

ing her own vigorous child. There are a number of such women to be found if search is made for them.

Twice during the past year I have had urgent need of drawn breast milk (one was the pneumonia case which I have just reported) and knowing of these women I was able to send a trained nurse and immediately get all the breast milk I needed. It was the greatest help. At the present time it would be very difficult for me to obtain any drawn breast milk. Now there is no reason why we should not all be able to get breast milk whenever we require it.

We need some organization, some society in this community, who would register wet nurses and keep a list of women who could furnish breast milk when called upon. There are many infant deaths that could be prevented by the use of human milk. There is plenty of human milk to be had. Is it not the duty of a society like this to teach the need of using human milk and to facilitate its being obtained?

REFERENCES.

- ¹ Moro: Wien. klin. Wochenschr., vol. xiv, p. 1073.
- ² Säuglingsernährung und Säuglingsspitäler. Verlag von Aug. Hirschwald. 1897.
- ³ Jour. Am. Med. Asso., Dec. 8, 1906, vol. xlvii, pp. 1904-1909.
- ⁴ BOSTON MED. AND SURG. JOUR., vol. clviii, no. 19, pp. 625-630, May 7, 1908.

DISCUSSION.

DR. J. L. MORSE: Just a word as to the difficulty in obtaining wet nurses. I never have any trouble in securing them. I have at present the names and addresses of four in my pocket who are anxious for places. Whether you can find a wet nurse depends upon how much you want one and how much you are willing to try. It is almost always possible to get breast milk at the Talitha Cumi or Salvation Army Home here in Boston, in either small or large quantities temporarily, if for any reason it is inadvisable to have a wet nurse in the house.

DR. T. M. ROTCH: I hope at some future time that the society will take action on Dr. Denny's suggestion and have a central office established where information concerning wet nurses can be obtained.

PSYCHOTHERAPY AS APPLIED TO CHILDREN.*

BY A. C. EASTMAN, M.D.,

Visiting Physician to Children, Mercy Hospital, Springfield, Mass.

THE literature published during the last few years on psychotherapy has dwelt chiefly with adults. Except for references and hints to its application to a child I have found very little written concerning this developmental stage of a human being. For what assistance I could get I am indebted to "The Psychic Treatment of Nervous Disorders," by Dubois; "The Force of Mind," by Scofield; Hall's "Psychology of Adolescence"; "Religion and Medicine," by Drs. Worcester, McComb and Coriat, and an article in the March, 1908, *Good Housekeeping* by Dr. Coriat on "Suggestions in Training Children."

A few months ago Dr. McComb told me that rarely did he give a lecture on the subject but at the end several mothers asked him how this could

be applied to children. This was an unconscious recognition that this could be applied to children, and, moreover, we owe it to parents that they should know how to apply it.

Childhood is the most suggestive period of a human life. From early infancy, in fact, from birth, the child is influenced by suggestion. First come the suggestions of external stimuli through the senses, then the suggestion of obedience to certain routine, necessary functions imposed upon the infant for his physical development, and finally, as speech develops, come the innumerable suggestions picked up from the conversation of those near at hand. The child's mind grows very rapidly and is exceedingly plastic, so that constant repetition easily develops a line of habit in the brain, and the constant influx of new sounds and ideas causes a rapidly increasing development of the mind.

The older a child grows naturally the firmer fixed become the habits of both thought and action. Hence, if suggestion can change habits fully developed in an adult, how much easier to change and model the mind into correct thoughts and actions during this plastic stage of childhood.

To take up the various opportunities for the use of suggestion, I shall divide childhood into three periods, viz.: Infancy and early childhood, from birth until five years of age. Early school life, from five until ten years of age. Early adolescent life, from ten until fifteen years of age.

During the first period we have the most notable development as far as rapidity is concerned. At birth the child instinctively eats and sleeps, a little animal, oblivious to outside influences. At five years of age the child has become a human being, seeing, hearing, thinking and demanding. He has already formed both good and bad habits and has learned his first lessons in obedience. His mind is fully alive to his small world and he absorbs more knowledge in twenty-four hours than we can appreciate. Thanks to the influence of physicians trained to care for children, he has, if fortunate, formed good habits of sleeping and eating; but perhaps his parents are careless or neurotic, and hence their method of training has resulted in the formation of other habits not so good. He may be irritable, he may easily cry, he may wet the bed at night, he may be impudent to strangers as well as to his parents. In other words, there may be innumerable different characteristics, which crop out at unexpected moments and which the parents try to change.

As physicians, we, of course, cannot assume the responsibility belonging to these parents, but many and many a time we have the opportunity to advise parents and oftentimes, at their request, to assume the responsibility of the training of some one habit. In all of these cases, being assured that there is no physical cause for the habit, suggestion can be of tremendous help. Many of these habits have been acquired by passive suggestion and they can be corrected by active suggestion. Hypnosis is rarely necessary in the treatment of children.

In this first period the best time to use sug-

* Read at the meeting of the New England Pediatric Society, Boston, Nov. 28, 1908.

gestion is just after the child has gone to sleep, or, if this is impossible, it can be used during sound sleep.

It is wise first to address the child in a natural and firm voice, saying that you will not disturb his sleep, that he will continue to sleep, etc., repeating this suggestion several times; then begin to suggest whatever you wish for treatment. Repeat the suggestion over and over and, whenever possible, use positive rather than negative suggestions. It is best to use only one suggestion a night to avoid possible confusion in the child's mind.

When the suggestion is given during sound sleep the hand should be placed on the child's head or the child's hand grasped firmly.

Dr. Coriat says: "From the medical standpoint the results of suggestion are brilliant in whatever form it seems best adapted to the disease or individual in question. It can be used with success in the hysteria of childhood, nail biting, sexual aberrations, various forms of habit-spasms, facial-spasms, bed-wetting, stammering, night terrors, etc."

In addition, I would mention the training of a small child's disposition, his attitude toward his necessary daily routine, certain notional states of mind, as functional anorexia, or, more properly, a refusal to eat, and also it is useful as a means in giving medicine to an obstinate child. In many ways we can thus assist in making the early years of a child's life develop a healthy and rational foundation for the later years.

The two following cases illustrate the use of suggestion in training the child during these early years.

A, age two, a healthy, vigorous child and well trained since birth. The parents had been in the habit of taking her up to pass urine when they went to bed. They wished to train her to sleep until six and then call to them rather than wet the bed; also she had acquired a habit of sucking her fingers, which they wished to correct. Her father was taught to use suggestion when she was asleep and the first week to suggest that she should not wet the bed, but should call her father in the morning when she wished to sit on her chair. At first she would call her father but continued to wet the bed before he answered her. After a few nights she waited for him to come and take her up. When the results seemed to be good he began suggesting that she should no longer suck her fingers, that it hurt her fingers and mouth, etc. The results of this suggestion were very noticeable the first day in that she would put her fingers in her mouth and then remove them, saying, "No fingers in mouth." After a few days of this suggestion it was noticed that she began wetting the bed again in the morning, so the father went back to that suggestion. In this way he alternated the two suggestions for periods of several nights at a time until within a few weeks the results were excellent.

With the occasional use of suggestion there was no more trouble during the next few months, which were the summer months. Later, with the

cool weather of autumn and the increased quantity of urine, it was found to be impossible for the child, at her age, to go through the night, so that the parents were obliged to take her up when they retired and then, again using suggestion, were able after a few weeks to stop further wetting of the bed.

B, age four, a strong, healthy child but thoroughly spoiled and always allowed to have her own way. She was especially irritable in the morning, and when any member of the family said "Good morning" to her, she either didn't reply and sulked or else whined and was very apt to strike at the individual addressing her.

While visiting some relations suggestion was given to her when asleep that she be pleasant and cheerful in the morning and say "Good morning" to the other members of the family. The second morning she came down and voluntarily said "Good morning" to the family at breakfast. Suggestion was continued for a week with the same good results and she then returned to her own home and the present condition is not known.

During the second period, from five until ten years of age, we have a different condition to contend with. During this time a child is naturally in the stage of savage life. Love of fighting and athletics becomes more manifest. Especially is this true of a boy; his ideals are physical prowess, warlike activity and the law of might. The growth of the child is not so rapid during this period, and much more uniform. As a result the child is less liable to disease and his desire for outdoor life keeps him in good physical condition. To offset this natural tendency to health and vigor, he begins his school life, which in most countries is carried on with keen competition and without sufficient regard for the child's physical needs.

The uses of suggestion during this period are mostly adapted to nervous conditions, as a result of too close confinement and the too keen competition in school. Nervous habits, various spasms, and mild forms of hysteria are prone to appear at this time, and although removal from school is often sufficient for their cure, suggestion is also of assistance, especially where removal from school is not permitted. Imitative neuroses are also most common at this stage and sometimes become very stubborn. When any of these milder forms of spasm or hysteria become more severe or chronic, suggestion is even of greater value in hastening the cure.

During both of these first periods what Dubois calls negative suggestion is often very useful. In other words, ignoring a symptom is the quickest method of curing it in many of the mild functional conditions. Although most sensible parents have known this for ages past, there are still a large number whom we need to educate.

The third period brings us to the borderland between childhood and adult life and opens up a large field for therapeutic and educational suggestion.

With our present methods of education and training, the child is very apt to enter this period

with a big handicap. Growth in height is more active at this time and girls begin to advance faster than boys. This growth is also irregular, that is, the muscles in one child may grow faster than the bones, or the reverse may be true in another case. The heart is now growing rapidly and oftentimes out of proportion to the blood vessels. Thus there is an added strain put on the heart, so that irregularity in the heart beat and palpitation are not uncommon. Increased work in school and a general tendency toward lassitude and indoor life prevent sufficient exercising of the lungs. Altogether the danger from various diseases is increased markedly during this period, and the health line is correspondingly lowered when normally, because of the increased growth, the health line should be higher. The changes due to advancing puberty add greatly to the difficulty, and especially in girls do we find anemia following the onset of menstruation and accompanied by the irregular and abnormal appetite at a time when a sufficient supply of good nourishing food is absolutely essential. The development of the sexual function in the boy causes corresponding changes, but not so severe.

As a result of these physical changes taking place in more or less rapid succession, we have for practically the first time the attention of the child focused on his physical organization. His imagination develops rapidly and every nervous symptom is carefully studied and correspondingly exaggerated. At the same time both boys and girls become naturally very secretive and their minds are keenly open to all sorts of suggestions.

The functional diseases common to this period are those we naturally would expect. Neurasthenia and severe cases of hysteria, religious states and emotions, phobias and superstitions, melancholia, and even the insanity of puberty may develop. The natural suggestive condition of the child's mind makes him more amenable to treatment by suggestion.

Direct suggestion, or, as Dubois calls it, "rational suggestion," now becomes of more service. It is necessary at this time for the physician to make the suggestions, as parents cannot be trusted to carry them out, or, if they should try, their success would neither be so rapid nor so sure.

The physician must make his suggestions both concise and emphatic and he must be confident of his results. We are dealing with a much more mature mind and any evidence of weakening on our part means failure, because, although we are appealing to their reason, at the same time we are going contrary to their habit of thought and against their will, so that the very openness and keenness of their mental condition, which we desire and need for success, may be the cause of failure through the ease with which they recognize a slight hesitation or flaw in our reasoning.

We must also be careful not to give a counter suggestion, for, by the line of least resistance, that suggestion may occupy their mind to the exclusion of all others. In a child of this age it is necessary to plan out a line of thought and reasoning before beginning treatment so that we may not be taken

unaware. One or two timely and emphatic suggestions accomplish more than a large number of hesitating and disconnected statements.

Thus we see that during these early years of adolescence, owing to the increased development of the child's reasoning faculties, and at the same time to the frankness and plastic suggestibility of his mind, our field through the means of suggestion is very broad, both medically and educationally.

In considering treatment of any kind in connection with children, we are always obliged to take into consideration the parents not only as individuals but also in relation to their influence over the children. Especially in connection with this influence which they possess do we have a chance to use suggestion. By taking time to leave a few pertinent suggestions well established in the mother's mind we can often do more for the child than in any other way.

We should also impress upon the parents the dangers from poor and even bad suggestions emanating from them. It is usually unconscious on their part, but at the same time just as harmful. As a slight example of this tendency, a mother holding her baby in her arms was leaving my office not long ago and struck her elbow on the door. The baby showed no signs of being injured, but the mother, appreciating the injury to her own elbow, was positive that the baby's head must have been bruised, so she began to question the baby with a very doleful expression and, as a result, the baby was soon crying lustily.

It was once suggested that there should be a training school for parents, but, as that blissful state has not arrived, it remains for us, as physicians, to do what we can toward assisting and educating parents.

In considering the subject of psychotherapy in relation to children I have tried to show under what conditions and in what manner it can be applied sanely and profitably. My only claim in connection with suggestion is that it should be applied more rationally and more consciously as well as conscientiously. It is a valuable means of assistance in training and educating a child's mind, so that more and more will the adult of the future be able to grasp and manage the problems which are constantly growing more complex.

DISCUSSION.

DR. I. H. CORIAT: I think that the valuable hints given in Dr. Eastman's paper are a step in the right direction. Psychotherapy in children is essentially educational; in fact, direct suggestive methods, as in hypnosis, are seldom indicated. I am always rather skeptical concerning suggestions for such disorders as bed wetting and sexual aberrations given to children while they are asleep. In order that suggestions may be efficacious it is necessary that an active state of consciousness be present and, of course, this active consciousness is reduced to a very low threshold or even completely absent in deep sleep. But the beneficial results are actual facts and can only be explained on the basis that the child is in the borderland, subwaking state when the suggestions are given, a kind of a natural hypnotic state and not in a deep sleep. Hypnosis is very rarely necessary, although I was able to cure a

very stubborn case of bed wetting of fifteen years' duration by this device. In the hysteria of children, purposeful neglect of the symptoms is most successful. Waking suggestion should be regarded merely as a means of re-education.

DR. J. J. THOMAS: The child's mind is plastic and is open to suggestion, but the subconscious is not as well developed and does not maintain as great independence as in the adult. Therefore, it is much easier to influence the subconscious ideas by direct suggestion, as I may call it, which is best done by the methods of education, teaching and training. Therefore, these methods are of much more importance in the treatment of various functional nervous diseases in children than when suggestion is used in its ordinary sense, as an appeal to the subconscious in states of abstraction or hypnotism. This training should often have been begun, however, with at least the parents, if not the grandparents, of the child. The development of nervous disorders in children, and particularly hysterical conditions, is often if not usually the effect of imperfect training and the absence of self-control, which is due to similar defects in the parents. It is on this account that Bruns, in Germany, in his method of treatment which he calls that of "purposeful neglect," insists so strongly upon the removal of the child from home influences, that is, withdrawing it from evil suggestion and by surrounding it with an atmosphere of cheerfulness and encouragement, as well as emphasizing the unimportance of the symptoms which perhaps it learned in the family,—suggestion, it is true, but suggestion to the conscious attention of the child and not directed to the subconscious, as is done during sleep or hypnotism or in allied states.

Bruns' other method of treatment, which he calls the method of surprise, again is an example of suggestion and consists in demonstrating to the child by surprising it into the use of a lost function, as, for example, in restoring the voice by a single application of strong electrical current, in this way demonstrating that the function is not lost; and then by encouragement, persuading the child to continue the normal use of the voice or paralyzed limb. These methods we see at once are examples not unrelated to the use of psychotherapy but are not appeals to the subconscious through suggestion, as the term is generally employed; so that for my part I feel that the narrower limitation of psychotherapy, as limited to the single form of suggestion during abstraction and similar states, is not the best use of psychotherapy in nervous diseases of children and, in fact, is seldom required. It is true that although the mind of the child is plastic and impressions are easily formed and others easily effected, it is not always easy by any one method to bring about this result, so that occasional cases do arise where the use of hypnotism or suggestion during sleep may be required.

DR. A. S. THAYER: We hear much on the subject of psychotherapy in general nowadays in various parts of the country, where it is spoken of as the "Boston fad," sometimes with amusement, sometimes with interest and sometimes with gratitude. We have to-night from Springfield a new contribution and yet all the exploiters of psychotherapy take a great deal of pains to assure us that there is nothing new about the application of the principles of suggestion, or particularly of suggestion in the waking state, to the treatment of disease. When we encourage the father who dangles his watch in front of the baby's eyes so that the doctor can make a better examination of the back of the baby's chest, or when we see to it that a scarlet fever patient is provided with worthless toys that are not too good to harbor the organisms of scarlet fever (about

which we know so little), or when we vaccinate a little boy's left arm and try to get him to look for the little red window screen which we tell him is coming there, we are practising psychotherapy without knowing it, as Dr. John K. Mitchell has said about himself. It seems to me that this psychotherapy which is floating about in the air so much nowadays, thanks to Christian Science, the Emmanuel Church movement and our neurological friends, at any rate makes certain things a good deal easier for us; it helps us to impress upon the mother and helps the mother to understand the folly, as pointed out by Dr. Eastman in his paper, of suggesting symptoms to children.

MEDICINE IN THE BIBLE. (A BRIEF REVIEW.)

BY HARRY S. BERNSTEIN, M.D.,
Medical House Officer, Boston City Hospital.

It is only within relatively recent years that the medical art has been divided into various branches. Each branch has developed independently and become so distinctive that its beginning is often overlooked. It is interesting, therefore, to seek in ancient times information regarding the early status of medicine. Although no strictly medical treatises have been handed down to us from before the days of Aristotle, it is evident that many fundamental concepts were even then recognized. No writing of this period casts so much light on the medicine of the time as does the Bible. Both the subject-matter of Scripture and its figures of speech present valuable evidence on the extent and nature of early medical knowledge and on the medical origin of certain religious customs.

The practice of medicine was then carried on by men who were regarded as the messengers of God. "I kill, and I make alive; I have wounded, and I heal," God said to Moses, and the physicians were the executors of this decree. The term "physician" in fact occurs eleven times in the Old and New Testaments; and in Exodus it is written, "If men contend, and one smiteth the other and he die not, but keep his bed: then shall he who smote him pay for the loss of his time, and shall cause him to be thoroughly healed." This passage would indicate that physicians' fees were likewise in vogue. Jesus also had said, "They that are whole have no need of a physician, but they that are sick."

Of anatomy and physiology the knowledge was scant and was derived solely from observations of animals when prepared for sacrifice. This was so since dissection meant the dishonoring of the dead, and it was not until this prejudice was overcome that anatomy became a more exact science. Metaphorical references to internal organs, however, do occur and these were based upon the empiricism of the slaughter-house. Job, in despair, laments that "God poureth out his gall upon the ground." In the first chapter of Leviticus such parts are mentioned as the priests would likely notice in sacrificing animals. Thus the head and the fat of the omentum are to be separated. And in case of fowls, the feathers and crop are to be cast aside. An early anatomi-