As a matter of definition, I would like for us to consider mental illness as the inability of an individual to adapt to the society in which he lives with a minimum of anxiety (frustration) and a maximum of happiness (satisfaction of needs). This inability to adapt may be due to a number of factors, the most common being genetic, physical, social, and educational. If we can agree that an individual learns a maladaptive response as the result of his genetic programming plus environmental influences (internal and external), then possibly he could learn adaptive responses under different environmental situations. And if we could determine epidemiologically the genetic backgrounds which increase susceptibility to the development of certain maladaptive responses, we could be more diligent in providing an optimum environment for prevention of mental illness in highly susceptible groups.

It would be inappropriate to attempt to discuss "An Ounce of Prevention" until we have considered the possibility of "A Pound of Cure." Since psychiatry is in the field of medicine, we feel obliged, and the public demands, that we cure mental illness. It is not at all unusual at the time of admission of a patient for the family to suggest that they do not want the patient released until he is cured. We have attempted to overcome this problem by developing specific behavioral objectives at or near the time of admission. We need to educate both ourselves and the public to the fact that a "cure" in the medical sense does not exist in psychiatry. The most we can hope for is the remission of very specific symptoms. Once a person is mentally crippled by the label "mental illness," in addition to life-long faulty behavior patterns, we must accept the fact that if he can manage with the crutches of medication, a structured environment, or a sheltered workshop—this is a success!

As far as treatment is concerned, we must set up realistic objectives; that is, we must attempt to relieve the symptoms that make the patient unacceptable to society and teach the patient responses which will be reinforced by society. In doing this, we must be very careful not to teach the patient useless responses or responses which only provide reinforcement for the therapist. For example, a therapist may spend hours teaching an autistic child to respond to the verbal command “Pat your head with your right hand.” What use can be made of this response, and will it be reinforced by society? The therapist, however, may feel highly reinforced by this accomplishment.

One of our major difficulties in developing a realistic treatment program is the fact that very little research data is available to indicate the effectiveness of various programs, and so we are stumbling along practicing whatever seems to work for us clinically. Research and evaluation should be built into every treatment program, and I would like to suggest the following approach:

1. Genetic. Inasmuch as certain genetic disorders may be remedied, they should be investigated and corrected, for example, cretinism, PKU.
2. Physiological. The symptoms of certain physical illnesses mimic mental illness, and as much as possible, these disorders must be corrected, for example, pellagra, myxedema, deliria of various kinds.
3. Social and Educational. We must determine the level of social skillfulness of the patient and attempt to correct this through an educational model in the same way we approach the remission of any other learning disability or handicap. At DeJarnette a couple of years ago, we tested several hundred patients and college students with the George Washington Test for Social Intelligence and found without exception that the college students scored above the fiftieth percentile, while the patients scored below the fifteenth percentile. Social intelligence did not appear to be a function of intelligence or educational background in that many of the patients had academic achieve-
ment superior to the college students. We have continued to use this test on all of our patients, and have found two or three who scored above the fiftieth percentile. All of these have been people who were admitted for problems other than mental illness.

Let us now look at “An Ounce Of Prevention.” There are three essential ingredients in preventing mental illness.

1. **Effectiveness.** Research and evaluation must be built into every program. Otherwise, we will never be able to determine whether or not a particular program is effective. There are many approaches which appear to have merit, and they certainly deserve to be evaluated. This can be accomplished by setting up small, scale model programs for the purpose of selecting for expansion those which appear most useful.

2. **Economics.** The time is rapidly approaching when the silent majority is going to demand accountability for the use of their tax dollars. A program for prevention of mental illness should be no more expensive than the prevention of illiteracy. Also, for those who still take pride in paying for services, the cost should be within the financial means of the average citizen. In some instances, effective programs will have to be discarded because they are economically impractical.

3. **Consumer Acceptance.** We are so obsessed with the idea of imparting our middle class values and morals to everyone that it never seems to occur to us that other people may not want what we have to offer. A glaring example of this are the various Mental Health, Mental Retardation, and Chapter 10 Boards. These are composed of civic-minded, nurturing members of our middle class society who are without consumer representation. We must find out what is important to our consumers, what *their* needs are, before we attempt to meet these needs.

Research in neurophysiology (1) has shown that the human mind must be programmed with facts such as language, mathematics, social skills, and so forth, before it can be expected to arrive at conclusions or make decisions. In most individuals, the mechanism for decision making is not present before the middle or late teens. For this reason, the primary school should emphasize programming on an individual basis so that each child can proceed at the rate at which he can succeed. Ogden Lindsley\(^1\) found that in order for learning to take place, a minimum reinforcement rate of once per ten minutes is necessary. We can, therefore, insure maximum learning (programming) for all of our children only when we are willing to provide individualized programs.

We have almost completely ignored the area of social skills, which must also be programmed into the child. As our society becomes more and more complex and over-crowded, the teaching of social skills should be emphasized above math and science.

Another area of neglect is the teaching of child development and child care. We make sure that our young people receive driver’s training but ignore their need for training in the all-important skill of parenthood. This need becomes more acute as our society becomes less family oriented, and the young parent has almost no one to turn to for advice on child care.

It is customary in meetings of this kind to point out the vast areas of need and then conclude with the many reasons why these needs cannot be met. I would like to depart from this custom and explain to you the program which is being developed at DeJarnette. If you are by some chance unaware of the difficulty in changing an institution from a traditional model to any other model, I would recommend that you read *Dynamics of Institutional Change* by Milton Greenblatt (2). It very beautifully points out the psychodynamics of this process.

DeJarnette is a small, self-supporting, adult psychiatric facility owned by the State of Virginia. As of July 1, DeJarnette will be known as The DeJarnette Center for Human Development. It will be changed from Special Fund to General Fund. This is an interesting situation in that no monies were appropriated from the General Fund for the operation of the institution. I will not attempt to point out to you a number of other reasons why the children’s program cannot be developed, and merely state that we intend to go ahead with our children’s program. Since most likely we are going to be dependent on Federal funding, we will probably have to limit our catchment area to Planning Districts 6 and 10. We surveyed the needs of the two Districts and found that most of these counties may be considered as

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\(^1\) From a paper delivered by Ogden Lindsley, Department of Education, University of Kansas, at the DeJarnette State Sanatorium Spring Workshop, 1970.
severe poverty areas. Six counties are considered high risks for institutionalization for mental illness, and eight counties are high risk for institutionalization for mentally retarded persons. Two counties, Highland and Fluvanna, have no special educational program of any type, and nine out of ten counties do not have the services of teachers for emotionally disturbed children or children with learning disabilities. The very conservative incidence figures supplied by the U. S. Office of Education Dunn & Mackie Study indicate that in these two Districts there are 1,336 emotionally disturbed children and 2,007 children with learning disabilities. The Virginia State Department of Education indicates that more than 200 teachers of children with emotional disturbances and learning disabilities are needed and that only nine are available in the two Districts.\(^2\) The Mental Health Clinics of these areas serve approximately 18% of the children who are in need of services. In view of the extreme shortage of trained personnel, we feel compelled to emphasize training as our primary objective at this time. In order to provide the maximum amount of useful instruction, we will accept initially children with problems in specific, most commonly seen behavior categories. The categories are as follows:

1. **Tantrum Behavior.** Includes fighting, hitting, biting, verbal abuse, and negativism.

2. **Withdrawn Behavior.** Withdrawal from adults, peers, or activities.

3. **Dependent Behavior.** School phobias, regressive crawling, baby talk, and bed wetting.

4. **Hyperactive Behavior.** Excessive off-task behavior and short attention span.

We realize that by limiting the categories for admission, we are excluding some individual children with the greatest need and children who we would find most challenging to treat. In providing training, we have worked closely with the institutions of higher education in our District so that students, teachers, and others, are able to receive graduate credit for their work at DeJarnette. We plan to furnish instruction on a community level for parents of emotionally disturbed children; for example, classes would be offered for parents of children with specific problems such as bed wetting, school phobia, and temper tantrums. Eventually, classes should be offered to train parents how to help their children improve study habits and social skills. Many researchers have shown that parents can be taught to become effective therapists for their children, and in many instances, the child does not need individual professional attention.

From an economic standpoint, we have the distinction of having treated more than 20,000 patients without any cost to the taxpayer. As a matter of fact, even the initial $100,000 loaned to DeJarnette by Governor Harry Byrd was repaid at 5% interest to the State Treasury.

Unless we receive some Federal or State funding, we will have to continue charging our consumers $30.00 to $40.00 per day for services, which is about half the usual cost for child-adolescent programs.

Will our approach to prevention and early intervention be effective? We must build into our program a method of evaluation, and we must never become so defensive that we avoid questions of accountability at all costs. We see our friends fall into the trap of defending programs of uncertain value, and although it is understandable psychodynamically, this attitude certainly cannot be justified.

In conclusion, we have found that an educational and behavioral approach has been most effective in correcting maladaptive behavior in children, and complete success is only limited by our own creativity. We cannot advocate behavior modification for all children because neither we nor our children should adapt to an ineffective educational system. Improvement in programming in both academic and social skills must be of primary emphasis in prevention. We must concentrate our best minds and personnel in the preschool and primary school years. As the child learns to accept the consequences of his behavior, the necessary social skills to meet his needs, and the basic information for decision making, he will be able to approach adulthood with reasonable assurance of success.

REFERENCES


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\(^2\) These estimates are based on reports by the Division of Educational Research, State Department of Education, December, 1971.