide variety of subjects.

With the advent of middle schools in 1972, and the raising of the school-leaving age in the near future, an even greater degree of effort both from teaching and health education staffs will be called for, and the fact that, during the course of the survey mentioned previously new lines of communication between schools and the health department were created, and the existing ones strengthened, will be of value in the days which lie ahead.

SCHOOL DENTAL SERVICE

Report by C. H. Griffiths, Principal School Dental Officer

1. General

The year 1971 was one in which there was continued expansion of the school dental service; more schoolchildren than in any previous year were inspected and treated by the dental staff.

Preventive dentistry received the highest priority, and in its many forms was practised by the dental officers and ancillaries.

The four mobile dental caravans were in use throughout the year and provided treatment at rural and some urban schools. In all, about 70 schools had treatment provided by dentists working in these mobile surgeries which operated close to the school premises. The saving of travelling time is an important factor in the further development of this aspect of the service.

The orthodontic service made a valuable contribution to the dental health of the children, and more visits for this specialised form of treatment were made than in any previous year.

The inspection and treatment of the mentally and physically handicapped child, an important part of the work of the school dental officer, was further developed and a close liaison with the hospital dental service was maintained in respect of the treatment for these children.

The planning of dental services in health centres was continued, and the future needs of the community were carefully considered with the hope of further integration of the dental services for the benefit of the patient.

2. Clinics

Several clinics were equipped with the latest modern aids to dental practice as part of the programme of up-grading all the county's clinics over the next few years.

The newly-designed dental suite at the health clinic at The Rye, High Wycombe, was completed, and the replacement of the old clinic at Priory Road with a new concept in the provision of treatment from The Rye, is considered to be a great improvement. Much thought was given to the conversion of the premises to make a functional and pleasant dental suite, consisting of four surgeries, waiting room, office and staff accommodation. New equipment was installed, and roomy well-lit surgeries with modern decor have made the facilities for treatment available in High Wycombe much more acceptable both for patients and for staff.

A new clinic in the Chiltern Avenue area of High Wycombe was completed, and it is hoped that this will be operating early in 1972. This clinic will serve schools in an area of the town which, up to now, has been short of dental services. In this building, which will be one of the last of the traditional health clinics, there are other clinical services, and it is hoped to build up a dental service for a nucleus of pre-school patients referred from the toddlers' and immunisation clinics held in the same building, in addition to the schoolchildren receiving treatment here.

3. Handicapped children

In the Slough and High Wycombe areas especially, the dental inspection and treatment of the mentally and physically handicapped has received special consideration. It is felt that this important group should be receiving regular inspection and treatment, as dental conditions in these children can create problems with regard to anaesthesia and other aspects of their care that necessitate special consideration and expert attention.

Mr. H. R. Rippon, area dental officer for south Bucks, has written the following report on the dental care of children in his area:—

> "This year the school dental service was given the additional statutory duty of inspecting and providing dental treatment for children at schools for the mentally retarded (formerly called junior training schools). In south Bucks all special schools had been visited already in previous years as an optional duty of the dental service.
>
> At the inspections in schools for the handicapped, excellent staff assistance has made it possible adequately to inspect every child's teeth. Some children were found already to be attending a general dental practitioner or the local hospital dental department regularly, and some had previously attended but still had outstanding treatment needs. By discussion of each handicapped child's dental problems with the parents, the head-teacher and the dental surgeon previously visited, it was usually possible to arrange for dental treatment to suit each child. This co-operation of the three branches of the dental services in the area, the hospital, local authority and general practitioner dentists, has enabled the best service to be provided in each case.
>
> Most handicapped children attending the school clinic were, perhaps surprisingly, able to accept dentistry in the normal way and could not be considered handicapped from the dental point of view. There were a few, usually the more severely handicapped, who required facilities for treatment using a general anaesthetic in a special unit."

Miss M. Pritchard, a dental hygienist, who has done some valuable work in health education and in the provision of treatment for children in the High Wycombe area, has sent me the following observations on her work at the day care centre for spastic children at Penn. The difficulties in the provision of treatment are explained, and the importance of a programme of preventive dentistry is emphasised. It is felt that the dental care of this type of patient, who needs great patience and dedication, will more and more become the duty of the public dental officer and his staff:—

> "After three visits to the centre over the past six months, I would make the following observations. Firstly, it is difficult to look at these children's teeth, as some have difficulty in opening their mouths, and nearly all the mentally handicapped children bite anything that is put into their mouths, be it an instrument or somebody's finger. It is hardly necessary to say that the standard of oral hygiene is low. In some cases the periodontal condition and the gums need constant attention, some having a heavy deposit of calculus. Very few children are able to chew their food normally, consequently they have a very soft, and in some cases, almost a fluid diet. Since it is obviously difficult to carry out any complex conservative treatment for these children, we felt that the best way to help them was to give them the most efficient kind of preventive care we could find. The staff at the centre have been cleaning the children's teeth after their mid-day meals with ordinary toothbrushes. We felt that they might be able to do this more effectively with an automatic toothbrush, and they have recently bought some and are now using them each day."

4. Conferences, courses, activities

The one-day course for dental officers and other staff was held at Missenden Abbey. Speakers included the county senior speech therapist, lecturers from the Eastman Dental Institute and the

London Hospital, and the chief dental officers of the city of Edinburgh and the borough of Hammersmith. Some colleagues from Oxfordshire and Bedfordshire joined this course, which was felt to be of great benefit to those attending. Dental officers also attended courses on children's dentistry at the Eastman Dental Institute, and the chief dental officer and other members of the dental staff attended the annual conference of the British Dental Association.

Mrs. P. Turner, a dental officer in Slough, was seconded for part-time study for the Diploma in Dental Public Health of the Royal College of Surgeons.

Lectures were given and papers read to dental groups by Mr. Maddick, Mr. Griffiths, and other members of the staff. Students, general practitioners and others seemed to be particularly interested in the future plans for the integration of services in the reorganisation that will take place in 1974. The planning of health centres was also a subject in which great interest was shown by a group of public dental officers of the London division of the British Dental Association.

5. Dental health education

The programme of dental health education was continued in all parts of the county. Dental officers, auxiliaries, hygienists and surgery assistants all took part in dental health teaching for groups in schools and also for some adult groups.

Members of the health education staff also did valuable work in this field, and over 18,000 children received some form of instruction in the care of their teeth. The teachers' pack of instructional material was demonstrated in the north Bucks area at the teachers' centre, and great interest was shown in the concept of project teaching in the schools, which has been described fully in previous annual reports.

It has become increasingly evident that the child population, as well as adults, are more dentally conscious than was the case some years ago. Diet and the benefits of water fluoridation are now better understood, and it is hoped that in future the child will leave school with a good dentition and the will to keep a healthy mouth for the rest of his life, thus benefiting from the efforts that have been made in the field of dental health education.

The sale of apples in some of the school tuck shops has been encouraged, and advice has been given to head-teachers on the sale of less cariogenic items than have previously been sold in the schools. Many schools do not have tuck shops, and it is hoped that more will realise the dangers of unsuitable between-meals snacks in increasing the prevalence of dental caries in the child.

6. Surveys

A number of surveys was carried out during the year; one of the most important being in the Slough area.

Mr. A. H. Brook, lecturer in children's dentistry, headed a team from the Eastman Dental Hospital, University of London Postgraduate Dental Institute, which concluded a survey into dental anomalies started in 1970. About 1,000 Slough school children with all first teeth present and 1,000 with all adult teeth present were examined and had x-rays of their teeth taken in a dental survey caravan which visited the schools. This was done as part of the routine school inspection.

The following short report has kindly been prepared by Mr. Brook:—

> "The collection of data among schoolchildren in Slough for the epidemiological section of a study on the prevalence and aetiology of some dental malformations is drawing to a close. This study has already shown that in a large group of children the combined use of bimolar and upper

and lower occlusal radiographs reliably provides full mouth screening for the detection of pathology in the developing dentition while giving only a small radiation dosage. The radiographs for each child have now been developed, and it is hoped in the near future to derive the prevalence data for the population from these results. These will then be compared with findings of a case history and family study being undertaken at the Eastman Dental Hospital in an attempt to determine the genetic basis of the malformations."

A team from the London Royal Dental Hospital children's department continued a monitoring service into the beneficial effects of fluoride in the water by examining the first year children at Orchard School who had lived all their lives in Slough. Once again, the Slough children, drinking water containing fluoride, had teeth about twice as good (half as many bad teeth) as the national average.

Mr. Ivan Curson of the Royal Dental Hospital, London, has recently published a thesis, for which he was awarded a Mastership in Dental Surgery, on work he carried out in Slough making a study of "The prevalence of dental caries and periodontal disease in a high fluoride area". This is a most interesting survey of the subject.

These surveys, which have all been carried out with the help and cooperation of the local authority education and dental staff, form a valuable link with the academic staff of the London teaching hospitals.

7. Statistics

More children were inspected and treated than in any previous year. The total number of visits, the number of fillings done and the number of courses of treatment completed were all higher than ever before. The orthodontic service was expanded, as is indicated in Miss Blandford's report on page 00. More patients were referred and attended for this specialised treatment, and more cases were completed in the year than previously. The value of this service for the correction of dental abnormalities is fully realised, and the demand has increased annually.

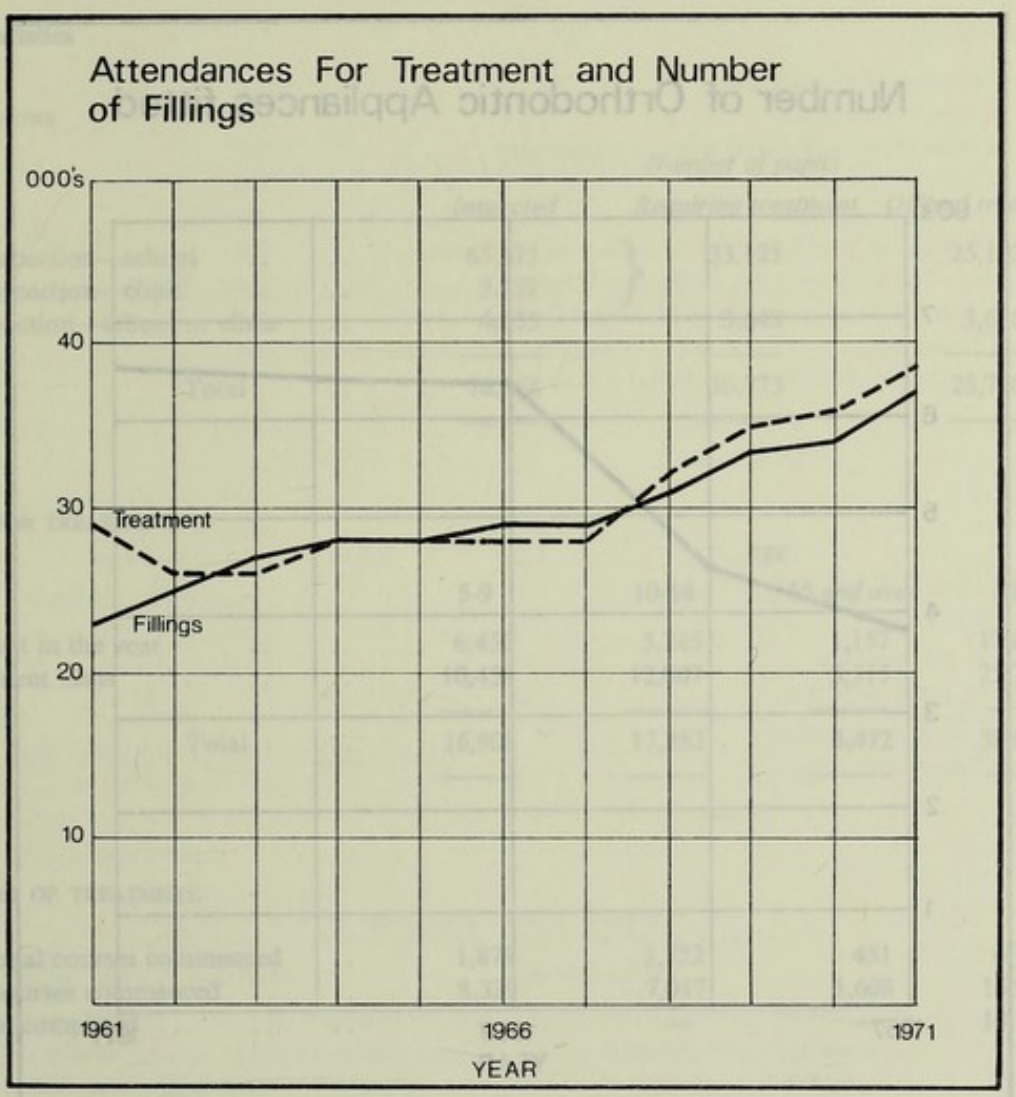
Dental officers inspected approximately 70% of the total school population, a figure nearly 10% above the national average. The ratio of permanent teeth extracted to permanent teeth filled remains very favourable, compared with the national average, indicating the emphasis on the conservation of teeth, rather than on their extraction.

8. General

The year under review has seen changes in the dental staff and the recruitment of suitable dentists, who have as their prime interest the care of the child, has not been easy. It is hoped that as the dental teaching hospitals regard children's dentistry as a subject for priority in their syllabus, more dentists will come into the local authority service. The establishment of the Diploma in Dental Public Health, a higher qualification in this subject, it is hoped will stimulate interest in the specialty and more dentists will consider this a desirable postgraduate qualification.

Despite these recruitment difficulties, it has been possible to provide inspection and treatment for a large number of children in the county's clinics, and the programme of replacement and building of new clinics will, one hopes, attract more staff to this important branch of dentistry. Buckinghamshire is fortunate in having a relatively high proportion of general dental service practitioners, and a large number of children regularly attend their surgeries for treatment.

The general condition of the teeth in the county, as is seen from dental inspections in the schools, is good and more people than ever are seeking treatment early in life.

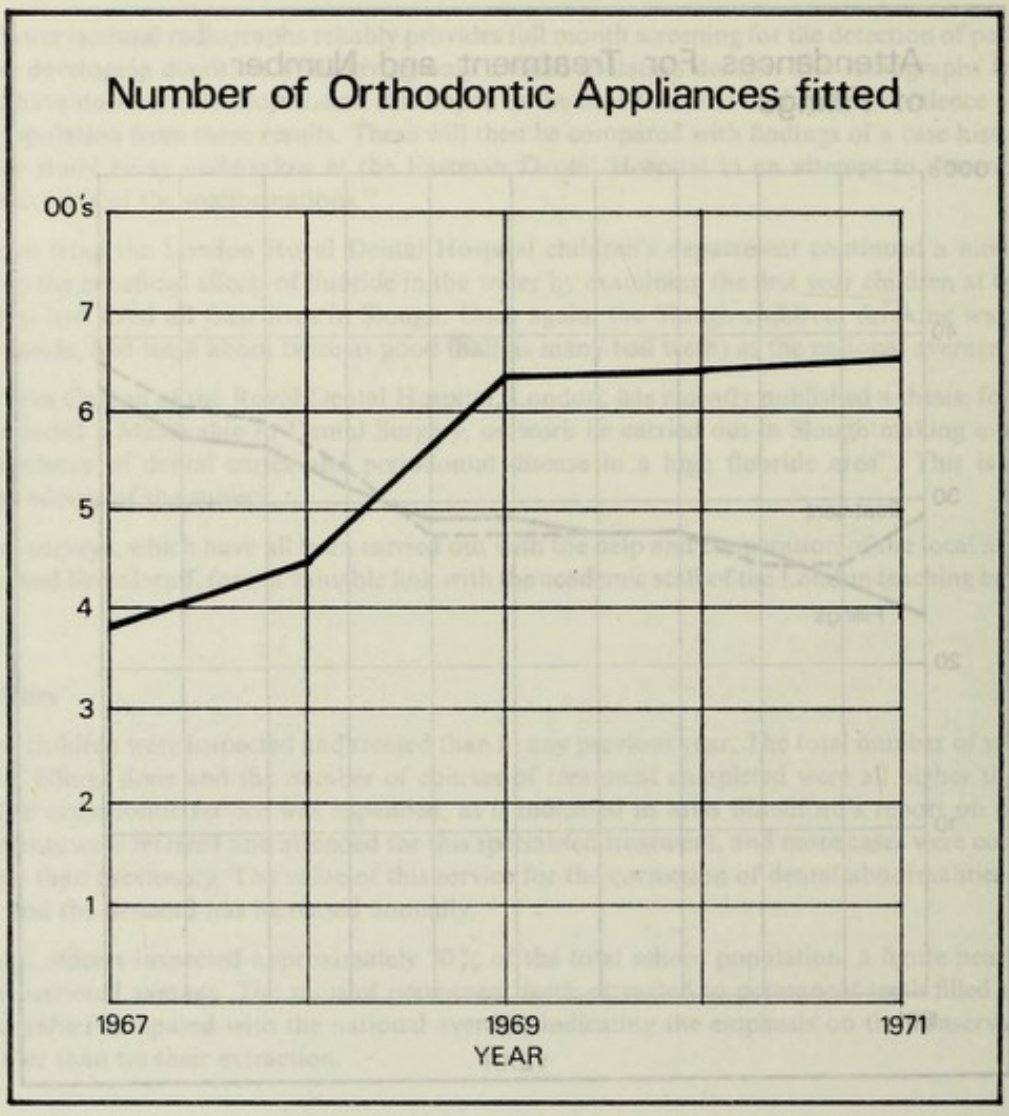


It is appropriate here to record appreciation of cooperation received from the Chief Education Officer, the head teachers, school secretaries and matrons, and all those members of the staff of the education department who helped in planning and carrying out the arrangements for the inspection and treatment of children at the county's schools. Thanks are also due to the specialist anaesthetists and medical staff of the county for their help and cooperation in many aspects of the service. These acknowledgements would not be complete without reference to the County Architect's staff for their invaluable advice and help in the planning, siting and maintenance of both our static and mobile clinics.

9. Orthodontics

Miss A. Blandford, County Orthodontist, submitted the following report on her work during the year:—

"The number of children referred by the school dental officers for othodontic treatment during the year totalled 576. In addition, 2,092 whose treatment commenced prior to 1971 continued to receive treatment during the year. Not all of these children need to wear appliances to align their



teeth; for some, certain teeth are selected for extraction and the remaining teeth allowed to move naturally into their correct positions. The number of children for whom it was necessary to fit appliances during the year totalled 251, and the appliances fitted for them, 524.

Cases completed during the year numbered 370. Treatment was discontinued for 13 children, some of whom moved from the area; others did not maintain their attendance at the clinic and did not cooperate in the wearing of their appliances.

The dental departments of Stoke Mandeville and Wexham Park Hospitals accepted 45 patients for further x-ray examination and necessary surgical treatment, many of these receiving their orthodontic treatment jointly with the clinic."

10. Statistics

Inspections

	Number of pupils		
	Inspected	*Requiring treatment*	*Offered treatment*
First inspection—school	65,575	33,125	25,102
First inspection—clinic	5,738		
Re-inspection—school or clinic ..	4,855	3,648	3,648
Total ..	76,168	36,773	28,750

Visits for treatment

	Age			
	5-9	10-14	15 *and over*	*Total*
First visit in the year	6,450	5,245	1,157	12,852
Subsequent visits	10,458	12,007	3,315	25,780
Total ..	16,908	17,252	4,472	38,632

Courses of treatment

Additional courses commenced ..	1,879	1,772	451	4,102
Total courses commenced	8,329	7,017	1,608	16,954
Courses completed	—	—	—	14,161

Treatment

Fillings in permanent teeth	6,333	14,933	4,872	26,138
Fillings in deciduous teeth	9,886	902	—	10,788
Permanent teeth filled	5,019	12,465	4,168	21,652
Deciduous teeth filled	8,344	786	—	9,130
Permanent teeth extracted	362	1,819	432	2,613
Deciduous teeth extracted	5,603	2,002	—	7,605
General anaesthetics	1,251	519	57	1,827
Emergencies	586	321	90	997
Number of pupils X-rayed				1,278
Prophylaxis				6,300
Teeth otherwise conserved				3,182
Teeth root filled				55
Inlays				3
Crowns				55

ORTHODONTICS

Number of attendances	4,024
Cases commenced	576
Cases brought forward from previous year	2,092
Cases completed	370
Cases discontinued	26
Number of pupils treated by means of appliances	328
Number of removable appliances fitted	654
Cases referred and treated by hospital orthodontists	51

(These figures include all orthodontic treatment carried out by the orthodontist and dental officers)

DENTURES

	Age 5-9	10-14	15 *and over*	*Total*
Number of pupils fitted with dentures for the first time:				
(a) with full denture	—	—	—	—
(b) with other dentures	2	14	26	42
Number of dentures supplied (first or subsequent time)	2	14	32	48

SESSIONS

Number of clinical sessions worked in the year

		School service			*Maternal & child health service*		
	Adminis-trative sessions	*Inspection at school*	*Treatment*	*Dental health education*	*Treatment*	*Dental health education*	*Total sessions*
Dental officers	457	598	5,312	50	230	6	6,653
Dental auxiliaries	—	—	646	102	72	10	830
Dental hygienists	—	—	46	84	—	2	132
Total	457	598	6,004	236	302	18	7,615

OTHER MATTERS

1. School meals

The county school meals and catering adviser submits the following report:—

"*Census for Autumn* 1971

MEALS	*For a day in September* 1971	*For a day in September* 1970
Pupils present	99,518	96,880
Taking school dinners	64,570	71,777
	(64.96%)	(74.1%)
Meals provided free	4,143	3,083
	(6.4%)	(4.3%)

MILK	*Present*	*Taking milk*
Infant (including nursery and special)	24,324	23,108
Junior (including special)	430 *	262
	36,076 **	380
Secondary special	733	639

* Entitlement by age.

** Entitlement on medical grounds *or* at a special school.

There are now 324 school kitchens and 69 additional dining centres in the county which cater for all schools except Moulsoe county primary where there is still no requirement.

The increased charge to parents for the school meal resulted in diminished numbers, and it was at a secondary level where this was most noticeable. During the second half of the autumn term, however, numbers have increased again and the number of children bringing sandwiches has decreased.

The staff position has improved considerably, although there are still difficulties in certain relatively small areas.

A second training kitchen was opened in October in Aylesbury, with the result that facilities are now available for a larger number of personnel. It is, however, extremely difficult for some of the staff to travel to either of the two centres, and it is hoped that another kitchen may become available for the northern part of the county.

At the beginning of the autumn term free milk was made available only to children who had not reached their eighth birthdays at the end of the previous term. Although this caused a lot of comment in the press and amongst parents, there has been little or no demand in most areas for the sale of milk at an economic rate. As can be seen from the figures, not all the children entitled to the milk by reason of age are taking advantage of it, and there are very few who have been granted it on medical grounds."

2. Milk in Schools

Mr. G. L. Davis, the Chief Inspector, reporting on the milk-in-schools scheme, states:—

"Although fewer schools now receive milk under the scheme, the number of suppliers remains the same and supervision has continued as in previous years. Sources of supply are approved by the Principal School Medical Officer and all samples are tested for quality, cleanliness, adequate heat treatment and disease infection where appropriate.

Only pasteurised milk is now supplied to schools and 137 samples have been checked both for efficient pasteurisation and quality. All but one sample, which failed the phosphatase test, were satisfactory. A biological examination of this sample proved it to be free from disease.

There were five complaints during the year. One concerned sour milk and it was found that a single crate of old milk had been delivered by mistake. The others contained a selection of foreign bodies; a piece of elastic, a glass splinter, a nail and the outer shell of an almond. In each case the dairy company was cautioned."

3. School Swimming Pools

During 1971 there were 92 swimming pools in operation in primary and secondary schools within the county. In each case the school staff take readings of the residual chlorine in the pool water three times each day, in order to maintain control on the hygiene of the pool.

In the swimming season the swimming pools are visited regularly either by the county health inspector or a district council public health inspector, and at intervals samples of the pool water are taken and submitted to public health laboratories for bacteriological examination.

MEDICAL INSPECTION AND TREATMENT

TABLE I

PERIODIC MEDICAL INSPECTIONS

Age Groups inspected (By year of Birth)	No. of Pupils who have received a full medical examination	PHYSICAL CONDITION OF PUPILS INSPECTED		No. of Pupils found not to warrant a medical examination	Pupils found to require treatment (excluding dental diseases and infestation with vermin)		
		Satisfactory	Unsatisfactory		For defective vision (excluding squint)	For any other condition recorded at part II	Total Individual pupils
		No	No				
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
1967 and later	992	990	2	—	9	34	34
1966	6,955	6,947	8	—	89	366	425
1965	3,682	3,677	5	—	72	349	342
1964	545	542	3	—	25	97	99
1963	264	260	4	—	14	50	53
1962	194	193	1	8	10	38	46
1961	1,126	1,123	3	2,883	56	107	154
1960	2,575	2,571	4	2,280	102	143	228
1959	526	523	3	220	24	57	70
1958	80	79	1	4	10	27	32
1957	799	793	6	2,142	35	56	77
1956 & earlier	2,233	2,233	—	2,195	83	91	162
TOTAL	19,971	19,931	40	9,732	529	1,415	1,722

TABLE II

OTHER INSPECTIONS

Number of Special Inspections	1,233
Number of Re-inspections	8,372
TOTAL ..	9,605

TABLE III

INFESTATION

Total number of individual examinations of pupils in schools by school nurses or other authorised persons	64,502
Total number of individual pupils found to be infested	508
Number of individual pupils in respect of whom cleansing notices were issued (Section 54 (2), Education Act, 1944)	27

TABLE IV

DEFECTS FOUND BY PERIODIC AND SPECIAL MEDICAL INSPECTIONS DURING THE YEAR

(1970 figures in parentheses)

Defect Code No. (1)	Defect or Disease (2)		PERIODIC INSPECTIONS				SPECIAL INSPECTIONS
			Entrants	Leavers	Others	Total	
4	Skin	T	29 (42)	15 (37)	10 (31)	54 (110)	13 (16)
		O	51 (57)	11 (15)	17 (33)	79 (105)	59 (77)
5	Eyes—a. Vision	T	177 (285)	133 (203)	196 (323)	506 (811)	192 (201)
		O	385 (408)	88 (118)	178 (186)	651 (712)	262 (272)
	b. Squint	T	67 (96)	7 (3)	19 (23)	93 (122)	17 (52)
		O	58 (57)	— (2)	12 (15)	70 (74)	49 (47)
	c. Other	T	10 (6)	7 (10)	6 (4)	23 (20)	8 (6)
		O	6 (2)	1 (8)	5 (7)	12 (17)	30 (13)
6	Ears—a. Hearing	T	100 (160)	17 (68)	34 (88)	151 (316)	142 (291)
		O	904 (733)	76 (48)	251 (198)	1,231 (979)	1,128 (872)
	b. Otitis Media	T	26 (27)	4 (1)	10 (10)	40 (38)	9 (10)
		O	58 (85)	3 (2)	6 (10)	67 (97)	56 (69)
	c. Other	T	9 (11)	— (—)	1 (8)	10 (19)	1 (7)
		O	14 (9)	2 (1)	1 (3)	17 (13)	20 (21)
7	Nose and Throat	T	66 (78)	8 (19)	21 (47)	95 (144)	43 (89)
		O	295 (236)	10 (17)	37 (46)	342 (299)	320 (277)
8	Speech	T	173 (195)	6 (6)	23 (39)	202 (240)	129 (148)
		O	195 (169)	2 (2)	14 (21)	211 (192)	126 (174)
9	Lymphatic Glands	T	— (3)	— (2)	1 (—)	1 (5)	1 (1)
		O	18 (27)	— (3)	4 (4)	22 (34)	32 (29)
10	Heart	T	12 (28)	— (6)	7 (11)	19 (45)	7 (11)
		O	97 (95)	17 (16)	40 (32)	154 (143)	88 (88)
11	Lungs	T	16 (25)	6 (14)	14 (21)	36 (60)	20 (28)
		O	114 (113)	20 (18)	52 (60)	186 (191)	232 (243)
12	Developmental—a. Hernia	T	28 (27)	6 (6)	3 (16)	37 (49)	5 (4)
		O	38 (29)	1 (1)	7 (7)	46 (37)	22 (13)
	b. Other	T	13 (45)	5 (8)	29 (61)	47 (114)	35 (32)
		O	180 (269)	7 (12)	53 (36)	240 (317)	133 (181)
13	Orthopaedic—a. Posture	T	9 (23)	6 (6)	6 (24)	21 (53)	15 (24)
		O	39 (35)	11 (12)	19 (18)	69 (65)	50 (50)
	b. Feet	T	88 (92)	12 (18)	35 (37)	135 (147)	36 (60)
		O	130 (108)	12 (13)	14 (24)	156 (145)	132 (129)
	c. Other	T	19 (23)	5 (28)	8 (15)	32 (66)	9 (27)
		O	47 (51)	6 (22)	19 (27)	72 (100)	82 (87)
14	Nervous System—a. Epilepsy	T	6 (9)	— (3)	5 (14)	11 (26)	7 (14)
		O	16 (27)	11 (17)	17 (9)	44 (53)	41 (38)
	b. Other	T	58 (41)	6 (13)	27 (39)	91 (93)	34 (55)
		O	151 (109)	9 (9)	46 (34)	206 (152)	122 (118)
15	Psychological—a. Development	T	39 (39)	8 (8)	30 (59)	77 (106)	107 (124)
		O	247 (309)	18 (27)	104 (112)	369 (448)	578 (438)
	b. Stability	T	18 (41)	7 (16)	22 (39)	47 (96)	53 (87)
		O	164 (99)	17 (27)	92 (52)	273 (178)	380 (412)
16	Abdomen	T	6 (13)	3 (—)	5 (6)	14 (19)	4 (4)
		O	25 (14)	6 (4)	16 (16)	47 (34)	25 (39)
17	Other	T	17 (30)	4 (20)	13 (25)	34 (75)	23 (15)
		O	79 (69)	34 (58)	42 (39)	155 (166)	239 (243)

(T)=The number of pupils found to require treatment. (O)=The number of pupils found to require observation.

TABLE V

HANDICAPPED PUPILS REQUIRING EDUCATION AT SPECIAL SCHOOLS APPROVED UNDER SECTION 56 OF THE EDUCATION ACT, 1944 OR BOARDING IN BOARDING HOMES

As at 20th January, 1972	Blind (1)	Partially Sighted (2)	Deaf (3)	Partially Hearing (4)	Physically Handicapped (5)	Delicate (6)	Maladjusted (7)	E.S.N. (8)	Epileptic (9)	Speech Defects (10)	TOTAL (11)
No. awaiting placement	4	8	1	—	9	6	35	312	—	2	377
No. attending special Schools etc. Day	—	7	4	34	62	—	46	1,114	—	—	1,267
Boarding	9	3	18	14	39	22	139	302	12	4	562
No. being educated in Hospitals	—	—	—	—	—	—	—	14	—	—	14
No. being educated at home	—	1	—	—	11	5	4	1	1	—	23
Total	13	19	23	48	121	33	224	1,743	13	6	2,243
No. newly assessed during 1971	4	9	1	2	7	8	47	307	1	—	386

TABLE VI

SCHOOL CLINICS

as at December, 1971

	Sessions
Child Guidance :	
Whalley Drive Clinic, Bletchley	4 sessions per week
Walton House, Walton Street, Aylesbury	4 " " "
The Grange, Amersham Hill, High Wycombe	9 " " "
School Clinic, Germain Street, Chesham	4 " " "
Health Clinic, Burlington Road. Slough	10 " " "
Dental :	
Flat 1, Verney Close, Buckingham	4 sessions per week
School Clinic, 122 Church Street, Wolverton	2 " " "
Whalley Drive Clinic, Bletchley	20 " " "
Quarrendon Clinic, Lay Road, Aylesbury	4 " " "
Pebble Lane, Aylesbury	12 " " "
Municipal Health Clinic, Abbey Way, High Wycombe	24 " " "
Health Clinic, Victoria Road, Marlow	4 " " "
School Clinic, Germain Street, Chesham	12 " " "
Ambulance Station, Chiltern Avenue, Amersham	6 " " "
Health Clinic, Burlington Road, Slough	28 " " "
Wexham Court Clinic, Knolton Way, Slough	6 " " "
Health Clinic, Parlaunt Park, Langley, Slough	6 " " "
1 Wentworth Avenue, Britwell Estate, Slough	4 " " "
Ophthalmic :	
Health Clinic, Burlington Road, Slough	2 " " "
Speech Therapy :	
Whalley Drive Clinic, Bletchley	3 sessions per week
Youth Centre, Aylesbury Street, Wolverton	2 " " "
Katrine Drive, Lakes Estate, Bletchley	3 " " "
Lovat Bank Silver Street, Newport Pagnell	1 " " "
Health Centre, Avenue Road, Winslow	2 " " "
Flat 1, Verney Close, Buckingham	2 " " "
Health Centre, Jansel Square, Bedgrove, Aylesbury	2 " " "
Quarrendon Clinic, Lay Road, Aylesbury	3 " " "
Walton House, Walton Street, Aylesbury	2 " " "
Tindal Hospital, Aylesbury	1 " " "
Memorial Hall, Wharf Road, Wendover	1 " " "
The Grange, Amersham Hill, High Wycombe	10 " " "
Health Clinic, Victoria Road, Marlow	1 " " "
Youth Centre, Maxwell Road, Beaconsfield	1 " " "
19 Chesham Road, Amersham	10 " " "
Teachers Centre, White Hill, Chesham	3 " " "
Health Clinic, Britwell Estate. Slough	1 " " "
Health Clinic, Burlington Road, Slough	10 " " "
Health Clinic, Parlaunt Park, Langley, Slough	3 " " "
Vaccination and Immunisation :	
Municipal Health Clinic, High Wycombe	1 session per week

APPENDIX A

MILTON KEYNES
PROBLEMS AND OPPORTUNITIES

J. J. A. REID

Chairman, Milton Keynes Joint Working Party

The first suggestion that a new town should be established in north Buckinghamshire came from the County Council in 1962, but the present project dates from the establishment of Milton Keynes Development Corporation in 1967. The Corporation appointed consultant planners, who began work towards the end of that year, and the final master-plan was produced in 1970. This is for a city with an ultimate population, shortly before the end of the century, of 250,000, some four-fifths of whose residents will be incoming population, the remainder consisting of the present inhabitants of the towns of Bletchley, Stony Stratford and Wolverton (with New Bradwell), and of 13 villages or hamlets within the designated area, which covers 22,000 acres (9,000 hectares).

The new city is situated on strategic rail, road and canal transport routes from London to the north. One of the objects of its substantial ultimate population is to try to ensure that, unlike the first generations of new towns which were much smaller, Milton Keynes will be able to support a full range of social, employment and cultural amenities which it would be impossible to justify economically in a lesser development. The city will also have a rapid rate of growth, with the population building up, once initial development gets under way, by about 8,000 to 10,000 per annum. This will help to ensure that the stage at which the above amenities can be produced will be reached as rapidly as possible.

The planning process

Soon after their appointment, the consultant planners held a seminar at which experts from a wide field spoke about their particular subjects. There thus began a process whereby town planners, sociologists, economists, experts in transport, health service planners and others were able to educate one another, and it was interesting to find, initially, how frequently members of one profession had remarkably little understanding of the problems and objectives of others. Thus, those taking part from the health service side learned a great deal from others involved in the course of the seminar and in subsequent continuing discussions; and were, in turn, able to help them with information about current problems and trends in the field of health.

Health planning stemmed from the joint initiative of the County Medical Officer of Health of Buckinghamshire and the Senior Administrative Medical Officer of the Oxford Regional Hospital Board, who began their task by inviting all medical practitioners working within the designated area of Milton Keynes to a meeting. It might be contended that this meeting should have been more widely representative not merely of the health professions but also of the public, but it was felt that, if any progress was to be made towards planning a health service for Milton Keynes, it was essential that the process should have widespread medical support, as otherwise it was unlikely to turn into reality. This led to the establishment of the Medical Planning Group which, at the end of 1968, produced a report entitled "A health service for Milton Keynes" suggesting the broad principles on which such a service should be founded. The Medical Planning Group comprised doctors drawn from all three branches of

the National Health Service and from occupational health, with observers from the Department of Health and Social Security. The Medical Planning Group also sought and obtained advice from a wide range of other health professions in the course of its work.

The general conclusions of the Medical Planning Group received the approval of the three statutory National Health Service bodies in the form of the Oxford Regional Hospital Board, Buckinghamshire Local Executive Council and Buckinghamshire County Council. The way was then clear to adopt a more permanent planning structure for the health services for Milton Keynes. This has been described elsewhere, (Gooding and Reid 1970) and is shown in diagrammatic form as an appendix to this paper. The apex of this structure is the Health Services Liaison Committee, presided over by the Chairman of the Milton Keynes Development Corporation and with a membership consisting of officers and members of the Development Corporation, the Oxford Regional Hospital Board, the County Council's Health Committee and the Local Executive Council, together with an observer from the Department of Health and Social Security. The Health Services Liaison Committee is the forum within which all policies are debated and, once decisions have been reached, the members of the Committee take them back to the parent statutory organisations which alone have the ability to implement whatever is recommended. The system of settling broad principles at Health Services Liaison Committee level has proved successful, and so far all decisions taken by that body have been ratified by the three statutory National Health Service bodies.

The Health Services Liaison Committee is served by a Joint Working Party under the chairmanship of the County Medical Officer of Health of Buckinghamshire and comprising all officer and professional members of the superior body, together with other specialised representatives. This Working Party has the task of preparing planning documents for consideration by the Liaison Committee, and in this is helped by a Working Party concerned with all aspects of administration and finance (chaired by the Deputy Secretary of the Regional Hospital Board) and by another concerned with all building matters, from which has stemmed a series of project teams. These all report to the Joint Working Party which, in turn, looks at health services clean across the administrative board and presents suggested policies to the Health Services Liaison Committee for its consideration.

The Joint Working Party also established working groups of two kinds. The first is a series concerned with professions such as dentistry, nursing and pharmacy, whose task it is to consider how these professions can best contribute their skills within the framework of the proposed health service for Milton Keynes. The second set of working groups is concerned with services, such as child health, mental health, care of the elderly, care of physically handicapped, and occupational health. These latter groups all have an inter-disciplinary membership and both types of groups report to the Joint Working Party, which examines their conclusions in order to ensure that they are consistent with overall policy before reporting back to the Health Services Liaison Committee.

This planning structure has the advantage of involving all services concerned with health in Milton Keynes; on the other hand, it has the disadvantage of having at its apex a non-statutory body which is entirely dependent upon the goodwill of the constituent statutory authorities whose representatives serve on it. The system of having both members and officers as equal members of the Health Services Liaison Committee has worked well; they have united to discuss policy matters, but members have been glad to leave the preparation of suggested policies and their implementation in the hands of the professional staff.

The secretariat of the planning mechanism is located within the Forward Planning Unit of the County Health Department, which is headed by a Principal Medical Officer who, in addition to responsibilities in relation to Milton Keynes, also provides medical supervision for the county's health centre development programme and holds an honorary appointment with the Oxford Regional Hospital Board. It would have been possible to have established a medical planning unit for Milton Keynes which

was free standing, with a budget provided by the statutory National Health Service bodies, but it was considered unlikely that such a structure would be able to offer satisfactory career prospects for its staff and that it was better that such staff should be clearly based within one of the existing branches of the National Health Service. In practice, the arrangement has worked well, and has been instrumental in drawing all three branches of the National Health Service together in the planning process for the new city. The secretariat has also served as a clearing house for communication with the Department of Health and Social Security, many branches of which have been involved in different aspects of Milton Keynes planning. Substantial help has also been forthcoming from the Principal Regional Officer of that Department.

The planning exercise has been carried out during a period of impending change in the National Health Service and, throughout the entire process, an attempt has been made to prepare for the future rather than to remain wedded to the structure and features of the present National Health Service. The process has survived two Green Papers and the Consultative Document, and it is considered that many aspects of the planning organisation might well form a model for the administration of a district within the reorganised National Health Service.

It might be added that planning has also had the advantage of taking place within what might be described as a "green fields" situation, in so far as only limited primary and secondary care facilities are at present available within the designated area of Milton Keynes, and hence options are much more widely open than would be the case in the expansion of an existing town with a long-established pattern of hospital, general practitioner and public health services. Care has been taken to keep health service personnel at present working within the designated area of the new city in the picture and, in the case of general practitioners, meetings are held periodically to discuss plans and problems.

Health planning in perspective

One of the great lessons which has stemmed from planning the health service for Milton Keynes has been that it cannot be regarded as a free-standing institution but must be related to a wide range of other matters such as general, industrial, transport, educational and local authority social service planning. This is, of course, the reason underlying the Government's stated intention to make the area (which will correspond to the new county) the prime unit within the revised National Health Service. Many members of the medical and other professions throughout the country are still apparently unaware of the wider social context within which the National Health Service must be fitted and, for them, involvement in a planning process such as that which is taking place at Milton Keynes would be highly educational.

Milton Keynes is probably the first new town in which health service planning has been an integral part of overall planning *ab initio*; and the proposed multi-focal physical layout of the city has, in fact, been affected by health service considerations. For example, the siting of the district general hospital on a single large campus comparatively near the town centre has had a direct effect on the location of other major facilities. There have, from time to time, been conflicts between health service and other planners in relation both to strategy and to detail, and these have had to be resolved by a continuing process of mutual discussion and joint decision.

Overall objectives

In their proposals, the consultant planners suggested six broad goals for the new city. The attainment of these goals involves the implementation of many suggestions contained in the master-plan for Milton Keynes and some of their health service implications will now be mentioned.

1. *Opportunity and freedom of choice:* From the general planning side this brings in such matters as the range of housing to be made available both in the private and public sectors; the width of variety in employment prospects; the element of choice in education; and the breadth of possibilities in recreation and shopping facilities. This goal will be facilitated by the large ultimate size of the new city and by its rapid rate of growth.

   In the health service, freedom of choice might be exemplified by the comparatively large health centres within most of which several groups of doctors will work, thus offering a series of alternatives to patients.

2. *Easy movement and access; and good communications:* This self-explanatory objective is vital to the success of the multi-focal layout of the city and is also essential for the type of health service which is being planned for Milton Keynes. The provision of an effective public transport system permits the grouping of primary care facilities into substantial health centres; and the ability of a single district general hospital to serve not merely the city but its hinterland will likewise be facilitated by good communications.

3. *Balance and variety:* Under this heading the consultant planners suggest policies for ensuring a more satisfactory age and social class structure in Milton Keynes than has been typical of previous new towns. Success or failure in achieving this goal has substantial implications for the health services in terms of the type of people who will require care and of the ability to staff the services which will care for them.

4. *An attractive city:* This again is a self-obvious goal with implications for the health and general well-being of the residents of Milton Keynes.

5. *Public awareness and participation:* The consultant planners and Milton Keynes Development Corporation have rightly laid great emphasis on this, and have tried to stimulate public participation through meetings, exhibitions, surveys and the supply of written information about the new city. Various matters relating to the health service have already arisen at public meetings and in correspondence, and this question of public participation is a matter of great importance to the future of the National Health Service, in which citizens must become increasingly rather than decreasingly involved.

6. *Efficient and imaginative use of resources:* The need for this in relation to the deployment of scarce resources of skilled personnel and of money extends throughout the entire range of facilities to be provided in Milton Keynes, and is equally an objective within the health service. This goal is in keeping with proposals for the revised National Health Service, and the ongoing monitoring which is envisaged at Milton Keynes is of great importance for the continuing development of health and other services during the twenty and more years in which the city will be growing towards its final state.

Health service objectives

The Development Corporation's master-plan enunciates four principal health goals for Milton Keynes:—

(i) The availability of a system of care, including care by the family doctor, which will enable those in need to find the appropriate service with the minimum delay and inconvenience. This in turn, implies that the location and nature of the service must be widely known and readily accessible by all forms of transport.

(ii) The organisation and distribution of the facilities must be such that optimum use is made of scarce resources, particularly manpower, but including such other factors as technical equipment, and accommodation.

(iii) A greater understanding of health matters on the part of the people of the new city so that they may take steps to protect their own health in this context. The contribution which can be made by voluntary organisations to the health of the city must also be recognised.

(iv) The attainment of a high quality environment which will minimise risks to health. The major factors are: co-ordinated public health planning; pollution control; suitably designed buildings for the handicapped; a well-organised occupational health service; and the reduction of accident risk in industry and in the city generally.

The plan which has been developed within the health service planning structure has six major features, and these are as follows:—

1. *Community orientated:* Prevention of disease is accomplished in the community, and it is likewise in the community that the ultimate success or failure of treatment is commonly determined. For these reasons it was decided that the health service should be community orientated, and that the hospital should fulfil its true secondary supportive role in the treatment of those who require its complex medical, nursing and scientific facilities.

2. *Primary care to be supplied from health centres:* It was agreed at an early stage that, in the setting of a new city, it would be unrealistic to plan for the provision of primary care from any premises other than health centres; and it was also agreed, in keeping with the Todd Report, that these centres should be staffed by teams of doctors, nurses and other personnel mostly looking after populations of some 30,000. On this basis, each health centre would contain some twelve doctors and, in view of the size of population served, the provision of consultant out-patient services from health centres, particularly in such community-orientated specialities as paediatrics, psychiatry and geriatrics, would be a viable proposition.

   It should be emphasised that the population figure of 30,000 was arrived at after considering various possibilities, ranging from much smaller units to, at the other end of the scale, concentration of the entire medical resources of the new city on a single central campus. Geographical, transport, social and other factors, were taken into account in arriving at the conclusion that most of the health centres should serve about 30,000 people, but it has been accepted that, as experience is gained, there may well be revisions of this figure, and it should be remembered that, whilst the first health centre is due to open this year, the final one will not be built for another ten to fifteen years.

3. *A single district general hospital:* With its hinterland, there will be a population of some 300,000 centred on Milton Keynes and they will be served by a single district general hospital, although there will probably also be day hospitals for the elderly and for the physically and mentally handicapped in the north and south of the city. The concept of a single district general hospital was facilitated by the decision that both primary and some specialist care should be provided from comparatively large health centres; and the road and public transport patterns will also ensure that patients and their relatives from Milton Keynes and the surrounding area can readily reach the hospital, which will be situated on a 77-acre site comparatively near the centre of the city.

4. *Integrated staffing:* In order to make the best possible use of limited resources of skilled manpower, integrated staffing will be a feature of the health service for Milton Keynes. Thus, for example, a potential general practitioner coming to the city will have the choice, at one end of the scale, of remaining a pure generalist or, at the other, of devoting up to half his time to special clinical interests both in the hospital and the health centre setting. Similarly, it was the unanimous opinion of the nursing working group that there should be a single nursing service for the city, providing care for patients in hospital and in their own homes.

5. *Balance between prevention and cure:* In the past, these processes have been regarded as being in some way qualitatively different from each other; but with the extension of the modern concept of

prevention to include primary, secondary and tertiary phases, it is essential to plan health services as a unity. It is hoped that, in the new city, most of the clinical work hitherto carried out by the public health service will be undertaken by appropriately interested and trained general practitioners.

6. *Close liaison with social and educational services:* It is particularly desirable that close liaison should be maintained between health and social services, and this has become even more important since the passing of the Local Authority Social Services Act. There is cross-representation on the planning organisations for health and social services in Milton Keynes, and it is hoped that the mutual support and education of each profession by the other will be encouraged through mixing at health centre and other levels.

   There is similarly a close relationship between health and education, both because of the need to educate child and adult members of the public about health, and because of the increasing reliance on educational services for the initial and continuing training of all types of health service personnel. In the setting of Milton Keynes it is proposed to explore and develop these relationships and, for example, one of the health centres will be situated on the site of a large complex of secondary schools.

Present position

While the initial health planning process was taking place, measures were initiated to encourage the closer integration of existing health services within the Milton Keynes area. Thus the attachment of local authority health visitors, nurses and midwives to general practices was completed; local authority midwives began to work within the general practitioner maternity unit at Bletchley; and local authority medical and other staff developed closer links with the hospital out-patient department in that town.

In or near Milton Keynes there are two general practitioner maternity units, two out-patient clinics and two physiotherapy units, one of the latter being run by the British Red Cross Society. The local authority has an ambulance station and a sub-station, three child health clinics, a mobile clinic, and a child guidance clinic. In general practice, there are 25 doctors organised in eight teams ranging upwards in size to one practice with six doctors; there are 16 general dental practitioners, plus two local authority dentists; and 16 pharmacists, all of whom spend their time in the traditional mixture of professional and commercial work.

The current population within the designated area is 51,400, but with some 1,000 houses under construction at the moment the population will shortly begin to rise rapidly, with predicted increases of 5,600 in 1972, 8,400 in 1973, 8,900 in 1974, and thereafter with some 8,000 to 10,000 people per annum until nearly the end of the century. Milton Keynes is therefore under way, and the importance of providing health services in parallel with such a rapid influx of population is apparent. In that connection it is worth mentioning, in passing, that many people have found it difficult to believe that Milton Keynes would actually happen. It may be the scale of development which had this effect on local inhabitants, and from time to time even members of the health planning teams have been afflicted by such doubts. A tour of almost any part of the designated area will now quickly dispel any which remain.

Current problems

This paper has so far given a brief description of what has taken place in planning the city and its health services, and a large amount of detailed information is available from the publications mentioned in the references. The object of the paper is to provide a background for the subjects to be covered by subsequent speakers and, in preparation for this, there are four particular matters to which reference

must now be made, all of which are relevant to the future success or failure of the health service plan for Milton Keynes.

1. *Acceptability to the public:* Planning for a new city involves the problem that most of the public who will make use of services are not present when they are being planned. However, even if they were in situ, there is the difficulty stemming from the essentially uncritical approach to health services by members of the public, most of whom seem well satisfied with what they already have. Furthermore, it is, for example, extremely difficult to elicit useful public opinion about a health centre from people who have had no experience of one. As has been mentioned, some questions about health services arose in the course of public meetings held as part of the planning process for Milton Keynes, and it would perhaps not be too great an exaggeration to say that what many people seemed to want was a doctor at each street corner, together with a district general hospital in the middle of each of the kilometre squares of which the new city will be physically composed.

   The difficulty lies in the almost complete lack of understanding amongst the public about basic health service matters, and one of the greatest challenges for Milton Keynes and also for the revised National Health Service will be to achieve effective public participation both in planning and in running health services. Providing the background knowledge on which such participation is to be based, however, presents a problem. Some might reasonably claim that it could best be achieved by means of public education in health service matters, but others would object that the dividing line between education and indoctrination is a thin one.

   The public pay for their health services and they therefore have a right to know what is being done in their name. They would also make more effective use of health services if they had a greater understanding of what they are all about.

2. *Staffing:* Staffing problems are endemic within the National Health Service, and the plan for Milton Keynes will fail unless staff of appropriate quality can be attracted in adequate numbers. Initially it will be necessary to recruit an appropriate number of staff from the incoming population, but thereafter it should be possible to devise training facilities within the city for most groups. It might even be possible to think in terms of a university with a medical faculty by the time the city is fully grown.

   If doctors are to be attracted it will be essential to ensure that they are coming to reasonable working conditions both in terms of supporting staff and in relation to the premises from which they will work. Similarly it is to be hoped that the extremely flexible form of employment which it is proposed to offer to them in Milton Keynes may serve as an attraction. In the case of consultants, proleptic appointments are being made, and it is encouraging to find early interest amongst young consultants who are appreciative of the need to revise the balance between care in the hospital and in the community.

   The changing balance in nurse training between these two forms of care should help in attracting staff to work in the new city. It will be important to provide a career structure which allows both for the clinical interests of the individual nurse and for a satisfactory management framework for a service which will comprehend the needs both of hospital and of community nursing. In that connection it is unfortunate that the Salmon and Mayston structures were designed in isolation from each other, despite the fact that both committees studied nursing management at a time when it should have been obvious that an integrated health service was bound to be instituted in this country sooner or later.

   As regards the other health professions, many depend on married women. Here again, hope must be placed upon the incoming population and upon the consultant planners' desire that this should have an adequate social balance. Participation by such women in health service work

should be further assisted by the emphasis on health centre care, with the prospects of employment comparatively close to their homes. It is also hoped that adequate industrial and manual staff will be attracted to the new city and, within it, to the health service.

It will be extremely important to study the reactions of staff to the health service in Milton Keynes and, wherever possible, to adjust conditions of employment to make them attractive, as otherwise the public will be denied their services and the health plan will fail.

3. *Premises:* As has been explained, the overall planning of the town and of its health services was achieved in the course of a series of interlocking operations. It was decided that primary care should be provided by strong teams based on comparatively large health centres and that the alternative of privately provided premises could not be seriously entertained in relation to an operation of the magnitude of Milton Keynes. Only by public funding could an adequate plan be prepared in advance, and appropriate sites selected and reserved for health centres; and no privately owned goup practice premises could hope to provide space and facilities for the size of the primary care teams envisaged at Milton Keynes.

The commitment, both financial and otherwise, to existing premises owned by general practitioners is understandable, and no pressure will be brought to bear on those at present practising within the designated area to give up their premises. Preliminary thought has, however, been given to the best means of re-grouping these doctors into health centre premises as and when they desire this.

Even in a new town situation, health centre planning has presented the usual problems, including such matters as architects having to build for a multiplicity of clients; as well as the problems of site acquisition, particularly where there are questions of inter-related developments in the area concerned.

As regards the hospital, there is splendid scope on the 77-acre site which has been made available, and the first phase will be in the nature of a "community hospital". It is also proposed to locate a health centre and probably an ambulance station within the same campus. For this reason a practical aspect of the integration of health services has been the sub-contracting of the task of preparing the plans of this particular health centre to the architects' department of the Regional Hospital Board, although with the County Council accepting its statutory financial responsibility for footing the bill.

Much will depend upon the ability of those concerned to keep the building programme abreast of the needs of the incoming population.

4. *Measurement and research:* In order to assess progress and to relate this to the objectives described in the health service plan, it has been necessary to try to establish base-line measurements and to continue to monitor what takes place in Milton Keynes. As regards the first of these tasks, it was not difficult to compile lists of facilities and personnel at present available in the designated area. On turning to the question of people to be served by the health service on the other hand, it was essential, if any form of effective monitoring were to take place, to establish some kind of population register. When the National Health Service is administratively unified in 1974, the basis of such a register will exist in the form of the lists already kept by the Local Executive Council but, pending this, it seemed important to build up a register comprising basic information about the existing population as, with the steady rise in numbers, this would become a progressively more difficult task as time went by.

Even in the presence of information about existing personnel and their potential work load, certain other desirable planning information is simply not available. One cannot, for example, say how many patients a general practitioner and his team can effectively care for in the community,

particularly when one allows for the many possible permutations of staff within the team and of tasks being carried out both within and outside the National Health Service by the general practitioner himself. There is need for much more information on subjects such as this, both at Milton Keynes and at national level.

It therefore follows that monitoring and research should become integral parts of the ongoing process of planning and running health services in the new city. The growing interest of the Department of Health and Social Security in operational research has been a notable development in recent years, and it is to be hoped that the Department may appreciate the unique opportunities which Milton Keynes offers for studies of almost any kind into the development of a comprehensive health service for a district of 300,000 people. It is also to be hoped, as the city gets under way, that there may be interest in research from the academic side; and the potential for training both at undergraduate and at postgraduate level is also apparent in relation to the various health professions which will be working in the city.

Reference has already been made to the fact that Milton Keynes will not achieve its final size until nearly the end of the present century. This means that there will be ample time to re-think and to re-plan where this appears necessary in the light of experience. It is one thing to achieve an agreed plan, but it is quite another to stick to it inflexibly irrespective of changing situations or of the needs of the people of the locality.

Milton Keynes and the future

It might be contended that it is inappropriate to devote so much attention to a new city such as Milton Keynes when things are frequently far from ideal in the health services of some of the country's older urban settlements. The fact that the latter is the case is not, however, a reason of condoning a second-rate or backward-looking service in a new city. Perhaps the greatest justification for trying to make the health service for Milton Keynes as good as possible is because it provides a potential model for the future from which all communities can, in the long term, benefit.

This conference is going to look at various aspects of the future as seen by those concerned with Milton Keynes and by others with related interests. The themes which will be developed have relevance not merely to that city but to the revised administrative form of the National Health Service which is due to come into being in little over two years' time. Milton Keynes could serve as a model for a district within that new service and, by 1974, should be starting to contribute experience which will be relevant to the overall future of the National Health Service.

Thus, although the subject of this conference is Milton Keynes, its implications are much wider.

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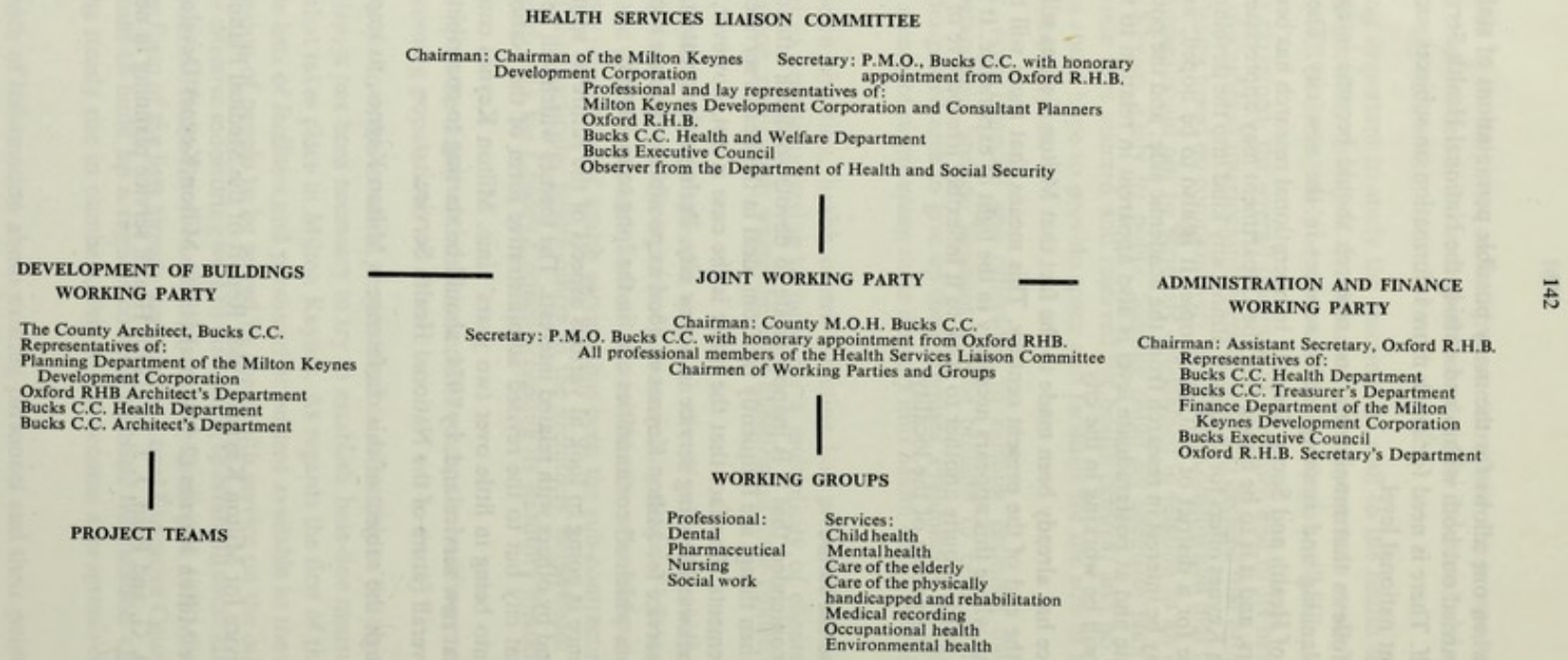
MILTON KEYNES
HEALTH SERVICE PLANNING STRUCTURE



APPENDIX B

FOOT HEALTH EDUCATION

the preparation of a teaching pack for Primary Schools.

A joint venture of the chiropody and health education sections of the Bucks County Council Health Department.

The preliminary stages

A three day course on foot health education, organised by the Association of Chief Chiropodists in conjunction with the County Health Department, and held at Missenden Abbey during October 1970, brought together the disciplines of chiropody and education.

The particular aims of the course were:—

1. to examine the methods of "selling" foot health to teenagers, and to children in primary schools; and
2. to investigate the role and effect of advertising and the mass media in this field.

Lectures, discussion and group project work suggested several methods which could prove effective in the primary school—an area which particularly interested the County Chiropodist. By the end of the course, the Aylesbury group (which included the area chiropodist and an infant school headmistress) had arrived at conclusions resulting in the following recommendations—

1. that information on foot health could best be presented in the primary school by the project method, and
2. a prototype teaching pack, which would support a project on the foot, should be produced by interested parties in the Aylesbury area.

As a result, a working party was set up to carry out these recommendations. This comprised:

J. D. Idris-Evans	County chiropodist
Mrs. J. Cotterell	Area chiropodist
Mrs. L. Moss	Area health education organiser
J. G. Myatt	Deputy county health education officer, following the retirement of Mrs. Moss in December 1970.
Mrs. P. J. Clare	Headmistress, Bedgrove Infants School
R. H. Kerslake	Headmaster, Bedgrove Junior School
J. L. Higgins	Co-ordinator, Aylesbury Teachers' Centre

In producing a teaching pack, the working party had a number of basic aims and objectives. Briefly outlined they were:—

1. To be comprehensive

The pack should be capable of being used in a variety of ways to suit the individual teacher, and the needs of particular pupils.

It should be designed to support a major project, or enable individual items to be extracted. The work cards could be disregarded or added to if necessary. The topics should be 'on going', suggesting other fields of investigation.

2. To interest the teacher by

   (a) presenting the work in such a way as to be in line with current educational theory and practice. For this reason, there was always at least one teacher from the health education section involved in production, and two head teachers acting as consultants.

   (b) Reducing preparation time. A wealth of information on foot health and allied topics was to be provided, In some instances the material was to be prepared ready for use by the children; otherwise the information was to be supplemented by suggestions for alternative methods of use or follow-up. In this way, individual teachers could develop the theme along lines of particular interest.

3. To stimulate the pupils

   (a) The material should be attractive as well as informative, and sufficiently wide to cater for a diversity of interests.

   (b) Traditional subject barriers would be crossed and the topic approached in a variety of ways—mathematically; biologically; geographically; historically; etc. By this method individual interests could be fostered whilst still focussing attention on the foot.

   (c) Opportunities should be presented for the children to be actively employed; finding out by experiment as well as by reading; solving problems by collecting, measuring and counting; writing creatively or reporting; constructing, illustrating and dramatising; and of course, seeing and feeling the foot in action.

4. To involve parents

An obvious opportunity exists to influence not only future generations of shoe buyers but also the current one. A vital part of the exercise was to involve parents; to make this possible, parts of the project were designed to be completed at home. It was hoped that children would relate what was happening in the classroom. In addition, they would be encouraged to seek assistance from the family in the collection of information on foot and shoe sizes; manufacturers; materials and styles; and most pertinent, attitudes to, and instances of foot measurement in shoe shops.

Production of the prototype teaching pack

Initial ideas formulated by Mrs. Cotterell and Mrs. Moss, and discussed at meetings of the working party, resulted in work commencing on a series of wall charts and work cards. Each of the charts was based on a subject closely related to the foot, and was designed to provide information, pose questions, and suggest activity.

As the teaching pack developed, the need for modifications and additions became apparent. It was soon obvious that neither the chiropody nor the health education sections could devote sufficient time to explore all the avenues of interest radiating from this central theme—the foot—without seriously affecting routine work. It was also realised that many teachers would wish to develop their own ideas: therefore production was halted after the completion of twelve basic wall charts which covered the following topics:—

1. Do your shoes fit your feet?
2. Measurement and shoe sizes.
3. Foot care and shoe care.
4. The parts of a shoe.
5. Materials used in shoe making.
6. Animal skins used for footwear.

7. At the shoe shop.
8. Footwear of different countries.
9. Shoes throughout the ages.
10. Shoes for the occasion.
11. How we use our hands and feet.
12. Bird and animal tracks.

Other items, supplementary to the wall charts, included in the teaching pack were:—

1. A skeleton foot.
2. A pedograph (for making foot prints).
3. Various foot and shoe measures.
4. Sectioned shoes.
5. Film strips:—
   a. "Our children's feet"
   b. "Care of our feet"
   c. "Teenagers feet"
6. Film: "The five". An 8 mm. British Medical Association production: suitable for all ages.
7. A variety of leaflets, pamphlets and posters.
8. List of reference books suitable for teachers; for children of various ages.
9. Teachers' notes.

Testing the product

Both of the headteacher members of the working party accepted the teaching pack in their schools for a two week trial period. Very favourable results were reported and, following discussion with the class teachers involved, some minor alterations and additions were made. The pack was then placed in the Mursley County Primary School for a two week period. As the results of all trials were so encouraging it seemed logical that a teaching pack on the foot should be made available to all primary schools in the county.

Further evaluation and professional production

Enquiries to Chief Chiropodists of other local Health Authorities indicated that no other teaching aid of this type was either available or contemplated. It was therefore decided to investigate the possibility of producing a teaching pack on a national basis. Large scale production being beyond local resources, contact was made with Mr. J. Hicks, Schools and Medical Liaison Manager, Clarks Ltd. (Shoemakers), to seek opinion and advice.

Mr. Hicks had been involved in the Missenden Abbey course, lecturing on advertising and the mass media: already well aware of the necessity for foot health education, he also knew something of the progress being made in Aylesbury toward that end. A meeting was arranged between members of the Health Department staff and the Board of Directors of Clarks Ltd. The teaching pack was examined in detail and was pronounced worthy of financial backing.

More testing, opinion and comment were obviously required before Clarks Ltd. went into production. Arrangements were made for the pack to be seen by lecturers and students in three Colleges of

Education—the City of Birmingham; St. Osyth's, Clacton; and Lady Spencer Churchill, Wheatley. Reports from these colleges were again very favourable.

Prototype sets of wall charts are now being printed. Twelve teaching packs will be produced initially in order that final evaluation can take place in schools and colleges of education. It is hoped that the finalised pack will go into mass production by the end of 1972.

Clarks Ltd. have agreed to cover the initial production and artwork costs themselves, and to be responsible for the marketing and distribution of the final products. It is anticipated that a nominal charge will have to be made for each pack to cover the cost of printing.

APPENDIX C

HEALTH EDUCATION IN BUCKINGHAMSHIRE PRIMARY AND SECONDARY SCHOOLS 1970-71

The survey, by questionary, was carried out by area health education organisers during the summer and autumn terms, and had the approval of the Chief Education Officer. Whilst not wishing to anticipate the findings, initial collation indicates certain trends, and these are included in this preliminary report.

The aims and objectives of the survey were to determine the extent of health education and health related courses in schools; to collect head teachers' opinions on the content and presentation of the health education programme in the school curriculum; to assist in the planning of an acceptable and efficient service to schools in the light of the responses; and to provide information for the Schools Council working party on health education in schools.

Methods

It was initially intended that each school should receive a questionary by post, completed forms being collected by area health education organisers. Following consultation with the Deputy Chief Education Officer it was decided that the questionary should be personally introduced and the survey completed verbally. The task of visiting 304 schools was obviously going to prove time consuming, but two major benefits were anticipated, namely an increase in the number of schools replying, together with greater accuracy of replies, and the establishment of personal contact between head teachers and area health education organisers (where it did not already exist), with the possibility of extended discussion on the subject.

Two lengthy briefing sessions were held, during which the questionary was discussed in detail, before the area health education organisers began their visits. They were most welcome in the majority of schools, and only 15 (5%) head teachers did not complete a questionary. The interest generated is indicated by the length of time most organisers spent at each school—it was seldom possible to conduct an interview in less than one hour.

Preliminary observations

It should be made quite clear, from the outset, that the survey has limitations. A casual scrutiny of the results would appear to indicate that the schoolchildren of Buckinghamshire are very fortunate in the amount and breadth of health education available to them.

However, when appraising the results, the following facts should at all times be borne in mind.

The majority of the questionaries were completed in one session: the head teacher seldom had the opportunity to consult members of staff. Without the comments of the individual teacher, the replies could only have been based on a general knowledge of the situation. Or as one head teacher stated—"What is done, and in what detail, will depend on the teacher . . . . I realise that some children will get more than others".

Some head teachers did not comment on certain questions. For example, replies from primary schools on the topic of human reproduction indicate that 70% of schools replying give deliberate or incidental instruction. But 30 (14%) head teachers did not reply to this question. It seems

probable that this refusal to reply indicates, in the vast majority of cases, that no course is available: thus, the proportion of primary schools providing such instruction could be as low as 59%.

Although particular courses may be available in schools, it is by no means certain that all pupils will participate in those courses. Forty-two per cent of secondary school head teachers indicated that not all pupils are involved.

For these reasons, the results indicate trends, rather than facts suitable for strict statistical analysis.

Preliminary results

(a) PRIMARY SCHOOLS

On examination of the replies from primary schools in more detail, the following information is readily available:

1. Of the total of 237 schools listed, 228 (96%) completed questionaries. Percentages quoted below are based on the number of schools replying, unless otherwise indicated.
2. Of the 228 schools replying, 139 (61%) included some health education.
3. In 195 (86%) of schools, teachers worked in relative isolation, using their own scheme of work: in the remainder (14%) some arrangement existed for coordinating the programme within the school.
4. Visitors assisted 136 (60%) of the schools with their programmes, and the most frequent visitors were those concerned with dental health, 33%; road safety, 90% and personal hygiene/ sex education, 14%.
5. Television programmes were used in 94 (70%) of the 135 schools replying to the question on use of visual aids. The most frequently mentioned programme was the B.B.C. Merry-go-Round series on sex education.
6. Selected topics, providing interesting information for this interim report, and certainly requiring more detailed examination are:—
   (a) 19 schools (8%) not offering information on simple anatomy and physiology.
   (b) 15% and 21% respectively not including human reproduction and menstruation in their syllabus.
   (c) 25% of the head teachers interviewed, thought it undesirable to introduce the topic of smoking.
7. In reply to a question as to the preferred method of undertaking health education, 42% of head teachers favoured a team approach, with one teacher responsible for coordinating the efforts of his colleagues, and of visiting speakers where appropriate. Only 9% of schools were actually using this method although, as indicated in item 3 above, a further 5% had some system of internal coordination.
8. Only 18% of the head teachers thought that teacher training in health education was adequate: 46% were of the opinion that training should be more thorough during initial teacher training and should be continued by in-service training.
9. Satisfactory contacts with the health education section were indicated by 15% of head teachers; 31% wished to have more help with programme preparation; 39% with visual aids, and 48% with visiting speakers.

(b) Secondary schools

The replies from secondary schools also provide some interesting information.

1. 67 schools are listed in the county, 61 (91%) completed the questionary. Replies were not received from 5 non-selective co-educational schools and 1 selective girls school.
2. 84% of the schools indicated that they included some health education in their curriculum; but, as mentioned previously, 42% indicated that not all pupils participated in the courses.
3. In 6 schools (10%), one teacher was responsible for health education; 40% of the schools had one teacher leading a team; and in 50% the teachers involved worked out their own programmes.
4. The programmes in 96% of the schools were visitor supplemented: health department health education staff assisted in 77%. Other frequent visitors were oral hygienists in 40%, doctors in 36%, and health visitors in 30%.
5. These visitors dealt with many topics; those most frequently mentioned were drugs (57%), smoking (51%), sex education (49%), dental health (43%), whilst both safety and venereal diseases were the subject of talks by visitors in 40% of the schools.
6. Television programmes were not used as frequently in secondary (29%) as in primary schools (70%). However, 90% of secondary schools made use of film strips or films on health education topics. Again the most frequent use of visual aids was in the field of sex education.
7. The topics section produced some interesting replies:—
   (a) Almost 100% of the schools replying include healthy habits; nutrition; food hygiene; anatomy and physiology; menstruation; reproduction and child birth in their courses.
   (b) Parentcraft, social and emotional development and relationships are also well covered.
   (c) Two schools (one non-selective co-educational and one selective girls) think that the topic of family planning is not desirable, and three schools think likewise on the topic of illegitimacy.
   (d) Only two schools do not wish to introduce the topic of smoking and one sees no place for information on drug abuse; 14% of schools, however, found it impossible to find someone to cover this latter topic.
   (e) Discussions on the problems of alcohol, venereal diseases, and obesity were thought desirable in certain schools (17%: 21%: 22% respectively) but were not covered for some reason.
8. As in the primary schools, 61% of secondary school head teachers thought the best method of presenting the health education programme was by team teaching, including visiting speakers and coordinated by one member of staff. This system is already in operation in 40% of secondary schools.
9. Only three head teachers thought that teacher training in health education was adequate: 19% thought that it should be more thorough during initial training; 29% called for in-service training of experienced teachers, and 32% wished to see better initial training together with in-service training.
10. 50% of the secondary schools replying indicated satisfactory contacts with the health education section, but a third or more wished to receive further assistance, especially with visual aids and visiting speakers.

Conclusion

A full report on the findings of the survey is at present being completed and will be circulated to interested parties as soon as possible. Whatever the value of the information extracted, the fact that all schools in Buckinghamshire were visited was, in itself, a worthwhile exercise. New lines of communication between schools and the health education section have been established, and existing ones have been strengthened.

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