MODERN METHODS IN THE TREATMENT OF EPILEPSY.

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Mr. President, and Members of the Eleventh Minnesota State Conference of Charities and Correction:

I am greatly indebted to your distinguished president, who was good enough to ask me to prepare a brief paper on this occasion on the epileptic disease, and the modern methods of his care. I incline to the belief that it would be better to speak more at this time on the epileptic disease and the forms of his public care than of the disease from which he suffers. The latter, while of surpassing interest always, is, I take it, hardly calculated to incite the broadest interest of any body of charity folks and philanthropists like this, whose work is not so much the use of diagnostic methods, the differentiation of the various forms of the disease of epilepsy, the searching for pathological conditions, and the use of medicines in curing the disease, as it is to seek to establish proper places of care at the expense of the state or of the community for this fearful afflicted class. And feeling all this to be true, I will speak more of the epileptic disease, his personality, peculiarities, and forms of care, and less of his disease.

The paltry space of fifteen years is enough for measuring the length of time in the United States the epileptic has been the object of concerted public interest and care, considerable facts when we recall that the disease is as old as medical history itself; for it was clearly described by that excellent physician, Hippocrates, more than 2,000 years ago.

The year 1849 saw the first effort made in France, at Bordeaux in France, for the relief of epileptics. Then came Germany, with the great colony at Bieldefeld, followed later by other institutions in the same progressive empire; but it was not until 1890 that the movement crystallized sufficiently in this country to start the construction of the Ohio Hospital for Epileptics at Gallipolis, which cares for all epileptics, including the insane. Then followed New York with the Craig Colony at Sonoyna, the only institution of its class in this country; Massachusetts, with a hospital at Palmer, New Jersey, with a village at Stillman near Princeton; Texas, with a separate institution at Abilene; while many other states, including Virginia, Illinois, Indiana, California, Missouri, and Minnesota, have shown most commendable zeal in furthering the welfare of the dependent epileptic.

The problem of devising and carrying forward a more widespread interest in the public care of epileptics in the United States is a serious one in which physicians and charity workers generally should labor together in perfect harmony and with untiring zeal. No other class so strongly demands public aid, and no class has been subjected to such cruel neglects. Of the forty-five states in the United States, five only have made state provisions for epileptics, and a few of the present time are caring for less than 2,000 patients—2,000 out of at least 50,000 scattered throughout the land. Hundreds of them unjustly confined in hospitals far from home, thousands still left in utter neglect in county poor and almshouses; the victims of constant suffering and despair, while he for the larger number remain in poverty-stricken hovels, objects of ridicule and painful care on the part of those who refuse to attend a human being, sick in this way, to a poorhouse, intending only an aid to paupers.

To further stimulate the work in this country, the National Association for the Study of Epilepsy and the Care and Treatment of Epileptics was organized in 1898 for these purposes:

To promote the general welfare of sufferers from epilepsy.

To stimulate the study of the causes and methods of care of this disease.

To assist the various states in America in establishing a uniform system of care for epileptics.

To advocate the care of epileptics in institutions designed for their special needs.

And at the second annual meeting of this association, held in the Academy of Medicine in New York, November 5th last, at which meeting many very valuable and scientific papers were presented, a resolution was adopted empowering the Executive Committee of the association to take up with boards of public charity, philanthropists, physicians, and scientists generally in all the states, the question of making some provision in every state possible for the dependent epileptic.

Before an architect can plan a house that will be a success he must know what it is to be used for, and since the epileptic house is supremely alone in the form of his affection and its result, his proper care demands special homes of many kinds. He represents marked differences in age, character and frequency of attack, race, social status, habits, and what is most important of all, in forms and degrees of unsoundness of mind, and after all it is his mental condition in the main that fixes the manner in which he should live.

Fully eighty per cent of every one hundred epileptics acquire the disease before the age of twenty years, and affecting the brain as an essential epilepsy in time always does, we must expect some impairment of the mind, either fixed or temporary, slight or profound, in every case in which the disease is genuine. To build institutions, therefore, for the epileptic without remembering that his disease is psychic as well as physical is to invite grave disaster.

To get the best results, epileptics should be cared for in institutions of three kinds: First: Hospitals for those that are insane. Second: Colonies for selected cases only. Third: Colonies for all cases save the insane. (It is entirely feasible to merge the two kinds of colonies into one, but the results are then less satisfactory than if they are separate and distinct.)
The leading features of hospitals for insane epileptics need not differ much from those observed in buildings for the ordinary insane, although there are some things we ought especially to take into account, and of these classification comes first. No matter if the epileptic is insane, he is an epileptic still, his convulsions do not cease and he is most apt to make trouble during his seizure periods. Already violent to a marked degree, his violence is apt to increase at these times and efficient means are required for his safe keeping until his excessive frenzy passes away. It has been my experience that more durable forms of construction are demanded in the case of some insane epileptics than for the ordinary insane; and while hundreds of cases may be cared for in one building, or in a compact group of buildings, living apartments should be planned to admit of necessary classification.

Congregate dining rooms for epileptics will not do. I have known a single fit in a dining room that lasted 100, to lead to disastrous results through symptomatic shock in causing five or six other seizures in the room in rapid succession. Some special features, such as broad, rounded corners on all woodwork, the breaking of stairways with two or more landings, and the protection of all heating pipes and radiators should be provided for. Two story buildings are infinitely to be preferred to those that are higher, and there is no objection to having some bed rooms on the first floor.

The problem of night supervision is as important as its solution is difficult, and this applies to epileptics of all kinds. I once saw the experiment made, through necessity, of having 28 epileptics sleep in one large room. This made it easy for the night nurse to detect anything wrong, but in all other ways it could not possibly have been worse. Fits occurred almost hourly, and the noise incident to each seizure awakened all the sleepers, and after this had been done six or eight times in a night, the frame of mind the next morning of those who had to endure it can better be imagined than described. In our opinion, it is not possible to devise any sort of night supervision that will entirely do away with the epileptic's liability to accident while he sleeps, unless every room is provided with a nurse in charge.

I recall two patients during the past year who died in bed as the result of fits that occurred between the half-hourly visits of the nurse, and we have come to believe that it is much better not to put more than five or six to sleep in one room and run the risk of an occasional accident, than to make vast numbers habitually uncomfortable by herding them in huge dormitories in which repeated attacks destroy the comfort of all the rest.

There are no colonies for selected cases only in this country at present, and because such institutions might seem to be too discriminating in the work they do, the state might hesitate to build them. Such colonies have a high value, a value which they can, perhaps, best reach under the stimulus of private benevolence, and there is a splendid opportunity for people of means to take up such work in the United States at this time. There should be such a colony in easy reach of every city in the country having a population of half a million or more. They should not be large—big enough only for 100 to 200 patients—the one great valuable feature about them being individual attention to a class that promises most, under proper care, in the way of improvement or cure; a class that is now submerged in institutions that care for hundreds of cases to whom we can promise but little or nothing for tomorrow.

Colonies like these would bear the same relationship to other colonies or institutions for epileptics that psychopathic hospitals bear to other institutions for the insane. A type of such an institution is to be found in the English Colony at Chalfont St. Peter, founded by the National Society for Employment of Epileptics. It has now about 135 patients, and Dr. William Alden Turner has this to say about the manner of selecting cases: "It has been found advisable to carefully select the colonists from among a large number of applicants. The points to which attention is especially directed by the medica committee are: Has the applicant been unable to obtain employment, or has he been discharged from one or more situations by reason of his fits? Is he capable of work under direction? It has been found necessary to regard as ineligibles those who from physical causes are not strong enough to undertake any kind of active work; those who from habitual irritability of temper and eccentricity of disposition would not live in harmony with their fellow inmates or be amenable to the rules and regulations of the institution, and especially those who are imbued, demoted, or liable to dangerous impulses. More frequency or severity of fits, however, does not disqualify the applicant, provided the mental condition is satisfactory."

This process of exclusion, we are told by Dr. Turner, results in about 60 percent of all who apply, and the work at Chalfont St. Peter has been entirely satisfactory. It seems to me that no finer plan can be devised for the care of epileptics who can do some work under proper supervision, than this, and of the plan and probable cost of building and maintaining such colonies we will speak later on.

The word "epileptic" conveys to one unfamiliar with the many types, causes and results of the disease, but little information we ought to have before we can successfully plan for the epileptic's best care; and the epileptic who voluntarily seeks help of the physician at his office is seldom representative of the class most apt to come under state care, and in taking all epileptics into one colony, many problems will engage our attention. The majority who apply will be mentally defective in some degree, either feeble-minded, or imbeciles, or idiots, while some will be demented or insane, and a few will have sound minds, and while we cannot sharply separate them into clear groups, because the lines of separation are so vague and constantly shifting, we can approximate the groups fairly well. In studying how we might well classify 1,200 mixed cases that have been admitted to the Craig Colony to this time, we have found it feasible to put them in houses of three kinds.

Houses in Class One hold from twelve to sixteen or eighteen patients whose condition is considered the best, in every respect to enable them to assume the care of the household in all its details, under the general supervision of one competent nurse or employee, the chief duties of the latter being to look after sick patients and to make observations of seizures to be reported to the physician in charge.
Houses in Class Two should be large enough to accommodate from 25 to 35 persons of the great middle class, and each house should be in charge of two employees, nurse and cook, and the bulk of the colony would be made up of houses of this type.

Houses in Class Three should consist of infirmaries; buildings combining home and hospital, for the use of perpetually bed-ridden, paralytic, or otherwise helpless cases. These buildings need not be large at the outset if care is exercised in selection of cases, but they should be so constructed that they might be enlarged in future.

In such a colony about 50 per cent of all admitted can do work of a recuperative kind; about 25 per cent will be able to do light housework only; and the remainder nothing at all, while the labor of 7 per cent to 10 per cent of the entire number will have a value equal to, or greater, than the cost of their support. We have come to believe that under the best conditions colonies for mixed cases may be able to earn from 25 per cent to 30 per cent of the cost of their maintenance, while colonies for selected cases only may reasonably aspire to do about twice as well.

Epileptics can work at almost anything, though some can be employed at occupations that are hazardous with greater safety than others. In seven years at the Craig Colony we have never known a serious accident to occur in the occupation, and our patients do everything from needle work to house painting and engine driving, though special cases are selected for special work.

Colonies for epileptics should therefore provide the fullest equipment of all industries common to normal communities and should employ skilled artisans to train and supervise epileptic labor; both for economic and therapeutic reasons, but especially for the latter. The epileptic who is idle is badly handicapped in the case of improvement in comparison with the epileptic who is kept at work, and colonies should be kept free from the atmosphere of invalidism.

In looking for a site, it should be announced that gifts of land will not be considered, for when the state accepts such gifts, emoluments are apt to always follow, and in choosing a site two things should be prominently borne in mind: First, The natural advantages of the place, including water, climate, fertility of soil, and drainage. Second, Reasonable proximity to centers of population. Whether or not it is a question as to which determines the matter, those named first have the greatest weight.

It is impossible for a colony to meet with success unless its water supply is pure and abundant, its climate such as to insure the greatest number of pleasant days in which outdoor life is possible with comfort; in which the fertility of the soil under cultivation by epileptic labor insures the largest yield; and in which diseases due to faulty sanitation are lessened by perfect drainage.

Size: It is difficult to say how large a colony should be, but as a rule an acre to each individual will be none too much. The epileptics food should come almost exclusively from the farm, dairy and garden, which makes the greatest amount of fertile land a prime necessity.

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Cost: The cost of a colony equipped for use can now be pretty definitely ascertained before the work of its construction is begun, if the cost of the land only is known. Durabke brick and stone houses for patients will cost about $500 per bed, while the cost of furnishing will vary from $300 to $700 per person. About one-half the cost of the colony will be in the houses; the balance in plants to supply heat, light and water, administration and offices, and in furnishing, in industrial shops, farm stock and implements, beverage system, roads, walks, grading and houses for officers and employees. There is no valid objection to building some houses of wood, if they are made small, properly located and protected against fire, and can be made ready for occupancy at the same cost as of brick and stone buildings.

Plan of Development. So far as possible, a definite plan of development should be followed by making a complete topographical map of the land at the outset, always remembering the value of approximating the main features, and we may illustrate the method of doing this by drawing a circle of sufficient diameter and putting in the office building, the hospital, the power plant, store house, laundry, schools, industries and other common necessities; then draw another circle and at the same point for the better classes, and then a third, beyond which houses for the poorer types of colonists should not go. By doing this it will be easy to have, light, furnish with supplies, and supervise the entire colony from a central point at less cost than if the essential features were scattered indiscriminately over the entire place. Local conditions may call for some modifications of this, but in the main the principle will be found correct.

The exterior design and color of cottages for patients may be all alike, or no two may be the same, the determination of the plan resting on individual prefeference. At Bielefeld and Chaffont St. Peter the buildings all differ; at the Craig Colony the two main groups of fifteen to twenty buildings each are almost identical in form and entirely so in color.

The cost of maintenance for mixed classes after the population reaches 600 to 700 will be less than for the insane, while colonies for selected cases only should not require more than $75 to $80 a patient a year, and under ideal conditions, even less.

Young epileptics, whose minds adapt to it, require some education, which needs to be simple, for as a rule they are unable to grasp and retain complicated ideas, and it has been our experience that pure intellectual knowledge acquired by them today is apt to be lost through the destructive effects of a fit tomorrow; but that when things go to the brain, like muscle, learns a thing well, that knowledge is not destroyed with each fit; therefore we have come to believe that the combined use of muscle and brain should be the favored method of educating this class, the value of the former compared with the latter being fully as great as ten to one.

In conclusion, allow me a personal word in stating that every addition year's experience in the care and treatment of epileptics under the colony plan at Souven serves to strengthen my conviction that the colony system is by far the best for this solely afflicted class, and that it stands to the older, better methods along the same line, under the same principles,
DISCUSSION

The treatment of epilepsy has made great progress. There are now several means at our disposal which have proved effective in reducing the frequency and severity of attacks in many cases. Among these methods are the use of medication, surgical intervention, and psychological approaches. However, there is no single cure for epilepsy, and treatment often requires a combination of different strategies.

In the discussion, Dr. Thompson highlighted the importance of early intervention and the need for continued care and support for those affected by epilepsy. He emphasized the importance of education for both patients and caregivers, as well as the role of public health in raising awareness and reducing stigma.

Dr. Brown added that while medical advancements have improved outcomes, there remains a significant gap in access to care, particularly in underserved communities. He called for increased investment in research and policy changes to address this issue.

The panelists also discussed the role of support groups and community engagement in improving quality of life for people with epilepsy. They highlighted the value of peer support and the need for continued advocacy to ensure that individuals with epilepsy have access to the resources they need to manage their condition effectively.

In conclusion, the discussion underscored the complexity of epilepsy and the need for a multidisciplinary approach to care. It was agreed that further research is essential to understand the underlying causes of the condition and to develop more effective treatments.

The audience was encouraged to stay informed and involved in the epilepsy community, as there is still much work to be done to ensure that all individuals with epilepsy have the support and resources they need to lead fulfilling lives.
establishment of some sort of an institution in this state. It is only a question of time when we will have it. Mr. Rogers of Fort Wayne is doing good work in that direction, and we will probably get it at any time.

Mr. RANKIN. I would like to ask what we shall do in the public schools, when we have control of them?

Mr. ROUSE. My personal experience and observation is such that I do not believe the education should be pushed so far in school. That same idea was brought out in Dr. Spalding’s paper. It is the education of the muscles that are much more than the education of the brain cells, and the stimulation of the brain from study in school very often results disastrously.

**SECULAR TEACHING**

BY PROFESSOR A. W. RANKIN, STATE SUPERINTENDENT OF GRADUATE SCHOOLS.

Mr. President, Ladies and Gentlemen,

The public school takes the child out of his home environment and makes him a matter of public concern. If he is a home among the vicious and needy, he must, for six hours a day at least, be reasonably well in person and dress. He must also, while in school, be outwardly free from effects of crime. The child of poverty and witness of vice sits amid most surroundings and sees things done which have no moral purpose in them. He must be regular in attendance, prompt in the performance of his tasks, respectful to his teachers, obedient to rules, regardful of the rights of others. Unconsciously he is influenced by the personal character of his teacher and the good example of his associates who have better homes than he has. The songs, the direct meal teaching, the manner of the formal routine of the school, all influence him. The consciousness that he is part of the great American citizenship grows up in him. This gives him pride and steadies him. He emphasizes the first word of our national hymn, “My Country,” and pride comes ambition and effort and hope. The thing that he is in the public school gives him opportunity to show others what he is made of. Opportunity for work comes to him. Many and many a poor boy gets a fair chance because of his teacher’s recommendation.

There is a more or less general feeling that the public school gives the child an opportunity for vicious habits. If those who see in this way would consider what happens when boys do not go to school, or if they would compare public school children with private or other school children, it would soon clear up their minds that crime is in spite of the public school and not because of it. However, loyal as we are to our public school system, we should not hesitate to seek for defects in it and to be merciless in our criticism. Too often the general public speak unkindly of our schools. There is a senseless praise for, and a thoughtless trust of, the efficiency of free and universal education. It is fair to say that the greatest barrier to progress in public schools is the too great satisfaction with them. Efforts at reform are met with foolish cries of “foul” and the three R’s are popularly held to be a sort of sacred trinity to which all instruction should be directed. It is the only thing that could be said of the saving power of which is sin. In the old days, when a family owned a horse for weaving cloth, a good ripsaw for getting their lumber, and a big wheelbarrow to convey goods to the mill, it was considered fortunate above its neighbors. Such things are now relics of a past industrial age. Just as, in the old day, writing and arithmetic were superceded by a new and larger curriculum. In the olden time there was much to read. I began with the Bible Primer and read that “Simpson was the strongest man,” etc. I read the next book for beginners was infinitely worse than that. It began, “It is an ox. Do we go up? Up we go, etc. We spelled out the words in this way. When we got on to the fourth reader we read hit and miss pieces. One day about a “Storm at Sea” The next about the “Consolations of Religion for the Young,” which is all right enough, only the reading of it somehow didn’t appeal as then. The readers were veritable scrap books, without beginning, continuity or end. A generation ago it was thought a great accomplishment if a boy could by dint of looking up his fingers, looking cross-eyed at the paper and throwing out his tongue at the work be able to write legibly.

In spite of statements to the contrary there is every reason to believe that if children read, write, compute and even spell better than they ever did, in fact, work in the so-called common branches and is given too much emphasis. Unfortunately it would be better if it only the formal session of the school were given to the teaching of the common branches as now outlined. Half the present time would be ample. Present methods being superior to the old memory plan the wise awake teacher is obliged to waste a great deal of the time of the pupils by insisting upon a useless over-elimination of the common branches. Unnecessary time is given to an over-emphasis of form in arithmetic, to the teaching of grammar, before the child’s mind is ready for it, to memorizing names in geography, which for the child has no meaning in them, to reading material which has no value in it, and in general to the vain attempt to make a young child grasp generalizations before he has the mental power to do it.

While the possibility of the prevention of crime by the school is limited, owing to the fact that home environments are powerful. I believe the school may and ought to be made more efficient than it is. I shall in the brief time allowed me, be able only to limit it to two or three ways in which this may be done.

First: The almost purely academic and bookish-schools are now have it, should be enlarged to an institutional school. The age limit should be removed. The public school building, under the management of the Board of Education, should be the center of activity along the lines designed for the betterment of the community. It should be surrounded by acres of ground. It should have club rooms for all, clubs of a proper sort, reading rooms for all classes of people. An audience room should be fitted up for the accommodation of lectures on topics of general interest. This should