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SPECIFIC READING DISABILITY - STREPHOSYMBOLIA

I. DIAGNOSIS

by

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In speaking about diagnosis, I would like to go back and reminisce a bit, if I may. When I reached the sixth grade in grammar school I became aware that there were three boys in our class who were continuing to have a great struggle with oral reading and with spelling, too. When any of them was called upon to read in class, the rest of us all suffered through their hesitations and their mispronunciations.

The first of these three boys was the biggest puzzle to us. He mixed well socially on the playground and he seemed to make good in arithmetic, in manual training, and in art and music, although I remember he was left-handed. Later on, he graduated from high school and became an officer in a bank and got along quite well. The second boy sort of plugged along and got by somehow or other, but when it came to reading aloud and to spelling, again the class felt a great deal of anguish and wanted to help him. Finally, there was the third boy. He was recognized by the class as being the dim one. He could not do anything. He couldn't read; he couldn't spell; he couldn't do arithmetic. He hated school and he didn't get along anywhere.

As I look back on it, I see in these three boys examples of diagnostic problems and remedial problems, too. The first boy, I believe, had a good level of intelligence but a specific reading disability. The second boy was probably borderline but I am sure that he, too, had an added handicap in reading and spelling. The third boy we can probably place in the moron group but who can say that morons do not have specific abilities and disabilities too? It has been shown that they do have. We recognize morons with mechanical, artistic, and musical abilities above average. Why not specific disabilities as well?

I was not in a position to make a diagnosis of these three boys at that time but I was probably correct in the vague wonderings that I had even then as to what went on there, why these three boys had so much more trouble than the rest of us in reading and spelling. Later on, after I got my M.D. degree, I suspected and almost diagnosed a specific reading disability in a boy whom I have had the opportunity to observe over a considerable period of time, a boy in my own family.

Before this boy, whom I shall call Billy, entered school, he seemed clumsy and awkward and it was hard to tell which was his dominant side. He would throw a ball first with one hand and then with the other. He ate

While we were looking into the matter, an instructor in obstetrics came running in with another examination paper from this same student. Sparring for time, I suggested to these two faculty members that they give the boy oral examinations in their subjects. The very next day the instructor in obstetrics came to tell me that he had found this particular student knew as much, if not more, about obstetrics than any other young man or woman in the class and he said, "I just don't understand it."

My attempt then to explain strephosymbolia to the dean and other faculty members seemed quite futile for a time but fortunately for the boy, for the School, and for me, too, my arguments eventually began to bear fruit. During the quarter off, which our medical students have during their third year, we made it possible for him to go to a special school where he received definite and good help with his reading and when he came back he began to pick up. It was at this time that I had some conferences with him and I remember going over some points in Dr. Orton's book with him. His eyes brightened and he said, "You know, I never knew there was such a thing in existence. I did not know what I was bucking up against but now it becomes clear to me." In due time, he graduated. He passed his State Board examination. He was a very creditable intern down in Texas and now he is practicing medicine.

Another interesting thing about this medical student is this: his mother told us that his father had had the same difficulty. The father graduated from medical school with her assistance, but he never could pass his State Board examination because he could not read the questions. However, he became an instructor and later a professor in one of the pre-clinical sciences. He even wrote quite an acceptable textbook.

Let me tell you about just one more late diagnosis. This boy was also a medical student and we will call him Bob. I was called into consultation after he had been hospitalized for an anxiety reaction and he had already received some insulin-shock therapy for his anxiety. This came toward the end of the winter quarter of Bob's freshman year. Just a few questions seemed to bring out that Bob had always been a very slow reader. Through high school and college he had avoided courses that called for a great deal of reading and, at the same time, he had obtained help from home and from others. He had a tremendous desire to study medicine and he had been a prodigious worker and a leader in student activities as well. During the first part of his freshman year in medical school when he was taking anatomy he did not have too much trouble. There was not too much reading to be done. He could see and feel and understand his subject matter. But when he got into physiology, he had more assignments that called for reading and the subject matter was not so easy. After a few weeks in physiology, he began to feel that he was so far behind that he might not ever catch up and might be dropped. His anxiety reaction became so marked that it called for hospitalization and he did have to be dropped for the rest of the school year. Before he left, however, we gave him some examinations in our Language Clinic and we found many residuals of a

the gun goes, which finger is used for the trigger. You see which eye sights down the barrel. You can see the stance of this person. It is a combination of several little things but it gives you quite a lead. There are more definite things too, like playing a game of beanbags or darts, but dominance certainly can be looked into in a very few minutes in any doctor's office.

I suppose that even in this audience there are probably some who might say, "What has this dominance business got to do with a reading disability?" From my point of view, I do not think it is any longer a thing to argue about. All I can say is that time and time again - too frequently for happenstance - I have found a definite relationship between confused dominance and the reading problem.

I have one or two other thoughts about the diagnosis of reading difficulties. One is that it is not an all-or-none proposition. It is not a matter of black and white but there are shades of gray just as there are in many other things; as in the diagnosis of a cold or of appendicitis, we may have just a wee touch of it or we may have an outspoken disease or disorder. In other words, it is not like a diagnosis of pregnancy; you either are pregnant or you aren't.

By the way of analogy, I often find it helpful to the person concerned and others, too, to draw attention to what we find in areas such as color vision, or the ear for music, the sense of rhythm, or general motor coordination. In color vision, there are the artists and the interior decorators, for example, who are exquisitely sensitive to all shades of varying colors while, at the other end of the scale, there are those who are completely color blind; everything looks gray to them. There are also lesser degrees of color blindness, those who cannot tell red from green in the traffic lights or those who may have trouble just in distinguishing between red and orange. Likewise in music, there are those with perfect pitch and those who are tone deaf. In between, there are all graduations.

I think it is the same with reading. There are those who are extremely facile and have a wonderful visual memory for words. This last year in Wake Forest College, a student was brought before the student council with all kinds of evidence that he had cheated on an examination, that he must have copied his answers in some way out of his textbook. He simply asked his accusers if any of them had a book with him. One of them produced a book. It was on a subject which he had not taken. He asked them to pick out a chapter and he proceeded to read it. He then handed the book back and he repeated the chapter almost verbatim and, of course, he was acquitted. I know a psychiatrist who had this same ability and it often led him into trouble, too. Three or four times when he was in school, he was brought up with charges of cheating, or having a textbook or pony or something with him in examinations, because he had such a remarkable facility in reading, registering and repeating back what he had read.

There was something more, I think. She had attended no less than six schools in at least two different states during her schooling period. The parents had been separated a part of this time and now, although they are living together, they argue all the time. The father is highly nervous, irritable and impatient. An only child, this little girl had been over-indulged, pampered, and allowed to play one parent off against the other.

Without going into any more detail, I think we may say in a case like this that there is some mental retardation, surely. I am quite certain that she has confused dominance, and she is at least slow in learning to read and would profit by some help in that line. But there are all these other emotional factors that enter into it, too. So when it comes to a diagnosis of Elmerene we have a problem and I bring this out to illustrate that we have to consider a great, great many factors which I am sure all of you who are working in this field must be definitely aware of.

Before closing, I should like to make one more point, that diagnosis and remedial treatment in relieving reading disabilities should be considered just as we consider other things in preventive medicine. We should not wait for the problem to be fully formed. It is rather like waiting for a person to have signs of tuberculosis in his lungs before you start a program for the prevention of tuberculosis. So it has been with reading disabilities. We have waited until the problem becomes so definite and acute that then, finally, the pupil is brought to someone who does the diagnosing. I would ask: Why do young men reach post-graduate training, even medical school, for example, before their disability is recognized? We might ask, too: Why do children reach even the fourth and fifth grade in school with some evidence of emotional or behavior difficulty, before we wake up and find that there is some specific disability?

It seems to me that ignorance in this field is probably the most important answer to these questions because methods of diagnosis and treatment are certainly available, or are rapidly becoming so. I think the school is the logical place for these things to be recognized. This leads us to think, then, that more attention should be brought to this subject in our teacher-training colleges as well as through on-the-job training opportunities for teachers who are already engaged in teaching. Moreover, I think the same is true of doctors, social workers, and even public health nurses and many other people. They, during their professional training period, should learn more about this subject.

In Winston-Salem we have a program in connection with the public schools that promises to bear considerable fruit in the early recognition of reading difficulties. Children who are going to enter school in the first grade in September are screened by group-testing the previous spring. From these tests, certain children are selected for individual study during the summer. Mr. Grassi, our chief clinical psychologist, has devised some very interesting tests that have to do with eye-hand coordination, and many other variations of that, which give quite a little

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GROUP METHODS IN THE PREVENTION AND TREATMENT OF
MENTAL DISORDERS

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From the title of this topic for discussion, I am going to choose the word "prevention" and leave the word "treatment" for others who may wish to cover that aspect. This is a challenging choice because when I finish this presentation of suggestions, some one will be sure to ask, "How do you know that these various group activities actually prevent mental disorder?" Unarmed with scientific statistics on the subject I shall have to answer, "I cannot prove it, but common sense indicates that we can do some things to promote better mental health, just as we have done many things to promote better physical health."

To all concerned, and especially to those who are oriented in public health, it must be obvious that we cannot get very far in prevention by the individual treatment of persons in poor health regardless of type or cause. Prevention calls for a broad educational program and other measures before ill health sets in.

When Clifford W. Beers organized the first mental hygiene society in the year 1908, the program did not include much beyond the goal of bettering the care and treatment of patients already committed to hospitals. In a way, this was a group activity involving people in legislatures and the lay public. This approach and emphasis is a worthy one and, of course, must be continued.

World War I served to demonstrate that prevention in the field of mental health through individual and group attack was possible. Then came the establishment of child guidance clinics and all-purpose mental hygiene clinics. Mental hygiene concepts and activities spread into our schools and colleges and into industry. Nursery schools were established and kindergartens increased in number. The churches and the courts took recognition and advantage of mental health principles. Many of these developments can be looked upon as group activities. Then came the introduction of group psychotherapy per se, but here again we were dealing with problems in existence and not with the prevention of these problems. From group psychotherapy we have learned much that should be helpful in our mental hygiene efforts, as well as in other aspects of public health.

In order to focus further discussion and give a starting point, I quote in part from a report made to the Connecticut Mental Hygiene Society in 1930, as follows: "I want to mention an idea concerning a possible future trend in mental hygiene. At present, child guidance work -- dealing with problem children, ranging from five to fifteen years of age -- is the outstanding mental hygiene activity. However, for some time it has been recognized that the very early years are the important ones in all mental hygiene problems. Therefore, it is suggested that as one important and practical starting point for mental hygiene -- dealing with both parent and child problems we should start educational work with parents in the prenatal period along with the instruction usually given in physical hygiene. The guidance should then be continued through what might be termed well-baby mental hygiene clinics -- following a lead taken long ago in physical hygiene."

Even in 1951 a community that has a child guidance clinic considers itself in the front lines of the mental health program. We need these child guidance clinics and more of them, but usually children reach them after rather serious problems are already in existence and the family, the school, and other agencies have thrown up their hands and have asked for help. This is not prevention. It is very much like waiting for a cavity to appear in the lung before starting prevention of tuberculosis. Well-baby clinics are not run for sick infants.

Before getting down to practical applications and specific programs, let us look a little further into this point of emphasis and focus for our efforts. Dr. Arnold Gesell has shown quite conclusively that there is three times as much mental development during the first six years of life as occurs in the next two six-year periods, which are, after all, the school years from six to eighteen. So much has happened, too, during those very early years in the social-emotional development, in shaping emotional responses and in character formation, that never again do we have the same chance to influence these factors to any considerable extent.

Dr. J. R. Rees, in his Salmon Lectures in 1944, made the following statement: "Child psychiatry holds out more hope for mental health of the community than any other of the facilities so far referred to, but yet it does not go far enough back in the scheme. We need the kind of investigation and care that the psychiatrist can provide to be available in child welfare activities and in pre-natal clinics if we are to provide the best chances of prophylaxis in the mental field. Our links with the pediatrician and obstetrician must be strengthened."

Many people have facetiously remarked that we should start mental health activities with grandparents. Others more seriously advocate courses in mental hygiene with emphasis on preparation for parenthood during high school and college years. This is all very fine and is being done, but a football coach does not lecture to his squad in a classroom on weekdays and then send the men out on the playing field Saturday afternoon. Accordingly, the very definite opinion is expressed that the logically ideal starting-point for a mental hygiene program is at the beginning of life.

Turning now to practical applications in such a program, I shall speak largely from first-hand experience, recognizing that many others have been working along similar lines in many parts of the world.

In our town we actually start our group work a bit before conception has taken place by holding discussion sessions for young people who are about to be married. During one month, weekly sessions are held at the YMCA, and during the following month, weekly sessions are held at the YWCA. Then, after another month, new groups are started, thus giving four courses per year for each sex. A married psychiatrist, Dr. Angus Randolph, originated this part of the program, but surely there are many outside of the specialty of psychiatry who are capable of conducting such group discussions.

The next and very important mental health activity in our town is the holding of classes for expectant mothers. A course consists of twelve weekly sessions and upon completion of this course, the expectant mother receives a diploma with pink and blue ribbons under a gold seal, certifying that she is a prepared parent. The program is continuous, and four courses are held each year. The sessions are held at a conveniently located downtown church.

Classes for expectant mothers are nothing new, but in so many localities they are attended by people in the lower income bracket; are conducted mostly by nurses and deal mainly with physical hygiene. In so many places those who can afford a private obstetrician are underprivileged so far as mothers' classes are concerned.

Our program has the sanction of, and assistance from, the County Medical Society, the County Health Department, the Community Nursing Association, as well as the medical school and other organizations. It is sponsored by the Junior Woman's Club. Each enrollee brings a referral card from her obstetrician.

The subject matter discussed is probably over fifty per cent on the mental health side, but there is no sharp dividing line between this and physical health. The obstetrician, in discussing the actual birth process, talks about the role of fear and the emotional state. The psychiatrist who covers the emotional aspects of pregnancy and delivery, speaks about the physiological functions of the uterus. The pediatrician intermingles attitudes, emotional reactions, and biological needs when discussing the newborn child.

The sessions are not just "lecture classes." Classroom discussion is always a part of the procedure, and discussion before and after class is also important. Motion pictures, diagrams, and models are used. In the discussion on physical hygiene, a fashion show with live models depicts the latest that the well-dressed expectant mother will wear, in keeping with her obstetrician's ideas. The best in layettes is shown. When the physiotherapist speaks on relaxation and exercise, the students bring blankets and pillows so that they can practice on the church floor. When the nurse demonstrates bathing the baby, the session is held at night so the expectant fathers may practice, too.

Many other details could be added, but perhaps an overall view of the course, giving the subject matter and the participants will be more worthwhile. The outline is as follows:

1. Health to You, to Your Baby and to Your Family.
(Obstetrician, Public Health Nurse, and Psychiatrist)
2. Personal Hygiene and Planning for the Baby.
(Public Health Nurse)
3. Emotional Aspects of Pregnancy and Delivery.
(Psychiatrist)
4. Physical Conditioning and Relaxation.
(Physiotherapist)
5. Nutrition for Mother and Baby.
(Dietitian)
6. Birth of a Baby.
(Obstetrician)
7. The Baby's Physical Needs.
(Pediatrician)
8. Bath Demonstration.
(Public Health Nurse)
9. Mental and Emotional Development
(Psychiatric Social Worker)
10. Mental and Emotional Development
(Psychiatric Social Worker)
11. Sexual Education.
(Psychiatrist)
12. The Future of the Family.
(Minister, Psychiatrist, and Public Health Nurse)

Many are the people who inquire about the obvious neglect of expectant fathers in this program. For nine months, or through three of the courses, we held the meetings at night, inviting the male of the expectant family, but the attendance diminished; discussion was less free, and the women missed their intimate chats before, during, and after the meetings. Now we have returned to the afternoon time but hope to schedule a few more evening sessions for the men.

By this mental health group approach in the prenatal period, we hope that we are dispelling superstitions, correcting misconceived ideas, giving physical preparation and eliminating fears, so that the birth process will be as normal a physiological process as possible and the baby will be born into an atmosphere of security, belongingness and preparedness. A similar program can be carried out in almost any community by obstetricians, pediatricians, public health nurses, educators, social workers, ministers, and others, without the presence of a psychiatrist.

As originally planned, and now at the urgent request of mothers who have attended the prenatal classes, we are embarking on a series of group meetings for mothers who have children below the school-age level. This, too, will be a co-ordinated project in consonance with the County Medical Society, the County Health Department, the Public Health Nurses, the Red Cross Nursing Service, the pediatricians and others.

Eight weekly sessions will be held for mothers who have children below the age of two. The next two months will be a "course" for mothers who have children between the ages of two and four. The six month period will be completed by covering the age span from four to six. Then we shall have a repetition of the courses during the next six months of the year.

The first program for mothers with children under two years of age is outlined as follows:

1. Child Guidance Principles.
2. Eating.
3. Sleeping.
4. Eliminating.
5. General Physical Care and Development.
6. Habits and Discipline.
7. Emotional Reactions and Development.
8. Looking Forward to the Next Two Years.

Going on through the next two age groups, the program will be modified to suit the situation. Here, too, these will not be "lecture classes." We plan to have a lay leader point up the topics for discussion for about thirty minutes before a pediatrician, a psychiatrist, nurse, social worker, or psychologist comes in for further guidance of the discussion. These

meetings, too, are scheduled in a downtown church where nursery school facilities are available. This will make it possible to include some demonstrations of child care in certain aspects.

Going beyond our town for other group activities in the neo-natal period, attention is first drawn to the "rooming-in plan" now in effect in many hospitals. Duke University Hospital has a compulsory rooming-in program, but in most places there is greater flexibility. Arguments for and against such procedure have been numerous, but where the arrangement has been tried without too much prejudice on the part of nurses, obstetricians, and interns, the plan has been adopted. Surely this can be considered as a group effort directed toward better mental health.

The well-baby clinics started by the late Dr. Anderson Aldrich at the Mayo Clinic, the activities of the Cornealian Corner in Detroit, the services of Dr. Herbert Thomas at New Haven Hospital, and many other instances can be mentioned that are directed toward neo-natal mental hygiene.

Regardless of the many sporadic efforts that contribute to mental health or social-emotional development before the magic age of six, when our public tax-supported schools step into the picture, it must be admitted that there is a cultural lag verging almost on a vacuum so far as the mental hygiene movement is concerned. Remember, there is three times as much development in this period as occurs in the school years from six to eighteen.

From the standpoint of group activities, kindergartens demonstrated their value even before the turn of this century. Nursery schools that have come lately are now accepted in most circles as a valuable cog in our machinery of mass education. I am not talking about day nurseries that serve only as parking lots nor about kindergartens that attempt to teach the three R's before the child is ready. Kindergarten and nursery schools with parent participation and study groups should become extremely important centers from the standpoint of community mental health. It is predicted that our public school systems will extend their services down from the usual six-year level to the two-year level in the interest of social-emotional development. This, too, represents a definite group activity in the mental hygiene field.

After the child enters school at the age of six, as is true in so many parts of our country and many places in the rest of the world, group mental hygiene should go hand in hand with the guarding of physical health and the general education program. The Parent-Teacher Associations can and do do a great deal for mental health as a group endeavor. Later in the grammar school or elementary school days, we find several very interesting developments that

This study and specialization at the start of school life leads to the observation that special classes for the generally retarded child, sight conservation classes, special provisions for children physically handicapped and for those with specific disability as in reading, are all group efforts that should lead to better mental health. The group should be composed of not only the children, but of parents, teachers, and all others concerned in these special projects.

Going on into the high school years, there are many other opportunities for the fostering of social-emotional development. Subject matter pertaining to human relations can be made into a specific course, or better still, offered for discussion by many teachers and even the athletic coaches. It is taken for granted that the topic of sexual human relations should be home work with parents as discussant leaders. Until we have enough such qualified discussant leaders, it might be better to bring this topic into the classroom and not leave it for groups in alleyways or behind the barn.

On through the college years and into the specialized schools for various professions, the possibilities, as well as the initiated procedures that should enhance mental health through group participation, are too numerous to mention. Without reference to many other worthwhile projects, we may say that we have now completed the circle and can start over with the engaged couple or the married couple experiencing their first pregnancy.