In this paper, the term Mental Defective is used instead of Feeble Minded in accordance with what seems to be current usage. The terms may be considered synonymous.

At the last meeting of this group, Dr. Minich told us that from the best information he could obtain, possibly and probably faulty inheritance was responsible for approximately 75% of Mental Defectives. He also told us of the mechanics of inheritance by which the defect is passed in the germ plasm from parent to child. Aside from those cases in which the mental defect is more or less widespread in the ancestry, there may be in one or both parents a condition of intoxication or poisoning which has affected the germ plasm or poisoned the embryo as a whole thus giving rise to a defective development of the individual.

Acute and chronic infections, toxemia of pregnancy, metallic or alcoholic poisoning are some of the conditions which may have a deleterious effect on the germ plasm or embryonic development. Then there are cases in which the mental or physical condition of the parents are in no way responsible for the defect in their child. These are due to causes acting at birth, or at any time during the developmental period, extending from birth to early adolescence.

A head injury occurring during birth or early infancy and childhood may result in an injury to the brain on account of which a state of arrested development of intelligence ensues. The injury may have been of the nature of pressure, concussion, or actual fracture of the vault or base of the skull.

A post-convulsive brain condition may result from a series of severe convulsions occurring in early infancy or childhood. These may produce hemorrhages in the brain substance and thus give rise to an arrest in the development of intelligence.

A post-meningeal brain condition may arise from meningitis of any bacteriological origin. This may result in a thickening of the meninges or a paramegalinitis, thus damaging or interfering with the function of the cortex and in this manner produce a state of arrested development of intelligence.

Post-encephalitic brain conditions may result from, or be a complication of any one of the acute infectious diseases including encephalitis lethargica, scarlet fever and whooping cough. When this occurs, it may have as its sequela, an impaired or arrested intelligence.

Endocrine disfunctions may be considered as causative factors. If present at birth and there is a corresponding endocrine disfunction in either parent, the condition may be considered as hereditary.
In discussing the care, management and treatment of mentally defective children it is to be emphasized that like other problem children, the needs of each case should be determined and then the requirements met as far as practicable. All factors should be considered including environmental influences, and the emotional nature of the child, as well as his level of intelligence.

It is well known that morons and cases with borderline intelligence may get along satisfactorily in social and economic ways. Many of these live satisfactory lives in their respective communities and never become social problems. Open-mindedness by the examiner is necessary in working out a constructive program for the care and management of individual cases. The basic aim should be to improve the defective child by medical, social and educational means so that he may be able to get along in life. The environment should also be modified where possible so as to best meet his needs. It is quite evident that physical care is as necessary in mental defectives as in other cases. Foci of chronic infection, if present, should be removed, malnutrition treated by dietary and tonic measures; orthopedic conditions remedied, visual defects corrected and endocrinologic disorders prescribed for, according to indications. It should be made clear to relatives and teachers, however, that these remedial measures may not increase the intelligence of the child.

Training and Education. Educational and social problems are generally more perplexing than physical diseases in mental defectives. Educational measures to be undertaken depend upon psychological findings, and upon the physical and psychiatric examinations. As a rule, formal school work is useless for the imbecile or the idiot. For these children the simpler forms of handwork, however, are of great value in increasing their motor control, in teaching them regular habits and application and in giving them a means of expression. For those of moron and borderline intelligence a limited amount of formal academic training is advisable. With them, however, such training should be so modified as to be thoroughly practical. The child should be taught at least how to read signs and directions, how to write simple letters and do simple reckonings.

The progress of these children is slow and they rarely make school progress beyond what may be expected as indicated by their intelligence ratings. A defective with a six-year mentality, for example, can generally do first grade work, one with a seven-year mentality, second grade work and one with an eight-year mentality, third grade work. Defectives and borderline types, however, are more "manually minded" than "book-minded". Therefore, for the younger children up to eleven or twelve years of age it is important that the more formal academic activities of the school room be in short periods and interrupted by intervals devoted to arts and crafts, music, games and physical exercises.

Young mental defectives should be assigned short tasks, as they even more than normal children, need to see the results of their labors. The successful teacher of the sub-normal is ingenious in devising ways and means of building up in such handicapped pupils feelings of
confidence and habits of success, thus stimulating interest in the classroom and the will to succeed, interests which may be the saving factor later on in life.

Older children ranging from twelve to sixteen should not be forced to attend classes with smaller children as this accentuates their feeling of inferiority.

The older boys, in addition to some formal school work, respond well to a manual training program, the older girls may be interested in domestic science courses, such as cooking, house-making, sewing, etc. By thus separating the older and younger pupils and meeting the requirements of each, many disturbing disciplinary problems are solved. Misbehavior among such pupils is often a reaction to what is to them an unsatisfactory and uninteresting situation.

Social Guidance. (And this is of the greatest importance)

Social guidance of mental defectives depends upon the individual factors in each case. The question as to whether to recommend home care for an idiot or insist upon institutional care may be difficult to decide. Idiots, of course, require constant physical attention. At times they may remain in their home particularly if they are of a quiet, non-excitable type. If their constant care absorbs the mother's energy and forces her to neglect her normal children, they should be in an institution, particularly if the other children feel unjustly treated because of the close attention required for a defective child. Then an idiot in the home embarrasses or humiliates the other children, institutional care is desirable.

Imbeciles may often remain in the community, particularly in rural communities, provided supervision is good. Higher grade imbeciles may be partly self-supporting at simple jobs and the higher grade girls may be usefully employed at housework and simple tasks in which the work is more or less routine. All are easily led, however, and the females are particularly apt to get into sex difficulties; hence, the need for careful and intelligent supervision. Generally speaking, imbeciles may get along in the community if they have proper food and clothing, are kept busy and remain away from bad company. They are less apt to get into difficulties on their own initiative than to be misled by others.

Morons and borderline cases offer special problems in the community. Some are sensitive to criticism and some may even become mildly paranoid; some are of psychoneurotic makeup; others are markedly lacking in moral feeling and in emotional control. Where psychopathic traits accompany the mental defect, morons should be dealt with in such the same way as other problem children. Those morons who cannot fit into their environment because of some personality disorder, or those who have unsatisfactory homes, are suitable for a period of training in an institution.
PREVENTIVE MEASURES

Obviously mental defectives are unfit for parenthood, even though they did not perpetuate the defective stock. That they should not become parents is particularly important when they are of the hereditary type, which, as we have stated, we believe makes up about 75% of all mental defectives.

Two methods of prevention have been advocated, segregation in an institution and sterilization.

Segregation in an institution affords an excellent means of giving individual care, training and treatment and prevents procreation. However, we well know that all mental defectives cannot be segregated.

The very nature of the morons, their close approach to the normal in their abilities and the tremendous numbers of them, make it economically impossible, as it is in fact unnecessary or undesirable to keep all of them in institutions for life.

The development of special classes, social supervision and community care make it possible to improve the general nature of inferior stock and make institutional care unnecessary for many. However, these cannot be depended upon to prevent procreation.

Sterilization for the elimination of the unfit has long been advocated by Eugenists. Twenty-four states have laws permitting sterilization of mental defectives. Although sterilization is no doubt preventing the birth of many children who would be mentally defectives, it should be appreciated that this method is not a solution of the problem. Even with sterilization, mental defectives require training, community guidance, social supervision and a certain percentage on account of antisocial conduct, will require continued institutional care.

As we know, a certain percentage of mental defectives are born of normal parents and come from ancestry in which previous mental deficiency did not exist.

What can be done to aid in the prevention of these cases?

Mental deficiency resulting from syphilis should be prevented by social hygiene and by prenatal treatment of the syphilitic mother.

Mental deficiency resulting from birth injuries, by improved methods of care of the expectant mother and skill of the obstetrician.

Mental deficiency following encephilitis may be eliminated when more efficient treatment of the original disease is possible.

It would be unfortunate if sterilization and other known means of prevention were looked upon as a solution of the problem and cause the general public and our legislators to believe the problem has been solved.
A SOCIAL PROBLEM

Mental Deficiency has been, is now and always will be a social problem and the more complex human society becomes, the more difficulties will be put in the way of the social adjustment of the defective individual.

We will continue to require more and more institutional care and community supervision in dealing with the problem of mental deficiency.

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DISCUSSION

Dr. Nieman: You have a school and I have been interested in the education in that school. Can you state offhand about what proportion of these fall into these groups?

Dr. Murdoch: Our work is really divided into 3 groups. There are the morons and imbeciles who are susceptible of training up to the 4th grade in school. We have in our institution about 2300 and about 500 would come into that group. Some of them go to the 5th grade. Then we have another 400 who will not progress as far as that and who are receiving training and who are getting some book learning and able to read simple sentences, count the numbers, tell time, and including this type, our school would be made up of 800 who are receiving actual instruction. There are from 4 to 83 teachers. Many of the children are only in class rooms for 3 hours a day. The majority of them have 2 hours in the morning and 2 in the afternoon.

Then we have another group, about 1/3, who are extremely helpless and they are not as a rule of the hereditary type. The hereditary type are likely to be the moron. The second group are not able to profit by any instruction, unless it might be habit training, something of the control of their functions so that they are less of a burden. That takes about one-third of our population.

Then there is about one-third who practically do the work of the institution, so that our population of 2300 is divided about equally into three groups.
Dr. Nielsen: If some of them improve, are they discharged from the institution?

Dr. Murdoch: Yes, after they are sterilized. I don't know how many we discharged last year, but I think it was something over 100. Our turnover during the year is about 150. Some of the girls are sent to the club houses under Miss Thomson's supervision. Girls get employment and are removed. There have been over 800 sterilization operations performed in the institution in the last five or six years. Most of the girls and women who have gone out are getting along satisfactorily.

Dr. Nielsen: Some of the children are discharged?

Dr. Murdoch: Some of them are discharged when the home is such that they can be returned, but we prefer to have them remain until after sterilization which we don't like to perform before 18.

Mr. Hush: What would your population be if your capacity was not limited?

Dr. Murdoch: It wouldn't make any difference what kind of an institution the Board of Control would build as it soon would be filled. That is practically the case of all our institutions. There is no state in the union that has not a waiting list for the institutions. Some years ago Minnesota was up in the -- I don't know but that it was the first in the number of beds per population and at that time we had provision for about 70 per 100,000 population and that was about as many as any state had at that time. Other states were provision more rapidly. It was looked upon as ideal that a state should have 1 bed per 1000 population. Finally Massachusetts has reached that number and so has New York. Massachusetts has gone on until they have 120 beds for mental defectives for each 100,000 of their population and they seem to have as many on their waiting list. They have practically doubled within the last 20 years. Minnesota comes among the first seven of the United States.

For a time there was little progress, but within the last few years Minnesota has increased its care. Since I went to Faribault, which was 7 years ago, we have increased our capacity about 400. We now take care of 2500. The State has built 2 cottages and has managed to increase the capacity about 400. The institution at Cambridge has grown very rapidly. We have transferred within that time 300 or 400.

Mr. Hush: Are the girls of the Midway Club, girls of your school and are they self-supporting?

Dr. Murdoch: They are looked after by the Board of Control, Children's Bureau. We do help, but the girls are usually self-supporting.
Mr. Hush Have they been discharged?

Dr. Murdoch: Yes, they have been discharged from our School, but they have not been discharged from the guardianship of the Board of Control, but where there is a deficit our School has contributed to the up-keep of the club.

Rev. Glabe: In discussing the causes of feeble-mindedness you mention that the spasms produced by whooping cough are often the cause. Have we any clinical data, or is that a personal opinion?

Dr. Murdoch: We have had cases who appeared normal before they had whooping cough and who have been mentally defective since. I can well see that in a severe paroxysm of whooping cough how there might be hemorrhaging of the delicate structures of the brain. Dr. Michael, what have you to contribute on that point?

Dr. Michael: I know it is the impression among physicians that such may occasionally be found. I don't know that I can recall a personal case where I have been absolutely satisfied that that was the case.

Miss Thomson: I wondered if there was not some discussion of Dr. Murdoch's first statement, that he was using the term "mentally defective" as absolutely synonymous with feeble-minded. I wonder whether some of the persons who are accustomed to using both terms agree that that is a proper usage. Dr. Minnick.

Dr. Minnick: I think I want to hear from the medical men.

Dr. Murdoch: I attended the American Association for the Study of Feeble-mindness and at their last session they changed the name of the association to the American Association of Mental Deficiency. Now mental deficiency is the general term used in England for many years. The English Mental Deficiency Act of 1913, as amended in 1927, defines Mental defect as follows:

"For the purposes of this section, 'Mental Defectiveness' means a condition of arrested or incomplete development of mind existing before the age of 18 years, whether arising from inherent causes, or induced by disease, or injury."

That is, before birth or at the time of birth up to 18. I think it is common among many writers to include mental deficiency and to have it include all below the normal age and to include the backward child and the border line and the moron. The Association stated definitely they used the term "mental deficiency" as synonymous and included no one in that term above the range of the moron.
The following definition has been suggested:

"A person is mentally defective when because of the arrest of mental development before 18 years old, he is incapable of behaving himself with safety to his person or property entrusted to his care, or with safety to the person or property of others and is not susceptible of being taught to behave himself and to conduct his affairs in a manner consistent with safety to his person or property, or the persons and property of others."

Miss Thomson: Now maybe the definition might come up for discussion.

Dr. McBroom: Personally I am very much opposed to it. I think I have patients with me that are definitely mentally defective and who were normal at 18. We know that there are epileptics that undergo more or less degeneration. They become more or less defective. I think the age limit should be entirely eliminated, particularly where it involves any statute on our law books.

Mr. Hall: Would you include senile dementia?

Dr. Murdoch: I think we should make a distinction between "mental deficiency" and mental illness. Insane is a legal term. Mentally ill is something that has come in where the mind has developed, but mentally deficient is like the tree that never grows up. I think we should make that distinction. Now it is true that many of our mental defectives are not very different from the dementias, but I think we should take into consideration and we should very definitely make a distinction between the individual whose mind has never developed and whose mind has developed and something later has come in.

Miss Thomson: From a psychological standpoint, what would you say, Dr. Goodenough?

Dr. Goodenough: I would be inclined to think from the scientific standpoint that there would be a definite line between the mentally arrested and the mentally deteriorated.

Miss Thomson: You would use the age limit as 18?

Dr. Goodenough: I don't know of any reason for trying to place some limit. As a matter of fact, the amount of mental growth after 14 or 15 is not very great. Make your definition as precise as possible so that there will be no question as to who will be included under it.
Mrs. Davis: The thing that puzzles me is that many cases would not be brought to our attention until long after that time, 25 or 30, and the burden of proof would be on the public to prove that they were mentally deficient before that age and with many loopholes and the advantage that the attorneys would take that would be quite a handicap.

Dr. Murdoch: It seems to me that the school record and psychological test would take care of that.

Dr. Michael: I am opposed to it. We have a child that is 12 years and then we had the definition of the legal age of 18. I am glad that these proposed definitions are subjects of discussion at the Neurological Society's next program.

Miss Thomson: Dr. Kuhlmann isn't there something you want to say on this question of the definition of the feeble-minded?

Dr. Kuhlmann: I have accustomed myself to make a distinction between mental defectives and feeble-minded, but if you are to have only the one term I like the term mental Defective rather than feeble-minded. The matter of what should be included in the term of mental defective is important. I don't like in the first place the idea of defining in such a way that the cause of the condition has to be determined.

Dr. Murdoch: I think we should make a distinction between commitable cases and cases where they can be taken care of in the home. Here is another child. They are both feeble-minded, but one is a commitable case and the other is not.

Dr. Kuhlmann: Does your definition take care of the situation?

Dr. Murdoch: It does.

Mr. Hall: Doesn't it seem that all feeble-minded need guardianship? The definition between the mentally ill and the mentally retarded because of the treatment is necessary. A mentally ill person may recover, while a mentally retarded person is generally permanently so.

Dr. Nielsen: Doesn't Dr. Murdoch bring out right into the open the question that we started the discussion in the beginning of this committee. The institution is full. The special classes for mentally subnormals in this state are getting only at the heart of that trouble. There has not been enough funds to take care of the children throughout the state. It fully brings it out in the open.

Miss Thomson: Dr. Murdoch has used many questions each one of which might be a question for further discussion.