NECESSITY OF A BETTER CLASSIFICATION OF EPILEPTICS.

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THE disastrous and pernicious custom of mixing up sane epileptics with imbeciles and epileptic lunatics, not only in the same habitations but also in the same literary and mental categories, is one that should cease.

Until December, 1888, when the first colony for sane and educable epileptics was established at Maghull, epileptics in this country whose relatives and friends could not look after them drifted to the imbecile or lunatic wards of asylums and workhouses, and certificates of insanity or of unsound mind containing the word "epileptic" did not require much other evidence to render them valid. The striking symptoms of a fit were quite sufficient to place on a par mentally and physically the sane epileptic, the insane epileptic, and the epileptic imbecile. It has often happened in the past that an epileptic, who appeared to the alienist under whose care he was to be sane, has been admitted for some action supposed to be a mad one by frightened or interested relatives or friends. Such a history, together with the alienist's knowledge of how many insane epileptics or imbeciles he has had under supervision, naturally will lead to the conclusion that although the state of mind of the particular case was very fair, yet, as he was still an epileptic and liable to repeat the deed for which he had been sent to the asylum, he could not be discharged. Besides, the alienist would reflect that, according to his knowledge of the disease, time would soon bring about the state of dementia to which, according to the prevalent opinion, all epileptics are liable, and therefore it would not be wise to take any risks.

With a better knowledge of epilepsy it is horrible to contemplate the condition of many poor epileptics in the past when there was no redress and no help, and when the effects of their environment often produced that dementia which the alienist ascribed to the disease. Our experience has amply proved the prevalence of this erroneous conception of epilepsy amongst all classes of society at the present time. For instance, when we first established our colony at Maghull the popular idea amongst the native population there was that the inmates of our homes were mad, and they wished walls built all round the place lest the sight of our patients working in the field should upset the course of nature in the observers. It was only when our patients beat the youth of the village at games that they were looked upon as rational beings. When we first placed a number of our patients under the charge of our farmer to dig up a lawn, his good-humoured tolerance of our belief that such patients could work was amusing to contemplate, and certainly the result of his management of them confirmed the bailiff's impression. When it was proved that they could and would work, his belief in their sanity took root and flourished. The same prejudice had to be eradicated in turn from the minds of all our officials. Again, when we established our school even the education authorities did not look upon the teaching seriously. They insisted strongly on drill, kindergarten work, and other interesting playthings, but the teaching of the "three R's" was preposterous in their sight. They went on the supposition that the children were all imbeciles and idiots and that the "three R's" were useless and impossible. It was only by examining the schools ourselves and insisting on progress in reading, writing, &c., that we were able to resist the powerful influence of the Board of Education, an influence due to a false conception of the mental capacities of sane epileptics. Paradoxical as it may seem, the Board insisted on highly paid and highly certificated teachers who were to spend the time on trifles and inanities that were looked upon as puerilities by most of the pupils.

"*Psychic equivalents*" of epilepsy; *mistaken relationship*.—The symptoms of epilepsy being so striking, it is not surprising that anything which occurs to an epileptic, connected or not with a fit, should be considered as belonging to the disease. Thus, if an epileptic becomes maniacal, it is called "epileptic mania"; if he be the subject of delusions unconnected with a fit, it is called a "psychic equivalent" of epilepsy; and if an epileptic—or, indeed, anyone who has ever had a fit—commits any mad act most alienists would

ascribe that mad act to the influence of epilepsy and not to a temporary insanity unconnected therewith. My contention is that these "psychic equivalents" point to insanity as a companion disease, and I hope to be able to show that patients who exhibit "psychic equivalents" often become insane, and that ordinary sane epileptics do not show "psychic equivalents" and do not tend to dementia or insanity. That alienists should associate epilepsy with insanity and imbecility, and believe in the frequent termination of epilepsy in dementia, was, no doubt, often justified by the class of cases received by them; but that modern superintendents of colonies should still share such an opinion is the more surprising when we have institutions for sane epileptics. For instance, Dr. W. L. Shanahan, the medical superintendent of Craig Colony, U.S.A., in a lecture says: "*Epilepsy is a disorder leading to dementia.*"¹ This is an opinion not by an "alienist," but by a superintendent of an epileptic colony to which are sent not only many imbecile epileptics, but also many sane epileptics; no doubt the degeneracy of the imbeciles may have confused the issue and caught the attention more than the permanence of the sanity of the sane. However this may be, what I am prepared to prove is *that sane epileptics do not tend to dementia to any serious extent*. To do this I have analysed our experience at Maghull, and in order to do so as effectually as possible I have only considered patients who have been under our care for three years and upwards. This excludes all temporary cases, and consequently all cases of which the issue is doubtful owing to insufficient time. The numbers available for our purpose are shown in the following table:—

TABLE I.—*Epileptics who have been Inmates of the Homes at Maghull for over Three Years.*

Essential, sane epileptics.	Epileptics with "psychic equivalents."	Imbeciles of various degrees.
256	19	84

When we opened our colony we intended to take only sane epileptics, but the natural tendency of parents and guardians at first was to send us only the worst cases such as imbeciles and troublesome epileptics. As we were undertaking a comparatively new work we had to ascertain how far the colony treatment would benefit the more imbecile cases and how far the troublesome ones would be influenced for their good by the life and peace we offered them. Our staff worked enthusiastically to develop the imbecile and to preserve, and if possible to restore, the balance of the mentally affected, and hence the above divisions of our patients, and hence our experience with cases which we did not expect to have, and which we do not now receive for obvious reasons. We do not express opinions, but refer with confidence to Table II., which shows the length of time these patients have been under observation. None of these patients have ever shown "psychic equivalents." Their minds were sane, their conduct rational, although their intellectual capacities varied from clever accomplished individuals to others who might be called feeble-minded.

TABLE II.—*Time under Observation of 256 Sane Epileptics.*

No.	Time.	No.	Time.	No.	Time.
61	over 3 years.	12	over 10 years.	3	over 17 years.
29	" 4 "	6	" 11 "	4	" 18 "
26	" 5 "	10	" 12 "	1	" 19 "
19	" 6 "	14	" 14 "	1	" 20 "
17	" 7 "	1	" 15 "	3	" 22 "
16	" 8 "	9	" 16 "	1	" 24 "
23	" 9 "				

Average time under observation nearly 7 years. Only 5 of these patients deteriorated and may be said to have become subjects of dementia:—(1) A woman who had been sent away for dementia 17 years after she became an epileptic; (2) a man who became demented and unmanageable 17 years after he became an epileptic; (3) an emotional girl who became gradually a troublesome dement 23 years after becoming an epileptic; (4) a troublesome girl who became demented 22 years after the onset of epilepsy; (5) a youth who seven years after the onset of epilepsy became demented and quarrelsome. Total demented out of 256 cases, 5, or 1.96 per cent. This does not show a strong, or, considering the time occupied in the change, a rapid

¹ Lecture at Fordham University School of Medicine, New York City (International Clinics Series).

tendency to dementia in sane epileptics. Twenty of the 256 were what might be called feeble-minded persons—i.e., persons who possessing all their faculties but without any great mental force, yet were not such as we could apply the term imbecile to. Not one of these deteriorated to any appreciable extent, although they were with us longer than the others and had every opportunity as far as time was concerned to show any impairment in their work or mental condition.

Patients with "psychic equivalents of insanity."—The history of these patients tells a very different story. There were 19 patients in this class. Their symptoms varied, and we will refer briefly to the nature of the equivalents which were always periodical: Delusions of poisoning; violent and apparently uncontrollable fits of temper unconnected with attacks; "fits of melancholia"; periodical outbursts of degraded or profane language; periodic efforts to escape by secret and difficult methods when doors were open; sudden, violent, and unprovoked attacks on teachers, nurses, or companions; recurring delusions about religion, &c. To mention two individual cases in detail. One young girl would be amenable to order and discipline for several weeks. She would perhaps be employed in sewing with several others when she would rise deliberately from her place, walk composedly across the room, and pinch a patient so severely as nearly to nip the piece out. She would then resume her seat, and on being taken to task would be very sorry, apologise, and promise amendment, but she repeated the act again and again, and no treatment could affect the impulse. She had to be removed. Another girl, a child about the same age (12 years), would periodically attack the nurses or her companions, pull out their hair or scratch their faces, and, although very sorry in the intervals and very loveable then, no training or warning could prevent their recurrence. Every one of these 22 patients with one exception became worse mentally and had to be removed, although "no stone was left unturned" in our efforts to save them. The majority were afterwards removed by their friends to lunatic asylums. The one exception was an adult woman who had periodical mental attacks, or "psychic equivalents," but who died in "status." Otherwise I have no doubt she would have ended her life in an asylum.

I now regard these not as "psychic equivalents" of epilepsy, but as prodromata or as premonitory symptoms of insanity, and the results—viz., the gradual development of insanity and their final removal to asylums—prove that, practically at least, my view that they are insane is correct. Table III. shows how long and with what success we were enabled for years to keep such cases out of a lunatic asylum, but every case had to be removed finally except one, and she went to her grave instead. It has not often occurred hitherto that we have had such an extended record of patients with "psychic equivalents." Our interest in such cases was always great, but we had no idea until lately that the prognosis was so gloomy. Until I studied these cases I shared the common view of "psychic equivalents" of epilepsy. Since looking up the records I regard "psychic equivalents" as forerunners of insanity.

TABLE III.—Time in Homes of Patients with "Psychic Equivalents" before Removal became Necessary.

No.	Time.	No.	Time.	No.	Time.
1	2 years.	1	9 years.	1	14 years.
4	3 "	2	10 "	2	15 "
2	4 "	1	11 "	1	16 "
1	6 "	1	13 "	1	18 "
1	7 "				

None of these cases were congenital epileptics.

Alleged causes of epilepsy in those suffering from so-called "psychic equivalents."—In two cases the children were three years of age, and were said to have suffered from sunstroke. In another case the attacks began at three years of age without any cause. In one case, aged 5, the alleged cause was rheumatic fever. Three were 8 years old at the time of the onset of the fits, and in two of them the alleged causes were the extraction of a tooth and a fall. In the remaining 11 cases epilepsy began at from 12 to 18 years of age, and the alleged causes were falls (2 cases), and menstruation (1). No definite causes were alleged in the remainder. In only two cases was there a history of epilepsy or other nervous disease in the family.

TABLE IV.—The Effects of Time on Imbecile Epileptics.

Results of Prolonged Treatment of 84 Imbecile Epileptics.

Deteriorated.	Improved or remained in statu quo.
53, or 63·8 per cent.	31, or 36·8 per cent.

As to our epileptics who were more or less imbecile on their admission to the homes, the above table shows that we have a different tale to tell from that which we have already told about the sane epileptics, but not quite so bad a story as that which we have also told about those cases with "psychic equivalents." These patients when admitted were imbecile to a moderate extent, but all had distinct mental defects. In regard to their habits, they might be said to belong to the better class of imbecile, so that we were able to keep them until they became a nuisance, and the next table shows how slowly the degradation took place. The helpless, hopeless imbeciles were rejected on application, or, if they appeared to be worse than we expected, on being presented for admission they were sent back home as soon as convenient. Those whom we received were taught and trained by enthusiastic officers, and every effort was made to improve their brains and to restrain the violence of the epilepsy.

The degeneration was a gradual process, as the following table (Table V.) proves. This table shows the number of years of their stay in the homes before they became absolutely unsuitable, and there was sometimes great reluctance on all sides to break the bonds that bound the nurses and the patients together.

TABLE V.—Time 53 Imbecile Epileptics were kept at the Homes before Deterioration Rendered them Quite Unsuitable.

No.	Time.	No.	Time.	No.	Time.
9	3 years.	4	8 years.	2	14 years.
6	4 "	4	9 "	3	15 "
7	5 "	4	11 "	1	16 "
3	6 "	4	13 "	1	17 "
5	7 "				

The next table shows that 31 imbecile epileptics did not degenerate, and gives the time these patients were under observation.

TABLE VI.—Showing how long 31 Imbecile Epileptics were kept without Deterioration or were Improved by Treatment.

No.	Time.	No.	Time.
2	3 years (1 still with us)	4	9 years (3 still inmates)
2	4 " (both still with us)	1	12 " (still an inmate)
5	5 " (1 still with us)	1	13 " (")
4	6 " (3 still inmates)	1	16 " (")
3	7 " (2 ")	1	19 " (still an inmate)
7	8 " (6 ")		

Of these patients 21 are still in the home, several of whom have improved very much, but the majority retain much the same mental conditions as when admitted. None have deteriorated, although the average time under observation was 7·4 years, quite sufficient time for degeneration to set in if epilepsy always lead to dementia.

We have tabulated the ages at which the epilepsy began in all these imbecile cases, so that we might compare them.

TABLE VII.—Age at which Epilepsy first Appeared in 53 Imbecile Epileptics who Deteriorated.

No.	Age.	No.	Age.	No.	Age.
12	Birth.	5	7th year.	1	16th year.
2	1st year.	1	8th "	1	17th "
3	2nd "	4	9th "	2	18th "
5	3rd "	2	12th "	2	20th "
1	4th "	1	13th "	1	21st "
2	5th "	1	14th "	1	48th "
4	6th "	2	15th "		

In eight cases there was evidence of hereditary disease in the family history.

TABLE VIII.—Age of Onset of Epilepsy in 31 Cases of Non-deteriorated or Improved Epileptic Imbeciles.

No.	Age of onset.	No.	Age of onset.	No.	Age of onset.
11	Birth.	2	5th year.	2	9th year.
3	1st year.	1	6th "	1	11th "
2	3rd "	4	7th "	1	13th "
2	4th "	1	8th "	1	18th "

In 5 of these non-deteriorated cases there was evidence of hereditary disease.

We have not much evidence of the mental condition of the patients before the onset of the epilepsy. In one case the child was said to be very bright and precocious in her school accomplishments. With the onset of convulsions her knowledge all disappeared, and when she came to us she had to be retaught the days of the week. Very slow progress was being made when she died in "status."

In concluding this part of the subject I think it may be considered proved: First, that healthy, sane epileptics under the conditions of a normal life in a modern colony do not tend to dementia, and are not liable to so-called "psychic equivalents" of epilepsy. Secondly, that where "psychic equivalents" occur there is also a tendency to insanity in the future. Under the conditions of a normal life the tendency is kept in check, but as time advances, in the great majority of these cases, the tendency becomes stronger and stronger, and most of the cases become unmanageable and drift to an asylum or to the insane wards of a workhouse. Thirdly, that imbecile epileptics show a tendency to dementia, 63 per cent. of 84 cases becoming demented after being under observation for long periods of time varying from 3 to 17 years, or an average of 7 years. On the other hand, 36 per cent. of the 84 cases, or 31 imbecile epileptics who were under observation for similar periods of time and under quite similar circumstances, did not change for the better, except in a few instances, after an average period also of 7 years.

We have considered the question whether amongst all these patients there were any characteristic differences in the nature of the attacks, the age of onset of the disease, or in hereditary influence, but so far we have not been able to detect any. The administration of bromides to imbecile epileptics appears to us to be much more harmful and much more likely to bring about dementia than is its administration to sane cases. Again and again, when dementia threatened, we have temporarily arrested its onset by stoppage of all bromides and by attention to the general health.

Confusion of ideas in regard to the character of sane epileptics.—One writer quotes an authority for saying that the most characteristic phenomenon of epilepsy is not convulsions, but periodical emotional disturbance characterised by sudden depression, or excitability, or fear, home sickness, suicidal desires, and marked mental confusion. The same writer also quotes an opinion on the epileptic character as "one compounded of egotism, obstinacy, deceit, hypocrisy, family pride, and reckless, quarrelsome excitability, recurrent outbreaks of temper accompanied by morbid suspicion and wanton destructiveness." Our experience at Maghull, except in the case of the patients with "psychic equivalents," whose character has already been described in this paper, does not lend any support to the truth of the description of the epileptic character just given.

The most characteristic phenomena of essential epilepsy are convulsions, and the mental and emotional disturbances are only such as one would expect in a person subject to epilepsy. Suppose the reader to imagine himself an epileptic, liable to fall down unconscious at any moment and in any place, would he not be likely to suffer from times of depression, excitement, or even fear, without such symptoms being considered part of the disease? I do not know what is meant by home sickness, but if it refers to institution treatment, it is not more in evidence amongst our patients than amongst boys at a public school. Suicidal desires, marked mental confusion, egotism, obstinacy, deceit, hypocrisy, family pride, and reckless or quarrelsome excitability, recurrent outbreaks of temper accompanied by morbid suspicion and wanton destructiveness, are not symptoms at all of simple, essential, sane epileptics. I have quoted these supposed characteristics of epilepsy to matrons at Maghull, who have had charge of households containing from 40 to 60 epileptics for many years, and their remarks were not complimentary to the intelligence of the writer who could describe such symptoms as the general characteristics of their past and present inmates. Our homes at Maghull are all managed by ladies, and have been so managed since their foundation 24 years ago. Were the above statements not a libel on a deserving class, already hopelessly handicapped by one of the most dreadful diseases that afflict humanity,

would it be wise or possible to do without the assistance of the sterner sex in dealing with them?

Character of sane epileptics.—Ordinary sane epileptics are subject to the same feelings and tempers as other people. They are specially dependent on relatives, friends, nurses, and attendants owing to their infirmity: they are attracted by sympathy and kindness, and are repelled by want of sympathy and unkindness, more so than ordinary individuals. They are very responsive to justice and fair play, and appreciate fair dealing acutely, like people to whom it has once been a stranger. To appreciate this point we must place ourselves in the epileptic's place and look upon matters from the epileptic's point of view. We shall then see that there are many pre-epileptic or post-epileptic events which an epileptic strenuously denies knowledge of because he knows nothing of them, does not even know that he has fits, or realise what a fit is. He is often surrounded by lies from his childhood upwards through a mistaken notion that any lie that will keep him in ignorance of his epilepsy is justifiable, forgetting that the patient has a brain and soon finds out that he is being deceived and that there is a mystery somewhere which he cannot fathom. When he reaches a colony the mystery is solved. He neither "dies" nor "goes mad," as ignorant relatives would have us believe he would if he knew the truth about himself, but instead he settles down to make the most of the large portion of life still left to him. He recognises his limitations, realises the dangers of his position, and knowing that he is safe in sympathetic company he can enjoy his life when he is relieved of the incubus that preys upon him, and, secure in the company of his equals, the conversation becomes unrestrained and spontaneous, and quite on a level with that of the class of society whence the patients are derived.

In conclusion, I would try to impress on the authorities that sane epileptic children can be taught the foundation of all knowledge—viz., reading, writing, and arithmetic—with little more difficulty than with ordinary healthy children. Arrangements must be made for the fits, but these only occupy a small portion of their time, and the greater part of it can be utilised for ordinary school work. The idea that these children cannot be taught to read, to write, and to do arithmetic, or that it is unnecessary or useless to teach them these things, is a wrong one. Education is a therapeutic remedy of great value; it strengthens the brain, tends to develop growing centres, and produces habits of perseverance, of attention, of self-control, of initiative, and of determination. If the school authorities give out the impression that epileptics cannot be taught, why should we have highly trained and certificated teachers, when kind-hearted women who know some needle work and some drill would do as well, and the present talent now wasted could be utilised elsewhere?

Epileptics enjoy the pleasure of reading probably as much as other people. It was stated in my presence some time ago by the superintendent of an epileptic colony, a colony certainly where a good many feeble-minded and more or less imbecile epileptics are admitted, that it is no use teaching epileptics to read, that they rarely use the accomplishment, or if they do appear to read, they do not absorb the knowledge or even know what they are reading about. I have ascertained the facts as regards the same epileptics at Maghull. The various matrons gave me the numbers of those who are in the habit of reading books in their leisure hours, and who are in the habit of discussing literary questions with each other. Amongst 171 male patients, 79 were fond of reading, and occupied their leisure hours in this way. Many of the others read spasmodically, but enjoy games and other methods of passing the time better. Amongst 140 female patients only 26 were fond of reading, or altogether 105 out of 311, or 33·7 per cent. We must remember that the leisure of the women was more likely to be utilised in sewing and embroidery, and where the majority took an interest in such feminine employments it required a strong penchant for a book in the 26 to choose that method for passing the time when, for example, love of dress and other instincts called them instead to the use of the needle. Besides, we do not encourage poring over undesirable books, and the report of the matrons gives the state of affairs without any desire to vary the records one way or the other.