

Thus it is that in many ways least expected the influence of the training school is felt. It has raised the quality of the nurse's work in every respect. It has demanded some education upon the part of the applicant; hence we have as a result a much more intelligent class of nurses.

If much of improvement has been accomplished, under the present circumstances, toward converting these institutions into hospitals, where all of the most approved treatment can be applied, what may not be the future possibilities under more favorable conditions. Although much has been added in the way of instruments, apparatus, electrical batteries, etc., yet we would call your attention to some things wherein great improvement could be made.

Our infirmary ward is simply an ordinary ward, opening off from the suicidal ward, with disturbed ward above and below.

Although the care of our sick has been greatly improved by placing them on a ward by themselves, yet you can see at once that the situation is not what it ought to be. You will agree that the infirmary ward should be entirely separated from the other wards.

Dr. Andrew MacFarlane, in his recent article, "The duty of the State to the Insane," has suggested the erection of a separate hospital at the state institutions, for the treatment of all acute cases.

I would amend this movement by proposing an addition to this separate hospital, which shall take in our infirmary ward.

I would suggest then, a separate building at each of our state hospitals, conveniently situated on the grounds, where all of our acute and hopeful mental cases, together with the physically sick, could be cared for. I would have the sick ward entirely separated from the acute mental, but located in the same building, away from all noise and confusion. In this building I would have a well-equipped diet kitchen, where all of the special dishes required by either class of patients could be prepared.

Here I would also have the operating room. One room could be fitted up with all of the electrical appliances, for all kinds of baths, massage, etc., where patients of both classes could be taken for treatment. Situated in such a building our patients would have the advantage of the best nursing and treatment without the disadvantage of noise and overcrowding condition of the remainder of the hospital.

Some such plan as this, successfully carried out, I am sure would greatly promote the recovery of our patients.

I wish also in this connection to point out an important defect in the commitment of patients to our state hospitals. That is, in the almost cruel way in which patients are arrested and confined in the jails of our cities, sometimes for periods of two or three days, before they are transferred to the state hospitals.

Many patients come to us feeling that they have been very unjustly treated, and ask what they did that they were locked up in jail.

This is a relic of former barbarism that should be speedily relegated to the past, and some place should be provided for the reception of patients other than among criminals.

There has been an attempt to meet this demand in some of our states. In Chicago the results of the detention hospital have not been very satisfactory. In New York this idea is carried out under the name of Pavilion hospital, in connection with Bellevue hospital. Here the patient adjudged insane is detained under the care of a physician and nurse for a period of five days before being sent to the state hospital.

In our state would it not be feasible, at least in St. Paul and Minneapolis, to have a ward at the city hospital set aside for insane patients, this ward to be under the care of the city physician and equipped with one or two nurses, accustomed to these patients? Here they would receive proper care until transferred to the state hospitals. This plan could be put into practice with slight expense and with great benefit to our patients.

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HUME FACTS AND FIGURES RELATIVE TO THE CAUSATION OF IDIOCY AND FEEBLE-MINDEDNESS.

BY W. F. WILSON, M. D., ASSISTANT PHYSICIAN MINNESOTA SCHOOL FOR FEEBLE-MINDED.

Our knowledge of the causation of idiocy, imbecility and feeble-mindedness must, at the best, be very indefinite incomplete and imperfect. Nevertheless, the careful study of a goodly number of cases will reveal much to us.

The facts and figures set forth in the following paper are taken from the information contained in eight hundred consecutive

etiological and application blanks, on file at the Minnesota State School for Feeble-minded at Faribault.

In the consideration of this paper and the value of its data it is requested that the following points be borne in mind:

1. That the histories were not complete in every case, though quite complete upon the whole.

2. That it is not the intention of this paper, nor is it possible, to group all cases into a table or classification, saying, so many cases caused by this, so many by that, and so on, for in very many cases there is in each undoubtedly a composition of causes, or combination of causative factors in operation.

3. That in many cases there is probably a predisposing cause, or predisposing conditions, and an exciting cause, but we are not always able to draw the dividing line.

4. That in many cases, where several possible causative factors prevail, one only may be the actual cause, and the others only concomitant, yet here again it is often impossible to differentiate and to determine which is the true direct cause and which are only accompaniments.

Illustrative cases of these last will be given later on.

The whole number of blanks examined, as stated before, was eight hundred, giving the following etiological data:

I. Age at which trouble began—

1. Congenital, 3G8.
2. Infancy (i. e., from birth to 2 years, and probably including some congenital cases), 188.
(Probably about one-half of all cases were congenital.)
3. 2 to 5 years, 91.
4. 5 to 10 years, 37.
5. 10 to 15 years, 18.
6. 15 years and over, 13.
7. Unknown or not given, 85.

H. Sex—

1. Males, 452 or 56.5 per cent.
2. Females, 348 or 43.5 per cent.

HI. Parentage—(Where the parents were of different nationalities, as was the case in a few instances, the nationality of the father is given as a rule.)

1. American	303
2. German	142
3. Norwegian	74
4. Irish	56
5. Swede	51
6. Canadian	46
7. English	23
8. Austrian and Bohemian	16
9. Dane	9
10. Scotch	9
11. Dutch	5
12. Colored	5
13. French	4
14. French-Canadian	4
15. Welsh	4
16. Polish	3
17. Swiss	3
18. Finn	2
19. Scotch-Irish	2
20. Icelander	1
21. Italian	1
22. Russian	1
23. New Zealander	1
24. Unknown or not given	35

There is a table appended showing what percentage each of the principal nationalities is of the whole number of feeble-minded persons represented by the blanks examined; and a comparison of this with a table showing what percentage each of these same nationalities in the state at large was of the total number of people in the state, according to the census of 1885. This comparison seems to show that in the main each nationality forms about the same percentage of the total number among the feeble-minded as it does among the normal. The most notable differences are in the cases of—

1. Americans, which formed 61 1-2 per cent of the population in general of the state, and only 38 per cent among the feeble-minded.
2. Germans, which formed 10 1-10 per cent of the population in general of the state, and 17 7-10 per cent among the feeble-minded.
3. Irish, which formed 2 8-10 per cent of the population of the state in general, and 7 per cent among the feeble-minded.

4. English, which formed 1.1 per cent of the population in general of the state, and 2.8 per cent among the feeble-minded, making, as will be seen, a good showing for Americans, but not so good for the other nationalities mentioned. (Table given at the end.)

IV. Heredity—

1. Family history of insanity or feeble-mindedness (i. e. the number of cases where insanity or feeble-mindedness existed in the families of the father or mother of the applicant, or their immediate ancestry), comprising 138 cases, or more (but one sixth of all.

Of these, given as definite cause:

- (a) One or other parent feeble-minded, 9 cases.
- (b) One or other parent insane, 5 cases.
- (c) Mother insane, and intemperate during lactation, 1 case.

2. Family history of intemperance (i. e., where either parent or grandparent was excessively given to the habitual use of stimulants or narcotics), 123 cases, or about 15.5 per cent of all.

Of these, as alleged cause:

- (a) Father a drunkard, 7 cases.
- (b) Mother insane, and intemperate during lactation, 1 case.

3. Family history of allied troubles (i. e., where the history of parents, immediate ancestors or their near relatives shows either epilepsy, paralysis, chorea, hysteria, other neuroses, deaf mutism, blindness, consumption, scrofula, cancer, goitre, other specific diseases'), 307 cases, or about 38.5 per cent of all.

Of these, alleged as definite cause:

- (a) Parents very nervous, 1 case.
- (b) Mother epileptic, 1 case.
- (c) Mother consumptive, 1 case.

Note.--It should be called to mind, in this connection, that there is quite a consensus of opinion among those most learned in this matter, that insanity, idiocy, imbecility, epilepsy, paralysis, chorea, hysteria, all other grave neuroses, deaf-mutism, congenital blindness, consumption, scrofula, cancer, certain specific diseases, intemperance and even criminality are to a certain extent allied or inter-related; to example, quoting from Strahan (Marriage and Disease, p. 19): "Thus the son of an insane parent may be a confirmed drunkard, and he in turn may beget a family, one mem-

ber of which may inherit his father's vice, while another may be epileptic, another idiotic and yet another who perhaps after giving early promise of superior intellectual attainments, will become insane."

V. Consanguinity of marriage and illegal births --

1. Parents or grandparents (on either side) related 51 cases, or about one-sixteenth of all.
Of these, with no other known cause, 2 cases.
2. Children of incestuous parents, 2 cases.
3. Other illegitimate children, 3 cases.

VI. Overtax, bodily or mental, of either parent prior to conception—

In all 21 cases.

One case, where ill health of father prior to the conception of the child stood in pretty definite causal relation.

One case where the father sustained injury to the spine two or three years before the birth of a feeble-minded child, this being the first horn after that injury.

VII. Ages of either parent over 45 or under 20

When the feeble-minded child was born, 107 cases, or more than one-eighth of all.

One case, father 50, mother 49, no other etiological factor given.

One case, father 65 and the parent of 22 children before this one.

VIII. Accident, ill-health, anxiety, grief, fright or overwork of mother during the period of gestation -

All sorts of things were given under this heading, from tooth-ache to interest in another daughter's matrimonial affair.

Whole number of cases, 179, or more than one fifth of all.

Of these, alleged to be actual causes:

1. Fright of mother during this period. 12 cases.
2. Accident to mother during this period, 4 cases.
3. Anxiety of mother during this period, 4 cases.
4. Grief of mother during this period, 2 cases.
5. Ill-health of mother during this period, 2 cases.
- (i. Hardship of mother during this period, 1 case.
7. Ill-health and nervousness during this period. 1 case.
8. Hemorrhage at 7 months, 1 case.
9. Rape of mother while pregnant, 1 case.

10. Mother annoyed during pregnancy by visits from a defective child, 2 cases.
 11. Mother while pregnant saw an epileptic have a spasm, 1 case.
 12. Mother received blow on the head while pregnant, 1 case.
 13. Where something happening during the period of gestation was alleged to be the cause, but the family history showed either insanity or imbecility existing as a hereditary taint, 7 cases.
- IX. Premature birth or protracted gestation—
1. Premature births, 22 cases.
Of these, alleged to be the cause, 2 cases.
 2. Protracted gestation, 1 case.
 3. Being one of twins, 2 cases.
- X. Difficult or instrumental labor, 101 cases, or about one-eighth of all.
Of these, alleged to be the cause, 8 cases.
- XI. Deficient animation at birth, 67 cases.
Of these, alleged to be the cause, 1 case.
- XII. Diseases given as causes, in all 218 cases, divided as follows:
1. Convulsions, 76 cases.
 2. Scarlet fever, 19 cases.
 3. Cerebro-spinal or spinal meningitis, 14 cases.
 4. Measles, 12 cases.
 5. Brain fever or inflammation of brain, 11 cases.
 6. Typhoid fever, 9 cases.
 7. Hydrocephalus, 8 cases.
 8. Pneumonia, (3 cases.
 9. Whooping cough, 5 cases
 10. Protracted diarrhea, 5 cases.
 11. Smallpox, 4 cases.
 12. Teething, 4 cases.
 13. Gastritis or indigestion, 4 cases.
 14. Rachitis, 2 cases.
 15. Irregularity of first menstruation, 2 cases.
 16. Diphtheria, 2 cases.
 17. Other diseases given, 4 cases.
 18. Acute diseases not specified, 31 cases.

- XIII. Injuries, etc., given as causes—
In all, 85 cases, divided as follows:
1. Injuries to the head, 33 cases.
In all these cases the histories showed pretty conclusively that the injury to the head was the direct and actual cause.
 2. Falls in general, 13 cases.
 3. Fright, 9 cases.
 4. Overdose of medicine, 8 cases.
 5. Injuries to the spine, 5 cases.
 6. Youthful indiscretion, 5 cases.
 7. Hardship and exposure, 4 cases.
 8. Ill-treatment, 2 cases.
 9. Having feet frozen, 1 case.
 10. Being given tobacco and liquor while a child under five years of age, 1 case.
 11. Almost drowned when two years old, 1 case.
 12. Intemperance of applicant, 1 case.
 13. Severe scalding at three years of age, 1 case.
 14. Grief after death of mother, 1 case.
Total of diseases, injuries, etc., given as causes, 303 cases, or about three-eighths of all.
- XIV. Common accompaniments of the feeble-minded condition—
1. Convulsions or epilepsy, including all cases presenting a history of having now or ever having had epilepsy or convulsions, 316 cases, or nearly two-fifths of all.
 2. Chorea—there were given 17 cases, but the records were not very complete on this point.
 3. Paralysis. 84 cases.
 4. Heads abnormal in shape or size, 69 cases.
There was only one clear case of microcephalia, or compression of the brain from the skull, while the infant was growing.
- XV. Where the histories were complete and good in every way and none of these or any other etiological factors operating, 15 cases.
- XVI. Cases given as illustrations, all idiotic or feeble-minded—
1. Boy, epileptic, fairly bright, bom of incestuous parents, ' father drank to excess, family history of imbecility and consumption.

2. Boy, parents cousins, family history of consumption, mother's emotions badly stirred up during pregnancy, and child had protracted diarrhea when an infant.
3. Girl, epileptic and paralytic, mother a drunkard and immoral, father 62 years old when the child was born, family history of consumption.
4. Girl, epileptic, family history of insanity, scrofula and intemperance, father 47 when the child was born, mother overworked during pregnancy, child very sick while teething.
5. Girl, family history of insanity, mother frightened during pregnancy, child received a fall and injury to the spine at two years.
6. Girl, family history of paralysis and consumption, father 51 when the child was born, anxiety of mother while pregnant, difficult labor, twin pregnancy, deficient animation at birth, infantile convulsions.
7. Boy, same family' history as above, birth normal, father thinks condition caused by boy's swallowing some kind of insect or animal, while drinking from a slough.
8. Girl, very bright for a feeble-minded child, family history of insanity, feeble-mindedness, paralysis, deafness, consumption and intemperance, difficult labor, acute sickness at 18 months, ending in paralysis.
- J). Boy, cause given as acute sickness, brain fever and ear-ache, fell down stairs, was in a team runaway.
10. Three children of the same family, brother of mother feeble-minded, mother herself a "sporting character," father had a violent temper, and died of cancer.
11. Boy, cause given as follows by father: "To my best judgment, the boy when about a year old took sick, and was treated by doctors with strong medicines which caused to deform one foot, and after a while it was noticed that he was weak and a deaf-mute."

In summing up, then, or trying to determine from the foregoing data, what the chief causes of idiocy and feeble-mindedness are, we would consider them to be:

- I. Of causes acting before birth—
 1. Heredity, i. e., a family history of insanity, imbecility or other allied disorders as given.
 2. Consanguinity of marriage as a factor, though not so important as often considered.

3. Parents immature or aged.
4. "Various accidents or abnormal conditions of mother during pregnancy.

II. Of causes acting at birth—

1. Difficult, protracted or instrumental labor.

III. Of causes acting after birth—

1. Various diseases, injuries, abnormal conditions, etc., notably brain diseases and injuries to the head.

Nationality (Parentage for F.M.)	Whole No. In State. Year 1885.	Per Ct. (About.)	Applications	
			Filed in Inst.	Per Ct. (About.)
American	687,120	611-2	303	38
German	112,926	10.1	142	17.7
Norwegian	92,428	8.3	74	9.2
Irish	31,801	2.8	56	7
Swede	50,735	7.2	51	6.3
Canadian	45,473	4..	46	5.7
English	12,692	1.1	23	2.8
Austrian and Bohemian	13,291	1.1	16	2.
Danish	11,785	1.	9	1.1
Scotch	4,825	.4	9	1.1
Grand total of these and all other nationalities known and un- known	1,117,798	800