MEDICOEDUCATIONAL PROBLEMS IN THE TREATMENT OF ATYPICAL CHILDREN.*

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In the newer order of things the physician is beginning to realize more and more the importance of treating his patients rather than their diseases, and therefore in his preparation for the practice of medicine he is finding it necessary to study psychology as well as physiology, anatomy, and chemistry. It is found that the disease itself is not so important as the manner in which the patient reacts to the disease, and on the same principle the modern physician is giving more attention to the effects of remedies than to the remedies themselves.

All this is a natural consequence of a fuller realization of the fact that there is something which distinguishes the human organism from a mere laboratory receptacle or test tube, and this something is obviously the patient's mind or the personality. The time has come when the physician must be more than a mere doctor or prescriber of drugs, and it would be interesting to speculate upon the conditions which are responsible for the change, but it is enough perhaps to recognize its existence, and also the fact that it has been in a measure forced upon us by circumstances over which we have had little or no control. It is not greatly to our credit perhaps that we should feel called upon to make this confession.

The practice of medicine, like the practice of

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every other profession, must improve in character largely as the result of opposing principles, and our methods of practice, like the methods of any other art, must change to meet the ever changing conditions of a progressive age.

The fact of the close relationship between mind and matter is now generally recognized, and we know that the physical organism of man is the basis of his psychical development. We know that the brain is the seat of the mind and that intellectual development can come only as a result of the physical development of certain cerebral structures, and vice versa, it being a poor rule that will not work both ways. We are becoming convinced that physical health is in some way related to, and dependent upon, psychical health, and that we always tend to be what we will or desire to be, if for no other reason than that we always strive consciously or unconsciously to reach the height of our ambition. This is probably what Browning had in mind when he said, "A man's reach should be beyond his grasp, or what's a heaven for?"

Moreover, modern thought leads us to the conviction that the prevention of disease is even more desirable than cure, and to no class of physicians should this belief appeal so strongly as to those who have the care of children. It is well known that the inefficiency of adult life is due largely to the mistakes of childhood, but it is not so well recognized that many of the actual diseases of later years may be traced to faulty habits acquired during infancy and adolescence. The physician is usually the first to receive and welcome the child into the world, and he should be the first therefore to outline and direct methods for its education and development, and thus enable it to avoid the mistakes which lead to inefficiency and disease.

Medicoeducational methods are applicable in a measure to all classes of patients, but they are especially indicated in the treatment of so called atypical children, and, as Oliver Wendell Holmes suggested, to be curative in every instance they should be instituted several generations before the birth of the child. Medicoeducational methods, therefore, have a twofold function, the prevention of disease and the cure of it.

The principle of eugenics has been advocated as a means of preventing disease, and but for the difficulties of establishing or enforcing the principle, it would doubtless be of great value. The chief obstacle to the successful practice of any medicoeducational methods, whether for the prevention or cure of disease, is the difficulty arising, first, in outlining a suitable course of procedure, and, second, in having the course properly carried out.

To meet these difficulties successfully the medicoeducationalist must be a specialist in the true sense of the term. He must be a medical man and an educational man; he must be at once a physician and a teacher; a physiologist and a psychologist; he must know his medicine well and he must know the workings of the human mind equally well. He must know, not only what should be done for the prevention and cure of certain abnormal conditions, but he must also know how to go about it and how to teach others. "To do" is not so easy as "to know what to do," and the great medicoeducational problem is to make men do the things that are good for them and leave undone the things that are not good for them.

Failure in the successful application of medicoeducational methods of treatment may be due to the physician's own lack of belief in them. If we would convince another of the error of his ways, we must ourselves be keenly alive to the error, and when we have once really convinced our patient of his error, we have him in the true psychological condition for the adoption of means which make for its complete eradication. Physicians are constantly making the mistake of separating the mind from the body in their diagnosis and treatment, and this is especially true in the diseases of children. The mind of the
child is always a product or function of the child's brain, and defective mentality always suggests a defective action in some of the cerebral structures. This defective action does not necessarily indicate organic cerebral defects, but it may be due merely and wholly to a bad start in the growth and development of the brain tissues.

A study of child psychology teaches that of all the organs of the body the brain is the most susceptible to physical and functional development. The cerebral convolutions increase enormously in number, and the enveloping gray matter, which forms the so called cortex of the brain, undergoes a corresponding increase in its surface growth during what we call mental development. Moreover, the so-called associational fibres of the brain, upon which its mental functions so largely depend, are merely rudimentary in early childhood, and attain their full functioning powers only after years of growth and development.

These anatomical and physiological facts must be taken into consideration in the application of medico-educational methods, and we should keep in mind that the physical development of the child's central nervous system is largely the result of, and directly dependent upon, his early psychical activities. A striking difference between the mentally normal and abnormal child appears in the fact that the one develops automatically, while the other halts in his development or actually, in some instances, loses ground or undergoes retrograde development. The physician's aim in the treatment of atypical children should be to assist them in both their physical and mental development, and the phrase that best expresses this work is "psychophysical education."

The two important things to keep in mind in the psychophysical education of children are: 1. The correction of postural attitudes; and, 2. the development of normal respiration, phonation, and articulation. These two things have been said to constitute a cardinal principle in the treatment and prevention of disease, and at all events they should form the starting point of all medicoeducational systems of treatment. Their application in the case of normal children is comparatively simple, but in subnormal or atypical children the problem is more difficult and more complex. These physical exercises have a psychical value far beyond that which is usually attributed to them, and when they can be made use of in the training of atypical children they should not be neglected or supplanted by the usual methods of manual training.

Atypical or backward children should not be coddled, but encouraged, and, like plants of slow growth, in some instances they may be "forced." This may be done by supplying favorable conditions for growth and development, and by directing their physical activities in the right channels. Comparative poor health is not always a contraindication, but often a decided indication for this forcing process. Many a nervous child immediately begins to improve physically as well as mentally when well directed pressure is brought to bear upon him in psychophysical education.

This is due to the fact that the child may have been wearing himself out nervously by his aimless and ill directed activities, and judicious training in such a crisis often results in a much needed rest to both mind and body. It is said of older people that it is not work that kills, but worry, and we are inclined to overlook the fact that this is equally true even of young children. The satisfaction of having performed constructive work in a successful manner is not confined to mature men and women, but may come very early in the lives of children, and it is not too much school work that impairs the health, but too little that is well adapted to individual needs.

Nervousness is the most characteristic state of the atypical child, and manifests itself in a thousand and one ways. In the majority of instances it is due to a neuropathic heredity, coupled with an unsuitable or unfortunate environment. Although the physi-
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The physician can do nothing directly to change the child's heredity, he may do much to make the environment more suitable and more favorable by at once instituting medicoeducational measures. These measures must be really medicoeducational, and only the physician can direct them because he alone knows whether the symptoms are of organic origin, or whether they are more or less functional and therefore subject to psychical and emotional treatment.

So called hereditary tendencies are frequently aggravated and encouraged by faulty parental attitudes, and these are usually the result of ignorance, selfishness, or it may be overanxiety with reference to the condition of the young offspring. In this way the mistakes of the parents may indeed be visited upon the children, even to the third and fourth generation. Atypical children are for the most part spoiled children, and they usually acquire nervous habits which, if allowed to continue long, can never be quite eradicated or supplanted.

The most difficult thing in the treatment of atypical children is to control and direct this parental influence and enlist its services in behalf of the child's welfare. In some instances the parents are hopeless, and it becomes necessary to remove the child entirely from the home environment before satisfactory progress can be made. Mother love is undoubtedly a great factor in child development, but if wrongly directed it may be so misunderstood as to be subversive of all medicoeducational influence.

The bright mother of in many respects a bright boy consulted me in behalf of her child while this paper was being written, and I may add that the father of the boy was a successful practitioner of medicine, although now retired. The purpose of the consultation was to devise measures for the cure of the boy's stammering. He is ten years of age and fairly well developed both physically and mentally, and, as is often the case, I found the stammering to be only one of several striking symptoms of a general nervous condition. The boy has occasion crying spells without any apparent reason. He is afraid to be alone in the dark, and at night he will not go unattended to bed.

In explanation of this condition I found that in early childhood he had a governess who was accustomed to recount to him all the terrible things that might happen if he did not "watch out," and he was frequently allowed to be present in the family circle during the recital of interesting and thrilling tales of adventure. As a result we have a boy who stammers in his speech and who, in spite of an otherwise good mind, is unable to control adequately certain of his emotional and psychical faculties, and it will now be a difficult task for him to overcome these acquired tendencies.

In contrast with this little story let me tell another of another son of a physician, who was brought to me at the age of two and a half years on account of a tendency to stammering speech. I had a brief consultation with the father of the child and outlined a little course of treatment, which consisted purely of what I have called medicoeducational measures. After two weeks a second consultation was held, and as a result of the father's well directed methods speech began to develop in a perfectly normal manner, and there is now no trace of stammering or other nervous affection after a period of about ten years.

Overanxiety and undue manifestations of solicitude as to the child's welfare on the part of the parents is a frequent cause of nervous fear in children, and I have recommended as a substitute a course of what someone has called "intentional neglect" in order to develop in the child greater independence of feeling and action. It takes courage for a mother completely to ignore the crying and pleading of her young hopeful, but she should understand that there are many occasions when this is the very best thing to do.

A case showing the disastrous results of too much coddling was that of a boy thirteen years of age, a
Canadian by birth, who was a bad stammerer, and at the same time had acquired other curious nervous conditions. The mother requested me prior to his arrival to allow no one of p.o-German proclivities to come in contact with him because it always aroused him to such a high pitch of excitement; in other respects also she herself insisted upon directing the manner if not the method of treatment. She was overanxious with reference to the slightest symptoms, and especially lest the boy should become too much fatigued, and I could not make her understand that by suggestion she was aggravating some of his most important and serious symptoms. Needless to say that in spite of all that we could do the boy continues to stammer and, what is of greater importance, he continues to be a psychophysical 'weakling, because, to use a well known expression, he is tied to his mother's apron strings, and the mother herself is guided by her heart rather than her head. In other words, her affections so dominate in the management of her son that whatever judgment she may have had originally is now woefully warped or completely held in abeyance.

These three cases illustrate very well how atypical psychophysical conditions may be acquired by children prior to the school age, owing to faulty environment and inadequate training, and the second case illustrates what may be done by way of prevention.

SUMMARY AND CONCLUSIONS.

Children are largely what we make them, and the factors which determine their psychophysical condition as well as their personality are heredity and environment.

Heredity is an important factor in the development of children, but environment is even more important because it is always subject to change and improvement, and in addition is probably even more responsible than heredity for putting the prefix, a, in the word atypical as it relates to children.

The most important feature of a child's environ-

ment is his education and training, and the most important neglected period in the life of anyone is that which comes prior to the so called school age.

Teachers believe that the failures of their pupils are due chiefly to faulty habits formed before their entrance into the schools and colleges.

The so called fixed habits are the early ones formed during the child's physical and mental development in the first years of his existence.

The Jesuits have a saying, "Give me the first seven years of a child's life and I care not who has the rest."

While the mind of the child has a physical basis, yet his mental activities determine to a great extent the character of this basis by regulating its development, and hence it is that the general physical condition of the child may be influenced for good or ill by the character of his mental and emotional activities.

Medicoeducational methods become real measures of prevention only when employed during infancy.

A mother once asked at what age should a child learn to be obedient, and the significant reply was, "If your child has not learned obedience now, he never will learn it."

Medicoeducational measures should aim not to remake the child, but to make the "absolute best" of what has already been made.

Nervousness is the most characteristic malady of children, and its treatment should be, first, preventive and, second, remedial or curative.

Preventive treatment is applicable in the earliest infancy, and consists largely in an attempt to control the child's physical activities through careful direction of his psychical and emotional activities.

If the child is normal physically, this treatment should result in a development of normal psychical and emotional faculties, but if the child inherits physical abnormalities such as cleft palate or other irregularities of structure, surgery and some form
of medication may be indicated in addition to the psychophysical training.

Punishment should never be inflicted except perhaps at the very beginning and before the child is mentally susceptible to medicoeducational measures.

It is said that there are upward of 300,000 stammerers in the United States alone, and I am of the opinion that if this vast army of defectives had had the right kind of early training there would now be few if any stammerers to contend with, and what is true of stammering is true of similar and allied nervous diseases.

The remedial and curative treatment of atypical children is physicopsychical in character. It is an effort to improve their condition through their physical activities.

The personality of the child is modified and moulded by what someone has called the reflex influences of its own acts and expressions. "To make any act or gesture or mode of speech or motion habitual through deliberate repetition is to stimulate in the personality the appropriate moral quality or emotion of which such an act or gesture is the expression."

The Japanese have a theory that for one to be what one would like to be, it is only necessary for one persistently to act the part, and according to this principle if we would have a child become polite, for example, and good, we have but to persist in the teaching of the principles of politeness and goodness, and encourage the child to practise them.

Doing things with what Frankel has called "purposeful intent" is found to have a greater educational value than doing them carelessly or even in play.

The play instinct is an important factor in child development, but at the present time is the most overworked of all, both in the home and in the primary school.

What may be called the work instinct is equally important, and is now greatly neglected in the early training of children.

The difference between play and work should be clearly understood by the child, and the greater dignity of the latter should be impressed upon his mind at an early age.

The child should be taught to do things, not because they are easy, but because they are right, and the greater the difficulty of doing them, the greater the educational value.

Moreover, work and play should not be commingled, but should form two distinct factors in education.

Mr. Roosevelt gave good advice when he said: "When you play, play hard, and when you work, don't play at all."

Correct postural attitudes and good respiratory, phonatory, and articulatory habits should have a conspicuous place in all medicoeducational methods, because of their esthetic value and because they tend to give greater selfrespect, selfreliance, and selfcontrol.

The training of speech is of special importance because of the close relationship between the so-called mental faculties and the organs of phonation and articulation.

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