Report of the Departmental Committee on Sterilisation.

REPORT OF THE DEPARTMENTAL COMMITTEE ON STERILISATION

Presented by the Minister of Health to Parliament
by Command of His Majesty
December, 1933

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The estimated cost of the preparation of this Report (including the expenses of the Committee) is £234 4*s*. 6*d*., of which £104 0*s*. 0*d*. represents the estimated cost of the printing and publishing of this Report.

MINUTE OF APPOINTMENT

I HEREBY APPOINT, with the approval of the Minister of Health :—

L. G. BROCK, Esq., C.B. (Chairman).

WILFRED TROTTER, Esq., F.R.S., M.D., M.S., F.R.C.S.,

R. A. FISHER, Esq., Sc.D., F.R.S., F.R.A.S.,

A. F. TREDGOLD, Esq., M.D., F.R.C.P., M.R.C.S., F.R.S.Ed.,

MISS RUTH DARWIN,

E. W. ADAMS, Esq., O.B.E., M.D.,

R. H. CROWLEY, Esq., M.D., F.R.C.P.,

E. O. LEWIS, Esq., M.A., D.Sc., M.R.C.S., L.R.C.P.,

to be a Committee :

To examine and report on the information already available regarding the hereditary transmission and other causes of mental disorder and deficiency ; to consider the value of sterilisation as a preventive measure having regard to its physical, psychological, and social effects and to the experience of legislation in other countries permitting it ; and to suggest what further inquiries might usefully be undertaken in this connection.

AND I APPOINT

Mr. F. CHANTER, of the Board of Control, to be Secretary of the said Committee.

L. G. BROCK,

Chairman of the Board of Control.

Dated 9th June, 1932.

REPORT OF DEPARTMENTAL COMMITTEE ON STERILISATION

To the Chairman of the Board of Control.

SIR,

(1) We were appointed under your minute of the 9th June, 1932, with the following terms of reference :—

> " To examine and report on the information already available regarding the hereditary transmission and other causes of mental disorder and deficiency; to consider the value of sterilisation as a preventive measure, having regard to its physical, psychological, and social effects and to the experience of legislation in other countries permitting it; and to suggest what further enquiries might usefully be undertaken in this connection."

We now have the honour to submit our report on the several questions contained in our terms of reference :—

CHAPTER I

INTRODUCTORY

1.—PROCEDURE

(2) We have held 36 meetings and we have taken evidence from 60 witnesses, a list of whom will be found in Appendix 1. In addition to the oral evidence which we have taken, local authorities have collected much statistical material at our request, and we wish to take this opportunity of expressing our indebtedness to all, local authorities and others, who have responded so readily to our requests for information. We know that the preparation of this material has involved a great deal of work, and we wish specially to thank the London, Birmingham and Nottingham local authorities for the evident care with which their statistics have been compiled, and the School of Social Sciences, Liverpool University, for putting at our disposal some of the results of the Merseyside Survey. Our thanks are also due in a special degree to the National Society for the Prevention of Cruelty to Children. The memorandum submitted by the Society, part of which we print in Appendix II, was all the more valuable because of its studied objectivity. The Society had no case to argue, and the absence of special pleading and the impartial statements of fact make this, in our judgment, a most impressive document. It would be difficult to illustrate in more striking fashion the serious social results and the moral corruption arising from failure to control mental defect. To the Eugenics Society we are indebted for a summary of the chief researches which have been made in foreign countries. Their memorandum, which was clear and complete in its arrangement, and detached and critical

in tone, has been of great assistance to us. Finally, we would record our indebtedness to the biologists, geneticists, psychiatrists and others, who in response to our invitation to give evidence have so freely placed at our disposal their knowledge and experience.

2.—PRELIMINARY GENERAL CONSIDERATIONS

(*a*) Legal Position

(3) The legal position in regard to sterilisation is not free from doubt, and, in setting out the view which is generally accepted, we would add the caution that it does not depend on decided cases. It is agreed, however, that there is a clear distinction between sterilising operations performed in the interest of the patient's health, which for convenience we call " therapeutic " sterilisation, and operations which are not necessary for the patient's health but are intended to prevent the propagation of unsound offspring. Such operations, advocated upon racial and social grounds, we call " eugenic " sterilisation. The legality of a sterilising operation which is necessary for the patient's treatment is not disputed in principle.

(4) There is general agreement that the sterilisation of mental defectives on eugenic grounds is illegal, and the arguments upon which this view rests would apply with equal cogency to the case of persons suffering from mental disorder. Most authorities hold that the consent of the patient would not be a good defence, even if he or she were capable of giving consent, a point which in the case of some defectives and of many mental patients might well be open to question. From the point of view of our enquiry it is immaterial to discuss whether, if a defective were to be sterilised on eugenic grounds, action might be taken under the Offences against the Person Act, 1861, or under Section 55 of the Mental Deficiency Act, 1913, or, in the case of a child, under Section 1 of the Children and Young Persons Act, 1933. Apart from the possibility of proceedings being taken under any of these Statutes, in the event of the patient's death it would seem that a charge of manslaughter might lie against the operating surgeon.

(5) The legal position in regard to the eugenic sterilisation of persons of normal mentality is less certain, but most authorities take the view that it is illegal. This is the view commonly adopted by the medical profession and acted upon by the hospitals, and we understand that the medical defence organisations agree in refusing to indemnify any practitioner undertaking eugenic sterilisation. In theory the point is not entirely free from doubt, but in practice it appears to be almost universally accepted that eugenic sterilisation is illegal and involves the surgeon concerned in the risk of legal

proceedings, even though the full consent of the patient has been obtained. This is in accordance with the practice of other countries, and it is significant that not a few of the foreign laws which sanction sterilisation on eugenic grounds expressly prohibit it except where the specified conditions are fulfilled.

(*b*) Concept of Mental Defect

(6) In any discussion of the concept of mental defect it is necessary to keep clearly in mind the difference between mental defect and mental disorder. Speaking broadly, mental defect may be described as arrested development of mind, whether congenital or induced by injury or disease before development is complete. It is in almost all cases a permanent condition and in the present state of knowledge is beyond real cure, though much benefit may result from skilled training. Mental disorder, on the other hand, is the generic term which includes all the various disorders affecting the mind which prior to their onset has been functioning normally. Mental defectives may also suffer from mental disorders, but in such cases the disorder is to be regarded as additional to the mental defect. Thus, though both conditions may occur in the same individual they are clinically distinct from one another.

(7) A difficulty which confronted us at the outset of our enquiry was that mental defect is commonly described in terms which are statutory in their origin and rest upon an administrative rather than a scientific basis. As one of our witnesses put it, " the term mental deficiency is not a clinical entity, but a medico-legal concept, and like the term insanity denotes merely a social group of persons, who are mentally deficient because of the presence of a wide variety of pathological conditions which have as one, and only one, of their symptoms, deficient intelligence." Broadly speaking, the definition in the Mental Deficiency Acts is based upon social adaptability, and the definition in the Education Acts upon educability. In other words, both statutory definitions rest upon the end result of the mental condition, whether social or educational, and not upon the clinical characteristics. Most, but not all, persons who come within the definition in the Mental Deficiency Acts would also be classed as educationally defective ; some few, including the rare type of " moral defectives," might not. But there are an appreciable number of educationally defective persons who would not come within the scope of the Mental Deficiency Acts. The two legal definitions differ in their scope and purpose, but they are to a large extent coincident. It is necessary to emphasise the fact that in our Report the term "mental defective" is used to mean a mentally defective individual within the meaning of Section 1 of the Mental Deficiency Act, 1927, unless otherwise stated.

The result of classification on a basis of either social or educational failure is to create an impression that the difference

between one defective and another is mainly a difference of degree. Though this in practice is in a large measure true and can rightly form the basis of educational and administrative measures, the result of such a view of mental deficiency is that the clinical differences between different types tend to be obscured and investigation into their ætiology may be invalidated. That certain types of defect exhibit well marked clinical differences has long been recognised. Mongolism, for example, and the two types of amaurotic idiocy are generally accepted as clinically wholly distinct from any other types. But the large class who are for convenience of administration described as "feeble-minded" probably also include a number of types which differ psychologically, pathologically and ætiologically, although our present knowledge does not admit of differentiating between them.

(8) The difficulty which arises from the use of a vaguely descriptive terminology is increased by the fact that equally vague terms with a slightly different content are used in other countries. The term "oligophrenia" in use on the Continent is wider than the English term "mental defect" and includes cases which in England would be classed as "retarded" or "dull." In the United States of America the term "moron" is used for the higher grade defectives and the dull, and "feeble-minded" is used in a more comprehensive sense, and is wider than the English term "mental defective." These variations in terminology make statistical comparisons misleading, besides making it difficult to interpret foreign researches in comparison with our own.

The discrepancies arising on this account are not, however, incapable of adjustment, though the degree of allowance to be made for them cannot be precisely calculated. But, from the point of view of any biological enquiry into the causation of mental defect, it is clearly necessary to determine whether we have to deal with one condition manifesting itself with varying degrees of severity, or with a number of conditions, due to different genetic or environmental factors, which exhibit certain characteristics in common. That distinct types of defect exist is, as we have already indicated, beyond doubt. What is less certain is how far the mass of defect which does not exhibit easily recognisable clinical differences consists of one type or of many. On the whole it seems probable there are more types than have yet been definitely identified, but the point we wish to emphasise is that general terms such as "mental defect" and "feeble-mindedness" represent classes or groups of conditions, all of which exhibit one common feature, arrested development of mind. Judged by the degree of intelligence and by behaviour it is true that different types may be said to shade into one another, but the similarity in the end results must not be allowed to obscure the clinical differences and so to suggest common causes for conditions which with more accurate knowledge may be found to be ætiologically distinguishable.

(*c*) The Extent of the Problem

(9) The Mental Deficiency Committee appointed jointly by the Board of Education and the Board of Control, which is commonly known as the Wood Committee, estimated, in their Report issued in the year 1929, that the number of defectives in England and Wales was not less than 300,000. The validity of this estimate has been questioned, and it is clear that any calculation based on an examination of sample areas, however carefully these areas are chosen, is liable to error. But the fact that in areas where ascertainment has been actively carried out, the results approximate to the Wood Committee's estimate, and in five counties and two county boroughs have actually exceeded it, furnishes strong presumptive evidence that the total has not been overestimated. Of this total of 300,000 the Wood Committee concluded that not more than a third would require to be segregated in institutions. The number of institutional beds available still falls very far short of the estimated need. It may, in our opinion, safely be assumed that the number of defectives living in the community is in round figures a quarter of a million.

(10) But this is not the full measure of the problem, and the question arises whether the number is increasing and, if so, whether it is likely to continue to increase. On this point the Wood Committee found it difficult to come to any definite conclusion, and we share their difficulty. Our reference did not require us to investigate this question, but the statistics which have been put before us, while they cannot be regarded as conclusive, leave on our minds an impression that the incidence of mental defect is increasing, though not at any rapid rate. In considering the question of increase, regard must be paid to such considerations as better ascertainment, and improvements in the public health services calculated to keep alive defectives who would otherwise have died at a younger age. Whether or not the incidence of defect, *i.e.*, the proportion of the total births who are, or become, defective, is increasing, it is beyond doubt that the proportion of defectives alive to-day is larger than it was a generation ago. At the same time, grave as the problem is, there is no ground, in our view, for the alarmist views expressed in some quarters that there is wholesale racial deterioration.

CHAPTER II

PRESENT KNOWLEDGE OF THE CAUSATION OF MENTAL DEFECT

(*a*) Preliminary Considerations

(11) Our terms of reference are wide and it was impossible within the time at our disposal to investigate thoroughly all the information available on such extensive issues. It was equally impossible, even if it had been desirable, to discuss within the limits of our report all the researches already made into the causation of mental abnormalities. We therefore decided to restrict our enquiry to those aspects of the problem of causation which, in our opinion, have the most direct bearing upon the question of sterilisation.

(12) Our first task was to consider the evidence as to the relative importance of heredity and environment in the causation of mental disorder and defect. The witnesses who gave evidence were not in agreement as to the method of transmission of mental defect and disorder, but all recognised heredity as an important factor in the causation of these conditions. This conclusion was based upon the data obtained by the study of the family histories of mental patients. In this and other countries there is now a large accumulation of such data. A substantial, if not indeed a high, proportion of the patients in mental hospitals and institutions for the mentally defective have one, two or more relatives who also have suffered from some form of mental disease or defect. If the incidence of mental abnormalities in these families prevailed in all other families of the general community the numbers of mental patients would be considerably larger than the most reliable statistics indicate. This " familial concentration " is the ground upon which psychiatrists base their belief that mental disorder and defect are to a great extent inherited conditions.

(13) The mode of transmission of these conditions is a more contentious subject ; and it must be admitted that it is only in recent years biologists have undertaken seriously to study this problem. Some experts maintain that several forms of mental disease are transmitted in accordance with Mendelian principles. At a later stage we shall cite evidence which goes to prove that certain rare clinical types of mental defect are recessive characters.

Another group of biologists, whilst recognising that the Mendelian theory may explain satisfactorily the transmission of certain specific types of mental disorder or defect, do not think that it can account for the mode of transmission of all forms of these abnormalities. They cite the fact that in the same family divergence

from the normal appears in different forms—insanity, psychoneurosis, mental defect, dulness, epilepsy. It is maintained that whilst the occurrence of these different forms of abnormality in the family points to some hereditary connection, it is probable that the germ change is of some more general and hitherto unrecognised nature, and that the clinical differences may be the result of the action of varying environmental factors upon this germinal peculiarity.

(14) Some of our witnesses, while admitting that familial concentration generally indicates transmission by inheritance, expressed the view that environmental factors alone may in certain cases account for the existence of various abnormal mental conditions in members of the same family, whilst in other cases the environmental factors may accentuate inherited weaknesses. From the stage at which the ovum is fertilised to that at which the individual has reached maturity a multitude of environmental factors operating during the pre-natal, natal, and neo-natal periods, or later during infancy and childhood, may impair development and growth; and one or more of these factors may account completely or partially for the mental abnormality of several members of the same family. These witnesses therefore urged that familial concentration alone should not be regarded as adequate proof that mental disease or defect have been transmitted by inheritance.

(15) We do not feel that we are called upon to examine in detail and decide upon the relative merits of these theories. Much research will be necessary before a conclusive decision can be reached, and it may be possible that in the light of future knowledge prevention will in some cases be effected by a modification of the environment. For our present purpose it is enough to have established that there are many families in which there is an exceptionally high incidence of mental disease and defect, and that in many of these families those conditions are undoubtedly inherited. Abstinence from parenthood is the only immediately practicable method of prevention, whether this be obtained by sterilisation or by any other means, and in assessing the value of this abstinence the extent to which the mental disease is familial is of primary importance. The immediate practical question is the frequency with which children whose birth might be prevented would, if born, have been afflicted with some form of mental disability. The enquiries of the Committee have for this reason been specially directed towards ascertaining the frequency of mental abnormalities on the one hand, and superior ability on the other, in those families in which at least one member is insane or mentally defective.

(16) We have found that investigators of families in which mental defectives occur give widely varying estimates of the incidence of mental abnormalities in these families. In one respect, however, there is considerable agreement. The incidence of abnormal mental

conditions is definitely greater in the families of the higher grade defectives than in the families of the lower grade defectives.

Another finding even more definitely established is that many of the families in which there are mentally defective children, have other members who, though not mentally defective, are persons of low intelligence. Several investigators who have made a personal study of the parents of mentally defective children and estimate the proportion of mentally defective parents to be as low as 5 per cent., state that at least 30 per cent. of the parents are persons of low intelligence. The fact that so many of the parents are borderline cases explains to a great extent the wide variation in the estimates given by various investigators of the proportion of parents who are mentally defective. A slight modification of standard may result in a large increase in the number of persons regarded as mentally defective among these borderline cases. Clinically there is no definite line separating mental defect from dulness ; the one condition merges gradually into the other.

(17) These findings suggest that the milder grades of mental defect may be regarded as simply poor endowment of intelligence. If this be the case the problem of the inheritance of mental defect is part of the larger problem of inheritance of intelligence. A considerable consensus of opinion exists amongst psychologists that intelligence is largely an inherited character. The opinion is based upon extensive studies which have involved the application of mental tests to large numbers of adults and children representative of many races and social groups and subjected to the greatest diversity of environmental conditions. While recognising the limitations of these mental tests as criteria of intelligence, and also that environmental factors such as educational facilities and the standard of nurture in the home determine to some extent the individual's achievement, most investigators are convinced that such tests do afford a reliable measure of those innate capacities which constitute intelligence. With these tests many investigators have accumulated data which present a strong case for the belief that intelligence is an inherited character. Highly gifted parents tend to have highly gifted children, and dull parents tend to have dull children.

Numerous studies based upon clinical examinations of retarded children in elementary schools go far to prove the statement that we have already made that there is no definite line of cleavage between dulness and the highest grade of mental defect. Many feeble-minded children seem to be extreme cases of dulness or of low intelligence. If we accept this view and also that intelligence is largely an inherited character, it naturally follows that feeble-mindedness in many cases where a special genetic factor is not demonstrable is none the less definitely inherited.

(18) In the case of persons whose dulness or poverty of mental endowment is not of such a degree that it can be said to amount to mental deficiency, it may yet prove to be an important antecedent

of mental defect. It has been stated that * " the fashion of speaking of a given factor or gene substitution as causing a given somatic change . . . has largely given way to a realisation that the change, although genetically determined, may be influenced or governed either by the environment in which the substitution is examined or by other elements in the genetic condition." Thus it is possible that a specific form of mental defect may remain latent if the mental endowments are otherwise normal, but become manifest if these endowments are abnormal in other respects also. If this view be adopted, dulness may be regarded as soil favourable to the manifestation of certain specific forms of mental defect ; and we have here one explanation of the high incidence of mental deficiency and mental disease in the " social problem group."

(*b*) Some Previous Enquiries

(19) The earliest and still the most widely known attempt to demonstrate the inheritance of mental defect was the investigation of the famous Kallikak family conducted in the United States by Dr. H. H. Goddard. Judged by modern standards the technique employed was unscientific and the instructions to the field workers so tendentious that it is not surprising that they succeeded in finding what they were told to seek. The criticism made by Dr. Myerson and others of this and similar enquiries has never been answered, and we do not think it necessary to spend time on any analysis of the dismal chronicles of the Kallikaks, the Jukes and the Nams.

(20) More recent enquiries, however, stand upon a different footing. We are particularly impressed by the researches carried out by Dr. Torsten Sjögren, Medical Superintendent of the Mental Hospital at Lillehagen in Sweden, into the aetiology of the two types of amaurotic idiocy, a rare form of low grade defect associated with progressive blindness and paralysis, and into a special type of defect, associated with well marked clinical signs, which he found to exist in an isolated Swedish valley. In this last case the conditions were peculiarly favourable for research, owing partly to the geographical isolation of the area chosen, and partly to the excellence of the local records, which enabled investigation to be pushed further back than is possible in countries such as our own, where trustworthy information about parents is often difficult, and about grandparents generally impossible, to obtain. Sjögren's investigations seem to us to establish that these particular types of defect are inherited, and that amaurotic idiocy of both kinds exhibits the ordinary characteristics of a Mendelian recessive ; or, in other words, it may be transmitted by " carriers " who do not themselves exhibit the defect.

(21) To say that a particular type of idiocy appears to be a simple recessive character does not prove that other types of defect are

* " The Genetical Theory of Natural Selection," by R. A. Fisher.

simple recessives. On the contrary, we find that the weight of the evidence is strongly against most defect being of an uncomplicated recessive type. But if certain types of defect can be shown to be inherited, and the method of their inheritance can be established with some degree of certainty, it is reasonable to assume that these are not the only transmissible types. If particular kinds of defect are transmitted, others may be.

How can this assumption be checked? What evidence is there that defectives come from defective stocks? To begin with we may ask what is known of the parentage of recognised defectives. The evidence indicates that the proportion of defectives now in institutions, one or both of whose parents can be shown to have been defective, is small. Institutional cases, however, form a selected class and the same proportion may not apply to the mass of defectives at large. The estimates given to us cannot in any case be regarded as conclusive, since the ascertainment of defectives is still far from complete, and it may well be the case that some of the parents, who have been recorded as normal, would have been found to be defective if the Mental Deficiency Acts had been in operation at an earlier date. Nevertheless, we find a remarkable consensus of opinion among those who have had long experience of institutional work and of defectives in general that the proportion of defectives with certifiably defective parents is small.

(22) This finding, however, proves little except that had compulsory sterilisation of defectives been in force for a generation, the reduction in the number now requiring institutional accommodation would not have been substantial. It certainly does not disprove the possibility of much defect being inherited. If defect is a recessive quality, the number of persons heterozygous for the character, *i.e.*, carrying a defective gene, would be many times more numerous than the homozygous, *i.e.*, the defectives themselves. Therefore, it is necessary to enquire not only about the parents but also about the grandparents and the siblings. The most important enquiry in England, which is still incomplete, is that now being undertaken by Dr. Penrose and Dr. Douglas Turner for the Medical Research Council and the Darwin Trustees at the Royal Eastern Counties Institution at Colchester. A systematic clinical and psychological examination is being made of all the patients together with a full investigation of their family history with a view to identifying causes of mental defect. Among the first 513 patients examined the number of cases in which the amentia was thought to be due entirely to hereditary causes was 137 or 29 per cent., and the number of cases considered to be due entirely to environmental causes was 47 or 9 per cent. It is necessary to regard the remaining 329 cases or 62 per cent. as suffering from mental deficiency which was conditioned by both heredity and environment in varying degree and manner. The antithesis between heredity and environment is logically convenient, but it is misleading

in so far as it suggests that these two causes are mutually exclusive. There are genetic factors which will produce a given character in any environment in which the subject can live. There are others, possibly more numerous, which will only produce the given character in an environment favourable to its production. Fuller information might enable some of the doubtful cases to be more definitely classified, but however far the enquiry is carried there will always be many cases in which both causes have been operating.

(23) The Colchester enquiry is still in progress, and much work on similar lines has been carried out in Germany, Scandinavia and the United States. As we have pointed out in Chapter I (para. 8), comparison is rendered difficult by the difference in terminology. In the case of several of the German enquiries it is clear that the figures include some subnormal persons who would not be regarded in England as mental defectives. None of these enquiries can by itself be regarded as in any sense conclusive, but the convergence of the results in spite of differences in standards and in methods gives them a cumulative significance. A summary of the principal foreign enquiries will be found in Appendix IX.

(*c*) Examination of Offspring of Defectives

(24) It is possible, however, to approach the problem from another angle. Instead of enquiring into the parentage of defectives we can examine their children. By this method of approach we can discover what are the actual results of the procreation of children by persons recognised as mentally defective. We wish, however, to point out clearly that the picture is a social rather than a biological one and does not pretend to indicate the causative factors involved. An enquiry on these lines is valuable as indicating what is actually happening rather than why it happens.

While this method of enquiry has its own limitations, it seemed to promise a valuable check on the results reached by other methods. So far as we were aware, an enquiry of this kind had never been undertaken on any large scale, and it appeared to us so important that, although we realised it would impose a considerable burden on local authorities, we felt justified in asking them to undertake it. We accordingly issued a circular to all mental deficiency authorities asking them to send us a return of the children of all known defectives in their area, including information not only as to mental condition but also as to physical defects. The enquiry was carried out with care by many authorities, and we are much indebted to them for their co-operation.

(25) The material from different areas showed marked divergences, but this was probably due, in the main, to differences of method. In London the mental age of the children was ascertained, wherever possible, by the recognised intelligence tests. In Somerset the great majority were seen by the Medical Officer of the mental

deficiency committee. In most other areas expert examination of the children was not undertaken, and the investigators had to rely to a large extent on the reports of teachers, voluntary association and other visitors whose experience of mental defect varied widely. These observers are not likely to have overlooked many cases of low grade defect : some of them may well have lacked the experience necessary for the diagnosis of high grade defect. It is probable, therefore, that some cases of high grade defect were overlooked and that the aggregate in some areas has been understated. It is also possible that cases of superior intelligence were missed.

Another source of variation in the material is possibly to be found in the adoption of different standards of defect in the parents for the purposes of this enquiry. The enquiry was not limited to certified mental defectives, but included many who, although ascertained to be mentally defective, were not subject to be dealt with under Section 2 (1) (b) of the Mental Deficiency Act, 1913, as subsequently amended, and some who were known to voluntary associations, but had not been technically "ascertained" by local authorities. It was inevitable that investigators in different areas should adopt different criteria. Some would include the doubtful cases and others would omit them. In the aggregate, these variations probably tend to cancel out, but as between one area and another the results must inevitably reflect differences in the standards adopted by those responsible for directing the enquiry.

Results of the Enquiry

(26) We attach great importance to the results of the enquiry, and a detailed examination of the figures will be found in a Supplementary Chapter at the end of our Report. The total number of cases reported upon was 3,733, the mother being defective in 3,247 cases and the father in 486 cases. The defective mother is more likely to be brought to the notice of the local authority than the defective father. This is specially the case if the children are illegitimate or neglected. These defectives produced 8,841 children, of whom 2,001, or 22·5 per cent., have already died. The percentage of deaths is striking, and this confirms the conclusion drawn from other evidence furnished to us that the mortality among defectives and the offspring of defective stocks is abnormally high. This high rate is doubtless due in some measure to the poor environment in which many defectives live and to their inability to take proper care of their children. But the mortality appears to us too great to be attributable entirely to bad environment and parental inefficiency, and in our view it goes far to confirm the evidence from other sources of a relation between mental defect and inherent poor physique.

In the analysis of the figures, children under seven have been excluded, because mental defect in very young children, except of the lowest grade, cannot be ascertained with any certainty. The significant groups are those between seven and thirteen, and those

over thirteen. The most striking point which emerges from a comparison of these two groups is, that in the latter group, the percentage recognised as definitely defective as compared with the retarded shows a marked increase and the percentage classified as superior shows a decrease.

(27) The distinction between mental defect and retardation cannot always be made with confidence until the later years of adolescence. There is a personal equation involved and a slight difference in the criterion adopted may materially affect the result. But experienced observers will distinguish the mentally normal among school children with a reasonable degree of uniformity. The salient figure, therefore, in our opinion, is the combined total of children classified respectively as defective or retarded. Excluding the cases classified as "unascertained," *i.e.*, about whom no definite information was available, there were 1,802 children between seven and thirteen of whom 305 or 16·9 per cent. were classified as defective and 423 or 23·5 per cent. as retarded. Only 21 or 1·2 per cent. were superior. In the second group, children over thirteen, out of a total of 1,848, the number of defectives was 599, or 32·4 per cent., and of retarded 240, or 13 per cent. Only 10, or ·5 per cent., were superior. The higher proportion of defectives as compared with retarded children in this group suggests that many of the children in the group seven to thirteen who were classed as retarded will later be found to be defective. Taking the two classes together we find that in the first group 40·4 per cent. of the children still living were mentally subnormal, and in the over thirteen group the percentage had risen to 45·4. When it is remembered that 22·5 per cent. of the children had already died and that these percentages apply to the survivors, the figures indicate that here we have a social problem calling urgently for some practical preventive measure.

(28) The enquiry brought out two other points, which are significant, though not unexpected. In the first place the aggregate material from all returns was classified in respect of size and of place in family with a view to ascertaining whether, as has been inferred from other data, first children are more frequently sub-normal than are later children in the same families. It should be noted that these data concern children of defective parents only and in whom the defect is presumably inherited. The data have no special reference to secondary cases. Among children over thirteen there were 201 first children recorded as defective against an expectation of 197·3, on the supposition that the incidence of defect is independent of place in the family. Seventy-five first children were recorded as retarded against an expectation of 86·8, and 385 were recorded as normal against 376·9 expected. The deviations from expectation of 3·7 more defective and 11·8 less retarded are not statistically significant.

A parallel enquiry on the children of seven to thirteen gives 178 first children recorded as defective or retarded against an expectation

of 199·1. This deficiency of 21·1 has a standard error of random sampling of 8·37 and must be judged statistically significant. In view of the fact that this discrepancy is only found in the younger age group, in which classification is certainly to some extent incomplete, it should scarcely be received as demonstrating a truth of medical significance. It is clear, however, that neither section of the data indicates an abnormally high incidence of defect or retardation among the first-born.

(29) The other point which the enquiry brings out is in regard to the fertility of defectives. There is a widespread belief that one of the characteristics common to defectives is abnormal fertility. This is not borne out either by the enquiry or by such other statistics we have been able to collect bearing upon the size of the families of known defectives. Such statistics are not entirely conclusive in the absence of recent data as to the fertility of normal unions, and there is the obvious difficulty that our returns included many women who are now inmates of institutions and are therefore protected from further child bearing, as well as others still living in the community who are young enough to produce more children. It is, of course, recognised that there are erotic defectives, who are in general quite unfit to be left at large. It would be easy, though it would serve no useful purpose, to cite cases of excessive fertility; but we are convinced that these cases are exceptional and prove nothing except the terrible results of leaving at large a type of defective wholly unfitted for community life. Except for a relatively small number of isolated instances, we find that there is no evidence of excessive fertility, and indeed it would be easy to set off against these exceptional cases a much larger number of cases in which the fertility rate was low. The supposed abnormal fertility of defectives is, in our view, largely mythical and results from the accident that from time to time distressing exceptions to the general rule find their way into the Courts and are noticed in the Press. It should be added that there is evidence from Nottingham, Liverpool and London, that the families from which defectives come are larger than the average families in the same locality.

(*d*) The Influence of Environment and its Relation to Heredity

(30) The term "environment" necessarily occurs so often in any discussion of causation that it is important to make clear the sense in which it is used. We use the term in a wide sense to include any adverse conditions of the surroundings which have been noted during the life history of mentally defective individuals at any stage from the fertilisation of the ovum up to the time at which the development of mind is complete. Such adverse conditions occur in a large proportion of cases. Thus, in the Colchester enquiry already mentioned, whilst hereditary factors were found in 91 per cent.

of cases, adverse environmental conditions were found in no less than 71 per cent. of the total number of defectives examined. These adverse conditions of the environment probably act in two ways. They may cause mental defect in the absence of any hereditary predisposition; or they may exert a precipitating or contributory influence when such predisposition is present.

With regard to the former group, the conditions responsible for the majority of cases are injury to the brain during birth, and inflammation of the brain or its membranes after birth. Many of the cases due to injury are accompanied by some form of paralysis and some of them also by epilepsy; but these complications are not invariably present. Most of the cases consequent on encephalitis or meningitis occur in the early months or years of life. These diseases may, however, cause mental arrest at a later age and there are numerous instances in which encephalitis lethargica has produced mental deficiency during the early years of adolescence. Further, there is some evidence that mental defect of the offspring may result from certain serious diseases of the mother during pregnancy. It has also been suggested that there may be other abnormal conditions of the pregnant mother, hitherto unrecognised, which may interfere with brain development to such an extent as to cause mental defect. It has often been said that there was an increased proportion of mental defectives amongst the children born during the later years of the war. We have received some evidence on this point, and, although the figures are not conclusive, they tend to support this statement. What may have been the cause of this increase, assuming that it really occurred, we are unable to say.

(31) Although it is clearly established that a proportion of cases of mental deficiency is due entirely to environmental factors, this proportion is comparatively small. In the Colchester enquiry, 9 per cent. of cases only are regarded as coming within this group. Other data which have been supplied to us place the proportion somewhat higher, and it is likely that differences in the clinical material investigated may account for the varying figures. On the whole it seems probable that between 9 and 20 per cent. of all defectives owe their condition solely to some adverse factors of the environment. The mental defect in these cases is usually due to injury or disease, and there is no evidence that it is transmissible to a subsequent generation.

The group of cases in which morbid hereditary and environmental conditions are both present, is a much larger one. The percentage of cases coming within it is estimated differently by different observers; according to the Colchester enquiry it amounts to 62 per cent. All observers have noticed the existence of this group and it seems probable it is a mixed one. If more complete information were available regarding each case it might be possible to make a more precise evaluation of the parts played respectively by inheritance and by environment. But, however complete the

analysis, it is probably correct to say that a residue of cases would remain in which both these factors are operative and in which the mental deficiency is the unfortunate result of their combination.

(32) In concluding this section there is a particular point which calls for mention, namely, the relationship between mental deficiency and that complex combination of unsatisfactory conditions which constitute what are known as " slum " surroundings. The statement is sometimes made that a slum environment is a potent cause of mental defect and several of our witnesses have adduced evidence to the effect that a considerable proportion of defectives do, in fact, come from such surroundings. Enquiries into the family history of such cases show, however, that in the majority there is evidence of morbid inheritance. Further, our evidence shows that many defectives come from surroundings which are described as good. During the past few decades very great improvements have been effected in housing and general conditions and, if unsatisfactory and unhygienic surroundings were at all prevalent causes of mental defect, it would be reasonable to expect that these improvements would have resulted in a lessened incidence of defect. The conclusion reached by the Wood Committee was that no such diminution had occurred during the past twenty years, but that there had in all probability been an increase. There is an association between slums and mental defect, and it may well be that, where hereditary predisposition is present, slum conditions act as a contributory factor in accentuating the results of this predisposition ; but we have been unable to find any evidence that slum conditions, though plainly disadvantageous in a general way to physical and mental health, are in themselves responsible for causing mental deficiency.

(*e*) General Conclusions on the Causation of Mental Defect

(33) Before proceeding to discuss the rest of our reference it may be convenient to summarise our conclusions as to the causation of mental defect. For the sake of completeness, we have included in this summary our conclusions on various suggestions which have been made to us in the course of our enquiry, but which we have not thought it necessary to discuss at length. Our conclusions may be summarised as follows :—

1. In many cases of mental defect there exists in the family some form of mental abnormality, *i.e.*, insanity, psychoneurosis, epilepsy, defect or dulness. In the majority of such cases there is evidence of heredity but the mode of transmission is at present unknown.

2. In the case of certain rare forms of defect, not only is the fact of hereditary transmission known, but the method of transmission has been demonstrated.

3. It is probable that some mental defect is determined by a combination of genetic and environmental factors.

4. Some mental defect is not inherited, *i.e.*, the defect is acquired after conception as a result of environmental causes. There is no evidence that such defect is transmissible to subsequent generations.

5. Low grade mental defect is more frequently associated than is high grade defect with environmental factors, and it appears to be fairly equally distributed among all classes of society.

6. There is some evidence that conditions operating during the intra-uterine period may produce mental defect, but very little is at present known on this point.

7. High grade mental defect occurs proportionately more frequently in the lowest social stratum than in the rest of the population. In this stratum there appears to be an unduly high incidence of mental defect, insanity, intellectual dulness, epilepsy, as well as tuberculosis and other physical defects. Cause and effect of the conditions found in the social problem group are debatable, but it is possible that selective mating may to a large extent account for this concentration of physical defects and mental defects and disorders. There is evidence that in the poorest districts neighbour marries neighbour, and like marries like.

8. There is no evidence that parental alcoholism is responsible for any appreciable amount of mental defect. Recent research on this matter casts doubt on some of the earlier conclusions based on animal experiments.

9. Our evidence does not indicate any causal connection between tuberculosis and mental defect.

10. Syphilis is responsible for some, though an undetermined amount of, mental defect.

11. It is impossible in the present state of our knowledge about the causation of mental defect to forecast with certainty whether a child of any given union will exhibit mental abnormalities. It can, however, be shown that, whether the cause be bad heredity or adverse environmental conditions, or both, the children of parents one or both of whom are mentally defective are, on the average, below the normal, and our enquiry shows that nearly one-third of such children as survive are likely to be defective, and more than two-fifths must be expected to exhibit some degree of mental abnormality.

CHAPTER III

PRESENT KNOWLEDGE OF CAUSATION OF MENTAL DISORDERS

(*a*) Preliminary Considerations

(34) As we have previously explained, there is an essential difference between *defect* of mind and *disorder* of mind. Mental deficiency is the legal term used to describe a state of arrested or incomplete development of mind of such degree that the individual is in need of care, supervision or control. Mental disorder, on the other hand, is the term used to denote an abnormality in the working, or a disturbance of the functions, of mind. Although the two conditions are thus fundamentally distinct, they are not mutually exclusive. The mind which is incompletely developed may also undergo a disturbance of function, and, as a matter of fact, a considerable number of mental defectives, especially those of milder grade, do at some time or other suffer from supervening mental disorder. In this chapter we are only concerned with mental disorder as it occurs in individuals who are not mentally defective.

(35) In considering the causation of mental disorders we are faced at the outset with several difficulties. In the first place, the term "mental disorder" is exceedingly wide. It refers to no definite entity, but comprehends many different clinical conditions. These conditions, moreover, vary greatly in severity. They range from cases which present a comparatively slight departure from mental health to cases in which the disorder is so grave as to necessitate restriction of the patient's liberty. These latter conditions constitute certifiable unsoundness of mind, or as it is commonly called "insanity."

We have found it impossible in the time at our disposal to consider the causation of all these forms of mental disorder. Since, however, the more severe are, on the whole, of greater social importance, and since the available evidence relates chiefly to them, it is to these more serious forms which constitute legal unsoundness of mind that we have confined our enquiries. It is probable, although not certain, that the causal factors of the milder forms do not greatly differ from those of the group we shall consider.

(36) Even when our enquiries are thus restricted, a further difficulty is experienced. Although "insanity" is an entity from the legal point of view, it is far from being so from the medical, psychological and scientific aspects. Viewed from these latter standpoints the term includes cases differing widely in the symptoms they present and the clinical course they run. This has long been

appreciated, and there is no doubt that these clinical differences are also associated with ætiological differences. It follows that the only satisfactory method of investigating the causation of the graver forms of mental disorder would be to enquire separately into the factors operating in each clinical group. This, however, presupposes a general agreement as to what these groups are, and, unfortunately, no such agreement exists. The classification hitherto in use in England is now under revision. It presents considerable differences from that in use in central Europe, and both of them differ from that used in America. It is clear that until agreement can be reached on this fundamental point of classification, full use cannot be made of foreign statistics, whilst a comparison of these with English figures may tend to give misleading results.

(37) Lastly, in spite of various investigations which have been made in recent years, the available data are still insufficient to enable a final answer to be given to many questions relating to causation. There is great need in this country for systematic and intensive enquiry into all the hereditary and environmental factors which may operate in the production, not of mental disorder in the mass, but of each distinctive clinical type ; and equally great need for checking the results so obtained against a " control " group of the mentally sound.

While we cannot ignore these difficulties and gaps in our knowledge, we must not be understood as implying that no reliable information exists. This is far from the truth. There is a considerable body of evidence, mostly derived from foreign sources, relating to certain particular types of mental disorder. We have also received some evidence relating to the causation of certifiable mental disorders in general. Although these data leave many questions regarding causation unanswered, we are of the opinion that they are sufficient to justify us in arriving at some general conclusions, which are stated at the end of this chapter.

(*b*) Causation of Particular Types of Mental Disorder

(38) With regard to the causation of particular types of mental disorder, we are indebted to Dr. Mapother and Dr. A. J. Lewis for the following summary :—

> " *Manic-depressive psychosis : more generally, the affective types of reaction.* If one limits investigation to the recurrent, indubitable cases of mania and depression, whether alternating or not, the predominant importance of the inherited factor is striking (*Cf.* Jolly, Medow, Jelgersma). This is constantly confirmed in clinical practice. In a large number of cases the part of the environment in leading to the manifestation of the predisposition is subordinate and even insignificant. This is not to deny that even severe recurrent attacks may be precipitated by environmental disturbances. When, however, the

milder, not always recurrent, forms of affective reaction are considered, the influence of the environment appears on the whole to be more considerable in determining the outbreak and duration of the illness, and it is not so common to find a frequent occurrence of indubitable affective disturbances in other members of the family ; there are, however, in such families a great number of persons with syntonic temperament, not necessarily outside the range of the normal but such as is found to be the most common type of premorbid personality in persons who develop affective illness.

There are a number of statistical reports on the occurrence and transmission of these degrees of affective responsiveness, chiefly by Hoffmann and Rüdin. These were concerned in the first instance with the mode of transmission. The predisposition is not found to be a simple dominant or a simple recessive. Secondly, they were concerned with determining how probable it is that the children of a manic-depressive parent will show similar disorder. Hoffmann examined the children of patients with indubitable manic-depressive psychosis : he found that where such patients were married to a healthy person, 31 per cent. of the children on the average showed definite affective disturbance, though in half of these it was not severe enough to call for hospital treatment. Rüdin's conclusion as to the probabilities is higher : he estimates that on the average a third of offspring having one manic-depressive parent will show the same disorder (whereas in the average population, the frequency is only 0·4 per cent.). Another sixth of the children will show milder mood disorders. If both parents have manic-depressive illness, two-thirds of the children will be manic-depressive, and the remaining third will show milder affective disturbances.

Schizophrenia. Of the children of definite schizophrenics 8–10 per cent. will probably themselves be schizophrenic ; 40 per cent. will show schizoid personality ; only about half will be mentally normal. This represents ten times as great an incidence of schizophrenia as may be expected in the offspring of healthy parents taken at random. If both parents are schizophrenic, half the children will be schizophrenic and only a fifth of the children normal ; of the grandchildren of a schizophrenic 2 per cent. will probably show schizophrenia ; of the nephews and nieces 1·4 per cent. If one or both of the parents of the grandchildren or of the nephews and nieces show schizophrenic or schizoid features, then the probability of schizophrenia is still higher among the generation in question. (Rüdin, Luxenburger, Hoffmann, Kahn.) "

(39) To the above we may add the following :—Kraepelin, in his patients at Heidelburg, found evidence of inherited taint in 80 per cent. of cases of manic-depressive psychosis, and in his investigations

of over a thousand cases of dementia præcox found hereditary abnormalities in 53·8 per cent. Sümner, in his investigations into 650 cases of manic-depressive psychosis at Munich, found an inherited taint in 84 per cent. Rüdin, in a series of over 700 cases of dementia præcox found 40 siblings similarly affected and 79 siblings with other psychoses. He also found that between 20 and 25 per cent. of the parents of dementia præcox patients suffered from some form of mental or nervous disorder.

(40) Rüdin maintains that the rare condition "myoclonus epilepsy" is transmitted as a simple recessive. With regard to idiopathic epilepsy he found that when one parent is affected the condition is transmitted to 10 per cent. of the offspring. Huntington's chorea he regards as a simple dominant and states that every patient who is heterozygous for this disease may expect on an average 50 per cent. of the children to be affected.

(41) Very few investigations relating to any considerable number of cases have been made in this country, and there is consequently a dearth of definite data. One of our witnesses, Dr. Menzies, Medical Superintendent of Cheddleton Mental Hospital, made enquiries into the family histories of 3,186 unclassified cases and found inheritance (including mental defect) in 41·6 per cent. of cases. In spite of the paucity of statistics, it would appear to be the general opinion of psychiatrists of experience that, whilst an attack of mental disorder is often the resultant of many factors, the chief and most important single factor is an inherited predisposition.

(42) It is, of course, desirable (as in the case of the mentally defective) that the figures we have quoted relating to the extent to which psychopathic inheritance occurs, should be compared with others regarding the mentally sound. Some investigations made by Koller in 1894, and by Diem in 1905, suggest that the difference may be less than is often assumed; although, with regard to direct inheritance, it was found that while one-third of the non-psychotics had parents who were in some way abnormal, this was so of nearly two-thirds of the psychotics. On the whole we do not consider that the data at present available are sufficiently complete or extensive to admit of any precise comparison of this kind. We can only say that the general trend of our evidence is to the effect that, although instances of mental disorder may be found in the family histories of many persons who are themselves mentally healthy, there is a greater concentration of mental abnormality in the families of the mass of mentally disordered persons.

(43) In a proportion of cases the mental disorder present in the patient is of the same clinical type as that in the antecedents, and this suggests the possibility of some specific form of inheritance. According to the foreign statistics this is especially so with manic-depressive psychosis and schizophrenia. In regard to this, however, it must be remembered that on the Continent these terms have a

much wider connotation than is usual in this country. It may, of course, be largely a matter of definition; but in England the general experience would seem to be that while some cases do show this handing on of a particular clinical type of mental disorder, in a large number the familial mental abnormality is of a different clinical type. What would appear to be inherited in these instances may then consist of some more general peculiarity of the germinal constitution which manifests itself, both in the antecedents and in the collaterals, in different clinical forms, such as varying types of psychoneurosis and psychosis, mental defect and epilepsy. Dr. Myerson, whilst drawing attention to a specific form of inheritance in certain clinical types, also mentions these variations and remarks that in many instances, although by no means all, there is a tendency for the mental disorder to appear in succeeding generations as dementia præcox and imbecility.

With regard to the mode of transmission, beyond the fact that several of our witnesses state that inheritance is more often through the maternal than paternal side, the available data do not enable us to arrive at any conclusion. There is at present no evidence of the transmission of mental disorders in Mendelian ratios with the exception of Huntington's chorea and possibly myoclonus epilepsy referred to in paragraph (40).

(44) While our evidence is thus to the effect that inheritance is the commonest single cause of mental disorder in general, it is necessary to emphasize the fact that environmental factors also play a part, and in many cases a very important part, in causation. It is unnecessary to enumerate these factors in detail. They come under the general headings of social, psychological, chemical, toxic and bacterial. In some instances adverse factors of this kind appear to be the sole, or at all events the chief, cause of the mental disorder or disease. Examples of this are the confusional psychoses which result from toxaemia; dementia consequent on cerebral arteriosclerosis, and general paralysis resulting from syphilis. With regard to the latter, however, it must be noted that by no means all syphilitics develop general paralysis, and that there is evidence that a proportion of general paralytics come of psychopathic stocks. In other instances, and probably the majority, environmental factors play a contributory rôle in that they precipitate a disorder of mind in an individual who has an inherited or acquired predisposition.

(45) Although the information available is insufficient to enable us to state with any precision what is the influence exerted by inheritance and environment respectively in the causation of mental disorders, the trend of the evidence we have received is to the effect that in a considerable proportion, probably the majority, of cases, there is an inherited predisposition, and that were it not for this predisposition, exciting factors would have comparatively little effect. We are unable to offer any opinion as to the actual nature of this predisposition. In some instances it would appear to be of a

specific character, in other instances to be not specific. We are also unable to say what are the modes of inheritance and transmission. But we find ourselves compelled to the conclusion that in a large proportion of cases of mental disorder the prime ætiological factor is some inherited peculiarity, and that this peculiarity shows a strong tendency to be transmitted. If such transmission could be prevented, it is reasonable to assume that some diminution in the incidence of mental disorder would result. Persons suffering from the psychoneuroses, or milder forms of mental disorder, are not, for the most part, under any restriction, and propagation by those who are insane is only restricted for such time as they are under care in a mental hospital. We have evidence that a considerable number of patients who have suffered from recurrent attacks of mental disorder necessitating detention in mental hospitals produce children during their periods of discharge from care.

(46) In view of the facts that there are so many different clinical forms of mental disorder, and that these forms probably differ widely in their causation and transmissibility, we are of the opinion that there is no justification for restricting propagation by all persons suffering from mental disorder. In some cases the disorder is due to inheritance and is transmissible ; in others morbid inheritance is slight or absent. In some cases the mental condition of the patient is such as inevitably to create an environment inimical to the satisfactory upbringing of a family ; in others this is not so. These varying conditions cannot be met by any indiscriminate measure. While we have no hesitation in saying that there are certain sufferers from mental disorder who ought not to have children, we are of the opinion that the decision as to who these particular persons are is one which can only be made after a careful investigation of the family and personal history of each individual case.

(*c*) General Conclusions on the Causation of Mental Disorders

(47) Our conclusions may be summarised as follows :—

(1) Heredity plays a large part in the causation of mental disorders, though except in the case of Huntington's chorea and myoclonus epilepsy, which are both rare types, there is no conclusive evidence that the transmission follows Mendelian ratios.

(2) In many mental disorders other than Huntington's chorea and myoclonus epilepsy the part played by heredity varies widely between different types.

(3) Manic-depressive insanity and schizophrenia appear to show a markedly higher familial incidence than other types of mental disorder which are of frequent occurrence.

(4) While psychopathic parents tend to have psychopathic children, the view that familial mental instability is usually progressive and tends to become more severe in each succeeding

generation is not established. The familial incidence in such cases is not necessarily entirely genetic in origin, since the environmental conditions in which children of psychopathic parents are brought up may tend to aggravate any inherited instability.

(5) Familial mental disorder is not necessarily transmitted in the same form, and in many cases what appears to be transmitted is not a specific character but a generalised predisposition.

(6) Where such a predisposition exists the immediate or exciting cause of the breakdown may be of an apparently trivial nature.

(7) In a proportion of cases of mental disorder an environmental factor, such as a toxic condition, syphilis or arteriosclerosis, is the immediate cause and often the only discoverable cause. In some of these cases there is evidence that these environmental factors are associated with an inherited predisposition.

(8) There is little evidence that alcoholism is a frequent cause of mental disorder, and in many cases which at present are classed as alcoholic the alcoholism appears to be a symptom of mental abnormality rather than its cause.

CHAPTER IV

RESULTS OF STERILISATION

(*a*) Physiological and Psychological Results

(48) Our terms of reference specifically require us to report on the physical and psychological results of sterilisation, and the point is important, because it has often been suggested that the operation may be followed by physical or mental deterioration. It is generally agreed that any surgical procedure, such as ovariotomy, which interferes with the internal secretion of the sexual glands tends to produce injurious results. But vasectomy and salpingectomy when performed upon adults do not affect the glandular secretions, and we cannot find evidence that in the case either of normal persons or defectives any harmful results, whether physiological or psychological, ensue. Sex life is not affected, and there is no diminution in either potency or desire. One witness contended on *a priori* grounds that some physical deterioration must inevitably follow vasectomy, but this was denied by witnesses who appeared on behalf of the Royal College of Surgeons, nor is this contention borne out by American experience.

(49) While we see no reason to apprehend any injurious consequences to normal persons or mental defectives, the position in regard to persons who suffer, or have suffered, from any mental disorder is more difficult. There is evidence that some, though by no means all, forms of mental disorder may be aggravated by any operation, particularly by one which has the effect of sterilising the patient. It is true that most of this evidence related to operations upon persons suffering from morbid bodily conditions, and it is impossible in such cases to determine how far the sequelæ are attributable to the morbid conditions necessitating the operation and how far they are attributable to the operation itself.

(50) There is evidence that mental injury might sometimes result from a sterilising operation, as for instance in the case of childless women; but on the other hand several witnesses, with wide experience of mental disease in all its stages, stated that the dread of having children to whom mental disease may be transmitted and of being unable to support or look after them, is often a disturbing psychological factor in mental illness. To the great majority of such patients sterilisation and the knowledge that marital relations could be resumed without danger of offspring, would certainly result in relief. One witness referred in particular to the manic-depressive group, in which there are special dangers owing both to the liability of transmission and to the sexual abnormalities apparent during

the early stages of the attacks. Contraceptive methods are not likely to be effective; on the other hand sterilisation would in all probability be welcomed by the patient when mentally normal, as a means of avoiding further parental responsibility and, in the female, the risk of a relapse during further pregnancy. Another witness stressed the possible failure of contraception owing to carelessness or to a sudden change of mood, and expressed the view that sterilisation might be beneficial to persons who at present refrain altogether from marriage through dread of transmitting defects to their offspring.

(51) We accept the view, therefore, that the psychological advantages of voluntary sterilisation to patients suffering from mental illness would outweigh any injurious results. But since in some mental states a sterilising operation may be contra-indicated, we consider that, in the case of persons suffering from any form of mental disorder, sterilisation should not be allowed without a recommendation from a competent psychiatrist, who should be required to examine the patient and to certify that, in his opinion, no injurious results would be likely to follow.

(52) The question of possible injurious results of sterilisation appeared to us to be so important that we caused a questionnaire to be addressed to all the teaching hospitals. A summary of the replies will be found in Appendix VII, but in our conclusions we have been guided mainly by the witnesses whom we had the opportunity to examine ourselves.

(*b*) Social Results

(53) We have also considered, as our reference requires, the effect on society of sanctioning sterilisation. It is unfortunate that many of the advocates of sterilisation in the past have supported it in the belief that it will serve as a substitute for the provision of institutional accommodation. This belief we are convinced is illusory. In reply to the question how many patients now in institutions could safely be released if they were sterilised, experienced superintendents gave estimates ranging from three to five per cent.; nor is the smallness of these proportions surprising. Hitherto most mental defectives have been sent to institutions chiefly because they are too helpless or too unstable or anti-social in their behaviour to make it safe to leave them at large. The helpless may improve to some small extent, but most of them need permanent care. The unstable improve with training and discipline, and some become so far stabilised that they return to community life. But sterilisation will not stabilise them. It does nothing to improve the mental condition and it does not lessen sexual activity. The unstable and anti-social defective remains unstable and anti-social. The thief remains a thief. The erotic girl or youth will still need institutional care. The impossibility of procreation will not save them from being a social

menace. Sterilisation will not in our opinion reduce to any appreciable extent the present wide disparity between the number of institutional beds available and the best estimate of the number needed. We would go further and say that until sufficient institutional accommodation is provided and ascertainment and community care are better organised, proper use cannot be made of sterilisation as a supplementary measure of care for the mentally defective and the protection of the community.

(54) It does not, however, follow that because a particular ground for advocating sterilisation is illusory, sterilisation has no social value. As was to be expected witnesses expressed different opinions on the complicated issues involved, but in one respect they were practically unanimous. With one exception they agreed as to the disastrous social and economic results of ignoring defect and allowing defectives to undertake the ordinary responsibilities of citizenship. Defectives make inefficient parents ; if only for social reasons they should not have children. The more controversial and complex question that follows is whether, in view of other incidental social results, sterilisation is a practicable and justifiable method of preventing parenthood.

As regards defectives in institutions, in our view the question of their sterilisation only arises when they are considered to be fit for discharge to some form of care in the community. So long as they remain in institutions they are virtually sterilised, and we cannot accept what appears to be the view of some American experts that the sterilisation of institutional patients is justified by the greater measure of freedom within the bounds of the institution which can then be allowed.

(55) In view of the small numbers suitable for discharge and of the care that licence in any case demands, it has been argued that sterilisation is unnecessary and may lead to reduced care in recommending discharge or licence. These objections, we think, lose their force if all idea of compulsion is set aside and a wider view is taken of the whole question. In the first place we would point out that owing to the shortage of beds in colonies only the most pressing cases can now be admitted, many of which are the least hopeful types. They are sent to an institution for some reason of urgency, often after the habit forming period is over. The great majority will need institutional care and control all their lives. But as this shortage of beds is overcome, it is probable that younger defectives will be admitted, for a period of training only, at an age when they are more susceptible to socialising influences. Thus the number of well trained and stabilised feeble-minded men and women leaving institutions for community care is likely to increase in the coming years. Many of them will not need permanent and costly institutional care if proper safeguards can be ensured outside.

We would also point out that we have had before us many instances of marriage and illegitimate propagation amongst patients

discharged from institutions where insufficient discrimination is exercised and where no satisfactory facilities exist for after care. The limitations of supervision as a preventive measure were pointed out to us by Miss Fox, the Honorary Secretary of the Central Association for Mental Welfare, who emphasized the difficulty of supervising effectually high-grade defectives living in the community. Although the limitations of supervision remain the same whether a defective is sterilised or not, sterilisation would at least obviate the risk of procreation.

(56) So far we have been considering the case of defectives about to leave institutions ; but it is doubtful whether institutional beds will ever be provided or, if efficient community care is organised, will ever be needed, for more than a third of the total defective population. Approximately two-thirds of all defectives are capable of community life. At present the number living in the community is nearer to five-sixths of the total, a large proportion of whom are still officially unascertained as defectives. If there is a case for sterilisation, a question which we discuss in a later chapter, it is clearly on numerical grounds more important in relation to the large number of defectives living in the community than in relation to the limited number who are from time to time sent out from institutions.

(57) We have had evidence to show that whereas the marriage rate of defectives is lower than that of the normal population, the illegitimate birth-rate is considerably higher. Figures quoted by Dr. Fox, Assistant Medical Officer to the Kent County Council, showed that amongst 100 male and 82 female ex-special school children aged from 20 to 25, three males were married as against the expectation of 15 to 20 in the normal population, and 10 females as against the expectation of at least 25. Born of the 82 women, however, there were 11 illegitimate children, which greatly exceeds the expectation. The enquiry made by the Committee, the results of which are given on p. 16, shows that out of 3,247 mentally defective women known to local authorities to have had children, 66 per cent. were unmarried.

(58) In considering the position of individual defectives living in the community, we have been impressed by the hardships involved in preventing marriage in the case of a feeble-minded man or woman living in almost normal surroundings under guardianship or on licence. Defectives of this type are not, as a rule, oversexed, but knowledge of the disastrous results of marriage has forced local authorities into preventing what are natural desires and ideals. We have questioned many of our witnesses as to the desirability of allowing sterilised defectives to marry, and experience goes to show that a few defectives, who have been stabilised by a sufficient period of training, may be able to run a household with a fair measure of success until they are faced with the added strain involved by the care and upbringing of children. We think that the marriage of a

sterilised defective would be less likely to fail and, in the event of failure, the result would be less disastrous and far-reaching if uncomplicated by children.

(59) It has been suggested to us by some witnesses that there is a danger that the sterilisation of defectives, particularly of the younger mentally defective women, may result in increased promiscuity and consequently in the spreading of venereal diseases. We have been at great pains to endeavour to ascertain whether, in those American States in which sterilisation has mainly been practised, there is any evidence that any such consequences have ensued. So far as we have been able to ascertain there is no evidence that this has happened, but the fact that no untoward results appear to have followed so far from sterilisation is, in itself, no proof that the apprehensions to which we have referred are ill-founded. It has been urged by some witnesses that in dealing with the class in respect of which the danger is likely to be greatest, fear of pregnancy does not operate as a deterrent. Whether this be true or not, it does not follow that the danger of promiscuity is imaginary, and we desire to record with all possible emphasis that the discharge of sterilised defectives, particularly of women, may have most unfortunate social results, unless the greatest care is taken to ensure that they receive the constant and vigilant supervision which their mental condition requires. It would be in the highest degree unwise, indeed it might be disastrous, to assume that sterilisation will in any way lessen, still less that it will obviate, the need for supervision and after-care.

CHAPTER V

DOMINION AND FOREIGN LEGISLATION

(60) A memorandum on existing and proposed legislative measures in other countries permitting sterilisation, will be found in Appendix VIII. This is based on information for which we are indebted to the Foreign and Dominions Offices. It will be seen that sterilisation laws are now numerous, but many of them have been in operation for such comparatively short periods that there has been little time in which to gain experience of their working. We understand that the Danish law, though we deprecate its penal character, has been found satisfactory in practice. Only 21 operations have been performed under the law in force in the Canton Vaud of Switzerland, but no difficulty in application appears to have arisen. In Zurich, the existing law permitting therapeutic sterilisation is interpreted liberally and many operations are performed for reasons which we should regard as eugenic rather than therapeutic. The law now in operation in the State of Alberta is being copied in British Columbia. The results in Alberta are stated to be satisfactory.

(61) Germany recently made a law of a comprehensive character intended to prevent the transmission of hereditary disorders both physical and mental. It permits the voluntary sterilisation and also provides in certain circumstances for the compulsory sterilisation of persons suffering from congenital mental deficiency, schizophrenia, manic-depressive insanity, hereditary epilepsy, blindness or deafness and other heritable conditions. It is interesting to note that this measure provides for the appointment of a special tribunal consisting of a legal president and two medical members one of whom is to be " specially competent in cases of hereditary disease." This is a novel provision, and so far as we know, without precedent in other sterilisation laws. The medical members of the court are not mere assessors and, as the decision is given by a majority vote, the doctors can if they are in agreement outvote their legal colleague. There is a right of appeal against an order for sterilisation, but the appeal tribunal is similar in composition with a legal president and two medical members. The law came into operation on the 1st January, 1934 ; but no information as to the proposed method of its administration is yet available. Other countries in Europe are contemplating legislation, and there can be no doubt that the movement in favour of sterilisation is gaining ground. The Latin countries are an exception to this general statement.

(62) In the United States, 27 States now have sterilisation laws in operation. Little use has been made of some of these and others

are of very recent date. We have been unable to obtain any sufficient explanation of the failure to enforce sterilisation laws in a number of States, except for flaws in drafting and the fear that these laws might be held to be invalid prior to the Supreme Court's decision in the case of Buck *v.* Bell, a decision the effect of which was to determine the main provisions necessary to bring a sterilisation law into conformity with the constitution of the United States. In certain cases laws appear to have been enacted without any money being provided to work them. But the real explanation is probably that the enthusiasm of small groups secured the passage of legislation for which there was no general demand and no sufficient backing of public opinion. The success of sterilisation, if success is measured by the number of operations, in California and elsewhere only serves to show that sterilisation laws will only succeed when public opinion is enlisted to support them.

(63) In addition to the 27 States which now have sterilisation laws there are three others, New York, New Jersey and Nevada in which similar laws have ceased to be operative. As the sterilisation law in Oklahoma has not yet come into operation, there are thus only 26 States in which these laws are being administered. Up to the 1st January, 1933, there had been sterilised under the provisions of these laws a total of 16,066 persons, of whom 6,999 were males and 9,067 females. With the exception of about 300 cases all the patients were in institutions at the time of their sterilisation, though some had entered the institutions for this purpose. We have not been able to obtain any explanation of the preponderance of females over males.

The only States in which sterilisation laws have been in operation on a sufficient scale and for a sufficient time to enable any judgment to be passed on their results are California, Kansas, Michigan, Minnesota, Oregon and Virginia. Up to the latest period for which figures are available out of 16,066 sterilisations performed in all the States which have passed sterilisation laws no less than 8,504 or 53 per cent. had been performed in California.

(64) The first sterilisation law in California was passed in 1909. Since then various amending Acts have been passed and California has continued to be the protagonist in the sterilisation campaign. It is not easy to appraise the results, since most of the information comes from sources which cannot be regarded as impartial, and we regret that no entirely independent review of the results has been attempted. This was all the more desirable as the "follow up" of discharged cases has not been either comprehensive or thorough. A noticeable feature of the Californian, and indeed of other American statistics, is that the great majority of persons sterilised were mental hospital patients and only about a fifth were mental defectives.

(65) Making due allowance for the inevitable bias of enthusiasts, and checking the results as far as possible from other sources, we find no evidence that the results of sterilisation in California have

not on the whole been good. We say " on the whole " because there is one feature which we cannot but regard as profoundly unsatisfactory. A test enquiry carried out in 1927 showed that of the sterilised insane 47 per cent. of the men and 29 per cent. of the women were still in institutional care ; the corresponding figures in the case of defectives were 34 per cent. of the men and 28 per cent. of the women. This suggests that the choice of defectives to be sterilised was not determined by their fitness for community care. In our view there is no justification for sterilising defectives who are unfit for community life, and we think that the greatest care ought to be taken to test the patient's condition in this respect before sterilisation is sanctioned. It is clear that in California adequate effort was not made to test this, and it was frankly admitted that in the early days of sterilisation many " experimental " operations were performed in the hope that the patient's mental condition would be benefited. But apart from the large number of useless operations there is no evidence that sterilisation in California has produced any of the bad results which its opponents had predicted. It is, however, significant to find that the parole rate in Californian institutions is equalled by the parole rate in a large mental deficiency colony in a State which has no sterilisation law. This confirms the view which we have expressed elsewhere in the Report that the number of patients now in institutions who could be discharged or released on licence if they could be sterilised is small. American experience certainly does not support the view that sterilisation can ever be a substitute for the provision of institutional beds. At the same time we wish to emphasise the point that while the experience of other countries is mainly negative, we have failed to find any evidence unfavourable to sterilisation, provided that proper care is exercised in the administration of the law.

CHAPTER VI

RECOMMENDATIONS

(*a*) General Conclusions and Recommendations as to Sterilisation

(66) Having completed our survey of the facts, so far as we could ascertain them in the limited time available, we come now to the crux of the whole problem ; and we have to ask ourselves whether the present state of knowledge and the experience of other countries warrant us in recommending sterilisation either on a compulsory or a voluntary basis. We propose to consider compulsion first, for the obvious reason that if the case for compulsion can be made out, there is no need to discuss the less drastic alternative. We assume that the Legislature would not feel justified in compelling any persons to submit to sterilisation, unless it could be shown beyond reasonable doubt that some at least of their offspring would either be mentally defective or would develop mental disorder. In the present state of knowledge no such proof can be produced. While the results of our enquiry and the other statistics we have collected may justify some prediction as to the average results in a large group of cases, it would be hazardous to attempt to forecast the genetic results of any particular union ; much less is it possible to say about any individual, without regard to the other partner, that he or she is so constituted that some of the offspring must inevitably be mentally abnormal. The more closely individual records are examined the more difficult it becomes to fix on one cause to the exclusion of others, or to say with certainty that the genetic endowment of any individual is such that it must produce a given result. About the social results it is possible to be more certain, since it is beyond question that the vast majority of defectives are temperamentally and socially unfitted for parenthood. But we interpret our reference as asking us to say whether there is on scientific grounds an unassailable case for compulsory sterilisation. To this question there can, in our considered judgment, be only one answer. If the test is to be the certainty with which the result of procreation can be predicted in individual cases, the case for compulsion cannot be established.

The Objections to Compulsion

(67) Even if on other grounds the case for compulsory sterilisation was stronger than we have found it to be, we should doubt the wisdom of compulsion as a practicable measure. It is significant that sterilisation in the United States of America has been most practised in the States in which it has been administered on a voluntary basis and no operations have been performed without the patients'

consent. Experience indicates that compulsory measures cannot be enforced, or that they become comparatively ineffective, without the support of public opinion. If public opinion is favourable compulsion is unnecessary ; if public opinion is indifferent compulsion tends to convert indifference into hostility. As one witness put it, " compulsion defeats itself."

(68) But this objection is far from being the only argument against compulsion. Witnesses of great experience stressed the point that any association in the popular mind between mental deficiency institutions and compulsory sterilisation would make parents less willing to let their children be admitted, and would definitely add to the difficulties of ascertainment. This we feel to be a real danger. Any measure which results in " driving defect underground " will gravely impede the administration of the Mental Deficiency Acts. Similarly some superintendents of mental hospitals urged that much harm would be done by creating the impression that sterilisation might be made a condition of discharge from a mental hospital. Such an impression would, in their view, which we share, have the effect of deterring early and hopeful cases from seeking treatment on a voluntary basis. A superintendent who has won the confidence of his patient might successfully recommend sterilisation. Indeed, he is sometimes asked now if he can arrange for it ; but the least hint of compulsion would cause the matter to be viewed in a wholly different light. For all these reasons we are convinced that the harm done by compulsion would far outweigh any possible advantage resulting from it.

(69) Although for the reasons already given we regard the objections to a general policy of compulsion as conclusive, these considerations would not necessarily exclude the use of compulsion in exceptional cases, such as some of those disclosed in the memorandum by the National Society for the Prevention of Cruelty to Children. But it is proverbial that hard cases make bad law, and exceptional cases by their very nature elude definition. We do not believe it would be practicable to define the categories to which compulsory sterilisation would be applicable so as to limit its use to exceptional cases only. Moreover, sterilisation is at best only a partial remedy for the harm done by such defectives and their anti-social tendencies would be more effectively controlled by segregation.

Voluntary Sterilisation

(70) Admitting that the case for compulsion fails, we have next to consider whether there is a case for legalising voluntary sterilisation. Once the element of compulsion is ruled out and the question is examined on a voluntary basis it is clear that very different considerations apply. It is outside our reference to discuss religious objections to sterilisation, but it is permissible to point out that the difficulty of the conscientious objector largely disappears the

moment all idea of compulsion is abandoned. The law has long recognised that a man ought not to be compelled to submit to something which he conscientiously believes to be wrong ; but the law has never recognised the right of the individual to impose his scruples upon others who do not share his views. The present state of the law, which goes back to the old prohibition of " mayhem " or maiming, probably had its origin in military needs. There were obvious military objections to allowing a man to do or to undergo anything which disabled him from begetting sons. It has been suggested that apart from any objection on religious grounds there is no valid reason for prohibiting sterilisation and that the present prohibition is merely a historical survival, for which there is no longer any real justification. Some witnesses have argued that sterilisation is in effect merely a permanent method of contraception and that it is illogical to permit the sale of contraceptives and at the same time to prohibit what is described as a surgical substitute for them. This is a view which we cannot accept. At present sterilisation is usually held to be irreparable, though instances of successful reversal operations are known. It is a serious matter and to seek to minimise its gravity is merely to evade the real issue. People have often to be protected against themselves, and we cannot agree that an operation which is irreparable ought ever to be permitted without strong grounds and without the fullest safeguards against abuse.

(71) Recognising, as we do, the gravity of the issue involved, we come now to the question whether there are adequate grounds for sanctioning sterilisation in the case of defectives and the mentally disordered. We think there are. Though there may be no certain prognosis in any particular case, we know enough to be sure that inheritance plays an important part in the causation of mental defects and disorders. We know also that mentally defective and mentally disordered parents are, as a class, unable to discharge their social and economic liabilities or create an environment favourable to the upbringing of children, and there is reason to believe that sterilisation would in some cases be welcomed by the patients themselves. This knowledge is in our view sufficient, and more than sufficient, to justify allowing and even encouraging mentally defective and mentally disordered patients to adopt the only certain method of preventing procreation. In this view, as in all our recommendations, we are unanimous, and we record it with a full sense of our responsibility. We believe that few who approached the question with an open mind and listened week by week to the evidence we have heard could have failed to be struck by the overwhelming preponderance of evidence in favour of some measure of sterilisation. Among sixty witnesses representing many different points of view there may be, as the evidence showed, much difference of opinion as to the results which would be attained by sterilisation and its usefulness as a measure of social hygiene ; but it is a striking fact

that out of this large number, including psychiatrists, biologists, leaders of the medical profession, representatives of local authorities and social workers, only three witnesses were definitely opposed to it in principle.

Restriction to Mental Cases Undesirable

(72) But we would go further. At the risk of going beyond our reference we would point out that the considerations which lead us to this conclusion apply with at least equal force to grave physical disabilities, such as certain forms of blindness, deaf-mutism, hæmophilia and brachydactyly, which have been shown to be transmissible. The case for legalising sterilisation rests upon the broad principle that no person, unless conscience bids, ought to be forced to choose between the alternative of complete abstinence from sexual activity or of risking bringing into the world children whose disabilities will make them a burden to themselves and society. If this principle is sound, to limit legislation to a particular class is neither logical nor equitable. We feel strongly that to impose any such arbitrary limitation will go far to defeat the object of the measure we advocate. Any measure which limits sterilisation to mental cases will carry with it a stigma, much as certification does now. It would give a quasi-penal character to a measure which in our view is properly to be regarded as an act of social justice, as a right to do something which is in the interest of society and not merely of the individual. Anything which gives to a voluntary action a penal character is clearly bound to act as a deterrent. So strongly do we realise this that we should feel unable to recommend any sterilisation scheme limited in this way. It is not for us to discuss how transmissible physical defect should be defined for this purpose, but we are unanimous in the conviction that it is both anti-social and inequitable that persons who have good reason to fear that they may transmit to their offspring grave physical disabilities should be left without any remedy except the harassing uncertainty of contraceptive devices. That the right to sterilisation should be carefully safeguarded we readily admit, and the nature of the safeguards desirable is discussed in a later portion of the Report. Recognition of the need for carefully studied safeguards does not lessen our strong conviction that sterilisation ought to be regarded as a right and not as a punishment.

The Problem of the Carrier

(73) In principle we are agreed that those who are likely to transmit mental disorder or defect have the same right to sterilisation as those who are likely to transmit grave physical defect. But the application of this principle to mental abnormalities presents peculiar difficulties. The transmissible physical defects which are

sufficiently grave in character to justify sterilisation are easily identifiable. Further, in the case of disabilities such as hæmophilia, hereditary blindness or deaf-mutism, not only is the fact of inheritance known, but the mode of transmission is also known. In many cases of mental defect and mental disorder this is not so, and even where there is no reason to doubt that the condition is due to inheritance, it is often impossible, in the present state of our knowledge, to say what is the mode of transmission. The question is of great importance, because in a considerable proportion of cases of mental disorder and defect the transmission is not direct from parent to child, but is indirect; that is, through " carriers " who do not themselves manifest the particular abnormality. While the ratio of such carriers to affected persons is not exactly calculable, we shall probably not be far wrong in estimating carriers as at least ten times more numerous than are affected persons. Even if a considerably smaller ratio is assumed, it is clear that the carrier is the crux of the problem. Unfortunately, in the present state of knowledge, these carriers cannot often be identified with certainty. In some cases the family history may create a strong presumption, but in other cases the evidence may be too incomplete or inconclusive to justify a definite finding, though we believe that this uncertainty will be lessened if the researches suggested in Chapter VII are carried out.

(74) We recommend that the right to sterilisation should be extended to all persons whose family history gives reasonable ground for believing that they may transmit mental disorder or defect. In case it is thought that the application of this principle in its entirety would be administratively impracticable and would impose too great a burden upon the advisory committee proposed in paragraph 82, we suggest a stricter criterion, e.g., the birth to such parents of a defective child. In such a case we recommend that either parent should have the right to be sterilised if he or she so wishes.

We believe that few parents with any sense of responsibility who had had a defective child would not wish to examine the possibility that they were the victims of a hereditary weakness; and we feel strongly that they are entitled, if they wish it, to the protection of sterilisation.

(75) We attach special importance to this recommendation because of its value in relation to the social problem group. There is abundant evidence that this group contributes much more than its numerical proportion to the total volume of defect, and an equal or even larger proportion of children of low intelligence. This is not surprising, since the economic inefficiency of the defective tends to depress him to the lowest economic level. Defectives drift to the slums. Like marries like, and not only is the incidence of defect greater in this group, but the proportion of carriers is

correspondingly greater. This means that the chances of two carriers mating is many times greater than it is in any other section of the population. It would be idle to expect of this group, most of whom are of subnormal mentality, a proper sense of social responsibility. But we believe that many of them would be glad to be relieved of the dread of repeated pregnancies and to escape the recurring burden of parenthood, for which they are so manifestly unfitted.

Objections to Voluntary Sterilisation

(76) Two main objections have been put forward to a scheme for voluntary sterilisation. On the one hand, it is argued that if it is really voluntary, the necessary consent will not be obtained; on the other hand, it is argued that defectives are so suggestible that they will be too readily persuaded and that their consent is really meaningless, since they are incapable of understanding to what they are asked to consent. In our opinion, whilst both objections contain an element of truth, neither is really valid. Many defectives are suggestible, a quality which is by no means confined to defectives, and they will accept the advice of those whom they have learnt to trust. Though they may be incapable of appreciating the sociological implications of sterilisation it by no means follows that, from their own point of view, they are incapable of understanding what it means and of making a rational choice. To a large extent this must depend upon the attitude and explanation given by those around them, and this again we believe to be true of other persons in the community besides defectives. Witnesses in immediate contact with defectives stated that the question was much discussed by the higher grade patients and requests are sometimes made by them for sterilisation. It is true that these requests have been inspired by a desire for discharge and in some cases for marriage. We are convinced that the higher grade patients are capable of understanding what they are asking for, and the contention that consent is meaningless is not borne out by actual contact with patients. It is true of some, particularly of the medium grade, that the validity of their consent would be open to question. But the essence of a voluntary system is that those who object should be free to do so. What matters is that there should be no compulsion. So long as there is no unfair pressure and no patient is forced or bribed to consent, it seems to us mere casuistry to discuss how far the patient fully appreciates all the implications of consent.

(77) The converse objection that no one will consent appears to us to have equally little force. Voluntary sterilisation has not failed in other countries and we see no reason why it should fail here. Indeed, as we have already pointed out, the laws administered on a voluntary basis have proved far more successful than the compulsory.

It is true that at first there may be refusals in cases in which sterilisation is obviously desirable. But we see no reason to anticipate that these refusals will be nearly as numerous as the cases in which judicial authorities would find some reason for not enforcing a compulsory measure. We are anxious that no pressure should be brought to bear on the patient, and we are convinced that anything in the nature of veiled coercion will do nothing but harm.

(78) A third objection to sterilisation measures is that they are aimed at the poorer classes and that the well-to-do are not touched at all. As a criticism of a compulsory measure this is to a large extent true, since experience shows that in practice compulsion is applied mainly to institutional patients. Indeed some of the American compulsory laws have been held to be invalid on this very ground that they discriminated against a particular class. This objection does not apply to a voluntary measure. Where there is no compulsion there can be no discrimination. Indeed, so far from a voluntary measure partaking of the nature of class legislation, the truth is the exact opposite. At present the well-to-do can and do get themselves sterilised if they wish. It is known that there are practitioners who are prepared to take the risk of performing sterilising operations in cases in which it would be difficult to plead any therapeutic necessity. But a poor man, a victim of an inherited physical or mental disorder, would have the greatest difficulty in finding any hospital willing to sterilise him. To test this we asked some of the most important hospitals in the country whether they would in any circumstances undertake a eugenic sterilisation. Most replied in the negative; a few said that an individual surgeon might consent to perform such an operation *sub rosa*, but the hospital authorities would not countenance it. This confirms our belief that the rich can always secure sterilisation and the poor cannot, however great their desire. The evidence given before us indicated that there is one hospital in England where a small number of sterilisations have been performed on eugenic grounds, mostly in cases of hereditary blindness. We know of no other.

(*b*) Procedure and Safeguards

(79) We do not consider that eugenic sterilisation should ever be performed without two medical recommendations. To accept a single medical recommendation is to put an undue responsibility on the doctor and, apart from this, it is in our view desirable that the medical evidence of the need for sterilisation for eugenic reasons should include both an expert opinion and the opinion of the family doctor, whose knowledge of the patient's medical history is of particular value. We therefore propose that recommendations in a prescribed form should be required from two doctors, one of whom should, if possible, be the patient's family doctor and the other a doctor on a list to be approved by the Minister of Health. If the family doctor cannot sign, the reason for his failure to do so should

be explained. It is important that no doctor should sign a recommendation unless he has examined the patient.

(80) If our recommendation in paragraph 72 is approved and it is proposed to extend sterilisation to persons suffering from transmissible physical diseases of a grave character, it may be advisable to divide the approved lists into two parts, one part containing the names of psychiatrists, and the other the names of general physicians of good standing. We recommend that this list should be compiled by the Ministry of Health after consultation, so far as relates to the psychiatric section, with the Board of Control. We are definitely against leaving the approval of practitioners in the hands of local authorities. Experience of the haphazard way in which some authorities have exercised their power to approve practitioners under Section 5 (2) of the Mental Deficiency Act, 1913, does not commend this method of selection. Moreover, the doctors qualified to give this second or confirmatory signature should be men of recognised standing. It is illogical and absurd that a doctor should be accepted as competent in one county and not in another ; and the choice of doctors for so important a duty ought not to be left to local caprice or indifference. The Minister would, no doubt, take steps to consult the various bodies representing medical opinion as to the method of selection and the standard of qualification to be required. While we are anxious that the standard should be high, it must not be put so high as to make approved practitioners inaccessible except to those living in or near a big city. If the second recommendation cannot be obtained without undue expenditure in travelling, the purpose of our proposals will be largely defeated. It is therefore a question of striking a balance between the need for a high standard of qualification and the need to make the approved doctors reasonably accessible.

(81) We recommend that, when the medical recommendations have been obtained, the papers should be submitted to the Minister of Health, who would in mental cases exercise his functions after consulting the Board of Control, and that the written authorisation of the Minister should be required before sterilisation is performed. It may be objected that any departmental examination is merely a paper check, and in effect secures nothing more than compliance with the statutory formalities. This objection appears to us ill-founded. The examination of the documents is by no means unimportant in itself, since the most meticulous care should be taken, in a matter in which the consequences of a mistake are irreparable, to ensure a strict observance of all statutory safeguards. But the duties of the central department will extend beyond the mere scrutiny of the documents, important as that is ; and in our view the Minister, acting in mental cases through the Board of Control, should have power not merely to require any necessary amendment of the forms, but also to cause the patient to be specially examined if it is considered advisable. We do not anticipate that the necessity

for special examination will be of frequent occurrence, but the fact that the Minister or the Board may order such an examination will, in our judgment, afford an additional safeguard against the possibility of error or abuse.

(82) Whatever formula may be adopted to define the disorders or abnormalities which should be accepted as justifying sterilisation, doubts will arise as to whether a particular case comes within the terms of the definition. Where the application rests on the ground that the applicant is believed to be a carrier of some disability, whether physical or mental, there will inevitably be cases in which the evidence of inheritance will be inconclusive. In order to meet this difficulty we recommend that the Minister could have power to appoint a small advisory committee, consisting partly of doctors and partly of geneticists, to whom all doubtful cases should be referred. In the early stages cases calling for reference to the advisory committee might be fairly numerous but we anticipate that in course of time a body of precedents, a kind of case law, would be built up and the need to consult the committee would gradually become less frequent.

(83) In all cases the medical recommendation should include a statement of the disease or disability in question. If the recommendations are not sufficiently explicit the central department should have power to require them to be amended or amplified before the necessary fiat is issued. The application should indicate where the operation will be performed. In all cases we regard it as most important that the procedure should be treated as strictly confidential.

(84) The hospital authorities, or, in the case of operations performed elsewhere, the operating surgeon, should be required to notify the central department when the operation has been performed. If, after sanction has been given, the operation has not been performed within a prescribed time, the sanction should lapse, subject to the power of the central department to extend the time or to renew the sanction on receiving a satisfactory explanation of the delay. We attach importance to this notification because in administering a novel measure a careful "follow up" of all cases is the only practicable way of testing its results.

Protection of Doctors

(85) Although we have proposed that the sanction of a central department should be obtained before the operation is actually performed, it is clear that the real responsibility must fall upon the doctors who sign the prescribed recommendation. This is a condition precedent of sanction being given, and no subsequent departmental or ministerial action can relieve the doctor of responsibility for the consequences of his recommendation. It follows that if doctors are reluctant to accept this responsibility, the whole system inevitably breaks down. Though the circumstances are not

strictly parallel, the well known reluctance of many doctors to give certificates under the Lunacy and Mental Treatment Acts emphasises the seriousness of this difficulty, and it is clear that unless the apprehensions of the profession can be removed the machine will never work at all.

(86) Our terms of reference did not empower us to undertake anything in the nature of negotiations with the medical profession, but we felt that it was so vital to the success of our proposals to find some solution of the difficulty that we invited Sir Henry Brackenbury, Chairman of Council, and Dr. G. C. Anderson, Medical Secretary of the British Medical Association, to discuss the matter with us informally. These gentlemen had not been authorised to speak on behalf of the Association, but their position gives them special opportunity of knowing what the attitude of the profession is likely to be. They were emphatically of opinion that many doctors would refuse to give the necessary recommendations unless they could be given some protection against vexatious legal proceedings. From the doctor's point of view, it is cold comfort to be told that in the event of an action he would probably win. Even though the actual law costs may be covered by insurance, the publicity, the loss of valuable time and the anxiety entailed would be sufficient to deter doctors from undertaking this responsibility.

(87) The problem is not a new one. It was fully discussed in Parliament in connection with Section 16 of the Mental Treatment Act, which provides in effect that no action may be brought against a doctor giving a certificate under the Acts unless on prior application the Judge is satisfied that there is substantial ground for the contention that the doctor acted in bad faith or without reasonable care. Under Section 330 of the Lunacy Act, 1890, there was power to the Court to stay an action where there was no evidence that the doctor had acted without good faith or had failed to exercise reasonable care. The effect of the amendment of this provision by Section 16 of the Mental Treatment Act is to transfer the onus of proof from the defendant to the plaintiff. It has been suggested that this is a change in form rather than in substance, but a recent action (unfortunately not fully reported) which was taken to the Court of Appeal, has shown that the protection afforded to the certifying doctor is now much more complete than some critics of the section have supposed.

(88) Clearly, Parliament cannot be asked to grant immunity from legal proceedings to the doctor who acts negligently or in bad faith ; and short of complete immunity we doubt if any better method of protection can be devised. But we are satisfied that the demand from the profession for some measure of protection is reasonable and must be met. The doctors should have the same claim to protection in the case of sterilisation recommendations as they have in respect of certificates under the Lunacy and Mental

Treatment Acts. The whole question having been exhaustively discussed so recently, it is unlikely that Parliament would be prepared to reopen that settlement; but no measure can work unless the doctors' apprehensions are removed, nor in the light of past experience can it be said that these apprehensions are unfounded. The doctors under the scheme which we propose can hardly ask for more protection than is afforded by Section 16 of the Mental Treatment Act; they will certainly not accept less.

Evidence of Consent

(89) We have emphasised the need for the fullest safeguards to secure that sterilisation shall be really voluntary, and for this reason we recommend that, in all cases in which the patient is capable of giving consent, he shall sign a declaration of his willingness to be sterilised, and one of the two medical recommendations, preferably that of the family doctor, shall include a statement that the effect of the operation has been explained to the patient and that, in the doctor's opinion, he is capable of understanding it. If the doctor is not satisfied that the patient is competent to give a reasonable consent, the full consent and understanding of the parent or guardian should be obtained. In the case of an application by a minor the consent of the parent or guardian should always be required. If the patient has no parents or if they cannot be found and there is no legal guardian, the person who is in fact responsible for the patient's maintenance should be treated as his guardian for this purpose. The signatures both of the patient and of the parent or guardian should be attested by a witness. Some Dominion and foreign sterilisation laws (*e.g.*, Alberta, British Columbia, and Denmark) require the consent of the spouse, if the applicant is married. While we recognise the force of the considerations underlying this provision, it is open to the objection that in effect it gives the spouse a right of veto which we cannot regard as desirable. We recommend, however, that a married applicant for leave to be sterilised should be required to state that the other party to the marriage has been notified of the application. We realise that these formalities may have a deterrent effect, but sterilisation is a serious matter and it is important to limit it to cases in which there is a genuine desire for it. Any suggestion of patients being tricked or cajoled into an unreal consent or a hasty decision must inevitably lead to harmful reactions.

(*c*) Operations Recommended

(90) In most countries the operation generally adopted is vasectomy in the case of males, and salpingectomy in the case of females. These are the operations which we recommend as the simplest and least dangerous to the patient. Vasectomy is an operation consisting of the division and ligature of the vas or duct, by which the spermatic fluid is conveyed from the testis.

Salpingectomy consists of the removal of the whole or a part of the Fallopian tubes or egg ducts which convey the ova from the ovaries to the uterus. In one European country (Denmark), the sterilisation law allows castration to be performed, and some of the American States allow both castration and oöphorectomy. In our view, this is an unwarrantable procedure. Vasectomy is so slight an operation that it can be performed, and in America often is performed, under a local anæsthetic, though we were informed that some English surgeons would prefer a general anæsthetic. Recovery is rapid and the patient rarely requires more than a day in bed. Salpingectomy involves an abdominal incision, and in severity and the time required for recovery it approximates to a simple uncomplicated appendicectomy. But the period in bed cannot be put at less than two weeks in the average case and may be more. As in the case of all abdominal operations, it is impossible to say beforehand what pathological conditions may be revealed, and the operation should, therefore, only be performed by a surgeon competent to deal with any other morbid condition which he may find.

(91) We recognise that even under the most favourable conditions, salpingectomy involves a period of several weeks in hospital and the discomfort and pain inseparable from any major operation. It would clearly facilitate sterilisation in the case of women if some simpler procedure could be devised. One witness suggested to us that sterilisation by X-rays is simple and effective, and that the dosage can now be so controlled as to minimise the risk to the patient. Other evidence did not confirm this view. It appears to be agreed by radiologists that in the case of women approaching the climacteric sterilisation by X-ray is safe and effective ; but in the case of younger women there is no certainty that the result will be permanent and the dosage may have to be increased to a point which entails some risk of injury. In any case, X-ray sterilisation is open to the objection that it may induce a premature menopause which may be followed by some degree of mental disturbance. There is the further objection that, if the patient at the time of treatment happened to be in the early stage of pregnancy, a condition not always easy of ascertainment, very grave results might follow. For all these reasons we regret that we cannot recommend X-ray sterilisation as a safe procedure for general use, though there may be exceptional cases in which it could be properly used. For the reason discussed in a later chapter we think that, pending further research, it is advisable that eugenic sterilisation in the case of males should not be performed before full physical development is reached.

Where the Operation should be Performed

(92) We have considered the question of where the operation should be performed. In the United States sterilisation of mental defectives is commonly performed at the mental deficiency institutions. In our view this is undesirable. Vasectomy is simple, but

salpingectomy is a major operation. It needs an operating theatre which few mental deficiency institutions possess and nurses with experience of surgical cases. But, apart from the unwisdom of attempting major surgery in an improvised theatre, there is another reason why the general hospital and not the mental deficiency institution is the proper place for it. We are convinced that anything which might suggest that sterilisation is an inevitable or probable result of entering an institution for defectives will tend to deter some parents from giving their consent to their children being dealt with under the Mental Deficiency Acts. For a similar reason we agree with those medical superintendents who urged that mental hospital patients should be discharged or granted leave of absence on trial from these hospitals before being sterilised. While we believe that sterilisation in properly selected cases is in the interest of the patient, we are bound to recognise that in the present state of public opinion there may be considerable prejudice against it, and anything which associates sterilisation with entry into either a mental deficiency institution or a mental hospital will have harmful reactions.

Cost of Operations and Medical Certificates

(93) We assume that those who are able to pay the full cost of sterilisation will make their own arrangements as in the case of any other surgical operation. With this exception, in the case of mental defectives we think that the cost, including the expenses of the medical recommendations, should fall upon the Mental Deficiency Authority, and, in the case of mental hospital patients, upon the Visiting Committee, subject to their right to recover from the relatives so much of the cost as is reasonable. In the case of persons seeking sterilisation on the ground of physical diseases or disabilities, the liability should fall upon the Public Health Committee. But in all cases in which the cost of the operation will fall upon local funds the local authority responsible should have the right to require the patient to enter a municipal hospital. Clearly it would be inequitable to require the local authority to pay for an operation performed in a voluntary hospital unless the authority consented to do so. An authority may find it convenient to enter into arrangements with voluntary hospitals, as is often done in the case of surgical tuberculosis, but such an arrangement is purely a matter within the authority's discretion. No sanction by a central department can operate to impose an indefinite liability upon local funds. It is plainly in the interests of public health to encourage sterilisation in appropriate cases, and we assume that local authorities will naturally take all reasonable steps to this end.

CHAPTER VII

SUGGESTED RESEARCH

Effect of Vasectomy on Development

(94) Our reference invites us to make suggestions for research bearing on the subject of our enquiry. The field is wide and there are many directions in which research is needed, but there is one investigation, of strictly limited scope, which we think ought to be undertaken immediately. It has been suggested that if vasectomy is performed at puberty and before full physical development is reached, the interstitial cells of the testes and their internal secretion may be affected. On this ground it has been contended by some witnesses that vasectomy ought to be postponed till full maturity, though other witnesses consider there is no need for this precaution. The point is important, since to wait till physical development is complete means postponing sterilisation for several years during which the patient is capable of procreation. We think that evidence of immediate value could quite easily be obtained by a series of experiments on animals such as mice, or other small mammals, which mature rapidly. We cannot discover that this matter has been adequately investigated, and so long as it remains open to doubt, we think that the central department should not sanction vasectomy until the patient reaches physical maturity. No witness has suggested that sterilisation need be postponed in the case of females.

Influence of Consanguinity

(95) As regards the main problem of the inheritance of defect, there are two directions in which investigation is clearly needed. A valuable clue to the inheritance of defects in human populations lies in the examination of the offspring of consanguineous marriages. The importance of this has been emphasised by recent studies in mathematical genetics. The alterations in the familial incidence of defect occasioned by consanguinity, though often small in magnitude, may be expected to throw direct light on both the number and the frequency of the germinal conditions causing hereditary defects. To be adequate, enquiries must therefore be based on abundant data, and should be pushed simultaneously along several lines. One line of approach should be investigation into the proportion of consanguineous marriages and, in particular, of marriages between first cousins among the parents of representative groups of defective children. It is necessary to supplement this enquiry by ascertaining the frequency of consanguineous parentage in the general population, and of its variations in respect of locality and social class. A comprehensive record of consanguinity among

parents of the general school population is therefore urgently to be desired. Such a record would, moreover, supply direct and independent information on the frequency of mental defect and of mental disorder occurring during childhood among the offspring of consanguineous parentage. It should be noted that if this enquiry were directly associated with the medical examination of school children it would afford, at the same time, a secure basis for judging the hereditary nature of numerous rare physical defects and anomalies, where, owing to recessive inheritance, direct familial transmission is not to be expected.

Investigation of Twins

(96) Another enquiry which we recommend is the investigation of twins, one or both of whom are found to be defective. Human twins are of two kinds, neither very rare. One kind, the binovular twins, while sharing the same uterine environment, in addition, generally, to a similar environment in early post-natal life, are genetically no more alike than other brothers or sisters. The other kind, uniovular twins, on the contrary, may be regarded as genetically identical. This fact affords a test of immediate value to decide between the claims of those who, in the causation of mental defect, attach the greater importance to purely genetic causes, and those who stress the possibility of injury during the pre-natal period. Here, again, since the number of children combining the two peculiarities of twinship and of mental defect probably does not exceed 100 a year for the whole country, the most comprehensive methods must be used in the ascertainment of cases. Nevertheless, the number of cases required to assess the importance of the uterine environment is not beyond what could be critically studied and recorded by a small properly equipped team of workers in two or three years.

Classification of Mental Defect

(97) We attach great importance to the investigation now being conducted by Dr. Penrose at Colchester in an attempt at a scientific classification of the cases in the Royal Eastern Counties' Institution. We think, however, that there is need for a parallel enquiry based on unselected non-institutional cases. It is essential in our view that such an enquiry should include the examination on the same lines of a " control " group of normal families.

Nature of Defective Inheritance

(98) There is another aspect of the question of inheritance which we regard as important and in need of investigation. Most recent enquiries into the hereditary factors concerned in mental deficiency have been confined to the extent to which mental defect, and mental defect only, can be traced in the families of defectives, and our report

has in consequence dealt more particularly with this. But if the term inheritance is employed in a wide sense, namely, to comprehend the sum total of the quantitative and qualitative development tendencies inherent in the germ cells, it follows the investigations which are thus restricted will fail to reveal all the germinal tendencies and peculiarities which may have a causal relationship.

In the evidence tendered to us we have been impressed by two main facts which seem to us of considerable importance. The first is the large proportion of mental defectives who come from parents one or both of whom have been of subnormal intellectual development, although not certifiable as defective under the Mental Deficiency Acts. The second is the large proportion of defectives who come from families in which there is a history of insanity, epilepsy, psychoneurosis, or some form of mental abnormality.

What may be the genetic explanation of this relationship between mental deficiency, mental dulness, and mental disorder or abnormality we are unable to say. There are various possibilities. It may, for instance, lie in the presence of multiple factors in the germ cells of the families concerned ; or it may lie in the existence of some common and hitherto unrecognised factor, which, as a result of the action of varying environmental influences, gives rise to different clinical manifestations in different individuals. However this may be, we find it impossible to ignore the evidence on this point which has been placed before us, and the connection between defect, dulness and disorder of mind is so prevalent and seems to us of so much importance that we desire to direct attention to the urgent necessity for its elucidation. The connection, moreover, has a very definite bearing upon the proposals we have made regarding sterilisation, since there is reason to conclude that propagation by the mentally dull and disordered plays as great if not a greater part in the causation of mental deficiency than does the propagation of defectives.

Investigation of the Causes of Mental Disorders

(99) With regard to mental disorders, whilst fully appreciating the value of the pathological and other investigations of individual cases which are now being carried out in many of the laboratories attached to mental hospitals, we feel there is great need for the institution of a definite systematic enquiry into the antecedent conditions. We consider that this would best be done by a detailed and complete investigation of the family and personal histories of patients suffering from each of the recognised clinical varieties of mental disorder. Such an enquiry should ascertain the mental and physical conditions of the antecedents, collaterals and children of the patients so as to include at least three generations of the family ; it should note the presence of any consanguinity ; and it should make full investigation of environmental conditions occurring during the life of the patient. The investigation would have to embrace a sufficiently large series

of cases in each of the clinical groups and it would be necessary to compare the results with control data obtained by an enquiry on similar lines with regard to a series of mentally sound persons. Although some enquiries on these lines have been made on the Continent and in America, there has been little or nothing on a comprehensive scale in this country, and the dearth of data has made it impossible for us to reach conclusions on many ætiological points which we regard as of extreme importance.

Statistics compiled from the ordinary case book entries have little value for the purpose we have in view. What we contemplate is a special investigation conducted by some one with a wide knowledge of general and psychological medicine who would be able to assess the importance of the facts elicited and to arrive at a conclusion as to their relative influence in each particular case. By this method there would, in course of time, be accumulated a mass of data which could not fail to throw valuable light upon many points relating to causation. It would, in fact, supply knowledge unobtainable by any other means regarding such important questions as the connection between subnormality, defect, and the different types of disorder of mind ; the relationship of mental abnormality to physical abnormality and to adverse environmental conditions ; the mode of hereditary transmission and the debated question of " anticipation " or progressive deterioration.

Influence of Intra-uterine Conditions

(100) Another direction in which we think research might yield valuable results is in the ascertainment of the intra-uterine conditions which have a deleterious effect upon the growth and development of the embryo. We have alluded to the association of mental defect in the offspring with certain diseases of the pregnant mother. It seems not unlikely that other and less obvious conditions may also have an unfavourable effect upon the embryo, possibly even to the extent of producing mental defect. It is clearly important that any such factors should be recognised since they might prove to be avoidable.

Study of Germ Mutations

(101) Important as these enquiries are, they do not go to the root of the problem of the causation of mental abnormality so far as it is based on inheritance. A more fundamental investigation is needed in addition to the researches we have already suggested. What we have in mind is laboratory research directed to ascertaining the natures and causes of germ mutations. The evidence we have received leaves no room for doubt that a large amount of mental abnormality in general is the result of such mutations. Beyond the fact that they are transmissible we have no certain knowledge either as to their mode of manifestation or, what is perhaps even

more important, as to their natures and the causes which produce them. They may arise spontaneously or from the conjunction of germ and sperm cells possessing certain peculiar, but unrecognised, differences. In either of these events their prevention is perhaps beyond human power. On the other hand, germ mutations may certainly be the result of some adverse factors of the environment, possibly even of some disease or morbid state of the host. Such cases should be preventible. It is known that X-rays will produce such mutations and there is some evidence suggesting that other agents may have a similar effect. Genetic research in Great Britain in so far as it has received public support, has been largely devoted to practical agricultural problems. The need we stress is for at least one institution devoted to research in the fundamental problems of inheritance in the widest sense.

Sociological Research

(102) There is another direction in which research seems to us desirable. We have already mentioned the Wood Committee's reference to the social problem group, the existence of which is discussed in detail in paragraphs 91 and 92 of Part III of their report. While sociologists generally would accept the view that there is a concentration in the lowest social stratum of the physically and mentally defective, the chronic unemployables, the habitual recipients of relief, and a delinquent element of a mentally sub-normal type, there is much difference of opinion as to the real size of this group. It is argued by some authorities that the Wood Committee went too far in suggesting that the social problem group amounts to as much as 10 per cent. From some points of view it may be true that the economic residuum of the population must always constitute a social problem, but it is contended that within this fraction there is a smaller, possibly a much smaller, group which constitute a far more acute problem than the remainder. Investigations which could be made without much difficulty in areas in which the social services are well organised and co-ordinated might result in some revision of the extent and constitution of the social problem group. It might throw light on the extent to which physical and mental defect are associated in persons forming this group and upon the relative part played by these defects and by social and economic conditions in causing social failures. As is pointed out in the Wood Committee's report, low mentality and poor environment form a vicious circle. We think such an enquiry would throw valuable light on some of the social consequences of mental defect and its tendency to perpetuate itself by creating an environment inimical to the development of normal mentality.

CHAPTER VIII

CONCLUSION

(103) It would be improper for us to attempt to anticipate the criticisms which our proposals will inevitably excite. But we may perhaps be allowed to say that our recommendations are not a compromise between conflicting views adopted reluctantly in order to secure the appearance of agreement. On the contrary we were fortunate at the end of a long enquiry in finding ourselves in complete harmony. In framing our proposals, we have gone as far as the evidence appeared to us to warrant, and no further. Two main considerations impressed themselves on our minds as our investigation progressed and guided us in framing our proposals. In the first place we were impressed by the dead weight of social inefficiency and individual misery which is entailed by the existence in our midst of over a quarter of a million mental defectives and of a far larger number of persons who without being certifiably defective are mentally subnormal. This mass of defectives and subnormals is being steadily recruited and is probably growing. Certainly nothing is being done to diminish it beyond the segregation of a portion of those more obviously unfitted for community life. In the second place, we were increasingly impressed by the injustice of refusing to those who have good grounds for believing they may transmit mental defect or disorder and who are in every way unfitted for parenthood the only effective means of escaping from a burden which they have every reason to dread. Contraception is no remedy, since we are dealing with people the majority of whom cannot be expected to exercise the care without which contraceptive measures are bound to fail. Nor is voluntary abstinence any remedy. Facts must be faced. It is idle to expect that the section of the community least capable of self control will succeed in restraining one of the strongest impulses of mankind. The mere suggestion is so fantastic that it carries its own refutation. Without some measure of sterilisation these unhappy people will continue to bring into the world unwanted children, many of whom will be doomed from birth to misery and defect. We can see neither logic nor justice in denying these people what is in effect a therapeutic measure.

(104) There is one caveat which we are bound to add, that neither our proposals nor any others with the same object can ever succeed until the ascertainment of defectives is carried out more completely than it is at present. Our enquiry has emphasised, as was already apparent from the figures in the Annual Reports of the Board of Control, that there are marked inequalities in the ascertainment of defectives in different areas. Ascertainment is a statutory

duty of local authorities, but it is clear that the duty is often performed in the most perfunctory way. While many of the larger authorities have a good knowledge of the defectives in their areas, some of the less energetic authorities have made little or no progress with this work. Four local authorities reported to us that they had no record of any mental defective having had a child. In many areas the ascertainments are so ludicrously small as to bear no relation to reality at all. The Wood Committee found that the incidence of defect is higher in rural than in urban areas, but there is nothing to suggest any marked differences among the majority of agricultural counties. We recognise that there may be differences between villages, though in our necessarily limited enquiry we have been unable to obtain any definite evidence of the existence of small " pockets " of defect. But in large areas where the ascertainment is markedly low there is only one explanation of the discrepancies in the numbers found. A low figure means that no proper ascertainment has been made. For a local authority to claim that it has hardly any defectives is in contradiction with all known facts about the distribution of defect. The defectives are there. This is strikingly illustrated by the report of the National Society for the Prevention of Cruelty to Children. Some of the worst cases in that grim document were unknown to the statutory local mental deficiency committees and came from areas where no effective steps had been taken to carry out the obligations imposed by the Mental Deficiency Acts.

(105) Deliberately to ignore mental defect is a futile policy. Advocacy of sterilisation without active ascertainment is doomed to failure at the outset ; and, as many witnesses have urged, ascertainment is a half measure without the provision of institutional accommodation for those who need it. If there is one conviction which has stamped itself on our minds as beyond any possible doubt, it is the disastrous social consequences of ignoring defect ; and we earnestly hope that the laggard areas will lose no more time in discharging their statutory duty of ascertainment and institutional provision. Until this is done not even a beginning can be made with other preventive measures.

SUMMARY OF PRINCIPAL RECOMMENDATIONS

(i) Subject to the safeguards proposed, voluntary sterilisation should be legalised in the case of :—

(*a*) A person who is mentally defective or who has suffered from mental disorder (paras. 70 and 71) ;

(*b*) A person who suffers from, or is believed to be a carrier of, a grave physical disability which has been shown to be transmissible (para. 72) ; and

(*c*) A person who is believed to be likely to transmit mental disorder or defect (paras. 73 and 74).

(ii) Before sterilisation is sanctioned in the case of a mental defective, care should be taken to test his or her fitness for community care (para. 65).

(iii) Mental defectives who have been sterilised should receive the supervision which their mental condition requires (para. 59).

(iv) The operation of sterilisation should only be performed under the written authorisation of the Minister of Health (para. 81) ; in regard to which the following procedure should apply :—

(*a*) Application for the authorisation should be supported by recommendations in a prescribed form signed by two medical practitioners, one of whom should, if possible, be the patient's family doctor and the other a practitioner on a list approved by the Minister. No medical practitioner should sign a recommendation unless he has examined the patient (para. 79).

(*b*) The Minister, on receipt of the recommendations, should be empowered to require any necessary amendment of the forms and to cause the patient to be specially examined if it is considered advisable (para. 81).

(*c*) In order to deal with difficulties that may arise in connection with applications on behalf of persons suffering from, or believed to be carriers of, inherited disease or disability, the Minister should be empowered to appoint a small advisory committee consisting partly of medical practitioners and partly of geneticists to whom doubtful cases could be referred (para. 82).

(*d*) The hospital authorities or (in the case of operations performed elsewhere) the operating surgeon should be required to notify the Minister when the operation has been performed (para. 84).

(*e*) In all cases in which the patient is capable of giving consent, he should sign a declaration of willingness to be sterilised, and one of the two medical recommendations should include a statement that the effect of the operation has been explained to the patient and that in the medical practitioner's opinion he is capable of understanding it. If the practitioner is not satisfied that the patient is competent to give a reasonable consent, the full consent and understanding of the parent or guardian should be obtained. If the applicant is married, he or she should be required to notify the spouse of the application (para. 89).

(*f*) In the case of persons who have suffered from mental disorder, sterilisation should not be permitted without a recommendation from a competent psychiatrist, who should be required to certify, after examining the patient, that, in his opinion, no injurious results are likely to follow (para. 51).

(*g*) In dealing with cases of mental defect and of mental disorder, the Minister of Health should exercise his functions after consulting the Board of Control (paras. 80 and 81).

(*h*) The procedure should at all stages be treated as strictly confidential (para. 83).

(v) Medical practitioners, in making recommendations for sterilisation should have protection similar to that accorded to them in respect of certificates given under the Lunacy and Mental Treatment Acts (para. 88).

(vi) The operations for sterilisation which are recommended are vasectomy in the case of males and salpingectomy in the case of females. The latter operation should only be performed by a surgeon competent to deal with any morbid condition which he may find (para. 90).

(vii) The operation of vasectomy should not be authorised in the case of any person who has not reached physical maturity, pending the results of the further research recommended in this connection (paras. 91 and 94).

(viii) The operation for sterilisation should not be performed in a mental hospital or mental deficiency institution (para. 92).

(ix) In the case of persons unable to pay the full cost of the operation, the cost (including the expense of the medical recommendations) should be borne by the Mental Deficiency Authority in the case of mental defectives, by the Visiting Committee in the case of persons suffering from mental disorder, and by the Public Health Committee in the case of persons suffering from transmissible physical disorders, subject to the right of the authority to recover from the patients or relatives so much of the cost as is reasonable. In all cases, however, where the cost falls upon local funds, the local authority should have the right to require the patient to enter a municipal hospital or any voluntary hospital with which they may have made arrangements for such cases (para. 93).

(x) In addition to the research mentioned in (vii) above, further recommendations for research are made in Chapter VII which do not permit of presentation in a summarised form.

In conclusion, we wish to record our indebtedness to our Secretary, Mr. F. Chanter, whose indefatigable industry has materially lightened our task. Upon him has fallen the burden of collecting and summarising the mass of statistics furnished to us, and his help has been of the greatest value.

(*Signed*)

L. G. BROCK (*Chairman*).
E. W. ADAMS.
RALPH H. CROWLEY.
RUTH DARWIN.
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WILFRED TROTTER.

FRANK CHANTER (*Secretary*).

8 *January*, 1934.

REPORT OF ENQUIRY INTO THE CHILDREN OF MENTAL DEFECTIVES

The returns from the local authorities were summarised by the Secretary to the Committee. The following statistical enquiries based on these summaries were prepared for the Committee by Professor R. A. Fisher. They fall into four groups :—

A. A preliminary and detailed investigation was made of the data from London and Birmingham with a view to ascertaining what subdivisions it would be important to make in the remainder of the data. This enquiry was especially directed towards ascertaining :—

(i) The effect of age on the classification of growing children.

(ii) The comparability of the children of mentally defective men with those of mentally defective women.

(iii) The comparability of the children of parents certified under the Education Acts but not subsequently under the Mental Deficiency Acts (these are termed Special School parents) with the children of parents certified under the Mental Deficiency Acts.

(iv) The comparability of the children of unmarried mentally defective parents with those of the married.

The basis of the conclusions upon these points is illustrated by the data supplied by the London County Council.

B. A comprehensive survey of the data for children of 7 to 13, and over 13, from married and unmarried mentally defective parents in the Counties and County Boroughs of England and Wales for which returns were available.

C. A comparison of the infantile mortality in so far as there is record of it, among the children of mentally defective parents, in the returns, with that in the general population.

D. The incidence of mental defect according to birth order and size of family.

Note.—Local authorities were asked to give full particulars in respect of all children who were (*a*) mentally defective and (*b*) those who were not certified as mentally defective but were "retarded."

As regards mental defect, local authorities were referred to Section 1 of the Mental Deficiency Act, 1927, and Section 55 of the Education Act, 1921.

As regards "retarded," the local authorities were asked to include all children who were two or more years retarded educationally.

A.—London County Council

Influence of Age on Classification

The children were classified into 4 categories :—(i) mentally defective, (ii) retarded, (iii) normal, and (iv) superior. The 57 children under 1 year were all unclassified, but less than half the children in their second year and very few in the older age-groups were left out of the classification. Table I shows the number placed in each class and the number unclassified in each of the first seven years of life.

TABLE I.—*Number of Children unclassified and classified as Mentally Defective, Retarded, Normal and Superior in the first 7 Years of Life*

Age.	Mentally Defective.	Retarded.	Normal.	Superior.	Total Classified.	Total Unclassified.	Total.
0 ..	—	—	—	—	—	57	57
1 ..	0	6	23	0	29	22	51
2 ..	1	16	47	0	64	7	71
3 ..	0	9	45	1	55	3	58
4 ..	2	15	46	1	64	2	66
5 ..	3	18	37	0	58	0	58
6 ..	4	11	45	2	62	2	64
Total	10	75	243	4	332	94	426

Table I shows clearly the effect of increasing discrimination with advancing age as evidenced by a falling proportion of the children regarded as normal, and a gradual increase of these assigned to the mentally defective and superior classes. From this cause it might be expected that these two classes may be seriously under-represented in the frequencies given for children under 7.

A discrepancy more serious in this respect appears when the frequencies assigned to the 4 classes of mental ability in the age group 0 to 6 are compared with those in the age-groups 7 to 13, and over 13. Table II shows the frequencies among the 669 children classified in the return from the London area.

TABLE II.—*Number of Children classified as Mentally Defective, Retarded, Normal and Superior by Age Groups*

Age.	Mentally Defective.	Retarded.	Normal.	Superior.	Total.
0–6 ..	10	75	243	4	332
7–13 ..	35	76	129	8	248
Over 13 ..	33	11	45	0	89
Total ..	78	162	417	12	669

The change in classification with increasing age is more clearly shown in Table III in which the frequencies are expressed as percentages of the total numbers classified in each age group.

TABLE III.—*Percentages of Mentally Defective, Retarded, Normal and Superior Children as classified at different Ages*

Age.	Mentally Defective.	Retarded.	Normal.	Superior.
0–6	3	23	73	1
7–13	14	31	52	3
Over 13	37	12	51	0

It is now seen that the mental classification of children not only shows, as might have been expected, an excessive number rated as normal in the earlier years, but that, at least up to 13 years of age, there is a strong tendency to take too optimistic a view of the mental status of these children. If the classification before 7 years of age is compared with that from 7 to 13 years, it appears that 11 per cent. rated as retarded or normal at the earlier age are now recognised to be mentally defective; while the number rated as retarded has been further increased by 8 per cent. at the expense of the normals. As a slight compensation, however, 2 per cent. from among those previously rated as normal are now classified as superior in intelligence. The main feature of the change, however, between these two periods is the increase in the proportion of those rated as mentally defective or retarded from 26 per cent. in the age group 0 to 6 to 45 per cent. in the age group 7–13. In the classification of the children over 13 this percentage has risen but little further, namely from 45 to 49 per cent. The striking difference, in the comparison of those over 13 with the 7 to 13 class, lies in the number of those previously reckoned as retarded who are later classified as mentally defective. The latter group has risen from 14 per cent. to 37 per cent. It would seem that a number of children who will later be regarded as mentally defective or retarded are considered to be normal in the first seven years of their lives and that many who will later be classified as mentally defective are, until their fourteenth year, still placed in the retarded group. The only other change in the classification which attracts notice is the disappearance of the group classed as superior. This may be another indication of undue optimism in the classification of children from 7 to 13, but no statistical importance is to be attached to it, since the oldest age-group comprises only 89 children in all. The effect of age on classification is exhibited even more emphatically in the parallel data from Birmingham.

Classification of Children over Six according to the class of Parents

The purpose of the examination of the effects of age upon classification was to afford guidance as to the validity of the other comparisons to be made. The data for children over 13 from London are, by themselves, too few to be usefully subdivided according to the class of parent. On the other hand it appears clearly that classification made before the age of 7 is entirely misleading as a basis for estimating the real proportion of mentally defective and retarded children. In using the classification of children from 7 upwards it must be remembered that a large proportion of those classified as retarded would, at a later age, belong to the mentally defective group, and that possibly the children classed as superior would ultimately be reckoned as normal. There is, however, some basis for believing that the total of the mentally defective and retarded will supply an estimate which is only slightly too optimistic.

For the London area it is possible to give separate figures for the children of parents certified as mentally defective and for children of special school parents who were not subsequently certified under the Mental Deficiency Acts. It is also possible to separate a sociologically important class of unmarried, mentally defective mothers. Table IV gives the classification of 337 children over 6 years of age in five classes of parentage.

TABLE IV.—*Number of Children classified as Mentally Defective, Retarded, Normal and Superior, born to Mentally Defective and Retarded Parents*

	Mentally Defective.	Retarded.	Normal.	Superior.	Total.
Mentally Defective fathers.	3	9	17	2	31
Married Mentally Defective mothers.	11	17	41	0	69
Unmarried Mentally Defective mothers.	30	31	44	3	108
Special School fathers	5	12	16	0	33
Special School mothers	19	18	56	3	96
	68	87	174	8	337

With respect to the percentage of mental deficiency and retardation from the different classes of parents it may first be noted that the percentages for male and female married parents are on the whole similar. The mentally defective and retarded children from mentally defective fathers are 12 out of 31, or 39 per cent. The mothers give 28 out of 69, or 41 per cent. In the class of parents from special schools the fathers give 17 out of 33, or 51 per cent., and the mothers 37 out of 96, or 38 per cent. In all the fathers give 45 per cent. and the mothers 39 per cent. This approximate equality between the offspring of mentally defective fathers and mothers is in very striking contrast to the great preponderance of defective mothers which is recorded in all the evidence received on the parentage of mentally defective children. In examining such data it has been difficult to decide whether the discrepancy was due solely to sociological causes as, for example, the greater actual fertility of mentally defective women compared to mentally defective men, or the more complete ascertainment of mental defect among the mothers than among the fathers, or whether, possibly, some of the genetic factors involved were to be regarded as sex-linked. The disappearance of the sex difference when the enquiry is directed to the children, rather than to the parents, of the mentally defective shows that the discrepancy must have been due, almost wholly, to sociological causes, and effectively demonstrates the superiority of this mode of enquiry. The data available from Birmingham completely corroborate the London data in the equal incidence of defect and retardation among the children of fathers and of mothers selected for mental deficiency.

The second point of importance in the data given in Table IV is the similarity in the proportion of mentally defective and retarded children among the offspring of married mentally defective parents and of those of married parents certified for special schools. Among 100 children classified over 6 years of age, from mentally defective parents, exactly 40 are mentally defective or retarded (*i.e.*, 40 per cent.), while among 129 children of special school parents, 54, or 42 per cent., are mentally defective or retarded. Although no statistical significance can be attached to the difference it may be noted that the special school parents gave actually the higher percentage. This fact is of some importance with respect to the data from other districts, since it gives assurance that diversity in the standard adopted in the classification of the parents involved in the enquiry will not be a factor of consequence in the comparability of the results. It also suggests that the educational criterion of deficiency, as applied in London some 15 years ago, is of greater genetical significance than is the more sociological criterion of the Mental Deficiency Acts. The Birmingham data for certified parents are sparse, but

here also the special school parents show slightly but not significantly more defective and retarded children than do the certified parents.

In contrast to the married parents, whether male or female, and whether certified as mentally defective under the Mental Deficiency Acts or under the Education Acts only, the results from the unmarried mentally defective mothers are remarkable. These give 61 mentally defective or retarded children out of a total of 108, or over 56 per cent., as compared with 41 per cent. from the married parents. Of these, as has been shown in Table II, at least three-quarters must be expected to be certified when adolescents or adults.

B.—Aggregate Returns for England and Wales

The data available for districts outside London, though much more abundant, are also inevitably somewhat more heterogeneous. A change in classification with age, similar to that exemplified in the data for the London Area, is shown in all the larger groups of returns. A large number of children who, from seven to thirteen, are classified as retarded only, are, by the time that they reach 14 or over, transferred to the class of mental defectives. In most groups of returns the total of the two classes of mental defectives and retarded is slightly but not greatly increased. An exception must be noted in the case of the English County Boroughs, where the increase, from 44 per cent. to 58 per cent., is really considerable, and suggestive of the view that not all mentally defective and retarded children are recognised as such during the eighth to the fourteenth year of their lives.

TABLE VA.—*Classified Children of 7 to 13 from English and Welsh Counties and County Boroughs*

	Mentally Defective.	Retarded.	Normal.	Superior.	Total.
Somerset (married) ..	27	7	59	0	93
Other English Counties (married).	64	92	142	1	299
All English Counties (unmarried).	85	128	318	5	536
Wales—					
Married	10	2	9	0	21
Unmarried	9	6	18	2	35
English County Boroughs—					
Married	41	33	71	0	145
Unmarried	14	20	66	0	100
Birmingham—					
Married	17	57	226	5	305
Unmarried	3	2	15	0	20
London	35	76	129	8	248
Totals	305	423	1,053	21	1,802

TABLE VB.—*Children 7 to 13. Percentages*

	Mentally Defective.	Retarded.	Normal.	Superior.
Somerset (married)	29·0	7·5	63·4	0·0
Other English Counties (married) ..	21·4	30·8	47·5	0·3
All English Counties (unmarried) ..	15·9	23·9	59·3	0·9
Wales (married)	47·6	9·5	42·9	0·0
Wales (unmarried)	25·7	17·1	51·4	5·7
English County Boroughs (married)..	28·3	22·7	49·0	0·0
English County Boroughs (unmarried)	14·0	20·0	66·0	0·0
Birmingham (married)	5·6	18·7	74·1	1·6
Birmingham (unmarried)	15·0	10·0	75·0	0·0
London	14·1	30·6	52·0	3·2
	16·9	23·5	58·4	1·2

In Table VA is given the distribution of 1,802 children of 7 to 13 years of age for the English and Welsh counties and county boroughs. Apart from the London group, which has already been examined in detail above, the children of married and unmarried parents have been stated separately. In the Counties, the County Boroughs and in Wales the children of unmarried mentally defective parents show a somewhat lower proportion of defect than do the children of the married parents, whereas in Birmingham, as in London, the incidence of defect is somewhat higher among the children of the unmarried. In the aggregate, excluding London, for children of the age group 7 to 13, there is little difference between the two classes. The 691 children of the unmarried show 16 per cent. mentally defective and 23 per cent. retarded, or a total of 39 per cent.; while the married, on a total of 863 children, give 18 per cent. mentally defective and 22 per cent. retarded, a total of 40 per cent. Putting the two groups together, and including 248 children from London, the totals at the foot of Table VA give 16·9 per cent. mentally defective, 23·5 per cent. retarded, 58·4 per cent. normal, and 1·2 per cent. superior.

TABLE VIA.—*Classified Children over 13 from English and Welsh Counties and County Boroughs*

	Mentally Defective.	Retarded.	Normal.	Superior.	Total.
Somerset (married) ..	197	56	348	0	601
Other English Counties (married).	138	77	164	2	381
All English Counties (unmarried).	127	47	267	5	446
Wales—(married) ..	10	3	19	0	32
(unmarried)	5	5	20	0	30
English County Boroughs—					
(married) ..	53	20	45	1	119
(unmarried) ..	23	18	37	0	78
Birmingham—					
(married) ..	9	3	47	1	60
(unmarried) ..	4	0	7	1	12
London	33	11	45	0	89
Totals ..	599	240	999	10	1,848

TABLE VIB.—*Children over* 13. *Percentages*

	Mentally Defective.	Retarded.	Normal.	Superior.
Somerset (married)	32·8	9·3	57·9	0·0
Other English Counties (married)	36·2	20·2	43·0	0·5
All English Counties (unmarried)	28·5	10·5	59·8	1·1
Wales—(married)	31·2	9·4	59·4	0·0
(unmarried)	16·7	16·7	66·7	0·0
English County Boroughs—				
(married)	44·5	16·8	37·8	0·8
(unmarried)	29·5	23·1	47·4	0·0
Birmingham—				
(married)	15·0	5·0	78·3	1·7
(unmarried)	33·3	0·0	58·3	8·3
London	37·1	12·3	50·6	0·0
	32·4	13·0	54·1	0·5

Table VIA gives a similar classification of 1,848 children recorded as over 13 years of age. It should be noted that the children from the different districts are far from being proportionally represented in the two age-groups. Thus Birmingham has 325 in the younger, but only 72 in the older group. In London also the elder children are under-represented, though not in so high a proportion. In the English County Boroughs, and in Wales, the numbers are not very unequal, but in the English Counties the elder children greatly predominate, owing almost entirely to the abundant data on the older age-group compiled in the County of Somerset. For this reason that County is shown separately from the remaining English Counties for the children of married parents. Owing to the composite character of the data such disproportions in the frequencies of the different classes of children have an influence upon the aggregate which makes it necessary to set out the tabulation somewhat fully. For example the proportion of mentally defective and retarded together is distinctly less from Somerset, 42 per cent., than from the other English Counties, 56·9 per cent., although in Somerset a larger proportion of these (more than three quarters), are classed as mentally defective ; whereas in the remaining English Counties the proportion is somewhat less than two-thirds. Consequently, the inclusion in the total of the large group of 601 children of married mentally defective parents in Somerset has somewhat lowered the percentages of mentally defective, and especially of retarded children, in the older age-group, below the values they would take had the proportionate numbers from different districts been the same as in the younger age-group.

In the aggregate, including the small group from London, of 1848 children over 13 years of age, 32·4 per cent. are found to be mentally defective, 13·0 per cent. to be retarded, 54·1 per cent. to be of normal intelligence, and 0·5 per cent. of superior intelligence. The mentally defective and retarded together constitute 45·4 per cent., as compared with 40·4 per cent. for the younger group, a not inconsiderable increase, in spite of the inclusion among the elder children of the large contingent from Somerset. Large as the percentage is, it cannot be regarded, in view of the composition of the data, as other than an underestimate ; for, as has been noted in respect to the English County Boroughs, the increasing proportion with increasing age of

mentally defective and retarded children suggests that not all who would ultimately be placed in these classes have yet been so classified. Moreover, in addition to the English Counties other than Somerset, the English County Boroughs show the highest percentages of mentally defective and retarded children, namely 61·3 per cent. for the married and 52·6 per cent. for the unmarried. And these Boroughs are, on the whole, but poorly represented in the data.

The contrast between the children of the married and the unmarried in districts other than London is more marked in the older than in the younger children. Of 566 children of the unmarried mentally defective included in Table VIA, the percentages of mentally defective and retarded children are 28 per cent. and 12 per cent. respectively, giving a total of 40 per cent.; while of 1,193 children of married parents the percentages are 34 per cent. and 13 per cent., making 47 per cent. in all. The greater part of these data come from the English counties, and again it must be noted that the inclusion of the large body of data from Somerset has lowered rather than heightened the contrast. Whatever may be its cause, it would seem certain that London and probably other large towns differ from the English counties in the relative incidence of defect among the children of unmarried as contrasted with those of married defectives.

C.—Infantile Mortality

TABLE I.—*Deaths under* 1 *year, as percentages of Total Live Births, for Children of Married and Unmarried mentally defective parents in five regions*

	Counties.	*County Boroughs.*	*Wales.*	*Birmingham.*	*London.*
Unmarried	15·1	24·8	17·0	24·1	45·0
Married	9·7	16·6	6·7	8·1	13·3

TABLE II.—*Deaths under* 1 *year per* 100 *Births, derived from Tables* 16 *and* 17 *of the Registrar-General's Statistical Review for England and Wales,* 1931

	Counties.	*County Boroughs.*	*Wales.*	*Birmingham.*	*London.*
Illegitimate	9·9	12·4	10·8	12·8	12·1
Legitimate	5·7	7·5	7·3	6·8	6·2

TABLE III.—*Stillbirths per* 100 *Births to mentally defective Parents, Married and Unmarried, in five regions*

	Counties.	*County Boroughs.*	*Wales.*	*Birmingham.*	*London.*
Unmarried	4·9	2·9	3·4	3·4	4·8
Married	2·3	3·6	1·9	1·2	2·5

TABLE IV.—*Stillbirths per* 100 *Births, derived from Table* 18 *of the Registrar-General's Statistical Review for England and Wales,* 1931

	Counties.	*County Boroughs.*	*Wales.*	*Birmingham.*	*London.*
Illegitimate	5·9	6·2	6·8	6·8	4·7
Legitimate, per 100 births in each category	4·0	4·4	6·0	4·2	3·3

It would appear that the data on stillbirths are very incomplete. In spite of any incompleteness in the data for deaths, the infantile mortality is regularly higher in this material than in the general population. Among the married, the difference is very striking for the County Boroughs and London and to a less extent for the English Counties.

TABLE VII.—*Classification of 2,113 Children (over 13) of Defective Parents, as Normal, Retarded or Defective, by Birth Order and Size of Family.*

Place in Family. F.	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
1st	120	118	82	52	38	27	28	14	17	3	5	1	–	–	–
	30	28	15	10	6	9	4	1	1	–	1	–	–	–	–
	88	54	40	43	21	19	8	8	4	2	–	–	–	1	1
2nd		52	53	42	29	28	27	10	10	2	3	1	–	–	1
		20	15	8	7	5	3	–	2	1	1	–	–	–	–
		29	25	31	14	13	10	8	6	1	2	–	–	–	–
3rd			36	31	29	24	25	13	6	3	6	1	–	–	1
			9	7	5	4	5	3	3	–	–	–	–	–	–
			19	20	9	12	4	3	8	–	–	–	–	–	–
4th				20	16	11	20	11	11	3	6	–	–	–	1
				5	3	7	3	2	–	–	–	–	–	–	–
				18	10	15	8	1	5	1	–	1	–	–	–
5th					15	5	19	9	11	3	4	–	–	–	1
					1	6	1	4	2	1	1	–	–	–	–
					3	15	5	1	1	–	1	1	–	–	–
6th						7	14	6	8	1	3	1	–	–	1
						3	4	2	–	–	1	–	–	–	–
						9	4	4	4	1	2	–	–	–	–
7th							6	7	8	2	4	–	–	–	1
							2	1	1	–	1	1	–	–	–
							3	3	4	–	1	–	–	1	–
8th								4	8	–	4	–	–	–	1
								2	1	1	–	1	–	–	–
								2	2	2	1	–	–	–	–
9th									8	2	5	–	–	–	1
									–	–	–	1	–	–	–
									–	–	–	–	–	–	–
10th										2	2	–	–	–	1
										–	–	1	–	–	–
										–	2	–	–	–	–
11th											2	–	–	–	1
											–	–	–	–	–
											–	–	–	–	–
12th												–	–	–	1
												–	–	–	–
												–	–	–	–
13th													–	–	1
													–	–	–
													–	–	–
14th														–	–
														–	–
														–	1
15th															–
															–
															–
Total	120	170	171	145	127	102	139	74	87	21	44	4	–	–	12
	30	48	39	30	22	34	22	15	10	3	5	4	–	–	–
	88	83	84	112	57	83	42	30	34	7	9	2	–	2	2

D.—Incidence according to Birth Order and Size of Family

The classification of over 2,000 children over 13 years of age when these are sub-divided according to the size of the fraternity and order of birth is shown in Table VII. The 15 columns of the Table refer respectively to fraternities of from 1 to 15 children. Many of the solitary children are isolated cases of illegitimacy, but, if followed by subsequent births to the mother, the first child, whatever its origin, appears in the table as the eldest of the family. In each cell, the three entries are the numbers of normal (including superior), retarded and defective children recorded.

The principal object of the sub-division shown in Table VII was to ascertain whether, among these children, the incidence of defect is heavier among the first-born, as has been often inferred from other data, or, as has been also suggested, among the last born. In considering the results it must be remembered that our table refers, not to a random sample of the children of the community, but only to children of mentally defective parents.

TABLE VIII.—*Percentages of Defective, Retarded and Normal Children (over 13) in Families of different Sizes.*

Size of Family.	Number of Children.	Percentage Normal.	Percentage Retarded.	Percentage Defective.
1	238	—	—	36·975
2	301	56·478	15·947	27·575
3	294	58·164	13·265	28·571
4	287	50·523	10·453	39·024
5	206	61·650	10·680	27·670
6	219	46·575	15·525	37·900
7	203	68·473	10·837	20·690
8	119	62·185	12·605	25·210
9	131	66·410	7·634	25·954
10	31	67·742	9·677	22·581
11	58	75·862	8·621	15·517
12	10	40·000	40·000	20·000
13	—	—	—	—
14	2	0·0	0·0	100·000
15	14	85·714	0·0	14·286

Table VIII gives the number of children available of the required age for each size of family, and the corresponding percentages of defective, retarded and normal children. Throughout this section the very small group of children classified as having superior intelligence has been added to the normals.

The percentages given for families over nine are necessarily highly erratic, owing to the small numbers of children available from such large families. Even for families less than ten considerable fluctuations are to be expected owing to the similarity of children belonging to the same family. We may, however, properly use the percentages observed, among the total of children from families of a given size, to ascertain the number of defective and retarded children expected among the first-born of these families.

TABLE IX.—*Expected and Observed Distribution of First Child*

Size of Family.	Expected.			Observed.		
	Normal.	Retarded.	Defective.	Normal.	Retarded.	Defective.
2 ..	112·956	31·894	55·150	118	28	54
3 ..	79·685	18·173	39·142	82	15	40
4 ..	53·049	10·976	40·975	52	10	43
5 ..	40·072	6·942	17·986	38	6	21
6 ..	25·616	8·539	20·845	27	9	19
7 ..	27·389	4·335	8·276	28	4	8
8 ..	14·303	2·899	5·798	14	1	8
9 ..	14·611	1·679	5·710	17	1	4
10 ..	3·387	·484	1·129	3	—	2
11 ..	4·552	·517	·931	5	1	—
12 ..	·400	·400	·200	1	—	—
13 ..	—	—	—	—	—	—
14 ..	0	0	1·000	—	—	1
15 ..	·857	0	·143	—	—	1
	376·877	86·838	197·285	385	75	201

For single children the numbers observed and expected on this basis must necessarily be the same. Table IX shows the numbers expected and observed for each size of family from 2 to 15 children for the 661 first born children in families of more than 1. The totals are summarised in Table X. It will be

TABLE X.—*Total Number of First Children Expected and Recorded*

	Expected.	Recorded.	Difference.	Standard Error.
Normal (and Superior) ..	376·877	385	+ 8·123	—
Retarded	86·838	75	−11·838	±6·382
Defective	197·285	201	+ 3·715	±8·761

observed that the numbers recorded agree somewhat closely with those expected. Among the first born there are found in all about 8 more normal children than would be expected, nearly 12 less retarded children and nearly 4 more defective. The standard errors of the two latter figures are shown in Table X and it will be seen that, though the deficiency of retarded children may be thought to be suggestive of something more than a sampling variation, neither deviation can be regarded as statistically significant. It has been shown in previous sections of this Report that there is a considerable transfer of children as they grow older from the retarded to the defective group, and in view of the predominance of young families in many of our returns it is probable that among the children over 13 a smaller proportion of the first born than of second and later members of the same families have been so far incompletely classified. This would lead to an apparent excess of defectives and corresponding deficiency of the retarded among the first born children. It is evident, however, that our data provide no basis for the view that deficiency and retardation are especially frequent among the first-born at least in the families of defective parents.

TABLE XI.—*Distribution of Defective Children by Place in Family*

		Order from the first child.		Order from the last child recorded.	
		Expected.	Observed.	Expected.	Observed.
Place in Family	1	285·3	289	170·5	171
	2	137·0	139	133·6	136
	3	86·2	75	108·5	110
	4	53·6	59	84·6	83
	5	29·6	27	51·3	42
	6	19·6	24	40·2	39
	7	11·1	12	19·4	26
	8	6·7	7	13·4	16
	9	5·9	3	7·9	6
	10–15			5·4	6
		635·0	635	634·8	635

In Table XI are shown the numbers of defectives expected and observed for each place in the family by order of birth, in addition to the corresponding value when the order is taken backwards from the last child recorded. In general the numbers agree remarkably closely, and we are not tempted to attach importance even to the largest discrepancies, such as the deficiency of 11 defectives in the 3rd place of the family, or the deficiency of 9 in the 5th place from the last. There is no sign of birth order influencing the incidence of defect in these families.

TABLE XII.—*Distribution of Retarded Children by Place in Family*

	Order from the first child.		Order from the last child recorded.	
	Expected.	Recorded.	Expected.	Recorded.
1 ..	116·8	105	67·2	72
2 ..	58·7	62	62·6	65
3 ..	33·8	36	42·7	41
4 ..	20·4	20	29·6	29
5 ..	12·9	16	21·7	22
6 ..	8·9	10	17·8	18
7–15 ..	10·4	13	20·4	17
	261·9	262	262·0	262

In Table XII are given the numbers expected and recorded for the retarded children in the same material. The deficiency of retarded children among the first born is considerably the largest discrepancy in this Table and it, as we have seen, cannot be regarded as statistically significant. The discrepancies in Table XII do not corroborate any important discrepancy in Table XI, and both Tables confirm the view that among the children of defectives even expensive material reveals no indication of the influence of order of birth.

TABLE XIII.—*Classification of* 1,966 *Children* (7 *to* 13) *as Normal v. Retarded or Defective by Birth Order and Size of Family.*

Place in Family.	Families of 1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
1st	276	178	94	53	28	12	3	2	–	–	–	–	–	–	–
	170	79	47	21	22	7	1	–	1	–	–	–	–	–	–
2nd		121	73	47	26	15	3	4	1	–	–	–	–	–	–
		75	49	25	21	11	6	3	–	–	–	–	–	–	–
3rd			45	34	19	14	5	3	2	–	–	–	–	–	–
			21	25	17	11	6	5	1	–	–	–	–	–	–
4th				18	14	16	7	6	–	–	–	–	–	–	–
				16	16	7	3	3	2	–	–	–	–	–	–
5th					12	14	5	5	2	–	–	–	–	–	–
					16	12	5	1	1	–	–	–	–	–	–
6th						10	9	3	3	–	–	–	–	–	–
						9	3	1	4	1	–	–	–	–	–
7th							16	3	3	1	–	–	–	–	–
							4	2	3	–	–	–	–	–	–
8th								3	2	1	–	–	–	–	–
								3	2	–	1	–	–	–	–
9th									4	–	–	–	–	–	–
									2	–	1	–	–	–	–
10th										1	2	–	–	–	–
										–	–	–	–	–	–
11th											3	1	–	–	–
											–	–	–	–	–
12th												1	–	–	–
												–	–	–	–
13th													–	–	–
													–	–	–
14th														–	–
														–	–
15th															1

Children of 7 *to* 13

Data for 1,966 children of 7 to 13 are given in Table XIII. These have been divided, for the reasons previously discussed, into two mental classes only, namely the normal, including a few classed as superior, and the retarded and defective, which at these ages cannot usefully be sub-divided.

TABLE XIV.—*Percentage of Defective or Retarded Children* (7 *to* 13) *in Families of different Sizes*

Size of Family.	*Number of Children.*	*Percentage Defective or Retarded.*
1	446	38·117
2	453	33·996
3	329	35·562
4	239	36·402
5	191	48·168
6	138	41·304
7	76	36·842
8	47	38·298
9	33	48·485
10	4	25·000
11	7	28·571
12	2	0
Total	1,966	37·742

Table XIV gives the numbers of children classified for different sizes of families from 1 to 12 and the percentage of defective or retarded children recorded in each size of family. These percentages are somewhat irregular for the same reasons as are the percentages in Table VIII.

TABLE XV.—*Numbers of First Children of* 7 *to* 13 *Expected and Recorded in the Group Defective and Retarded for Families of* 2 *to* 9 *Children*

Size of Family.	*Expected.*	*Recorded.*
2	87·4	79
3	50·1	47
4	26·9	21
5	24·1	22
6	7·8	7
7	1·5	1
8	0·8	0
9	0·5	1
Total	199·1	178
Standard error	±8·367	

Table XV shows the numbers of first children in the group defective or retarded expected on the basis of these percentages and also the numbers observed in families of from 2 to 9 children. It will be seen that the total number recorded falls short of expectation by about 21 children, which is a little more than $2\frac{1}{2}$ times the standard error of random sampling. The discrepancy must therefore be judged to be statistically significant. It would appear that in this age group first children have been recorded as defective or retarded significantly less frequently than have later children.

TABLE XVI.—*Distribution of Defective or Retarded Children* (7 *to* 13) *by Place in Family*

Place in Family.	Order from first Child.		Order from last Child recorded.	
	Expected.	Recorded.	Expected.	Recorded.
1..	369·1	348	307·5	316
2..	176·1	190	186·3	188
3..	81·2	86	111·9	106
4..	44·4	47	69·8	62
5..	31·7	35	44·0	44
6..	17·4	18	15·2	20
7..	12·4	9	7·3	6
More than 7 ..	9·7	9		
Total ..	742·0	742	742·0	742

In Table XVI we give the total numbers expected and recorded for each place in the family in order of birth and also in reverse order, from the last child recorded. The data for this age group necessarily contain a higher proportion of incomplete families than do those for the older children.

It will be seen that the only large discrepancy is that already noted in the lower proportion of first children recorded as defective or retarded, and that the deficiency is largely counter-balanced by an excess in the number of second children. The observed excess among the last two children of the families is not great enough to be judged significant, and since it occurs principally in the smaller families, of from two to five children, it could in any case scarcely be ascribed to any deleterious effect of frequent childbirth. The paucity of defect recorded among first children appears not to be susceptible of any simple or attractive explanation. Since it appears only among a group of children in a range of ages during which changes in classification must be frequent, and is not confirmed by our data for children over 13, we are inclined rather to regard it as a casual, but unexpected, consequence of the great difficulties of collecting data adequate to the discussion of the relation between defect and birth order, than as demonstrating a truth of medical significance. It should, we think, receive serious consideration, as such, only if confirmed in data obtained independently from other sources.

The danger of hasty conclusions from the distribution of birth order among children showing mental or other defects is well illustrated by the data collected by this Committee. Had account only been taken of the defective or retarded children it would have appeared from Table XIII that these occur predominantly among the earlier children, in small families of 1 to 5, and among the later children in larger families. Equally, Table VII shows a great predominance of defect and retardation among the earlier children; but, when the normal children are tabulated, it is seen that they also have been more frequently recorded among the children coming earlier in their families. The selection of ages at which classification is more or less possible has, in fact, ensured in both tables a tendency to record far more of the earlier than of the later children of families of a given size; while the exclusion from Table XIII of children over 13 years of age has excluded the earlier members of the largest families. The necessity for studying the distribution of normal children in parallel with that of defectives is apparent once the data for both are presented together, but must frequently have been overlooked in cases where data for normal children have not been simultaneously collected.

GLOSSARY OF TERMS USED IN REPORT

Amaurotic Idiocy

There are two forms, an infantile and a juvenile. Both forms are rare. The infantile variety is a family disease of infancy characterised by gradual failure of vision leading to blindness, progressive weakness of the muscles and idiocy. The juvenile form occurs in older subjects from the eighth to the twelfth years.

Amentia and Dementia

Amentia (literally lack of mind) is applied to the various degrees of mental deficiency due to arrested or incomplete mental development. Whereas in Amentia there is a failure to attain a certain level of mentality, in Dementia there is a retrogression from a level already attained.

Brachydactyly

Literally " short-fingeredness." An inherited dominant condition in which the middle phalanges of the fingers are missing.

Carrier

See " Heterozygous and Homozygous " and *" Dominant."*

Chromosome

Chromosomes are tiny filaments, named from their affinity for dyes, seen in the nuclei of cells undergoing division. They are the bearers of hereditary qualities.

Collaterals

Relatives by blood, but not by direct descent.

Cretinism

A disease associated with defective secretion of the thyroid gland. Affected persons are of feeble intellect and stunted growth.

Dementia Praecox

Literally " precocious dementia." A severe form of Schizophrenia (*q.v.*), usually beginning in early life, characterised by a slowly progressive deterioration of mind and accompanied by loss of interest and emotion.

Dominant

If members of two strains manifesting different genetic characters (e.g. brown and blue eyes, or tallness and shortness), mate together, and if *all* the offspring of such matings manifest the character shown by one of the parents, that character is then said to be " dominant " and the character which does not appear is said to be " recessive." The recessive character is, however, carried in a latent form by the offspring (who are thus termed " carriers ") and if one of these carriers mates with an individual who is a carrier of the same character it will then again become manifest in a proportion of their offspring.

Encephalitis Lethargica (*Encephalitis Epidemica*)

Popularly known as " sleepy sickness." A disease of the brain and the rest of the central nervous system of undetermined origin but probably an infection. It is often followed by mental changes and, when occurring before mental development is complete, may produce amentia. Not to be confused with " sleeping sickness " of African origin, which is due to a parasite transmitted by the tsetse fly.

Epilepsy (*Idiopathic*)

A nervous disorder characterised by temporary loss of consciousness, with or without fits, without any sign of organic disease of the brain. It may produce amentia or mental disorder.

Epilepsy (Myoclonus)

A rare familial disorder commencing in childhood with fits of an epileptic character accompanied, as the disease progresses, by quick short muscular spasms (clonus) and progressive mental impairment.

Eugenic

Literally, pertaining to being "well born"—coming from a good stock. Not used in the sense of social position but in respect of inherited mental and physical endowment. The adjective is applied both to measures designed to improve the stock and to those designed to prevent the perpetuation of inferior stocks (*e.g.*, "eugenic" sterilisation).

Familial Concentration

The occurrence among several members of a family of a defect, disorder, or abnormality of a similar general type.

Gene

The physical basis of heredity. The genes have been located in the chromosomes (*q.v.*) and preserve their identity in successive generations of individuals.

Genetics

The modern term for the study of the modes of hereditary transmission.

Germ Cell

A reproductive cell. The union of a germ cell derived from the male (spermatozoon) with a germ cell derived from the female (ovum) constitutes the act of fertilisation and the beginning of the developmental process of a new individual.

Hæmophilia

Popularly known as "bleeders' disease." An abnormal tendency to persistent hæmorrhage even from trivial injury; spontaneous bleeding may also occur. With certain rare exceptions the disease is confined to males but is transmitted by females.

Heterozygous and Homozygous

An organism is said to be homozygous (similarly yoked) in respect of heritable factors when similar genes (*q.v.*) are received from both parents. When the genes are dissimilar the individual is said to be heterozygous (dissimilarly yoked). A heterozygous individual may appear normal although carrying a gene which when homozygous would produce defect. Such an individual is frequently termed a "carrier" of the defect.

"High-grade" and "Low-grade" Mental Defect

Indicate a "mild" or "severe" degree of defect. The feeble-minded are usually referred to as "high-grade defectives" and idiots and imbeciles as "low-grade defectives."

Huntington's Chorea

A form of chorea described by Dr. Huntington in 1872. It is a disease of middle or late life and in a typical case there are tremors of the head, limbs and body which increase and are accompanied by progressive mental impairment.

Hydrocephaly

A condition in which there is an excessive collection of fluid in the spaces of the brain. It is often accompanied with enlargement of the head and mental impairment.

Macro- and Micro-cephaly

Conditions in which the head is abnormally large or abnormally small. The mentality may be abnormal also.

Manic-Depressive Psychosis.

A form of mental disorder in which emotional fluctuations, *i.e.*, elation or depression, constitute the outstanding feature.

Mendelian

Pertaining to the theory of heredity advanced by Johann Gregor Mendel (1822–1884), Abbot of Brünn in Moravia and the founder of the modern science of genetics.

Mental Age

The measurement in years of intellectual development as ascertained by the application of standardised mental tests.

Mongolism

A form of amentia so called because of certain physiognomical resemblances to members of the Mongolian race.

Oligophrenia

Literally, "paucity of mind." A term, more frequently used abroad, designed to cover the many grades of mental subnormality.

Paranoia

Literally, "beyond reason." An older term was "monomania." A chronic mental disorder with delusions of a systematised character. These delusions form a compact, interrelated system, and the patient often appears rational on matters not connected with the delusional edifice he has constructed.

Psychoneurosis

A mental disorder with nervous manifestations but no evidence of organic disease of the brain ; *e.g.*, hysteria and "anxiety states."

Psychosis

A serious disorder of mind characterised by a change in the personality.

Recessive : See Dominant

Schizophrenia

Literally, "split-mindedness." A mental disorder in which there is a division of the personality, part being completely occupied with phantasy. The patient tends to retreat within himself and to lose touch with external reality.

Siblings

Brothers or sisters.

Social Problem Group

This term refers to a relatively small section of the community the families of which show a high incidence of chronic pauperism, physical disease, infantile mortality, neglect of children, habitual crime, mental disease and mental defect.

APPENDIX I

LIST OF WITNESSES IN ORDER OF APPEARANCE BEFORE THE COMMITTEE

Miss E. Fox, Honorary Secretary of the Central Association for Mental Welfare.

Dr. F. C. Shrubsall, M.A., M.D., B.Ch., F.R.C.P., Senior Medical Officer of the London Mental Hospitals Department ; and Dr. E. S. Litteljohn, Medical Superintendent of the Manor Institution.

Dr. A. W. Potts, M.A., M.D., C.M., Medical Officer to the Birmingham Committee for the care of the Mentally Defective ; Dr. A. M. McCutcheon, M.B., Ch.B., F.R.F.P.S., Medical Superintendent of Monyhull Colony ; Mr. R. W. Blackie, Inspector of the Birmingham Committee for the care of the Mentally Defective ; and Mr. P. D. Innes, M.A., D.Sc., Chief Education Officer, Birmingham.

Dr. F. D. Turner, M.B., and Dr. L. S. Penrose, M.A., M.D., Medical Superintendent and Research Medical Officer, respectively, of the Royal Eastern Counties' Institution.

Dr. J. W. Fox, M.B., Assistant Medical Officer, Kent County Council.

Mr. S. Wormald, Executive Officer of the Leeds Mental Health Services Committee.

Mr. W. J. Elliott, Director of the National Society for the Prevention of Cruelty to Children.

Mr. E. J. Lidbetter.

Dr. A. G. Morison, M.A., M.D., Ch.B., Deputy Medical Officer of Health, Bristol (in respect of an enquiry by him when Assistant Medical Officer of Bolton, Lancashire).

Dr. R. Lawrence, M.D., Ch.B., Assistant Medical Officer, West Riding of Yorkshire County Council ; and Mr. S. F. King, Solicitor, in the Office of the Clerk of the County Council.

Professor R. J. A. Berry, M.D., C.M., F.R.C.S.Ed., F.R.S.Ed., Director of Medical Services, Stoke Park Colony.

Dr. R. M. Stewart, M.D., Ch.B., F.R.C.P.Ed., Medical Superintendent of Leavesden Mental Hospital.

Dr. Doris M. Odlum, M.A.

Alderman J. C. Grime, Vice-Chairman of the Lancashire Mental Deficiency Acts Committee ; and Dr. R. B. F. McKail, M.B., Ch.B., Medical Superintendent of Brockhall Institution.

Sir Henry B. Brackenbury, Hon. M.D., Hon. LL.D., and Dr. G. C. Anderson, M.D., Ch.B., Chairman of the Council and Medical Secretary, respectively, of the British Medical Association.

Professor J. Shaw Bolton, D.Sc., M.D., B.S., F.R.C.P., Medical Superintendent of the West Riding of Yorkshire Mental Hospital, Wakefield, Professor of Mental Diseases, University of Leeds.

Dr. W. F. Menzies, M.D., C.M., B.Sc., F.R.C.P., Medical Superintendent of the Stafford Mental Hospital, Cheddleton.

Professor E. W. MacBride, M.A., D.Sc., LL.D., F.R.S., Professor of Zoology, Imperial College of Science.

Mr. D. Caradog Jones, M.A., and Miss J. E. McCrindell, of the Liverpool School of Social Sciences and Administration, University of Liverpool.

Professor Lancelot Hogben, M.A., D.Sc., Professor of Social Biology, University of London.

Dr. A. A. E. Newth, M.B., B.S., Senior Medical Officer of the Nottingham Education Committee.

Captain Mayer, M.B.E., Superintendent of the Royal Western Counties' Institution.

Mr. A. L. Beeley, Professor of Sociology of the University of Utah, U.S.A.

Professor R. Ruggles-Gates, M.A., Ph.D., LL.D., F.R.S., Professor of Botany, University of London.

Professor F. A. E. Crew, D.Sc., Ph.D., M.D., Ch.B., F.R.S.Ed., Professor of Animal Genetics, University of Edinburgh.

Mr. C. J. Bond, C.M.G., F.R.C.S., Dr. C. P. Blacker, M.C., M.A., M.D., B.Ch., M.R.C.P., Dr. A. J. Lewis, M.D., B.S., M.R.C.P., Dr. E. Mapother, M.D., B.S., F.R.C.S., F.R.C.P., representing the Eugenics Society.

Mrs. C. B. S. Hodson, Honorary Secretary of the International Federation of Eugenic Organisations.

The Right. Rev. Monsignor Newsome, Administrator of Besford Court Certified Institution.

Dr. J. Tylor Fox, M.A., M.D., B.Ch., Medical Superintendent of the Lingfield Epileptic Colony.

Professor D. K. Henderson, M.D., Ch.B., F.R.F.P.S., M.R.C.P.Ed.

Dr. L. M. Davies, M.A., M.D., B.Ch., Dr. C. A. P. Truman, County Medical Officer and Medical Certifier, respectively, of the Devon County Council ; and Miss MacMichael, Secretary of the Voluntary Association of the County of Devon.

Professor J. M. Woodburn Morison, M.D., C.M., F.R.C.P.Ed., F.R.S.Ed., Professor of Radiology, University of London.

Mrs. Cooke Hurle, Dr. G. W. J. MacKay, M.B., Ch.B., and Mr. C. E. Newman, Chairman, Medical Officer and Secretary, respectively, of the Somerset Mental Deficiency Acts Committee.

Mr. C. J. Bond, C.M.G., F.R.C.S., Mr. Victor Bonney, M.S., M.D., B.Sc., F.R.C.S., M.R.C.P., and Mr. Hugh Lett, C.B.E., M.B., Ch.B., F.R.C.S., on behalf of the Royal College of Surgeons.

Mrs. Neville Rolfe and Professor Cyril L. Burt, M.A., D.Sc., representing the British Social Hygiene Council.

The Right Hon. Lord Dawson of Penn, P.C., G.C.V.O., K.C.B., K.C.M.G., M.D., F.R.C.P., Hon. F.R.C.S., President of the Royal College of Physicians.

Dr. A. A. W. Petrie, M.D., Ch.B., B.S., F.R.C.S., F.R.C.P., Medical Superintendent of the Banstead Mental Hospital.

Professor J. B. S. Haldane, M.A., F.R.S., Professor of Genetics, University College.

Miss Brayn, Secretary of the Portsmouth Voluntary Association.

Miss Freshney, Secretary of the Leicestershire Voluntary Association.

Dr. N. S. Finzi, M.B., Medical Officer in Charge of the Radiological Department of St. Bartholomew's Hospital.

APPENDIX II

MEMORANDUM SUBMITTED BY THE NATIONAL SOCIETY FOR THE PREVENTION OF CRUELTY TO CHILDREN

Note.—*In appending this extract from the Memorandum of the National Society for the Prevention of Cruelty to Children, the Committee wish to point out that the Director, Mr. W. J. Elliott, who gave evidence on behalf of the Society, was not authorised, nor was he asked, to express any view as to the desirability of sterilisation. The oral evidence, like the Memorandum, was directed solely to summarising the facts found by the Society's Inspectors in the ordinary course of their work.*

1. In order to present to the Committee information which should be as up to date as possible a special census has been taken of the work of the Inspectors during the twelve months ended 30th September, 1932. All the following figures, therefore, relate to that period, but, owing to serious illness of four Officers (all in England) the return is not indicative of the Society's full work.

It was further decided, as being likely to assist the Committee, to present figures for England and Wales separately from Ireland.

2. In England and Wales the Society dealt with 38,984 new complaints in the year ending 30th September, 1932. In 2,310 of these cases (or 5·9 per cent. of the whole) there was a degree of mental deficiency in one or other of the parents (or guardians) concerned.

Incidence of Mental Deficiency

3. This incidence (5·9 per cent.) varies to a sharp degree as between the various Branches of the Society. In some few, the Inspectors are not prepared to say that any of the cases are those in which the parents could be placed in such a category, whilst in others, the proportion is as high as 30 per cent. At first sight there will be temptation to suppose these variations to be due to the differing standards employed by our Officers. This is discounted, however, by the almost invariable fact that the Inspectors working in large towns find the incidence of mental deficiency to be lower than the average for the country as a whole, whilst those working in country Branches give it as higher.

In this particular aspect of the question it is not unlikely that mentally deficient people are better looked after by other bodies and authorities in large towns and that therefore their cases are not required to be reported to our Society.

The county of Suffolk appears to provide a high incidence of cases where the parents are mentally deficient. We have two Inspectors in the area, one stationed at Ipswich and the other at Bury St. Edmunds, and their Branches correspond geographically with the areas covered by the two County Councils of East Suffolk and West Suffolk. The Ipswich Officer reports that 22 out of his 176 cases concern feeble-minded parents, and his colleague at Bury St. Edmunds 24 out of 170 cases.

Here are typical cases from both areas, both occurring in rural districts :—

Ipswich and district, Case No. 6726.—Both parents, age 30 years, are below par mentally, the mother particularly. They have 6 surviving children—1 child died—and their ages range from 11 years down to 6 weeks. They are apparently sub-normal, though not in a marked degree, so far as one can judge at the moment. Physically, they are below the standard. The father works as a labourer. The mother is feckless and always in a muddle ; she seldom goes out. Home, untidy and dirty ; children pale and grubby. Frequent complaints respecting two children attending school. When the Health Nurse calls she is refused admission. Recently I called with the M.O.H. and found the chamber utensils in back room containing excreta. There is a garden at the back of the cottage which is not cultivated ; overrun with grass,

weeds, etc., and lavatory not used ; overgrown with nettles, no path or track to it. It is difficult to reason with the parents. When reproved the woman flies into a paroxysm of temper and shrieks out. Maternal grandmother is M.D. Children are likely to be born into this home for some years yet.

Bury St. Edmunds and district, Case No. 5866.—In a family of mother, father, and 6 children, the mother is mentally affected and two of the children ; and a boy aged 13 and a girl of 11 are mentally deficient and suffering from paralysis. The boy is only partly paralysed, and about 4 years ago he entered a Home where he is making progress, both mentally and physically. In spite of numerous enquiries no Home could be found to take the girl and she was left in the care of her mother, who is totally unfit for such a task, with the result that the girl's deficiency has got steadily worse. She is now practically an imbecile and almost totally paralysed. Fresh efforts are being made, before it is too late, to find a Home for the girl.

Both the above Officers refer to the sympathetic and helpful attitude of the local authorities, with whom they work in close co-operation. Both, however, refer to the inadequacy in the number of Institutions available and speak of the great delay whilst waiting for vacancies, and this difficulty seems to be most acute in West Suffolk. Both Inspectors speak highly of the work of the Mental Welfare Association and refer to the fact that there are a great many mentally deficient children known to them whose cases have not been reported to the Society to deal with, presumably because there was no degree of neglect which would warrant our being called in.

An even higher incidence is reported from West Sussex. Our Officer resides at Chichester and reports that 31 of the 108 cases dealt with in the year were those where the parents were feeble-minded ; in 21 of these instances it was the mother, and in 7 both parents.

A typical case is :—

Chichester and district, Case No. 3771.—A farm hand and his wife, aged 45 and 40 years respectively : they have seven children, all on the backward side. The woman is very dirty and neglects the children and home. When warned they fall over themselves to get things improved. They are very civil and respectful and show no signs of objection on being reprimanded. If left without supervision they would get into a most deplorable state.

The Officer responsible for this area states, "There are no Institutions here for M.D. children : arrangements have to be made by the County Councils with other Counties who have Institutions. Delay is caused by waiting for vacancies. It is also rendered difficult to obtain parents' consent to the children going into Institutions, because they are going so far away that it will be impossible to visit them."

In North Devon, our Officer resides at Barnstaple and reports that 18 cases out of 152 concern feeble-minded parents. A typical case is :—

Barnstaple and district, Case No. 3183.—This case concerns a girl, aged 12 years, who owing to her weak mentality has been exempted from attending school. Both her parents are weak-minded. The girl has been certified M.D., and her immoral habits have been the subject of many enquiries, both by the police and the Society. She is in the habit of enticing boys to commit acts of indecency and was recently observed in compromising circumstances with a boy of about 12 years of age. The parents refuse to allow an application to be made for her removal to an Institution. It is feared that if the girl is allowed to continue her habits, it will lead to serious trouble, both for her and for the boys concerned. The mother is an illegitimate child, and, prior to her marriage, she had 4 illegitimate children, 3 of whom are dead. There are 5 children of the marriage, one of whom is in an M.D. Institution.

The Inspector says that Institutions in North Devon are inadequate as to numbers, and in many cases where the consent of the parents has been obtained for the removal of the children concerned, as long as two years has elapsed before a vacancy has occurred. This long wait often leads to the parents changing their minds and the children are, therefore, not removed. Frequently this has a detrimental effect, not only upon the child itself, but upon other children in the family.

The Inspector for Cambridgeshire reports that of 329 cases in the year, 43 concerned mentally defective parents.

Amongst the cases is :—

> *No.* 6557.—Where a girl, now aged 16 years, recognised as M.D. throughout her school days, at the age of 15 gave birth to a female child of which a brother (also certified M.D.) was alleged to be the father. This baby, now a year old, is still in hospital recovering from general neglect and starvation. The girl's father and mother are more or less mental and they have 9 children. The Inspector fears that other illegitimate children will be born in this family.

The Officer states that his area includes large stretches of thinly populated country where the inhabitants are all of a simple type and many married couples are undoubtedly mental. He has dealt with several cases where the families were living under conditions which he states would compare badly with the huts of partly civilised natives in primitive nations. In one such, found in the Fens, there were 4 children in the family; the parents were mental and did not even know the children's ages or where they were born. Again, this Officer refers to the insufficiency of Institutions, but states that the question of finance prohibits it.

The Dewsbury Inspector appears to have a varied experience. He dealt with 225 cases in the year, of which 26 concerned feeble-minded parents. He states that in Dewsbury itself there is a Voluntary Care Association for the Feeble-Minded, which does excellent work. Outside the Borough, however he finds it difficult to get things done and refers to the fact that the parents seem to know they need not let their children go to Institutions if they do not wish.

Other Branches where the incidence is high are :—

Bishop Auckland	15	out of	129
Bromley	18	,,	135
Caernarvon	19	,,	183
Colchester	13	,,	148
East Cornwall	19	,,	89
Exeter	25	,,	203
Hastings	15	,,	155
Hull (3 Inspectors)	63	,,	847
Leeds (3 Inspectors)	74	,,	689
Leicester (2 Inspectors)	49	,,	517
Mansfield (2 Inspectors)	83	,,	422
Newark	23	,,	217
Nottingham	21	,,	203
Oxford	26	,,	167
Peterborough	20	,,	141
Pontypridd	17	,,	158
Reading	44	,,	227
Southend-on-Sea	22	,,	220
Swansea	42	,,	228
West Bromwich	32	,,	164
West Wales	42	,,	81

In all the above cases the Branch covers a much larger area than the City or Borough serving as Branch Centre.

Unit of Family affected

4. Of these, 2,310 cases where mental deficiency existed in the parents (or guardians) it occurred as follows :—

In father only	534	23·1 per cent.
In mother only	1,335	57·8 ,,
In both parents	400	17·3 ,,
In other guardians	41	1·8 ,,

There can, of course, be no inference from the foregoing that mental deficiency occurs more frequently amongst mothers than amongst fathers. A normal minded woman will frequently prevent any neglect or cruelty to children by the sub-normal father. It is, for obvious reasons, more difficult for a normally minded father to prevent neglect by a feeble-minded mother. Thus more of the latter are reported to us.

Where both parents are mental the Society's difficulties are frequently intense.

A typical case is :—

> *Wrexham and district, Case No.* 4816.—In this case, the woman, who is only 29, had had 3 illegitimate children by different men before marriage. She had since married a man who had been an in-patient at a mental hospital for some years. Three children have resulted from this marriage, the eldest being 2 years and 10 months and the youngest 4 months. Physically, they are all below normal, whilst the baby is very emaciated. The Inspector called in a doctor who advised the infant's removal to Hospital. It was with very great difficulty that the Inspector secured the parents' consent. Later, the Officer consulted the M.O.H. for the County, and ultimately the man consented to his wife entering a Mental Institution. On calling to carry this out the woman refused and the consent of the man was withdrawn. The case had to be dropped, because the woman was not certifiable as a lunatic. Later, the father removed the baby from Hospital where it had greatly improved. It is at the moment being kept under constant supervision by the Inspector and a Health Visitor. The mother is again pregnant.

5. It does not appear that mentally defective parents are inclined to be brutal. The number of cases of ill-treatment dealt with in the year was 3,128. In 261 of these the actions complained of were done by people of feeble mind. This proportion—8·3 per cent.—though higher than the general incidence in all our cases, already mentioned, is not sufficiently high to suggest that, as a class, mentally deficient people are brutal to their offspring.

Corruption of Morals

6. When we come to the corruption of morals the figures are more disturbing. It should be appreciated first of all that all cases of defilement of girls under the age of 13 are reported automatically by the Society to the police, who make their own enquiries and take such action as they think fit. We are, therefore, not in a position to submit evidence under that heading. As regards girls over 13 but under 16, the Society sometimes hands the cases over to the police and sometimes deals with them itself, this being in accordance with agreements with Chief Constables in the areas concerned. During the year we dealt with 1,027 cases affecting the morals of children. They included some few of criminal assault, some of indecent assault, whilst others were of exposure and many of improper sleeping arrangements within the family. Of these 1,027 cases no fewer than 269 concerned feeble-minded persons.

Dealing with the Society's prosecuted cases of criminal and indecent assault alone, we found that substantially half the girls involved were feeble-minded, whilst in regard to the men it was exactly half.

Cases could be multiplied where the Inspectors have been faced with appalling conditions. The following will serve to stand as examples of conditions by no means infrequent :—

Pontypridd and district, Case No. 7442.—A mother and 6 children, the two eldest being girls of 17 and 16, were being maintained by the Public Assistance Committee during the father's imprisonment. The elder girl, who is unmarried, had had a miscarriage recently and the relief allowed the family had been reduced. It appeared that the father was in prison, serving a sentence for incest with the girl of 16 (the crime having been committed when she was 12). The Officer states that the mother appeared far below normal and was in no way perturbed at the impending release of her husband. Steps were taken to protect these girls and, through the help of the Church Army they are now in a Home. The case remains under supervision in respect of the other children.

Gt. Yarmouth and district, Case No. 7777.—A single woman of low mentality, living with her mother and giving birth to 3 illegitimate children. The woman appeared incapable of understanding the nature of the Inspector's visit, which had reference to the state of the eye of one of the children, and all the business had to be transacted through the grandmother.

West Wales, Case No. 1222.—A woman still under 30 has had 5 illegitimate children, and in not a single one of the cases is she receiving any maintenance under the Bastardy Acts. One of the children is dead, and the ages of the survivors range from 13 years down to 6 months. The first child was actually born in a field. Two of the children are suffering from rupture, and belts have been provided by the Welfare Centre. These belts were not being used. The woman has a violent temper and uses vile language.

General Neglect, etc.

7. As has already been shown, the bulk of the Society's work is concerned with cases of general neglect where children are deprived of food, clothing, etc., and where, in many instances, they are allowed to become verminous through laziness. We dealt in all with 21,925 cases of this type and 1,519 were those of feeble-minded persons. Many of the latter were chronic cases and required constant supervision. Also it is necessary to remind the Committee that this return refers solely to *new* cases reported during the year. Almost every Inspector would have open on his books cases of mentally deficient persons left over from the previous year, which it was felt undesirable to close. They are kept more or less satisfactory by regular supervision, but would drop back again at once if the Officer refrained from visiting. We should not tolerate this in normally-minded persons.

Conditions exemplified in the following cases occur in most Branches :—

Accrington and district, Case No. 6212.—The Inspector describes the mother as very feeble-minded and the father simple. They have had 9 children and have been under the Inspector's observation for 6 years. Before that, they were known to his predecessor. Twice during this period it has been felt necessary in the interests of the children to prosecute the parents for wilful neglect. It was only by this means that the children could be removed, for the parents resisted all attempts to persuade them to allow the children to be taken away voluntarily. The children were returned to the parents after they, and the house, had been cleansed. The Inspector reports that some twelve months ago it was at last possible to have the woman certified and removed to an asylum. The father is unemployed and remains at home. He seems unable to realise that it is necessary for him to keep the house and the children clean. Nearly all the children suffer from rickets and have had to receive treatment for sores caused by vermin. " Although," says the Inspector, " one could

not say that the children are M.D., all are of poor mentality and it has already been necessary for me to visit a daughter of this couple, who has recently married; she has an infant who is suffering from rickets and at the moment I am endeavouring to prevail upon her to take it for treatment." Punishment is not a deterrent to these people and our only remedy is to keep them under constant supervision, working in co-operation with the Medical Officer of Health and the School Clinic.

More than one Officer comments upon the inadequacy of the present laws. Even where there is a sufficiency of accommodation in Institutions, the parents frequently refuse to give their consent to the children being removed. In several cases this has been got over by charging the parents under Section 12 of the Children Act, 1908, and asking the Bench to impose a purely nominal sentence but depriving the parents, for a time at any rate, of the custody of their children.

Cases " due to Drink "

8. The Committee will no doubt welcome some observations on mental deficiency and drink. Taking the *whole* of the Society's cases, before the War, drink was held to be at the root of at least one half of them. It is not meant by this that the parents were necessarily drunkards—but that the children were suffering because an improper amount of the family income was being spent upon drink. Since 1914, there has been a steady decrease in cases due to drink.

A few examples are given below :—

Year ending 31 *March*	*Total cases*	*Due to drink*	*Percentage*
1914–15	49,046	19,755	40·27
1916–17	42,835	13,365	31·20
1918–19	34,397	5,664	16·46
1920–21	38,174	7,640	20·01
1922–23	38,027	5,649	14·85
1927–28	39,774	4,490	11·28
1931–32	43,246	3,573	8·25

In England and Wales alone during the year under review, 2,422 cases out of the 38,984 new cases dealt with were described by the Inspectors as " due to drink." This proportion—6·21 per cent.—is lower than ever previously recorded in the Society's history. In all probability the leanness of the times and the excessive amount of unemployment has been a substantial contributory factor. Of the 2,422 cases it is interesting to note that only 166 involved feeble-minded parents. It may well prove to be the case that feeble-minded persons lose their employment sooner than the normally minded and that, therefore, there is less money in their hands at the present time than in ordinary years.

Vagrancy

9. The Society spends a considerable amount of energy in keeping in touch with vagrants who move about the country, accompanied by their children. This is done in co-operation with Masters of Public Assistance Institutions who advise our Officers of the presence of children in the casual wards. Where these children are being deprived of education or where younger children are being exposed to the rigours of inclement weather, steps are taken to persuade the parents to a more settled mode of life, and practical assistance to that end is afforded them. We are far from being always successful. After allowing for duplications—for many of the families would be seen and reported upon by more than one Inspector—it would seem that during the year we dealt with 450 separate families, but of these there were only 81 in which either of the parents was of feeble mind. It

would almost appear from these figures that the task of eking out a living whilst leading a nomadic life is beyond the powers of the sub-normal, and their attempts at it lead to early abandonment of the practice.

It is possible that the foregoing conclusions would not be concurred in by the Inspector of the Society dealing with West Sussex. For some reason or other he meets with very many cases of vagrancy and in that Branch alone several of the cases noted concern feeble-minded adults.

The following are taken from amongst them and were all originally noted in that area :—

Chichester and district, Case No. 3676.—A man, aged 32, living apart from his wife who could not endure his unnatural conduct. He tramped with his boy, aged 9 years, round the country and one day claimed to have walked 38 miles. This man obtained board and lodging under false pretences and also served a term of six months' imprisonment for bigamy. He was the father of at least one illegitimate child and deserted the single woman, with whom he was then living, when her baby came. The boy has been taken from him and is now with a relative. At one time the Society prosecuted this man in a case of indecent assault, alleged to have been committed on a girl of 9 years. The man pleaded loss of memory and said that if he had done it he could recall nothing of the incident. The Bench dismissed the case.

Chichester and district, Case No. 3728.—A man and woman on tramp with a girl of 5 years. Both are very feeble-minded and state they have a grown-up family, whereabouts unknown. The child is wild and out of control.

Chichester and district, Case No. 3746.—A woman, aged 39 years, tramping with 2 children, aged 3 and 1½. The woman admits to having had 4 children by different men, the other 2 being in Institutions.

Chichester and district, Case No. 3754.—A woman, aged 53, tramping with her boy of 13 years. She is of very low mentality.

The Committee will appreciate that when the Society's Inspectors' persuasions prove insufficient to make this class of person alter their mode of life in the interests of the children, we are powerless, unless sufficient evidence is forthcoming to charge them under section 12 of the Children Act, 1908. This would entail our having to prove wilful neglect or exposure in a manner likely to cause suffering to their health. Where the children are over school age, they can be dealt with by the Police and Education Authority under section 118 of the same Act. We find a disinclination to do this in many parts of the country, one of the difficulties no doubt being that local authorities are reluctant to add to the burden of their own rates in regard to cases which arose elsewhere. Recently we prosecuted a woman vagrant—of low mentality—in Somerset and obtained the custody of her child, aged 5 years. The Justices bound the woman over on the understanding that she would immediately leave the district. The Society can, quite definitely, state that cases of vagrants accompanied by children are met with, with far greater frequency in the South of England than in the North. What the actual reason for this is, it is difficult to say. Possibly, the chief explanation is that life is easier for them in the South.

Heredity

10. In the 2,310 cases where mentally deficient parents were concerned there were as many as 771, in which one or more of the children of the union were also feeble-minded. This means there were 1,539 in which the children were apparently normal (or at the most merely dull and backward), or on the other hand were so young that it was impossible for our Inspectors to express an opinion. The 400 cases where *both* parents were mentally deficient would provide a majority of these 771 cases where the children also showed signs of feeble-mindedness.

A typical case with glaring results inimical to the health and welfare of the community is the following :—

Newport and district, Case No. 9483.—Fourteen years ago the Society prosecuted a man and woman for neglect of their 4 children. As a result the parents were sent to prison and the children were placed in a Mental Institution where they still are. After their release, the parents resumed cohabitation and 4 more children were born. It has been necessary, recently, to prosecute the parents again in respect of these younger children. As a result the parents were bound over and the case is still under supervision. One of these children, a boy of 10, has had to be placed on probation for theft ; another was killed in running behind a lorry.

Another case from the same area is :—

No. 9848.—This concerns a woman of low mentality ; the father is of average intelligence. The children provide an interesting study, the oldest being apparently normal, but each successive child appears to be of weaker mentality than the last, and the seventh and eighth are very bad indeed.

A curious case in the same Branch is :—

No. 9495.—It concerns a couple of apparently normal mentality. They have had 5 children ; 3 are definitely low grade and verging on idiocy ; another is a girl of 10, who appears mentally fit, but is excluded from school and is attending a V.D. clinic ; the other child is still an infant.

Hull and East Riding district, Case No. 2292.—In this case the father and all 6 children are mentally deficient. The man resents interference, and at the moment the case is proving difficult to deal with. It is a branch of a family which has intermarried in two or three instances a generation or so ago. Two of the families have been under the notice of the Society for some years, and in both cases both parents and all the children are mentally defective.

Fecundity

11. As regards the fecundity of mentally deficient persons the Society is unable to give exact figures, even in regard to cases which have come before it. We do not record children over the age of 16 (where our jurisdiction ends), and, further, have no statistics in regard to the members of these families who die in infancy. All our Officers are in agreement that the infant-mortality rate in the families of the feeble-minded is high.

In the 2,310 cases dealt with in the year, the number of living children under the age of 16 was 9,813, giving an average of 4·25 per family. There are many glaring instances—especially where both parents are sub-normal—of families greatly exceeding this number.

The following are the particulars in a case which is before the Society in the East Riding :—

Hull and East Riding district, Case No. 794*M.*—Father born 1880 ; mother born 1883. The paternal grandfather was feeble-minded ; two great-uncles were certified insane and a maternal uncle was epileptic. This woman has given birth to the following :—

(1) Daughter : died of convulsions in infancy.
(2) Son : died of convulsions in infancy.
} These two illegitimate.
(3) Daughter : certified M.D. In an Institution.
(4) Son : certified as imbecile. Died at age of 11.
(5) Son : certified as M.D. In an Institution.

(6) Daughter : certified as imbecile.
(7) Daughter : died at 11 months.
(8) Son : certified as imbecile.
(9) Daughter ; in service.
(10) Son ; died in infancy.
(11) Daughter ; at school, but of very low mentality.
(12) Son ; at school and of average intelligence.
(13) Daughter ; aged 9, has never been to school ; M.D. ; now in Institution.
(14) Daughter ; now aged 8 ; never been to school ; in M.D. Institution.
(15) Son ; aged 5, recently admitted to M.D. Institution.
(16) Daughter ; aged 4.
(17) Daughter ; aged 1.

It would be impossible to exaggerate the tragic possibilities which are still likely in this family's history. The children now in Institutions are likely to go back to their place of settlement on reaching the age of 16 years. Doubtless, all will have benefited from their stay and training in the Institutions, but it is extremely doubtful whether they will make satisfactory citizens and more than likely that they will themselves produce deficient offspring.

Institutional Treatment for M.D. Children

12. In regard to cases of mentally deficient *children* most Inspectors have a number where they consider the removal of the child to an Institution would be to its advantage. Where children are removed—even bad cases—there is general agreement amongst our Officers that improvement takes place. They concur also in saying that this improvement greatly deteriorates and sometimes finally disappears on their return home.

Shortage of Institutions

13. It is disturbing to find that three-fifths of the Inspectors state there is a deficiency in their areas of Institutions for the care of feeble-minded children. They are constantly faced with cases where such children are regarded as something of a danger to younger members of the family. Even where the parents are willing for them to be placed in an Institution, it is frequently impossible to do anything, for the available accommodation is filled. Also the delay which often occurs before children can be placed occasions the parents to change their minds and their consent is withdrawn.

No doubt, also, even where suitable Institutions exist, there is a tendency which can hardly be condemned, of taking the worst cases first. It cannot be over-emphasised that by comparison mentally deficient children in rural districts are severely handicapped. The difficulty of providing special schools for their attendance is almost insuperable—the distances the children would have to travel constituting an effective barrier to anything practical in this nature being achieved.

A North Riding Inspector of the Society states that he has had many cases of children who at the age of five have been excused from attending school on the grounds of mental deficiency. Beyond an occasional visit by the Schools Medical Officer to the child's home, no further action is taken. The children eventually become what is colloquially described as "the village idiot," and the Officer has had cases where, on reaching the age of 16, they are dealt with under the Lunacy Acts.

A case which shows up into sharp relief the many difficulties of this character comes from the Gloucester and district Branch :—

> *Case No.* 5904.—It concerns a girl of 12, one of five children, of average parents. She is mentally deficient, an epileptic, and a cripple ; both legs are affected and walking is a great effort. The complaint which reached

the Society was that this girl was neglected. On making an investigation the Inspector found that the child was left unattended for lengthy periods. The man is away from the house at work all day and the woman states she has four other children to attend to and that shopping, etc., must be done, and the family income is insufficient to hire help. It is generally acknowledged that the child is a moral danger to herself and others. A full report was made to the County Medical Officer of Health with a view of removing the child to a suitable home, the consent of the parents having been obtained. There was a conference between the Medical Officer, the Education Officer and the Public Assistance Officer, but it was agreed that the only place to which the girl could be sent (in view of her triple disabilities) was the Public Assistance Institution. The child was, therefore, placed with the female inmates, mostly elderly and totally unsuitable company. The inmates themselves resented her being placed amongst them and the child was most unhappy. She was therefore returned to her parents in May last. The latest information is that she is still at home ; but the authorities are hopeful of obtaining from the Board of Education a certificate, which will permit them eventually to place her in an Institution.

The Inspector for the Bury (Lancs.) and district Branch states there have recently been public references to the insufficiency of accommodation for female mental defectives in the County of Lancashire and it has been said that in certain Institutions there is already substantial overcrowding. The Inspector himself cites :—

Case No. 7098.—This concerns a married couple, both of weak intellect, which is particularly marked in the woman. There are 3 children under the age of 4. When the Officer called the woman was washing clothes in the living room and all 3 children were playing on the floor close to a large fire, with no guard, and a large pan of boiling water perched on top. Recently one of the children had been severely scalded but the incident had left no impression on the mother. The house was in an indescribably filthy condition ; the children were verminous and the condition of the beds appalling. One child was suffering from whooping cough and, on a doctor's instructions, was removed to a hospital. The Inspector called in the Sanitary Authorities who cleansed and fumigated the house. The Inspector keeps the case under close supervision, but states he feels convinced that the only way to deal with the children will be eventually to charge the parents with wilful neglect under the Children Act and ask the magistrates to deprive them of the custody.

Mental Deficiency and the Housing Problem

14. The Committee will be anxious to hear something of the Society's experience in regard to the housing conditions under which mentally defective persons appear to live, having regard to the number of rooms available to the family. For some years the Society has compiled careful records in regard to overcrowding. During the twelve months ended March 31st, 1932, 5,189 of the 43,246 complaints investigated concerned families that lived as families in one room, whilst another 6,523 families lived as families in two rooms. Coming to the year ended September 30th, and dealing only with the 2,310 cases already referred to where one or other of the parents is mentally deficient, we find that of these 419 lived as families in one room and 588 lived as families in two rooms. There is apparently no uniformity in the experiences of the Inspectors. Quite a number have had many cases of overcrowding during the year, of which none concerns mentally deficient people.

The Manchester branch reports that it had 270 families living in one room, but of these only 6 concerned feeble-minded parents. In the same Branch there were a further 292 families living in two rooms and of these only 3 affected persons whom the Inspectors regard as in any way feeble-minded.

In the Leeds Branch there were 91 cases of families living in one room and 19 were cases in which the parents were mentally deficient. The same Branch had 183 cases of families living in two rooms and of these 26 concerned mentally deficient parents.

The Sheffield Branch gives 133 cases where the parents are in one room and of these only 2 are connected with feeble-minded adults. 143 cases in the same Branch concern families living in two rooms and of these 9 have reference to feeble-minded parents.

The Birmingham Branch reports disclose 83 cases where the families live in one room and 55 where they live in two rooms. Of these, the first include 3 and the second 2 where the parents were feeble-minded.

The Bristol Branch figures are 74 families living in one room and 134 in two rooms. Of these, those where one or other of the parents were mentally deficient concerned 15 in the first instance and 6 in the second.

Turning to rural areas, the Bury St. Edmunds Branch where, as has already been mentioned, the incidence of mental deficiency is high, none of the mentally affected live as families in one room and in only 1 instance were they limited to two rooms. The same Inspector, however, has 12 cases of normally minded parents living with their families in two rooms or less.

In the Chichester Branch, where the incidence of mental deficiency is also extraordinarily high, the Inspector dealt with 9 cases where the families lived in two rooms or less and of these 4 were where the parents were of low mentality.

In both these Branches the housing question does not assume the serious proportions which it does in industrial areas.

The Portsmouth Branch Inspector makes an interesting commentary. He says that his experience compels him to think that overcrowding has a great deal to do with increasing the degree of mental deficiency in children. He had 11 cases in the year of families who lived in two rooms or less and of these four concerned feeble-minded parents. The Officer has had a unique opportunity of observing children who have been transferred from the slum areas of Portsea to the Council houses which have been built at Hilsea. He can state definitely that the effects of the new environment on the children's mentality have been very marked. He has noted many who, in their former squalid surroundings, were extremely dull and backward, who have shown great improvement. He considers the closely confined slum family a prime factor in the product of mental and moral degeneracy and, at the present moment, has on his books cases of 5 girls in different families who have exhibited immoral tendencies at a very early age. He instances a further case of a family consisting of father (mother dead) and 5 children living in one room. For three years the eldest child, a boy of 12, was practically responsible for the care of the home and younger children. On medical examination, when the Society were endeavouring to have these children placed in an Orphanage, he was found to be of such low grade mentality that at first it was feared the application in his case would have to be refused. Fortunately, however, the Orphanage agreed to admit him on probation. After a few months his mentality had improved to such a degree that it was found possible to retain him.

General Observations

15. It would be wrong to conclude this evidence compiled by the Society in regard to its work during the last twelve months, without making some reference to a fact mentioned by several Inspectors—that in their opinion mentally defective people are not necessarily neglectful of their children. More than one Officer states that he knows personally, cases of women of undoubtedly weak mentality who have an extraordinary flair for house-work, and whose homes are spick and span. Sometimes they get into difficulties brought about by their desire to do well by their children, and there have been not a few cases in which the Inspector has been able to act as a friend

by showing how the family budget can be expended to better advantage. There have been cases where people of poor mentality denied themselves the necessities of life in order to give their children abundance of food.

In one case which came before the Society recently, there was a request by the relatives that the mother (a widow) should be relieved of the custody of her children on the grounds of her feeble-mindedness. Upon investigation, it was found that the woman was living in a house, which she owned, and was in receipt of a fair income, through compensation money received after the fatal accident to her husband. The real difficulty was, not that the woman was in any way neglecting her children, for they were adequately clothed and well fed, but that she was spending her funds wastefully on them. The Society is keeping in touch with the case, and the woman is proving tractable and amenable to the Officer's advice.

APPENDIX III

MEMORANDUM SUBMITTED BY Dr. A. G. MORISON, M.A., M.D., D.P.H.

Dr. A. G. Morison, M.A., M.D., D.P.H., Deputy Medical Officer of Health, Bristol, personally investigated 84 consecutive cases of mentally defective children whilst acting as Assistant Medical Officer of Bolton, Lancashire. In every case inquiry was made in regard to insanity, attendance at special schools, nervous disorders, epilepsy, illegitimacy and alcoholism in the families of both parents, and in the brothers and sisters of the children. The health of the mothers during the pregnancies and any accidents or upsets to their peace of mind were considered, as well as the full life-histories of the children themselves.

The cases were grouped thus :—

(*a*) Thirty-four children recommended for notification to the local authority under the Mental Deficiency Acts and referred to as " lower grade " cases.

(*b*) Fifty feeble-minded children recommended for admission to special day schools for mentally defective children, and referred to as " higher grade " cases.

The following table gives particulars of mentally defective members of the families :—

Grade.	Father and Mother Defective.	Father Defective.	Mother Defective.	Other Relatives Defective.	Total.	Families with Siblings.
Lower	—	1	4	1	6	3
34 cases ..	—	2·9%	11·8%	2·9%	17·6%	8·8%
Higher	2	4	9	10	25	14
50 cases ..	4%	8%	18%	20%	50%	28%

Dr. Morison concluded his evidence before the Committee by giving the following information :—In the 34 families of lower grade children, there were 113 living children, 37 (or 32·7 per cent.) of whom were defective. But four of the children were only children, so this ratio—37 to 113—may be much " over-weighted " as regards an incidence of mental deficiency amongst the children.

He submitted that the lower grade children appeared often where least to be expected and that their presence in a family was no proof of an inability of their parents to produce normal children. For example, J.H. was a low-grade female imbecile. She was the only mental defective in a family of six.

Had these 34 marriages been sterile, 37 mental defectives would not have been born, and 76 other children would have been lost. Dr. Morison admitted, however, he had no knowledge of the parental potentialities of these 76 children.

The 50 higher-grade children belonged to 49 mothers, who had in all 188 living children, 63 (or 33·5 per cent.) of whom were defective. Again in this group, all defective children did not have a defective parent, and it was no more true that these parents had only mentally defective children. Dr. Morison had, however, already referred to a family, the father and mother of whom were both feeble-minded and of whom all the six children had in their turn been certified as mentally defective.

Had these 49 marriages been sterile, 63 defectives and 125 other children would not have been born. As of the 76 in the lower grade group, Dr. Morison had no knowledge of the parental potentialities of these 125 other children.

APPENDIX IV

MEMORANDUM SUBMITTED BY THE LONDON COUNTY COUNCIL

The London County Council conducted an investigation in the year 1932 into the history of 4,366 families, one member of which had been ascertained to be mentally defective during the years 1930 and 1931. From this it appears that the average size of the fraternity from which the defective came was 6·01, of whom 1·43 had died and 1·17 (including the individual bringing the family to notice) were mentally defective, the average percentage of the fraternity who were mentally defective being 19·4.

The size of the fraternity and the number of defectives was found to be slightly greater in the feeble-minded than in the lower grades and in cases of primary as compared with secondary amentias.

Grade.	Number of Families.	Average size of Fraternity.	Average No. dead in Fraternity.	Average No. defective in Fraternity.
Feeble-minded ..	2,794	6·20	1·46	1·21
Imbecile	1,374	5·87	1·19	1·08
Idiot	198	5·38	1·18	1·14
Type.				
*Primary amentia	2,999	6·10	1·49	1·22
Other varieties ..	1,367	5·74	1·27	1·09

*Note.—*Primary amentia : a residual heading after the exclusion of cases where defect may be due to epilepsy or to toxic, inflammatory, or traumatic causes arising after conception.*

Of 1934 families, one member of which came to notice as a feeble-minded primary ament :—

No other member of the family was defective in 1,598 cases.
One brother or sister was defective in 244 cases.
Two brothers or sisters were defective in 60 cases.
Three brothers or sisters were defective in 21 cases.
Four brothers or sisters were defective in 8 cases.
Five brothers or sisters were defective in 3 cases.

These figures are broadly comparable with those obtained in 1912 from a study of children who had been in attendance at Special Schools for the mentally defective between the years 1899 and 1910. From the records of 2,000, so far as is known, separate families, the following data were obtained :—

	Insanity.	*Epilepsy.*	*Mental defect.*
In father	24	34	96
mother	49	49	127
siblings	19	134	259
collaterals	189	85	33
grandparents	108	83	6

In 1,000 families, in each of which one child at least was defective, it was found possible to give the number of children born and the number who had died by the time the defective member, bringing the family to notice, had attained the age of 9 years. The data thus collected were compared with the records of 3,000 families, in each of which one child at least had obtained a scholarship or bursary and might thus be regarded as of over average ability :—

	Number in fraternity.	*Number dead.*	*Survivors.*
Defectives	6·46	1·91	4·55
Scholars	4·59	0·48	4·11

APPENDIX V

MEMORANDUM SUBMITTED BY DR. A. A. E. NEWTH, M.B., B.S., D.P.H., SENIOR MEDICAL OFFICER, CITY OF NOTTINGHAM EDUCATION COMMITTEE

The records of 1,417 cases were examined ; they were obtained during the routine ascertainment and diagnosis of mental defectives for the local education authority and with the help of the local mental deficiency committee.

(i) *Classification*

Dr. Newth divided his classification of the cases into (*a*) Hereditary and (*b*) Non-Hereditary as follows :—

Heredity is assumed where there is a definite history of one, or more than one, near relative who is defective. Non-heredity where there is evidence of mongolism, cretinism or secondary amentia. Unclassified where the history is incomplete.

Feeble-minded.

Hereditary	409	
Non-Hereditary	19	
Unclassified	575	
Total		1,003

Imbeciles and Idiots.

Hereditary	166	
Non-Hereditary	91	
Unclassified	157	
Total		414
		1,417

(ii) *Social Status*

		Very Superior. A class homes.	Superior Working Class. B class homes.	Inferior Working Class. C class homes.	Slums. D class homes.	Totals.	
General School population		46 5%	514 55·8%	301 32·7%	60 6·5%	921 100%	
Scholarship children ..		56 8·6%	480 73·8%	106 16·3%	8 1·2%	650 100%	
Dull and backward ..		32 2·5%	478 37·1%	609 47·2%	170 13·2%	1,289 100%	
Feeble-minded		27 3·2%	293 34·5%	313 36·8%	217 25·5%	850 100%	
Imbeciles and Idiots	All grades..	37 9·7%	143 37·5%	142 37·3%	59 15·5%	381 100%	
	Hereditary	4 2·6%	48 31·2%	64 41·5%	38 24·6%	154 100%	
	Non-Hereditary	21 22·1%	43 45·3%	26 27·3%	5 5·3%	95 100%	381
	Unclassified	12 9·1%	52 39·4%	52 39·4%	16 12·1%	132 100%	

This table shows that the hereditary imbeciles and idiots come from lower social strata than do the non-hereditary cases. The feeble-minded, who are mostly hereditary in origin, come from social classes similar to those from which the hereditary imbeciles and idiots come. The dull and backward in their social distribution correspond closely to the feeble-minded and hereditary imbeciles and idiots. These are in contrast with the scholarship children who come, in the main, from better class homes.

(iii) *Size of Families*

The records of 4,093 families of *normal children* were analysed. These 4,093 families comprised 15,510 children, an average of 3·79 children per family.

Dull and Backward

Accurate figures were not available.

Feeble-minded

The records of 506 families containing one or more than one mentally defective child were analysed.

These 506 families comprised 2,304 surviving children, an average of 4·62 per family.

Imbeciles and Idiots. All grades

The records of 329 families containing one or more than one imbecile or idiot were analysed.

These 329 families comprised 1,408 surviving children, an average of 4·28 per family.

Imbeciles and Idiots. Hereditary cases

The records of 132 families were analysed.

These 132 families comprised 581 surviving children, an average of 4·4 per family.

Imbeciles and Idiots. Non-Hereditary cases

The records of 72 families were analysed.

These 72 families comprised 272 surviving children, an average of 3·78 per family.

Imbeciles and Idiots. Unclassified cases

The records of 125 families were analysed.

These 125 families comprised 544 surviving children, an average of 4·33 per family.

(iv) *Maximum number of children born and number of children dying*

Feeble-minded

The records of 496 families were analysed.

These 496 families comprised a maximum of 3,174 children born, of whom 883 died.

Hence the maximum number of children born averaged 6·4 per family.

Subtracting the 47 only children, of the remaining 3,127 children 28·2 per cent. died.

Imbeciles and Idiots. All grades

The records of 298 families were analysed.

These 298 families comprised a total of 1,610 children born, of whom 372 died.

Hence the maximum number of children born averaged 5·4 per family.

Subtracting the 31 only children, of the remaining 1,579 children 23·5 per cent. died.

Imbeciles and Idiots. Hereditary cases

The records of 122 families were analysed.

These 122 families comprised a maximum of 688 children born, of whom 178 died.

Hence the maximum number of children born averaged 5·64 per family.

Subtracting the 9 only children, of the remaining 510 children 26·2 per cent. died.

Imbeciles and Idiots. Non-Hereditary cases

The records of 69 families were analysed.

These 69 families comprised a maximum of 328 children born, of whom 55 died.

Hence the maximum number of children born averaged 4·75 per family.

Subtracting the 7 only children, of the remaining 321 children, 17·1 per cent. died.

Imbeciles and Idiots. Unclassified cases

The records of 106 families were analysed.

These 106 families comprised a maximum of 594 children born, of whom 142 died.

Hence the maximum number of children born averaged 5·6 per family.

Subtracting the 15 only children, of the remaining 579 children, 24·5 per cent. died.

(v) *Defects in other members of the family containing a defective*

In 63 or 15·7 per cent. of feeble-minded children there was history of epilepsy in other members.

In 167 or 41·6 per cent. of feeble-minded children there was mental deficiency in other members.

In 27 or 6·7 per cent. of feeble-minded children there was imbecility in other members.

In 51 or 12·7 per cent. of feeble-minded children there was insanity in other members.

In 234 or 58·3 per cent. of feeble-minded children there was illiteracy in other members.

In 6 or 1·5 per cent. of feeble-minded children there were suicides in other members.

In 40 or 24·1 per cent. of imbecile or idiot children there was history of epilepsy in other members.

In 50 or 30·1 per cent. of imbecile or idiot children there was history of mental deficiency in other members.

In 28 or 16·8 per cent. of imbecile or idiot children there was history of imbecility in other members.

In 32 or 19·4 per cent. of imbecile or idiot children there was history of insanity in other members.

In 67 or 40·3 per cent. of imbecile or idiot children there was history of illiteracy in other members.

In 8 or 4·8 per cent. of imbecile or idiot children there was history of suicides in other members.

(vi) *Superior Intelligence in Mentally Defective Families*

Cases of secondary amentia, mongols, etc., are to be found in children of intelligent parents, but it is rare to find hereditary cases in such families.

	Parents skilled.	*Parents unskilled.*
Feeble-minded	56	516
	9·8 %	90·2 %
Imbeciles and Idiots ..	67	161
	29·4 %	70·6 %
Hereditary ..	19	Hereditary .. 75
Non-hereditary	27	Non-hereditary 22
Unclassified ..	21	Unclassified .. 64

It is estimated that of the normal school population, about half the parents are in skilled and half in unskilled trades.

(vii) *Scholarship Children*

Amongst the 1,027 children of eleven years of age who came out best in the Annual General Examination in 1932, there was not a single child who was known to have a brother or sister who is feeble-minded or imbecile or idiot.

APPENDIX VI

MEMORANDUM SUBMITTED BY MR. D. CARADOG JONES, M.A., LIVERPOOL SCHOOL OF SOCIAL SCIENCES AND ADMINISTRATION, CONCERNING MATERIAL COLLECTED IN THE COURSE OF A SURVEY OF MERSEYSIDE

Source of Data.—The material upon which this memorandum is based was obtained as the result of a special investigation made in the Liverpool area in 1930 of the case-paper records of :—

(i) All children of ages 5 to 15, last birthday, attending Special Schools for the Mentally Defective.

(ii) All persons of any age who were—or had been, prior to institutional care—under the supervision of the West Lancashire Association for Mental Welfare, the defect in this case being usually of a graver type.

These two groups, numbering respectively 841 and 784, will be referred to as the Special Schools Group and the Mental Welfare Group when it is desired to distinguish between them.

Relation of Defect to Sex and Age.—Whereas in the general population females definitely outnumber males, the reverse is the case among aments. The proportion of males to females found in the Special Schools Group was 56 to 44 ; in the Mental Welfare Group it was 54 to 46. There is a notable variation, however, in the proportion with age, which is best seen by a consideration of the figures for the Mental Welfare Group alone (*see* Table 1).

TABLE 1.—*Relation of Mental Defect to Age: Mental Welfare Group*

Age in Years last Birthday.	5-15.	16-21.	22-29.	30+.
Male Percentage	61	53	49	34
Female Percentage	39	47	51	66

This variation is partly a reflection of the gradual increase in the number of females over males as age advances in the general population, but there are no doubt other considerations affecting the figures. It is possible that in the early years a retarded boy is more trouble, whether at home or at school, than a girl with a similar grade of defect. He would, therefore, stand a better chance of medical examination. But from adolescence onwards the female defective is usually considered to be more of a danger to herself and others than the male, and, accordingly, she is more likely to be placed under supervision.

Defect among Relatives.—Both groups were further sub-divided into three classes as follows :—

P.R.—Those with one or more relatives who were, or had been, (*a*) attending Special Schools for the Mentally Defective, or (*b*) under the supervision of the West Lancashire Mental Welfare Association, or (*c*) definitely certified as insane or epileptic.

R.—Those with one or more relatives recorded as mentally weak, unstable, retarded or subject to fits.

N.R.—Those with no record of defective relatives as above defined.

The proportions found in each class are shown in Table 2.

TABLE 2.—*Record of Defect among Relatives*

Group.	No. of Cases sampled.	Percentage of Cases in each Class.			
		P.R.	R.	N.R.	Total.
Special Schools	841	24·6	16·4	59·0	100
Mental Welfare	784	22·4	3·7	73·9	100

These figures indicate that there is a considerable proportion of mental defect among the relatives of Special School Children, amounting to 41 per cent., when persons of doubtful mentality are added to those definitely notified as defective. In contrast with this, no record of defect was noted in nearly three-quarters of the Mental Welfare Group of families. This lends support to the view generally held, that the graver forms of defect—so serious that the children concerned are ineducable even in Special Schools—are frequently sporadic in character. They may arise, for instance, from injury at birth or from meningitis contracted in early infancy. It should be specially noted that the sample includes only a very small number of the lowest grade of defectives who have been sent direct to institutions, because we did not set out to include these, and the difference between the percentages in the two groups is consequently less marked than it otherwise might have been.

When the two groups were combined and the number of defective relatives counted, it was found that to every 100 cases investigated there were 37 blood relations who were definitely known to be mentally defective, insane or epileptic; and this figure was increased to 60 when relatives recorded by skilled visitors as at least mentally retarded if not seriously defective were included in the count. Table 3 shows the number of primary cases having 1, 2 and 3 or more defective relatives of each class where this information was given.

TABLE 3.—*Percentage of Cases with Defective Relatives classified according to their Number*

Grade of Defect among Relatives.	Percentage of Cases with Defective Relatives to the number of			No. of Cases sampled.
	1	2	3 or more.	
Under Supervision, Special Schools, Insanity and Epilepsy	67	19	14	380
As above, plus Mental Retardation	56	25	19	524

The figures given above, although they point to a high degree of defect among the relatives of defectives, do not conclusively prove that mentally deficient persons are more liable than normal persons to have defective relatives. It is conceivable, though unlikely, that, had we started with 100 normal individuals, they might also have been found to have about the same proportion of defectives among their relations. The matter can, however,

be put to the test in another way by comparing the results of this enquiry with those of parallel investigations concerning the deaf and the blind. Out of 475 persons who had become deaf some time after birth, only 2 per cent. were recorded as having a relative who had also become deaf after birth. Out of 845 persons with acquired blindness, only 3 per cent. were recorded as having a relative with acquired blindness. Whereas out of 1,625 mentally defective persons, 33 per cent. were said to have one or more relatives defective or retarded.* It may, therefore, be inferred that the appearance of more than one case of mental defect in the same family is seldom accidental in the sense in which blindness and deafness may be sometimes "acquired" by more than one member of a family, although even in these cases one cannot always be sure how much is due to accident and how much to predisposition. When a family is doubly affected with mental defect, not due to birth injury or some similar cause, we shall certainly not be far wrong in assuming that the defect is more likely than not to be hereditary in character.

Type of Relationship among Defectives.—When among defectives who had defective relations the type of relationship was defined, a count was possible of the number of persons affected within each separate class. Thus, within the class defined as "Siblings," two defective brothers and a sister, also defective, would count as 3 affected persons; father, mother and two children, all defective, would count as 2 within the "Sibling" class and as 4 within the "Parent/Child" class. The same persons may, of course, enter into more than one relationship as in the second of the above examples, but there is no duplication of the persons concerned within any one type of relationship, and it is possible to express the total for each type as a percentage of the aggregate of such totals for all types. The result is shown in Table 4.

TABLE 4.—*Percentage of Defective Persons concerned in each Type of Relationship*

Group.	Aggregate of Related Persons.	Percentage of Persons concerned in each Type of Relationship.				
		Siblings.	Parent/ Child.	First Cousins.	Uncle/ Nephew, Aunt/ Niece.	Other Types.
P.R. Defectives	812	62	15	4	11	8
All Defectives..	1,555	43	36	3	10	8

The only significant difference produced in the figures when the mentally retarded are included among the relations of the primaries along with persons who are officially recognised to be defective, is a reduction in the number of relationships of the sibling type and a decided increase in the parent/child type. This is probably due in large measure to the provision of facilities for the discovery of defective children in the present day which did not exist when their parents were children. Hence, many of the parents may be classed as merely retarded when perhaps they would have attended Special Schools or even been notified had they been born a generation later.

* This result is obtained by combining the two groups in Table 2.

Relation of Defect to Social Class.—Some evidence was found also in support of the theory that, while the graver forms of defect are liable to appear in any social class, the milder forms are more likely to be discovered in the subnormal classes of the population.

Fertility of Parents to Whom Defectives are Born.—An attempt was made to collect information as to the number of children, living and dead, in families containing one or more defectives. These particulars were frequently given in the case papers to which we had access, but the resulting estimate of the size of family is almost certainly a conservative one because the record would not always be complete. Where the information was not given the family was not included in the count.

TABLE 5.—*Defective Families compared with Normal Working-class Families as to Fertility*

Group of Families.	No. of Families sampled.	Percentage of Children who Died.	Mean Number of Children.		
			Alive.	Dead.	Born.
Defective	1,115	34	4·69	2·47	7·16
Normal..	4,379	24	2·97	0·95	3·92

The " defective " families in this table are families containing one or more defective individuals, between the ages of 5 and 22, either under supervision or guardianship, or attending Special Schools. The normal families were a random sample of the working-class population visited in the course of the Merseyside Survey.

Relation of Mentality of Children to Mentality of Parents.—When the children as well as the parents were classified as subnormal or otherwise, it was found that the lowest percentage of subnormal children was recorded when both parents were normal, and the highest percentage of subnormal children was recorded when both parents were subnormal (Table 6). In this Table if the number of living children was definitely stated to be unknown, a total of four living children was assumed.* Also, dead children were not included in the count unless they were definitely stated to be subnormal, on the ground that, if a child does not live to be at least 7 years of age, we cannot be sure whether it should be classed as defective or not.

TABLE 6.—*Relation of Mentality of Children to Mentality of Parents*

Mentality of Parents.	No. of Families	Percentage of Children.	
		Normal.	Subnormal.
Both Parents Subnormal ..	24	41	59
One Parent Subnormal	176	57	43
Both Parents Normal	1,399	70	30

* The average number of living children in families containing a mentally defective child was found to be between 4 and 5.

Mr. Caradog Jones submitted the following analysis of the material contained in his memorandum, including certain parts of which, owing to lack of space, have not been reproduced in extenso in this Appendix :—*

It is to be understood that these results, though stated in general terms, relate only to the area in which the investigation was made, nor does the investigation itself cover the whole field. There is no reason to suppose, however, that Liverpool is not representative of other large and thickly populated cities ; also, within the limits indicated in the text, the size of the sample may be deemed large enough to give results statistically reliable. The main groups of mental defectives investigated comprised 841 children attending Special Schools and 784 persons under the supervision of the local Mental Welfare Association.

1. In the total sample, more males were discovered than females in the proportion of about 55 to 45.

2. The Special Schools group of defectives was confined to children under 16 years of age. The Mental Welfare Group was not so limited, but 94 per cent. were found to be under 30. The proportion of females in the latter group steadily advanced with age.

3. Nearly 1 out of every 4 defectives had a blood relation also recorded as either mentally defective, insane, or epileptic, and this proportion rose to one-third when account was taken of relatives recorded as mentally retarded, unstable or subject to fits.

4. Persons suffering from the less grave types of defect were more frequently recorded as having relatives who were probably defective.

5. Some defectives had more than one affected relative. To every 100 defectives investigated there were 37 relatives definitely known to be defective, insane, or epileptic, and the proportion was 60 when the retarded were included in the count.

6. Among defectives with affected relatives it was possible to count up the number of persons entering into each type of relationship. The most conspicuous relationship was the sibling type and next, but rather a long way behind, came the parent/child type. The gap between these two types was, however, considerably diminished by the inclusion of retarded relatives in the count.

7. When families containing a mentally defective person were classified according to the occupational grade of the head, the Mental Welfare Group—comprising the more serious cases of defect—were more like the general population than the Special Schools Group. Over 60 per cent. of the latter belonged to the unskilled labouring class as compared with 40 per cent. of adult males in general.

8. A higher proportion of the homes in the Special Schools Group were classed also as " poor," in regard to tidiness and cleanliness, as compared with the homes of the Mental Welfare Group.

9. In the Special Schools Group, a low occupational grade, a poor home, and a large family were frequently found in association.

10. The mean number of children born, dead, and surviving to parents of families containing at least one defective child was considerably above the average for normal working-class families ; and generally the proportion of large families in the former group, as compared with the latter, was high.

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* A full account of the whole material will be available in the Report of the Social Survey of Merseyside.

11. But only a very small proportion of defective children were recorded as having a parent definitely classed as defective, although quite a large proportion, 15·5 per cent., had a parent who was classed as at least mentally retarded by the Head Teachers of Special Schools or by experienced Mental Welfare visitors.

12. Reasons were given for thinking that at least some of these mentally retarded parents would have been classed as mentally defective, had facilities for such classification been developed during their childhood.

13. Figures were given indicating that subnormal parents are more likely than normal parents to produce subnormal children.

14. A large number of the defectives investigated were found to be suffering from some other defect. More than one-third had some physical deformity or disability. About 4 per cent. were deaf and an equal number were blind.

15. There was a considerable amount of defect also among the relatives of defectives.

16. Mental defect and all the physical defects investigated, as well as certain moral defects—immorality, crime, and inebriety—and social disabilities, such as poverty and overcrowding, were found to be distinctly more prevalent in the inner and more congested districts of Liverpool than in the outer districts.

17. Furthermore, a concentration of defect of different kinds was conspicuous in certain streets in the majority of the wards of these inner districts, and not infrequently more than one case of defect was discovered in the same house, family, or person.

APPENDIX VII

CIRCULAR LETTER SENT TO TEACHING HOSPITALS AND MEMORANDUM CONCERNING REPLIES

The Board of Control,
Caxton House West,
Tothill Street,
Westminster, S.W.1.
20th *July*, 1932.

Sir,

It will doubtless be within your knowledge that the Board of Control with the consent of the Minister of Health have appointed a Committee with the following terms of reference :—

> To examine and report on the information already available regarding the hereditary transmission and other causes of mental disorder and deficiency ; to consider the value of sterilisation as a preventive measure, having regard to its physical, psychological, and social effects and to the experience of legislation in other countries permitting it ; and to suggest what further inquiries might usefully be undertaken in this connection.

The suggestion has been made to the Committee that sterilisation may, possibly, after a more or less considerable interval of time, have a prejudicial effect on the physical health of the person sterilised. They are anxious to ascertain whether there is any foundation for this suggestion, and as there have doubtless been many cases in your hospital where, on grounds of health, operations have been performed which have the effect of rendering the patient sterile, they would be glad to be informed whether in your experience any instances of prejudicial after effects have come to your notice. In particular, the Committee would be glad to be informed whether in the case of women there is any perceptible difference in the after effects on general health of hysterectomy or ovariotomy as compared with operations which do not involve the removal of either the uterus or the ovaries.

The Committee would be glad to be favoured with your views on these questions at your early convenience.

I am, Sir,
Your obedient Servant,
L. G. Brock,
Chairman.

Analysis of Replies to Circular Letter sent to Teaching Hospitals

1. The number of teaching hospitals, London and Provincial, to which this letter was sent was 29, and replies were received from 27. Of these latter there were five answers to the effect that the medical staff of the hospital concerned did not feel able to frame definite replies to the questions raised in the circular. It will be seen, therefore, that the total number of hospitals providing more or less definite information relating to the points at issue was 22.

2. In respect of the authority behind the replies the answers received may be divided into two categories. In the one was the reply sent as representing the joint opinion of the honorary medical staff. Two of the hospitals approached appointed sub-committees of the medical staff to consider what reply should be sent to the letter, and that reply was forwarded in the form of a resolution of the sub-committee. In the other category the replies were expressions of individual opinion by surgeons on the staffs of the hospitals. The two groups were numerically equal, 11 hospitals forwarding the collective opinions of their respective staffs and 11 forwarding the individual opinions of the surgeons or gynæcologists upon their staffs.

I

Sterilisation in the Male

3. The medical staffs of five hospitals collectively record their experience and express their opinion concerning the operation of sterilisation by vasectomy. A sixth hospital sends the opinion of one of its surgeons on this point. In no case which has come within the purview of these gentlemen have any prejudicial mental or physical effects been noticed as the result of double vasectomy. For reasons above stated it is, however, impossible to give the number of patients upon whom observations were made.

II

Sterilisation in the Female

4. Sterilising operations upon women, in so far as these replies are concerned, may be conveniently considered under the following heads :—

(*a*) Operations on the Fallopian tubes ;

(*b*) Hysterectomy without removal of ovarian tissue ;

(*c*) Operations involving double oöphorectomy ;

(*d*) Sterilisation by the use of radium or X-rays.

5. (*a*) *Operations on the Fallopian tubes.*—Opinion is almost unanimous that sterilisation by operations designed to occlude the Fallopian tubes, accompanied by no further interference with the genital organs, produces no harmful after-effects, either physical or mental, save that occasionally there may be, in neurotic types, some regret for the loss of fertility. Many of the opinions given are quite emphatic, such as " all functions except that of child bearing unaltered " and " patient's economy is not altered," etc. The sexual life is stated not to be restricted, the internal secretion of the ovary is still available, and there are no menopausal symptons. Nevertheless, we are reminded that all sterilisation operations in women, even the simplest, involve entrance into the peritoneal cavity and *some* risk, though slight, to life. One surgeon, dealing with this point, estimates the risk as comparable to that involved in a quiescent appendicectomy.

6. There are two exceptions, however, to the generally favourable opinion of this operation, though the objections appear to be based rather upon general principles than upon actually observed cases. The Medical Board of one Infirmary are of opinion that sterilisation of sexually normal people is, in any circumstances, to be deprecated, for they believe that any interference with normal organs is liable to be deleterious to the individual as a whole. They agree, however, that operations not involving hysterectomy or ovariotomy are less likely to be harmful to the general health than operations involving these procedures. A surgeon on another staff has definite objections to any method at present available, though he is in sympathy with sterilisation *qua* sterilisation.

7. (*b*) *Hysterectomy without removal of ovarian tissue.*—Where the point is mentioned, all are agreed that the risk to life in hysterectomy is much greater than in the tubal operation and also that, unless some pathological condition is present, removal of the uterus ought not to be undertaken as a sterilisation procedure. But as regards the probability of deleterious mental or bodily after-effects, opinion is divided. Provided that some ovarian tissue is left, most are of opinion that no harmful effects of any kind follow a straightforward operation ; at any rate, the surgeons expressing this opinion have not met with such in their experience except, occasionally, neuroses in the case of young women. This appears to express the opinion of the majority. One observer makes here a distinction between panhysterectomy and high removal

leaving the cervix untouched. In the former, sexual life may be seriously affected and menopausal symptons may occur, but the partial operation does not cause ill after-effects. Another surgeon goes so far as to say that simple hysterectomy does not at any age in normal women cause any ill effects either bodily or mental, if the nature of the operation has been carefully explained to the patient, and it is pointed out that the ovaries are being conserved.

8. In a small minority of the replies a less favourable view is taken. The opinions in this group vary from a statement that operations for the removal of the uterus "in many cases have a prejudicial effect on the health of the persons concerned" or "seriously interferes with function" to "definite injurious effects in certain cases." Few particulars are, however, given and it may fairly be said that the opinion summarised in paragraph 9 is consonant with the large majority of the replies received.

9. (*c*) *Operations involving double oöphorectomy.*—There is substantial agreement that bad after-effects are much more likely than with simple hysterectomy. Some rate the probability of impairment of the bodily or mental health, or both, very high as is indicated by statements such as the following: "Removal of both ovaries is greatly to be deprecated, as this operation not only produces acutely the symptoms of the menopause but also it often leads to the development of extreme obesity which is almost impossible to control;" "nearly always causes temporary disturbances of both body and mind;" "removal of both ovaries in women under 50 often has a very prejudicial effect upon the character and psychology;" and "usually does have a disturbing effect on a woman's health particularly if she is young." Others make more cautious statements, *e.g.*, that the operations "have in some instances been followed by prejudicial results" and "may have a more profound effect on the general health" than excision of the tubes. The after-effects generally referred to are the symptoms of the "artificial menopause" coupled sometimes with extreme obesity. In one of the replies attention is called to the observation that if the ovaries have been removed for pathological conditions of the organs ill-effects are unlikely, save in the rather exceptional cases of double ovariotomy in young women. At one hospital, the computation is made that severe menopausal symptoms occur in 25 per cent. of the cases, the severity varying with the age. Some held that the symptoms of the "artificial menopause" produced by ablation of the ovaries are more severe than those due to the normal menopause: others hold there is no difference. It would appear that even if a fraction of the ovarian tissue is left, say half an ovary, trouble is much less likely.

10. The above represents the general opinion, but mention must now be made of the results of an enquiry conducted in 1922 by Dr. J. W. Bride, of St. Mary's Hospitals, Manchester.* This is necessary not only for the intrinsic interest of the paper but also because reference is made to it by the staff of a hospital for women as expressing in the main their own views. The after-histories of 231 patients were investigated and came under two groups: (1) 163 patients in whom hysterectomy had been done with removal of both tubes and ovaries, (2) 63 patients subjected to hysterectomy but in whom one or both ovaries had been left. Dr. Bride's conclusion which differs from the general opinion is: "In brief, then, one might fairly say that, so far as the majority of the manifestations of the artificial menopause are concerned, there is very little to choose between the two types of operation. The advantage lies with the radical operation in every way save two. These two exceptions are the occurrence of flushes and the sexual disability. The difference between the figures in the last two cases is very slight."

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* "The After-results of the Removal of the Ovarian Appendages in Hysterectomy for Uterine Fibroids and Chronic Metritis," J. W. Bride, 1922, *J. Obstet. and Gyn. Brit. Emp.*, V. 29, pp. 68–83.

11. (*d*) *Sterilisation by the use of radium or X-rays.*—A few observations are made upon this method. In 3 male patients there were no deleterious after-effects. Where the method is mentioned in connection with females the results seem to have been very similar to those recorded under ovarian operations. One surgeon states that sterilisation of young women by this method inevitably leads to impairment of ovarian function and constitutional disturbance and that clinical experience in this direction quite definitely supports experimental evidence. Even temporary sterilisation by radiological methods is held by more than one observer to impose upon the ova, and therefore upon future offspring (possibly in the second generation), a serious risk of defect.

12. In respect of our query whether there is " any perceptible difference in the after-effects on general health of hysterectomy or ovariotomy as compared with operations which do not involve the removal of either the uterus or ovaries " most of the replies received answer the question by implication rather than directly. Seven of the replies may be considered to be direct answers, and of these the question is answered affirmatively in five, negatively in one, and in one reply a distinction is made between hysterectomy and double ovariotomy, the observer being of opinion that, as between salpingectomy and hysterectomy, there is no perceptible difference in their effects on the health of the patient, but that bilateral ovariotomy is bound to be accompanied by unpleasant subjective symptoms. In the other replies an affirmative answer is plainly implied, and there is no doubt but that opinion is almost unanimous on this point. There are only two exceptions, the definitely negative reply mentioned above and the view adopted by Dr. Bride, in the article quoted and which is the view with which the hospital referred to are " in the main " in agreement.

Summary

13. In some directions the material is not as copious as could be desired but bearing in mind its limitations the evidence here collected seems to lend support to the following propositions :—

(1) Double vasectomy in the male is a safe operation and is not followed by prejudicial after-effects upon the general health. There is, however, no indication of the actual number of cases observed, and the replies do not enter into sufficient detail to enable us to answer satisfactorily questions such as the ultimate effects upon the sexual life of the individual, effect on outlook upon life, etc.

(2) Straightforward sterilisation operations on the female involving occlusion of the Fallopian tubes do not ordinarily have any prejudicial effects upon the mental or physical health, but occasionally in young women there may be depression due to after regrets for the loss of fertility. The risk to life of the operation appears to be very slight but has to be taken into account.

(3) Though there is an appreciably greater risk to health, bodily and mental, involved in operations which implicate uterus or ovaries than in those operations in which there is no such involvement, yet by far the greatest risk is incurred and the disturbances are more profound when both ovaries are removed.* Many are, indeed, of opinion that effects prejudicial to health are exceptional after simple hysterectomy. In both kinds of operation the risk to life is greater than when uterus and ovaries are left untouched. Nevertheless, prejudicial after-effects upon the general health are by no means invariable even when all ovarian tissue has been removed.

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* This summarises the general opinion. The exceptions have been sufficiently indicated in the text.

APPENDIX VIII

MEMORANDUM REGARDING FOREIGN LAWS ON THE SUBJECT OF STERILISATION

I.—United States of America

Alabama. (*See* Note 8.) Date of Act, 1919: amended 1923. Constitutionality not tested.

Number sterilised = 73 Males, 58 Females = Total 131.

The law provides for compulsory sterilisation and applies to mental defectives in Institutions.

Arizona. Date of Act, 1929. Constitutionality not tested.

Number sterilised = 10 Males, 10 Females = Total 20.

The law provides for compulsory sterilisation with a right of appeal and applies to the insane, mental defectives and epileptics in Institutions.

California. Date of Act, 1909: amended 1913 and 1917. Constitutionality not tested.

Number sterilised = 4,423 Males, 4,081 Females = Total 8,504.

The law provides for compulsory sterilisation, but very few are done without consent. It applies only to inmates of state institutions for insane and feeble-minded and certain types of prisoners in state prisons. It also includes syphilitics in its scope, though this aspect has not been applied, nor that which touches criminals.

Carolina, N. Date of Act, 1929. Declared unconstitutional in 1932. New law passed 1933.

Number sterilised = 10 Males, 36 Females = Total 46.

The law provides for compulsory sterilisation with a right of appeal. Provision is also made for voluntary sterilisation. The law applies to the insane, mental defectives and epileptics.

Connecticut. (*See* Note 1.) Date of Act, 1909: amended 1919. Constitutionality not tested.

Number sterilised = 18 Males, 320 Females = Total 338.

The law provides for compulsory sterilisation but consent of the nearest relative is always obtained. It applies to the insane and mentally defective (nearly all were female insane) and also includes those with "inherited tendency to criminality" in Institutions.

Dakota, N. Date of Act, 1913: amended 1927. Constitutionality not tested.

Number sterilised = 56 Males, 37 Females = Total 93.

The law provides for compulsory sterilisation but with a right of appeal and applies to the insane, mental defectives, epileptics, habitual criminals, moral degenerates, sexual perverts, in Institutions.

Dakota, S. Date of Act, 1917: amended 1927. Constitutionality not tested.

Number sterilised = 55 Males, 84 Females = Total 139.

The law provides for voluntary sterilisation and also compulsory sterilisation but with a right of appeal. It applies to the feeble-minded whether in or out of Institutions.

Delaware. Date of Act, 1923: amended 1929. Constitutionality not tested.

Number sterilised = 181 Males, 115 Females = Total 296.

The law provides for compulsory sterilisation and applies to the insane, mental defectives and epileptics.

Idaho. Date of Act, 1925 : amended 1929. Constitutionality upheld.

Number sterilised = 4 Males, 9 Females = Total 13.

The law provides for compulsory sterilisation with a right of appeal. Provision is also made for voluntary sterilisation. The law applies to the insane, mental defectives, epileptics, habitual criminals, moral degenerates and sexual perverts who are a menace to society.

Indiana. Date of Act, 1907, declared unconstitutional. New Acts passed in 1927 and 1931. Constitutionality not tested.

Number sterilised = 159 Males, 58 Females = Total 217.

The law provides for compulsory sterilisation with a right of appeal and applies to the insane, mental defectives and epileptics about to be committed to institutions.

Iowa. Date of Acts, 1911 and 1915. Amended 1929. Constitutionality not tested.

Number sterilised = 56 Males, 38 Females = Total 94.

The law provides for voluntary and compulsory sterilisation and applies to the insane, mental defectives and epileptics in or out of institutions and also syphilitics and degenerates.

Kansas. Date of Act, 1913. Constitutionality not tested. Amended 1917. Constitutionality upheld.

Number sterilised = 588 Males, 388 Females = Total 976.

The law provides for compulsory sterilisation, but consent is usually obtained. It applies to the insane, mental defectives, epileptics, habitual criminals in institutions.

Maine. Date of Acts, 1925 and 1929. Amended 1931. Constitutionality not tested.

Number sterilised = 5 Males, 36 Females = Total 41.

The law provides for compulsory sterilisation but with a right of appeal and applies to the insane and mental defectives in institutions.

Michigan. Date of Act, 1913. Declared unconstitutional ; Act of 1923 repealed ; New Act passed in 1929. Constitutionality not tested.

Number sterilised = 264 Males, 819 Females = Total 1,083.

The law provides for compulsory and voluntary sterilisation and applies to the insane, mental defectives, epileptics, moral degenerates, sexual perverts. (The Act is liberally construed.)

Minnesota. Date of Act, 1925. Constitutionality not tested.

Number sterilised = 72 Males, 621 Females = Total 693.

Consent of spouse or next of kin. The law applies to the insane and mentally defective. Also " diseases of syphilitic nature."

Mississippi. Date of Act, 1928. Constitutionality not tested.

Number sterilised = 1 Male, 11 Females = Total 12.

The law provides for compulsory sterilisation but with a right of appeal. It applies to hereditary forms of insanity that are recurrent and to mental defectives and epileptics in Institutions.

Montana. Date of Act, 1923. Constitutionality not tested.

Number sterilised = 33 Males, 48 Females = Total 81.

The law provides for compulsory sterilisation but consent is sought. It applies to the insane, mental defectives and epileptics in Institutions.

Nebraska. Date of Act, 1915 (repealed). New Act passed in 1929.

Number sterilised = 94 Males, 135 Females = Total 229.

The law provides for compulsory sterilisation and covers the insane, feeble-minded, habitual criminals, moral degenerates, and sexual perverts, inmates of

institutions, who are about to be discharged or paroled. The law was attacked in the case of a feeble-minded patient and was upheld by both the district court and the State Supreme Court. The lower court stated, however, in passing, that the law was constitutional only as to a feeble-minded person. The higher court did not discuss this matter as it was not before the court directly; but since the lower court's decision the officials have ceased operations on the insane.

New Hampshire. Date of Acts, 1917, 1921 and 1929. Constitutionality not tested.

Number sterilised = 23 Males, 142 Females = Total 165.

The law provides for compulsory sterilisation but with a right of appeal, and applies to the insane, mental defectives, and epileptics in Institutions.

Oklahoma. Date of Act, 1931. Constitutionality not tested.

Number sterilised = Nil.

The law provides for compulsory sterilisation but with a right of appeal and applies to the insane, mental defectives, and epileptics in Institutions.

Oregon. (*See* Note 2.) Date of Act, 1917. Declared unconstitutional Amended 1923 and 1925. Constitutionality not tested.

Number sterilised = 296 Males, 586 Females = Total 882.

The law provides for voluntary and compulsory sterilisation and applies to the insane, mental defectives, epileptics, habitual criminals, moral degenerates, and sexual perverts.

Utah. Date of Act, 1925. Constitutionality not tested. Amended 1929 Constitutionality upheld.

Number sterilised = 44 Males, 41 Females = Total 85.

The law provides for compulsory sterilisation and applies to the insane, mental defectives, epileptics, and persons with hereditary criminal sexual tendencies in Institutions.

Vermont. Date of Act, 1931. Constitutionality not tested.

Number sterilised = 8 Males, 22 Females = Total 30.

The law provides for voluntary sterilisation and applies to the insane and mental defectives.

Virginia. Date of Act, 1924. Constitutionality upheld.

Number sterilised = 479 Males, 854 Females = Total 1,333.

The law provides for compulsory sterilisation with a right of appeal and applies to the insane, mental defectives, and epileptics in Institutions.

Virginia, W. Date of Act, 1929. Constitutionality not tested.

Number sterilised = 0 Males, 1 Female = Total 1.

The law provides for compulsory sterilisation with a right of appeal and applies to the insane, mental defectives, and epileptics in Institutions.

Washington. (*See* Note 3.) Date of Act, 1909. Declared unconstitutional. New Act passed in 1921. Constitutionality not tested.

Number sterilised = 6 Males, 24 Females = Total 30.

The law provides for compulsory sterilisation with a right of appeal and applies to the insane, mental defectives, epileptics, moral degenerates, and sexual perverts in Institutions.

Wisconsin. Date of Act, 1913. Constitutionality not tested.

Number sterilised = 40 Males, 452 Females = Total 492.

The law is compulsory with no appeal but in practice it is voluntary. The law applies to the insane, mental defectives, epileptics, and criminals in Institutions.

NOTES.—(1) In Connecticut the statute enjoins the operations of "vasectomy or oöphorectomy as the case may be."

(2) Of the sterilisations done in Oregon 86 operations were castrations and 24 of the operations on females were "ovariotomies." According to Laughlin and Banta's Table, castrations have been done under the sterilisation laws in the following States: Delaware (39), Iowa (117), Michigan (30), Nebraska (7), New Hampshire (2), N. Dakota (2), Oregon (134), Utah (34), and one each in Connecticut, Virginia, and Wisconsin.

(3) The Washington statute authorises "such a type of sterilisation as may be deemed best." Castration is apparently not excluded, but it is enjoined that no operation shall be of a punitive nature.

(4) The figures as regards the number sterilised have been given by "State Authorities."

(5) In some states that have no eugenic sterilisation laws, institutions occasionally sterilise on their own responsibility. No account is here taken of such operation.

(6) Nevada and New Jersey once had sterilisation laws, but never performed any operations under them. The Oklahoma law has not yet been enforced.

(7) The following points should be noted as regards number of operations performed :—

(*a*) Indiana. The figure does not include several hundred males sterilised for eugenic reasons between 1899 and the adoption of the first law in 1907; nor 230 radium sterilisations of the female, primarily for therapeutic reasons.

(*b*) Maine. The figure does not include 40 operations performed in private hospitals at the instance of the Welfare Department.

(*c*) New Hampshire. The figure includes 13 sterilisations of women which, although done in county hospitals, were done under the state law.

(*d*) North Carolina. The figure includes the numbers for county hospitals (2 men and 5 women) and non-institutional cases (1 man and 16 women) which, however, are both included in the state law.

(8) The information concerning Alabama was supplied to the Committee by the Human Betterment Foundation, California. According to information received by the Foreign Office, the State of Alabama has no law on the subject of sterilisation.

(9) The total number of sterilisations performed in all States up to January 1st, 1933 = 6,999 Males and 9,067 Females (16,066). With the exception of approximately 300, all were Institutional cases. Of these 300, more than two-thirds were done in Michigan.

II.—Canada

The Act passed by the State of **Alberta** is appended (p. 118). It provides for the appointment of a Board whose members are named; their successors are to consist of two medical practitioners and two lay individuals appointed by the Lieutenant Governor in Council. The Board meets quarterly at any one of five Institutions and names the hospital and surgeon for each operation. The Act legalises the sterilisation of inmates whose discharge from mental hospitals is proposed provided the Board is unanimously of the opinion that the patient might safely be discharged if the danger of the multiplication of the evil by the transmission of the disability to progeny were eliminated. It is necessary for the patient to consent to the proposal. Where he or she is not capable of consenting, the husband or wife, or parent or guardian, as the case may be, may give the required sanction.

Any hospital may be designated a mental hospital by the Lieutenant Governor in Council and thus the statute covers a training school for mental defectives and applies to special wards in general hospitals.

The class of persons coming within the scope of the Act are—

(i) Patients who are convalescent from a psychosis.

(ii) Patients sufficiently improved from a psychosis as to justify discharge with or without supervision.

(iii) Patients who though unimproved might be cared for outside an Institution.

(iv) Mental defectives of all grades whose discharge from Institutional care might be reasonably considered were any danger of reproduction removed.

Application to the Board for sexual sterilisation of a patient is made by a responsible Medical Officer, a psychiatrist in the Public Health Service, and his recommendation must be supported by at least one other psychiatrist also in the public service.

A comprehensive summary of each case must be submitted to the Board, setting forth the facts with respect to family and personal history, physical and mental state, and with the reasons for recommending sterilisation.

It is represented that sterilisation has permitted the discharge of patients who would not otherwise have been eligible, but the operation has not, of course, rendered post discharge supervision unnecessary.

Up to the present, 163 cases (42 males and 121 females) have been presented for sterilisation and the operation has so far been performed in the cases of 27 males and 105 females. Five of the females were subsequently promiscuous: four of them had been promiscuous before hospitalisation. The other girl demonstrated immoral propensities after the operation, but her sister was regarded as promiscuous and having an undesirable influence on her. She was returned to the Institution. The four women who were promiscuous had venereal disease both before and after the operation.

The State of **British Columbia** passed a sterilisation law on 7th April, 1933: a copy of the Act is appended (p. 119).

The Act provides for the appointment of a Board of Eugenics consisting of a judge, psychiatrist, and a person experienced in social welfare work. Persons who have been sent to Institutions for the insane or to Industrial Schools may be sterilised as a condition precedent to discharge if it is thought that they would be likely to beget or bear children who are likely to transmit serious mental disease or mental deficiency. The recommendation for sterilisation must be accompanied by the patient's history and the reason why the operation is recommended. It is necessary to obtain the consent in writing of the patient: if he or she is incapable of giving such consent then the husband or wife, or the parent or guardian, may do so. If no such individual is available the Provincial Secretary gives the required sanction.

III.—Denmark

The Danish law was passed in June, 1929; a copy of the Act is appended (p. 120).

It will be observed that it is primarily an Act dealing with sexual offenders and psychotic individuals who are undergoing detention in an Institution. As regards the former type, the Act provides that the consent of the sexually abnormal person is necessary to the operation as is also the sanction of the appropriate judicial, medical and health authorities. If the applicant is

declared incapable of managing his affairs the request for sterilisation may be signed by his guardian. If married, the consent of the wife shall be obtained as a rule.

As regards the mentally abnormal person undergoing detention in a State or other Institution, sterilisation may be permitted in those cases where it is considered important for the general public and to the advantage of the patients themselves that they should be rendered incapable of having offspring, even though they do not present the menace to public security mentioned with the first class of individual.

In these mental cases, application to the Minister of Justice for consent to the operation can be made only in regard to persons who are of age, and must come from the authorities of the Institution in question, accompanied by the opinion of the doctor or medical official of the Institution. If the person concerned be incompetent, on account of his mental deficiency, of understanding the significance of the operation, the application for it shall be entered by the authorities of the Institution. The consent to the operation shall be given by the patient's guardian and such guardian must be advised by a doctor of the consequences of the operation. If the man is married, the wife's consent must as a rule be obtained.

As regards the sexually abnormal person, he may himself select a doctor to perform the operation but, as regards the mental cases, the doctor is chosen by the Director of the Institution.

Forty women in the Institution for feeble-minded women and 14 men from the Detention Institution have been sterilised. The operation performed in the case of the men is a complete bilateral castration, a measure prohibited as a grave physical injury by the existing Danish penal code even when the person concerned has given his consent. It is customary for the patients to remain in the Institution for one year after the operation, in order that the staff may have an opportunity to keep them under observation. Applicants for sterilisation are informed that the operation is not a guarantee that they will be discharged. The Sterilisation Act does not refer to discharge : patients are discharged under the Act regarding internment, which states that an interned person shall be discharged when he is no longer considered to be a danger to the public.

According to information furnished to the Committee it is deemed necessary to exercise caution in estimating the results of this Act, owing to the small number of patients who have undergone the operation and to the short time since the Act came into force, but the impression gained is that further operations for sterilisation should be undertaken.

The view is expressed that none of the patients who has been sterilised in such a drastic manner has deteriorated either physically or mentally. None of the resulting symptoms which were feared has been observed. It has been found that after the operation the patients were more even in temperaments, easier to get on with as regards their relationship with the staff and patients, and that their output of work was more satisfactory. It is stated that the results of the operation may be said to have surpassed expectations. The staff of the Institution keep in contact with the patients who have been discharged therefrom and so far none of them appear to have been found guilty of crimes or misdemeanours.

IV.—Switzerland

(Canton of Vaud.)

In September, 1928, the Canton of Vaud passed a law providing for the sterilisation of persons suffering from mental disease, mental infirmity or toxicomania (morphinomania, cocainomania, alcoholism) in so far as their condition requires care or is a source of danger to others or to themselves :

also those suffering from mental disease or mental infirmity if it be recognised they are incurable and where it be desired to prevent the procreation of children who in all probability will be affected. The approval of the Health Council is required before any such step can be taken.

It is stated that the majority of applications for the operation have been made by persons who were at liberty, although it has been possible to allow a few persons to be discharged who, but for sterilisation, would have had to remain in the mental hospital.

It appears that since the law was passed in January, 1929, 21 females have been sterilised. These consisted of 15 oligophrenics, 3 schizophrenics, 1 manic-depressive insanity, 1 epileptic, and 1 post-encephalitic case. It is further reported that a male described as a feeble-minded sex delinquent was castrated. It is stated that when patients are subject to castration the grounds for the measure are primarily therapeutic and secondarily as a protective measure for society.

The penal code of this Canton was revised on the 1st July, 1932, to permit of the termination of pregnancy on eugenic grounds. The article is to the following effect :—

> *Article* 130.—Abortion is not punishable when it is practised on a person suffering with mental illness or mental infirmity and whose offspring will in all likelihood be tainted, but the operation can be performed only with the authority of the Health Council.

The Committee were furnished with copies of papers read by Professor Hans Maier, Director of the Psychiatric Clinic of the University of Zurich, on his visit to this country in September, 1933. Professor Maier stated that voluntary sterilisation is permitted in most of the Swiss Cantons if it is indicated on therapeutic grounds, but it seems probable that " therapeutic " is liberally interpreted and would include racial grounds as well as personal hygiene, and that sterilisation as a condition precedent to discharge would not be considered an illegal attitude to adopt. One of Professor Maier's papers read at a private conference held at the Royal College of Surgeons was concerned with the extent to which castration could properly be employed. It appeared that this procedure had been limited to cases of sexual delinquents, and then only with their consent. The number so treated was very small, but it was stated that in general an improvement in behaviour and mental condition had resulted.

V.—Germany

A copy of the comprehensive law which was made in Germany on the 14th July, 1933, is appended (p. 122.)

No rules or regulations, or information concerning the method in which the Act is to be administered, have so far been published. It is stated that heretofore sterilisation for eugenic reasons had been forbidden in Germany, according to the interpretation placed on the law by the majority of the judges of that country.

The law as at present drafted provides for the sterilisation of persons with hereditable psychoses, feeble-minded persons and those suffering from epilepsy, Huntington's chorea, blindness, deafness, physical defects, and severe alcoholism. The operation can be performed either with or without consent. The Act provides for the appointment of a special court consisting of two doctors in addition to a judge for its administration.

B.—COUNTRIES WHICH HAVE PROPOSED THE INTRODUCTION OF LAWS REGARDING STERILISATION

VI.—Tasmania

Tasmania has proposed, as an addition to its Mental Deficiency Acts, a clause to legalise the sexual sterilisation of mental defectives prior to discharge or transfer from an Institution as a condition precedent thereto, provided that the patient consents. Where he or she is not capable of giving consent, the husband, wife, parent or guardian, as the case may be, is enabled to consent. If no parent or guardian is available the appropriate Minister can consent. Where discharge has been proposed and consent is withheld the order of discharge ceases to have effect.

The Tasmanian authorities point to the lack of precise information concerning the hereditary transmission of mental disease and defect and they propose further enquiry into this problem.

VII.—New Zealand

In 1924 a Committee was appointed on the subject of mental deficiency and sexual offences. It recommended that persons suffering from recurrent insanity or idiopathic epilepsy, high grade morons and others who, in the interests of themselves and society, ought not to be allowed to reproduce but who do not for other reasons require custodial care should have their cases considered for sterilisation by a Eugenics Board. It was suggested that sterilisation should be a condition precedent to discharge from the Institution but that the operation should not be performed unless the person concerned or his parent or guardian consented to the operation. Anyone found subsequently to be leading an immoral life should be returned to the Institution ; but the Committee did not feel able to make any recommendation on the subject of sex offenders. A clause was introduced into the Mental Deficiency Bill forbidding the marriage of persons who had been registered under the Act, etc., and legalising sterilisation for any person subject to the statute. The proposal evoked very keen discussion in New Zealand, with the result that the clauses dealing with sterilisation and the prohibition of marriage were withdrawn. The proposal has not yet been resubmitted to the New Zealand Parliament.

VIII.—Finland

The subject of sterilisation has been considered in Finland following the report of a Committee appointed in April, 1926. The Committee considered that sterilisation should be permitted for the following classes of persons :—

(a) *Feeble-minded.*—The reason given for the inclusion of this class was that the feeble-minded persons were those who exercised no discrimination in sexual intercourse and feeble-minded women frequently had illegitimate children. Sterilisation was advised on both eugenic and social grounds, it being alleged that feeble-minded persons neglect their children, who frequently become a charge on relatives. In any event the child of a mentally defective person is brought up in the wrong environment.

(b) *Insane.*—The Committee admitted that the need for sterilisation was not quite so obvious as with feeble-minded persons. It was suggested that, whether the offspring of an insane person is conceived or born

during a period of insanity or during a free period, it has no effect on the transmissibility of the disease. But the proposal should extend to persons outside Institutions.

(c) *Psychopathic Individuals.*—The Committee suggest that serious cases of psychopathy should be considered as insanity and therefore subject to the proposed measure.

(d) *Epileptic Persons.*—It was considered that the Bill should also apply to persons suffering with epilepsy.

(e) *Deaf Mutes.*—The Committee suggested that congenital deaf mutes should be sterilised when they wished to marry other congenital deaf mutes.

The Committee also considered that sterilisation should be allowed for persons suffering with misdirected or abnormal sexual instincts which might lead to crime.

A translation of the Bill is appended (p. 125).

IX.—Norway

In 1925 the Penal Code Committee of Norway drafted a Bill to legalise sterilisation but the Bill has not yet apparently been introduced in the Norwegian Parliament. The proposed draft law is appended to this report. (p. 127). It will be observed that it requires the consent of the person concerned but, where he is below the age of twenty-one years or is insane or feeble-minded, the consent of the guardian is also required. The Bill was directed towards the sterilisation of persons who might be a charge upon public funds, where there was a suggestion that the defect might be transferred to the offspring, or where he or she might be likely to commit offences against decency. The Bill provided for a council of experts consisting of a medical director as Chairman, one woman, one judge, one psychiatrist, and one medical man specially qualified in eugenics. Where the person was married, the consent of the spouse was required.

X.—Sweden

There is no law on the subject of sterilisation but a Bill has been prepared ; a translation is appended (p. 128).

It will be observed that the Bill was directed towards the sterilisation of persons who might transmit hereditary insanity, mental disorder or epilepsy, and which rendered them incapable of managing their affairs. It also applied to persons who, by reason of their defect, were permanently incapable of caring for their children. Provision was made for excluding the operation in the case of persons of unsound mind in respect of whom there was a reasonable prospect of recovery. The measure was entirely voluntary, except in so far as minors were concerned, in which case the consent could be given by the guardian.

We have recently been informed that the Swedish Government are considering the appointment of a new Committee to enquire into the question of sterilisation of persons of unsound mind, mental defectives and epileptics. It is stated that the draft law previously referred to is not sufficiently far reaching and will not be applicable to those cases of mental defect where sterilisation may be most needed.

Alberta

1928

Chapter 37

THE SEXUAL STERILISATION ACT

(*Assented to* 21*st March*, 1928.)

His Majesty, by and with the advice and consent of the Legislative Assembly of the Province of Alberta, enacts as follows :—

1. This Act may be cited as " The Sexual Sterilisation Act."

2. In this Act, unless the context otherwise requires—

(*a*) " Mental Hospital " shall mean a hospital within the meaning of *The Mental Diseases Act ;*

(*b*) " Minister " shall mean the Minister of Health.

3. (i) For the purpose of this Act, a Board is hereby created, which shall consist of the following four persons :—

Dr. E. Pope, Edmonton.
Dr. E. G. Mason, Calgary.
Dr. J. M. McEachran, Edmonton.
Mrs. Jean H. Field, Kinuso.

(ii) The successors of the said members of the Board shall from time to time, be appointed by the Lieutenant Governor in Council, but two of the said Board shall be medical practitioners nominated by the Senate of the University of Alberta and the Council of the College of Physicians respectively, and two shall be persons other than medical practitioners, appointed by the Lieutenant Governor in Council.

4. When it is proposed to discharge any inmate of a mental hospital, the Medical Superintendent or other officer in charge thereof may cause such inmate to be examined by or in the presence of the Board of examiners.

5. If upon such examination, the board is unanimously of opinion that the patient might safely be discharged if the danger of procreation with its attendant risk of multiplication of the evil by transmission of the disability to progeny were eliminated, the board may direct in writing such surgical operation for sexual sterilisation of the inmate as may be specified in the written direction and shall appoint some competent surgeon to perform the operation.

6. Such operation shall not be performed unless the inmate, if in the opinion of the board, he is capable of giving consent, has consented thereto, or where the Board is of opinion that the inmate is not capable of giving such consent, the husband or wife of the inmate or the parent or guardian of the inmate if he is unmarried has consented thereto, or where the inmate has no husband, wife, parent or guardian resident in the Province, the Minister has consented thereto.

7. No surgeon duly directed to perform any such operation shall be liable to any civil action whatsoever by reason of the performance thereof.

8. This Act shall have effect only in so far as the legislative authority of the Province extends.

British Columbia

1933

Chapter 59

AN ACT RESPECTING SEXUAL STERILISATION

(*Assented to 7th April*, 1933.)

His Majesty, by and with the advice and consent of the legislative assembly of the Province of British Columbia, enacts as follows :—

Short title.

1. This Act may be cited as the " Sexual Sterilisation Act."

Interpretation.

2. In this Act, unless the context otherwise requires :—

" Inmate " means a person who is a patient or in custody or under detention in an Institution ;

" Institution " means any public hospital for insane as defined in section 2 of the " Mental Hospitals Act," the Industrial Home for girls maintained under the " Industrial Home for Girls Act," and the Industrial School maintained under the " Industrial School Act."

" Superintendent," in the case of a public hospital for insane, means the Medical Superintendent of that hospital, and, in the case of the Industrial Home for Girls or the Industrial School, means the Superintendent or other head thereof.

Board of Eugenics.

3. For the purposes of this Act, the Lieutenant-Governor in Council may from time to time appoint three persons, one of whom shall be a Judge of a Court of Record in the Province, one of whom shall be a psychiatrist, and one of whom shall be a person experienced in social-welfare work, who shall constitute a Board to be known as the " Board of Eugenics."

Recommendation of Superintendent of Institution.

4. (1) Where it appears to the Superintendent of any Institution within the scope of this Act that any inmate of that institution, if discharged therefrom without being subjected to an operation for sexual sterilisation, would be likely to beget or bear children who by reason of inheritance would have a tendency to serious mental disease or mental deficiency, the Superintendent may submit to the Board of Eugenics a recommendation that a surgical operation be performed upon that inmate for sexual sterilisation.

Particulars accompanying Recommendation.

(2) The recommendation of the Superintendent shall be in writing, and be accompanied by a statement setting forth the history of the inmate as shown in the records of the institution, so far as it bears upon the recommendation, and setting forth the reasons why sexual sterilisation is recommended.

Examination of inmate.

(3) The Superintendent may cause the inmate to be examined by or in the presence of the Board of Eugenics.

Power to order surgical operation.

5. (1) If upon such examination of the inmate the Board of Eugenics is unanimously of opinion that procreation by the inmate would be likely to produce children who by reason of inheritance would have a tendency to serious mental disease or mental deficiency, the Board may by an order in writing signed by its members direct such surgical operation for sexual sterilisation of the inmate as is set out in the order, and may appoint some legally qualified medical practitioner to perform the operation.

(2) Nothing in this section or in any order made under it shall prevent the inmate, or any person acting on behalf of the inmate, from selecting and employing at the expense of the inmate a duly qualified medical practitioner to attend in consultation at or to perform the operation directed by the order of the Board of Eugenics.

Consent of inmate or other person.

6. The operation directed by the order of the Board of Eugenics in any case shall not be performed unless the inmate has consented thereto in writing, if in the opinion of the Board the inmate is capable of giving consent, or if in the opinion of the Board the inmate is not capable of giving consent, unless the husband or wife, of the inmate or, in case the inmate is unmarried, the parent or guardian of the inmate has consented in writing, or, in case the inmate has no husband, wife, parent, or guardian resident in the Province the Provincial Secretary has consented thereto in writing.

Protection from action.

7. A legally qualified medical practitioner appointed by the Board of Eugenics to perform any surgical operation on an inmate duly directed by order of the Board pursuant to this Act shall not be liable to any civil action whatsoever by reason of the performance thereof, except in the case of negligence in the performance of the operation.

Expenses of members of Board of Eugenics.

8. (1) The members of the Board of Eugenics shall not receive any compensation for their services, but they shall be paid the amount of the travelling and other personal expenses necessarily incurred by them in the discharge of their official duties.

Remuneration of physician.

(2) Every legally qualified medical practitioner appointed by the Board of Eugenics who performs an operation on any inmate as directed by the Board shall be paid his proper fees therefor.

Appropriation.

(3) All expenses and fees payable under this section in respect of any inmate shall be paid out of the moneys appropriated for the purposes of the institution in which that inmate is a patient or is in custody or under detention.

Legislative authority.

9. This Act shall have effect only in so far as the legislative authority of the Province extends.

Commencement.

10. This Act shall come into operation on the first day of July, 1933.

Denmark

1929

LAW REGARDING STERILISATION

WE Christian X, etc.,

Make known that: Parliament has adopted and We by Our consent have confirmed the following law:

Section I

Persons, whose abnormally developed sexual strength and tendencies predispose them to commit crimes and who thereby become a danger to themselves and the general public, may at their own request undergo an operation on their sexual organs, after first receiving medical advice and after the Minister of Justice, having received a declaration from the medico-legal council and the health authorities, has given his sanction.

Such a request can only be made by persons who are of age. The request shall be accompanied by a doctor's declaration and shall contain the fullest possible information regarding the applicant's reason for his decision. If the applicant is, for personal reasons, declared incapable of managing his affairs, the request shall be subscribed to by his guardian. If the applicant is living in wedlock the consent of his wife shall be obtained as a rule.

Section II

Furthermore the Minister of Justice, after obtaining a declaration from the medico-legal council and health authorities may permit operation on the sexual organs of psychically abnormal persons who are under the control of a

State Institution, or institution recognised under section 61 of the Poor Law of April 9, 1891, and in whose case it may be considered especially important for the general public and advantageous for themselves that they be rendered unable to have offspring, even if they do not present the menace to public security mentioned in Section I.

In such cases the application can be made to the Minister of Justice only in regard to persons who are of age and must come from the Directorate of the institutions in question accompanied by the opinion of the doctor or medical official of the institution, and if the person concerned be incompetent, on account of mental deficiency, to understand the significance of such an operation, the application shall be entered by these authorities.

The application shall be accompanied by a declaration from a guardian appointed for this purpose. If such psychically abnormal person is not of age his guardian can be appointed to give the said declaration. Before the guardian gives his declaration he shall be advised by a doctor of the consequences of the operation. If such a person is married, and there has been no separation or actual lengthy disunion, the wife's consent must as a rule be obtained before the operation can be undertaken.

Section III

Before the Minister of Justice gives his permission for the operation referred to in this law, he shall make certain that the person concerned or his guardian clearly understands the nature and possible consequences of the operation which it is a question of performing.

If the Minister of Justice sanctions the operation, its nature and scientific medical description shall be stated. In the circumstances mentioned in Section I the person concerned shall himself select a doctor, from among those who have the necessary surgical training, to perform the operation, whilst in the cases mentioned in Section II the doctor shall be chosen by the director of the institution in question. It is the duty of the doctor to inform the Ministry of Justice immediately the operation is performed.

If the Minister of Justice refuse the application, it may not be renewed for one year after the date of such refusal unless circumstances arise which are important to the settlement of the case, and which did not exist when the earlier application was made.

Section IV

The fees for the operation mentioned in Sections I and II are payable by the person concerned. If such person be without means the fees in the cases named in Section I shall be paid from State funds, and in cases named in Section II, according to the ordinary regulation of the Poor Law, and in both cases without the operation of Poor Relief for the person concerned.

After consultation with the Minister of the Interior, the Minister of Justice shall decide as to whether the fees shall be defrayed, wholly or in part by the person concerned, from the State Funds or according to the ordinary regulations of the Poor Law.

Section V

Any unauthorised person who undertakes the operations mentioned in this law shall be punished by fines ranging from 500 kroner to 5,000 kroner, provided that the circumstances do not merit a greater punishment under other laws.

Neglect to supply the information mentioned in Section III, paragraph 2, is punishable by fines ranging from 10 kroner to 200 kroner.

These fines go to the State Funds.

Section VI

This law shall be presented to Parliament for revision, at latest during its ordinary session, 1933–34.

To which all concerned shall conform,
Given at Christiansborg, June 1, 1929.
Under Our Royal Hand and Seal,
CHRISTIAN R.

Germany

LAW FOR THE PREVENTION OF HEREDITARY DISEASE IN POSTERITY, 14TH JULY, 1933

The German Government have decided upon the following law which is promulgated herewith :—

Section I

(1) Anyone who is suffering from a hereditary disease may be sterilised by means of a surgical operation if it may be expected with some certainty, according to the experiences of medical science, that his posterity will suffer from serious physical or mental hereditary disease.

(2) Persons will be considered as hereditarily diseased in the sense of this law if they suffer from any one of the following diseases :—

(i) Innate mental deficiency.
(ii) Schizophrenia.
(iii) Manic-depressive insanity.
(iv) Hereditary epilepsy.
(v) Hereditary (Huntington's) chorea.
(vi) Hereditary blindness.
(vii) Hereditary deafness.
(viii) Severe hereditary physical abnormality.

(3) Further, persons may be sterilised who suffer from severe alcoholism.

Section II

(1) The person to be sterilised may himself apply for sterilisation. If he is unfit to act, or if he has been declared incapable of managing his affairs on account of mental deficiency, or if he has not yet completed his eighteenth year, his legal representative is entitled to apply. For this he must obtain the consent of the Court for the Protection of Wards. In all other cases of limited capacity to manage affairs the application must receive the consent of the applicant's legal representative. If an adult has been given a guardian for his person, the latter's consent is necessary.

(2) The application must be accompanied by a declaration made by a doctor approved for the German Reich to the effect that the person to be sterilised has been made fully aware of the meaning and consequences of sterilisation.

(3) The application may be withdrawn.

Section III

Sterilisation may also be applied for by the official doctor or, in the case of an inmate of a hospital, sanatorium, nursing home, or prison, by the head of the Institution.

Section IV

The application must be made in writing or be dictated at the office of the Court for Prevention of Hereditary Disease. The facts which form the basis of the application must be confirmed by a medical certificate or by some other means. The office of the Court must inform the official doctor of the application.

Section V

The competent court for the decision is the Court for the Prevention of Hereditary Disease in the district in which the person to be sterilised has his legal residence.

Section VI

(1) The Court for the Prevention of Hereditary Disease is to be connected with a lower court. The former is to consist of a judge of the lower court as President, of an official doctor, and of one other doctor, who has been approved for the German Reich, and is particularly competent in cases of hereditary disease. For every member a deputy is to be appointed.

(2) Persons are excluded from being president who have decided on an application for the consent of the Court for the Protection of Wards in accordance with Section II, paragraph 1. If an official doctor has made the application he cannot participate in the decision.

Section VII

(1) The procedure before the Court for the Prevention of Hereditary Disease is not public.

(2) The Court for the Prevention of Hereditary Disease must take all the steps necessary for the decision. It can call witnesses and experts and may demand the personal attendance, or the medical examination, of the person to be sterilised and may demand his appearance should he be absent without excuse. In regard to the calling and swearing in of witnesses and experts, and as regards the exclusion or removal of members of the court, the rules for civil procedure are to be normally applied. Doctors who are called as witnesses or experts, are obliged to give evidence without regard to professional secrecy. Legal and administrative authorities as well as medical institutions must give information at the request of the Court for the Prevention of Hereditary Disease.

Section VIII

The Court must decide according to its free convictions after considering the whole substance of the process and the proofs. The decisions will be arrived at, after an oral debate, by majority vote. The decision is to be set down in writing and to be signed by the participating members of the court. The reasons must be given, as a result of which the sterilisation is decided on or refused. The decision is to be communicated to the applicant, the official doctor, and to the person to be sterilised, or, if the latter is not capable of making application, to his legal representative.

Section IX

The persons indicated in Section VIII, sentence 5, may, within a period of one month after the communication of the decision, appeal against it either in writing or by dictation at the office of the Court for the Prevention of Hereditary Disease. The appeal results in delaying the application of the decision. The appeal will be decided upon by the Higher Court for the Prevention of Hereditary Disease. Should appeal not be made within the prescribed time, the right to do so may nevertheless be extended in accordance with the provisions of the civil code.

Section X

(1) The Higher Court for the Prevention of Hereditary Disease will be connected with a Higher District Court and will embrace the territory of the latter. It will consist of one member of the Higher District Court, one official doctor, and one other doctor approved for the German Reich and specially competent in cases of hereditary disease. For every member a deputy is to be appointed, Section VI, paragraph 2, applies correspondingly.

(2) The procedure before the Higher Court for the Prevention of Hereditary Disease will be governed by Sections VII and VIII.

(3) The decision of the Higher Court for the Prevention of Hereditary Disease is final.

Section XI

(1) The surgical operation necessary for sterilisation may only be carried out in a hospital by a doctor approved for the German Reich. The doctor may only undertake the operation when the decision decreeing sterilisation has been made final. The highest district authorities will determine the hospitals and doctors to be entrusted with the carrying out of sterilisation. The operation may not be carried out by the doctor who made the application or who took part in the procedure leading to the decision.

(2) The operating doctor must hand to the official doctor a written report on the execution of the operation stating the method employed.

Section XII

(1) If the court has finally decided on sterilisation it shall be carried out even against the will of the person to be sterilised, provided that the application did not originate with him alone. The official doctor must request the police authorities to take the necessary measures. If other methods prove of no avail the application of force is permissible.

(2) If there are circumstances which make necessary a reconsideration of the facts of the case, the Court for the Prevention of Hereditary Disease must resume the procedure and temporarily forbid the sterilising operation. If the application was refused the resumption of the procedure is only permissible if new facts have come to light which justify sterilisation.

Section XIII

(1) The cost of the judicial procedure shall be borne by the State Treasury.

(2) The costs of the medical operation will be borne by the Health Insurance Fund in the case of insured persons, or in the case of other persons in need of assistance by the Relief Associations. In all other cases the expenses, up to the minimum of the legal medical tariff and of the average tariffs in the public hospitals, will be borne by the State Treasury ; further expenses will be borne by the sterilised person.

Section XIV

A sterilisation which is not carried out according to the procedure laid down in this law, or a removal of the glands, is only permissible when the doctor performs the operation according to the rules of medical practice for the removal of serious danger to the life or the health of the person on whom he is operating, and with the consent of the operating party.

Section XV

(1) The persons participating in the judicial procedure or in the carrying out of the operation are sworn to silence.

(2) Whoever breaks his obligation of silence without justification will be punished with imprisonment up to one year or with a fine. He may only be proceeded against on application. This application may also be made by the President of the Court.

Section XVI

(1) The execution of this law falls to the State Governments.

(2) The highest State authorities will decide on the seat and territory of the competent courts in accordance with the procedure laid down in Section VI, paragraph 1, sentence 1, and Section X, paragraph 1, sentence 1. They will name the members and their representatives.

Section XVII

The Reich's Minister of the Interior, in agreement with the Reich's Minister of Justice, will issue the necessary legal and administrative decrees for the execution of this law.

Section XVIII

This law will come into force on the 1st January, 1934.

Berlin, 14 July, 1933.

Finland

PROPOSED BILL TO LEGALISE STERILISATION

In accordance with a decision of the Riksdag it is hereby enacted :

1. Where the good of the community requires that a feeble-minded or insane person, or an epileptic, shall be prevented from bearing offspring, such a person may be sterilised in the manner laid down in this Act.

The Act shall also apply :

Where an epileptic person or a deaf mute can be granted permission to marry, only on the condition that he is sterilised ; or

Where any person, owing to abnormally strong or misdirected sexual instinct shows an inclination to commit offences whereby he may be a danger to himself, to another, or to the community.

2. Permission for sterilisation shall be granted by the Medical Board.

3. In the case of a person as mentioned in paragraph 1, Section 1, a request regarding sterilisation may, where such a person is an inmate of an institution for mentally defective or insane persons, or of any similar institution, be made by the director of the said institution, and in other cases by the Board of Health.

4. The request shall be accompanied by :—

(*a*) A report from the Medical Officer drawn up in accordance with a prescribed formula, with a statement regarding the heredity, mental development, and state of health of the person mentioned in the request together with information as to the course and the nature of his disease, his circumstances and any other relevant matter. It shall also be stated how far the said person is in a position to realise the importance of the measure in question ;

(*b*) the written consent of the person concerned, where he is in a position to realise the importance of the measure and the consequences thereof ;

(*c*) in the case of a minor, the written consent of his guardian.

Where the person concerned is unable to realise the importance of the measure to be taken, he shall be provided with a guardian, unless he is already under guardianship.

Where the person in question is married a statement from the husband or wife shall be appended, or an explanation to the effect that such a statement cannot be obtained without considerable difficulty or undue delay.

5. Any person who, in virtue of paragraph 2, Section 1, shall apply for permission to be sterilised, shall enclose with his application the statement necessary to enable a decision to be made as to whether he may be allowed to marry after sterilisation. (*See* Note.)*

6. An application for sterilisation on the grounds mentioned in paragraph 3, Section 1, may not be made before the person concerned has reached the age of 21 years ; the application shall be accompanied by the medical report mentioned in Section 4.

Where the applicant is married the observations of the husband or wife shall be called for, where such observations can be obtained without considerable difficulty or undue delay.

7. The Medical Board shall be entitled to obtain from the competent authority reports and statements required in connection with proposals and applications for sterilisation. They may also carry out any enquiries necessary for the elucidation of cases.

8. When granting permission for sterilisation the Medical Board shall state the nature of the measure found necessary. In considering the different processes care shall be taken that the person concerned is not exposed to greater suffering or to more serious consequences than are necessary to achieve the desired end. The decision of the Medical Board, which shall be issued free of charge, shall be final.

9. Measures mentioned in Section 8 shall be carried out by a Medical Officer in a hospital. Where the person concerned is without means, the measure shall be carried out free of charge in a hospital belonging to the State.

The Medical Officer shall notify the performance of the operation to the Medical Board within ten days.

10. Any person obtaining information in virtue of this Act shall be bound to secrecy regarding such information.

11. A Medical Officer shall be punished by a fine if he shall sterilise a person, with that person's consent but without the permission of the Medical Board, where the sterilisation was not required to cure a disease of the said person or to maintain his health.

A Medical Officer failing to make the report mentioned in Section 9 shall be punished by a fine.

12. The State Board shall issue any further regulations which may be necessary to bring this law into effect.

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* *Note to Section 5.*—The meaning of this Section becomes clear if read in connection with the Bill regarding the new Marriage Code. This Bill requires the permission of the President of the Republic :

1. for the marriage of persons suffering from epilepsy not due to causes mainly external, or from venereal diseases in an infectious stage ;
2. for the marriage of a deaf mute with another deaf mute unless the defect of one party is not congenital.

Norway

DRAFT LAW CONCERNING ACCESS TO STERILISATION AS PROPOSED BY THE PENAL CODE COMMITTEE

Section I

In the event of an operation which aims at the cessation of a person's reproductive capacity or sexual activity (sexual operation) not having a reason of undoubted medical character, it may only be performed in accordance with the regulations contained in this law.

Section II

A sexual operation may be performed upon a person who himself (herself) requests the same, when the request is of a creditable nature. If the person is below the age of 21 years, or is insane or feeble-minded, the consent of his (her) guardian is also required.

Section III

Insane persons and those with defectively developed mental powers may be operated by request of their guardians when there is reason to assume that the person concerned will not be able to support himself (herself) or his (her) offspring by his (her) own work, or that a sickly mental condition or a serious physical deficiency might be transferred to the offspring, or that he (she) on account of abnormal sexual propensities will commit offences against decency.

An insane person may not be sexually operated upon in accordance with this law without his (her) own consent, should there be hope of cure or material improvement.

As a rule a person with defectively developed mental powers may not be subjected to such an operation except by his (or her) own request or permission, if he (she) has not attained or may be assumed to have attained the mental nine years' stage.

A request for the sexual operation of an insane person or of a person with defectively developed mental powers may also be made by the Superintendent of Police in the district where the person concerned resides; if the person concerned has no permanent place of residence the request may be made by the Superintendent of Police at the place where he (she) is staying. If the person concerned is confined in a prison or penal workhouse, or in a home or institute under public control, the request may also be made by the manager of the institute concerned. In both the cases mentioned here there is also required the consent of a guardian.

Section IV

In conformity with this law a sexual operation may not be performed without the consent of a council of experts. This shall consist of the Medical Director as Chairman and 4 other members, viz., 1 woman, 1 judge, 1 psychiatrist, and 1 medical man who is specially expert in eugenics. These 4 members are to be nominated by the King for 5 years at a time. The King nominates a deputy for each member and if necessary may ordain that another medical man shall take the place of the Medical Director for a shorter or longer period.

The council of experts shall determine the nature of the operation to be performed. It shall also prescribe when and where the operation may or shall take place and by whom it is to be performed. As a rule the operation must be performed at a public or municipal hospital or at a private hospital which is approved by the Council for that purpose.

Section V

In cases where a sexual operation requires the consent of a guardian and the person concerned has no guardian, the Medical Director shall attend to the appointment of a guardian. If the council of experts consider that the natural or appointed guardian is not qualified to give a declaration concerning such an operation, the Director of Medicine shall attend to the appointment of a special guardian for that purpose.

Section VI

Before consent for a sexual operation is given in the case of a married person, the husband (wife) shall, as far as possible, have access to express an opinion regarding the request.

Section VII

The King will issue the more detailed regulations which may be considered necessary for the fulfilment of this law.

Sweden

DRAFT LAW RELATING TO STERILISATION

(Incorporated in Report of Swedish Government Committee on Sterilisation)

Section I

If there is valid reason to presume that any persons, in view of hereditary tendencies, will transmit to their children insanity, mental disorder or epilepsy, which will render them incapable of managing their own affairs, they may, after authorisation in accordance with this law, be subjected to a medical operation whereby they are deprived of their procreative power (sterilisation).

The same rule shall be applicable where any persons, owing to a disease of the nature above indicated, are permanently incapable of having the care of their children, and there is reason to presume that the disease is hereditary.

Sterilisation may be performed only by an operation of such a nature that, as a general rule, it does not involve injury to health.

Section II

Except in very special circumstances sterilisation may not be performed on a person who has not attained the minimum age for lawful marriage, nor on a lunatic where there is a fair prospect of his recovery.

No person may be sterilised unless he has given his consent thereto whilst realising the nature of the measure, nor may any persons be sterilised in spite of their refusal or opposition.

A minor in the custody of another person may not be sterilised without the latter's consent ; nor may persons who, owing to mental disorder or chronic abuse or intoxicants, are incapable of managing their own affairs, be sterilised without the consent of their guardian.

Section III

Authorisation for sterilisation is to be granted by the Medical Department.

Section IV

Any persons who desire that sterilisation shall be performed upon them should apply to the Medical Department.

In the case of minors application may be submitted also by the person who has the custody of them, and in the case of a person who has been admitted to a public asylum by the superintendent of the asylum.

A guardian of the character referred to in the third paragraph of Section II may also submit an application in respect of his ward.

Section V

An application for sterilisation shall be made in writing and shall bear the autograph signature of the applicant.

The application shall be accompanied by an extract from the parish register regarding the person to be sterilised ; a certificate from relatives, spouse or other persons containing particulars which may serve as a basis for judging whether sterilisation should be authorised ; a certificate from a qualified doctor regarding the medical examination of the person referred to in the application ; and, in cases where the consent of a person other than the applicant is required, the written authorisation of that person, signed by himself or herself.

The doctor's certificate should contain a statement to the effect that the person referred to in the application, as well as any other person whose consent is required in accordance with Section II, has been apprised by the doctor of the nature of the measure and has given consent whilst realising its consequences.

The application and the papers with which it is to be accompanied, with the exception of the extract from the parish register, shall be drawn up in accordance with forms determined by the Medical Department.

Section VI

If an application for sterilisation has been made in due form, the Medical Department shall decide as soon as possible whether authorisation is to be granted.

If the person referred to in the application is married, and if in the papers appended to the application there is nothing to show that the other spouse has consented to the measure, the Medical Department shall, as soon as possible, afford an opportunity for the latter to make his or her observations.

Should further information be required, the Medical Department shall direct the applicant to submit it within a certain time.

Section VII

A resolution authorising the sterilisation shall be issued in writing. The period for which the authorisation is valid shall be stated in the resolution.

There shall be no appeal from the resolution.

Section VIII

Authorisation granted shall cease to be valid if the sterilisation has not been performed within the time prescribed in the resolution.

Section IX

Sterilisation shall be performed at a hospital by a doctor employed there. Before the sterilisation is performed, the doctor shall remind the person in question of the nature and effects of the measure.

After sterilisation the doctor shall forthwith report to the Medical Department.

Section X

A doctor or other person who has been present at, or has taken part in, proceedings relating to sterilisation, or has given a certificate or has submitted observations on such a matter, may not, without due reason, disclose any information which has thus come to his knowledge. Any person who infringes this regulation shall be liable to a fine of not less than fifty *kroner*, and not exceeding one thousand *kroner*, unless the offence is subject to a severer penalty under common law. The fine shall go to the crown.

An offence of the nature referred to in this section may not be prosecuted by a public prosecutor, unless it is reported by the injured party for prosecution.

This law enters into force on the .....

APPENDIX IX

MEMORANDUM REGARDING FOREIGN INVESTIGATIONS INTO MENTAL DEFICIENCY

I.—Germany

[It will be observed that the terms " endogenous " and " exogenous " are used by the investigators. These words mean literally " arising from within " and " arising from without." An endogenous cause or factor is one which modifies the reproductive cells before conception takes place (*e.g.*, hereditary influences). An exogenous factor is one which modifies the development of brain or body or both either within or without the uterus (environmental influences).]

(a) *Dr. Hans Reiter and Herman Osthoff, " The Importance of Endogenous and Exogenous Factors in Special School Children "*

[*" Zeitschrift für Hygiene und Infektions-Krankheiten," Volume* 94, 1921.]

The material was taken from a Special School at Rostock, Mecklenburg, and consisted of 250 children (from a total of 400) whose parents could be investigated : they were visited personally by one of the authors. The differentiation between the sexes is not given.

In 39 cases (15·6 per cent.) there was no evidence of mental defect in the parents.

In 42 cases (16·8 per cent.) no definite conclusion could be reached as to the parents' mental condition.

In 140 cases (56 per cent.) one of the parents showed a marked degree of mental deficiency.

In 29 cases (11·6 per cent.) both parents showed a marked degree of mental deficiency.

Classification

There is no indication given by the authors of the method of investigating the parents by intelligence tests, although they visited them and obtained reports as to their school achievements.

(b) *Alfons Lokay, " The Relationship of Heredity and Imbecility "*

[*" Zeitschrift für die gesamte Neurologie und Psychiatrie," Vol.* 122, 1929.]

The investigation was conducted at the Genealogical Department of the German Research Institute for Psychiatry in Munich.

82 patients were examined of whom 55 were males and 27 were females. They were described as consisting of 57 endogenous cases and 25 exogenous cases. Cases of mongolism, amaurotic idiocy, cretinism and other pathological types were excluded.

Lokay found that with the endogenous group, and taking into account the survivors only :—

(i) Where the parents were normal, 13 per cent. of the sibs were oligophrenic.

(ii) Where one of the parents was oligophrenic, 33 per cent. of the sibs were oligophrenic.

(iii) Where both parents were oligophrenic (one case only) all the sibs were oligophrenic.

Classification

Lokay describes his method of classification as follows :—

Imbeciles were deemed to be persons who could not progress in a Special School ; could only read and write a little ; could do simple sums with difficulty and who could in later life follow only an occupation which required no independent reasoning. They were frequently in casual employment and many were unemployable. The lowest grade imbecile is described as a boy of 11 years of age with an intelligence quotient of 64 and a Binet Simon age of 7.

(c) *Carl Brugger, "Genealogical Enquiry into Feeble-mindedness"*
["*Zeitschrift für die gesamte Neurologie und Psychiatrie,*" *Vol.* 130, 1930.]

The material for this enquiry was taken from the Thuringen Regional Mental Hospital, Stadtroda.

254 families were examined. In 113 cases the mentally defective parent was a male ; in 141 cases a female. They were grouped into 205 endogenous cases and 49 exogenous cases. Cases of mongolism, amaurotic idiocy, cretinism and other pathological types were excluded.

Brugger found that with the endogenous group :—

(i) Where the parents were normal, 17·8 per cent. of the sibs were oligophrenic.

(ii) Where one of the parents was oligophrenic, 41·25 per cent. of the sibs were oligophrenic.

(iii) Where both parents were oligophrenic, 93·15 per cent. of the sibs were oligophrenic.

Classification

Brugger divided his material as follows :—

(a) *Debile.*—Persons with a mental age of 12 to 14 years who are able to earn their own living as labourers or independent artisans.

(b) *Imbeciles.*—Persons with a mental age of 6 to 12 years, *i.e.*, persons who could only be employed as casual labourers or in simple domestic work.

(c) *Idiots.*—Persons who were wholly ineducable and who had not reached a mental age of 6 years.

(d) *Werner Pleger, "Enquiry into the Heredity of Feeble-minded Children"*
["*Zeitschrift für die gesamte Neurologie und Psychiatrie,*" *Vol.* 135, 1931.]

The material for Pleger's enquiry was taken from the Education Department of the Residential School for Feeble-minded Children at Wittenau, near Berlin, and consisted of 75 patients, of whom 51 were males and 24 were females. 57 of these patients were deemed to be endogenous, 12 exogenous, and 6 doubtful. Cases of mongolism, amaurotic idiocy, cretinism and other pathological types were excluded.

Pleger found that with the endogenous group :—

(i) Where both parents were normal, ·4 per cent. of the children were oligophrenic.

(ii) Where one of the parents was oligophrenic, 58·1 per cent. of the children were oligophrenic.

(iii) Where both parents were oligophrenic, 71·9 per cent. of the children were oligophrenic.

Classification

Pleger described his classification as follows :—

(*a*) *Debile.*—Those who could get along in the Special School, were capable of independent mechanical work but could not originate anything.

(*b*) *Mild Imbeciles.*—Those who could do such work as cleaning, if under supervision.

(*c*) *Severe Imbeciles.*—Those who could articulate, feed and dress themselves without help, but could not be used for any occupation.

(*d*) *Idiots.*—Children who could not express themselves by speech but only by inarticulate sounds : could not feed or dress themselves, etc.

II.—Denmark

Jens C. Smith, " The Causes of Mental Deficiency in the Light of Investigations on 66 Pairs of Twins, Denmark, 1930."

6,700 cases of mental deficiency have been recorded in Denmark by the Danish Anthropological Committee. Of this number, 122 cases were found to be twins or triplet births. In 67 cases it was possible to obtain information as to their mental condition. In one of these cases the author could not determine whether the twins were uniovular or binovular. Of the remainder, 50 pairs were binovular, 3 pairs were probably uniovular, 13 pairs were uniovular.

Smith found that *both partners were mentally defective* in 8 per cent. of the cases of the 50 binovular twins and in 80 per cent. of the cases of uniovular twins. In the case of uniovular twins it was found that both partners belonged usually, though not invariably, to the same grade.

III.—United States of America

(a) *Dayton, N. A., " Investigation of the Travelling School Clinics of the W. E. Fernald and Wrentham State Schools,* 1921–1923."

3,553 cases of mental deficiency were examined. In 1,404 cases no information about the parents was obtainable.

Of the remainder, 262 cases had one or both parents feeble-minded, and in 142 cases one or both parents were insane or epileptic.

Of 1,000 cases at the Wrentham Institution :—In 420 cases no information as to parents was obtainable.

Of the remainder :—In 350 cases the parents were normal ; in 160 cases one or both parents were feeble-minded ; in 50 cases one or both parents were or had been insane ; in 20 cases one or both parents were epileptic.

(b) *Moorrees, V., " The Immediate Heredity of Primary Aments committed to a Public Institution. A Study of the Parents of* 45 *Cases at the New York City Children's Hospital, Randall's Island."* 1924.

There were excluded all cases of secondary amentia, epileptics, or subjects with a history of convulsions, and abandoned children whose parents could not be traced.

Moorrees found that :—

" Of the 45 cases figuring in this study, 33 or 73·3 per cent. have one or both parents who are themselves below the border line. These may be classified as cases of primary amentia in which immediate heredity is an important factor."

" Of these mentally defective parents, 30 were mothers, 13 were fathers, and in 11 cases both father and mother were defective."

(c) *Myerson, A., " Pathological and Biological Problems of Mental Deficiency."*—Proceedings of the American Association for the Study of Feeble-Mindedness, 1930.

983 cases from the Waverley Institution were examined. In 417 instances, nothing was known of parents. Of the remainder :—

In 166 or 29·3 per cent. of the cases, one or both parents were feeble-minded ;

210 or 37·1 per cent. of the cases had one or both parents either feeble-minded, epileptic or insane.

INDEX TO REPORT

Note.—The reference thus (47) is to the numbered paragraph ; the reference thus 131 is to the page.

18.1.34 (C12627) Wt.—/— 1,500 2/34 Hw. (Gp.311)