RESEARCH TECHNIQUES AND EVALUATIVE PROGRAMS

An Address By
JOSEPH ZUBIN, Ph.D.
Chief of Psychiatric Research
New York State Department of Mental Hygiene

It is a great pleasure to be able to address a gathering such as this on matters which may have some bearing on the future of the mental health of the citizens of New Jersey. It is doubly pleasant since though my office is in New York, my home is in New Jersey.

In reading the material sent to me by your organizing committee I became aware of the fact that there was considerable controversy regarding the introduction of research into such a newly developing field as community mental health and some conflict as to what kind of research needs to be undertaken. There was also some question regarding the timeliness of research -- is it too early to begin now, and regarding the question of who should do the research and by what means. There seems to be one thing on which everyone agreed, however -- namely, that research was necessary, that it is here to stay and that even its staunchest opponents cannot eliminate it entirely. Since I am a purveyor of research rather than a consumer, the controversy was a little puzzling to me and I must admit somewhat threatening too. No one feels happy when his life work is questioned!

However, despite these qualms, the zeitgeist is such that research is a glamorous word and glamour is something which even clinicians cannot do without. Furthermore, there is money for research, and that too is a factor. I recall that as a young man I proposed to utilize the Regents Examination in New York State in order to contrast the examination papers of those high school graduates who were hospitalized during the year following graduation with a control group. Some $500 was required for travel and assistance. The project was turned down for lack of money. Today, it could be done within three months out of some petty cash account!

However, because of the qualms expressed regarding the nature of research, I am going to address myself to the following simple questions:

1. What is the goal of research?
2. What is the research process?
3. What the community mental health clinic can do.
4. What the community can do.
5. What the outcome may be.

My talk will have to be general in scope, academic if you will, but I trust that you will be able to see the implications of my remarks for your own work. I note that more specific analyses of the problem will be made by my colleagues on Wednesday and Thursday.

Let me begin by asking why the problem of research has been raised at all?
Are there not enough tasks to be done by the clinic, enough patients and clients to see, enough families to help to absorb the full strength of our staffs?

1. Whether we are aware of it or not, the last decade has seen a veritable revolution in the field of mental health. This revolution has two phases -- in management of the mentally ill and in research. Some of the earmarks of the revolution in management are: (1) the reduction of the hospitalized cases, (2) the opening of the doors of the mental hospitals, (3) the return of the mentally ill to the family and community, (4) the provision of community care, and (5) the attention paid to the mental health of the 1/5th of the nation living in "poverty pockets."

The revolution in research has been no less dramatic. The development of drug therapies, the recognition of the hereditary component in mental disorder, the discovery of the role of early experience in later personality development, to mention but a few; but the greatest discovery of all of the last decade is that there is money for research! Now, in two senses, the clinician cannot afford to continue practicing without evaluating his results, and a new clinic, like a new test or drug, must have a built-in program for self-evaluation or it is out of touch with the times. Thus, one of the goals of research is to test the usefulness of everyday practice. The practical man has been defined as one who repeats the errors of his forefathers. The research man exposes these errors but does not always find better solutions. Another goal is to eliminate the biases which now operate to interfere with progress. This holds true especially in the field of attitudes towards the mentally ill. Up to the 1940's about 1/3rd of our patients were released, one third improved but remained in the hospital and 1/3rd became chronically ill. We now push the middle third out of the hospital into the community even though many of them relapse. Our hospitals are now more like subway trains, always full but never the same people. It might be better to call them revolving door rather than open door hospitals. As a result, many a former schizophrenic has been returned to his teaching job, some have returned to law and medical practice, to executive jobs and to household duties including care of children. Several decades ago there would have been a hue and cry raised against such practice. We now take them in our stride.

A third goal is to unearth the sources of mental ill-health and eliminate them. Unfortunately, we have not gone very far in the attainment of this goal. The physical sciences can boast of results and therefore, if I were a physical scientist I would have spoken to you of achievements. In the biological and social sciences we have sometimes to content ourselves at first with discussing methods and techniques instead of results; but hopefully if we find the methods, results will follow.

2. Let us now turn to the second question -- what is the research process, what does it consist of?
Research advances on two fronts — observation and schematization. Observation and collection of data does not need much explanation. Usually there is some burning issue which causes man to stop and observe and collect data in order to answer questions about what he observes. Schematization requires a little more explanation. As a result of previous experience and understanding of the phenomena that he is observing, man tends to schematize and organize his knowledge into some kind of a structure in which certain dimensions stand out. These dimensions are based upon a set of definitions and assumptions which give rise to certain hypotheses. These in turn are subjected to experimental test and observation in order to determine whether or not the hypotheses are tenable. Thus Newton first had to define what he meant by mass and by force and, having done so, make certain assumptions, such as the assumption that the mass of a body is concentrated at its center. With these definitions and assumptions he was able to develop the gravitational model which holds not only for the orbit of the moon and the planets but also for the tides at Asbury Park. Fields of investigation differ, however, with regard to the level of articulation that characterizes them. In order to work in the field of physics all one needs to deal with are a series of rather definite assumptions and laws which are well known, so that even a high school student can today calculate, for example, the velocity required for a projectile to go beyond the gravitation pull of the earth. On the other hand, there are fields like geographic discovery which have few, if any, rules, laws and regulations. In order for our pioneer forefathers to have discovered the topography of North America they had to visit every river, stream, valley and mountain. Between these two extremes there are fields of science that are more or less well articulated. Just where the field of Mental Health is today in this regard is somewhat debatable, but probably it is closer to geographical discovery than to the physical sciences. A rather simple example of a scientific model for mental disorders was provided in our own state of New Jersey by Henry Cotton in 1921 when he developed a model of mental disorders based on the assumption that they are produced by endogenous toxic substances. An hypothesis emanating from this model was that focal infections are the origin of the toxic substances. To test this hypothesis a series of investigations were undertaken in which mental patients were bereft of all their foci of infections, by pulling all their bad teeth, taking out their diseased tonsils, altering their infected colons to semicolons! The only difference between the two groups that was found on follow-up, was in their mortality rates, the operated cases dying in greater numbers, but the improvement rate in the survivors remaining the same in both groups.

What are some of the current models that are available for the explanation of mental disorders?

The scientific models which have proved useful in the field of psycho-pathology are the following: (1) the social-cultural model, (2) the developmental model, (3) the conditioning or learning model, (4) the genetic model, (5) the internal environment model, and (6) the neuro-physiological or brain function model. Until recently, the first three models — social-cultural, developmental and learning — were the most
prominent. In recent years, genetics, internal-environment, and brain function models have become more popular.

The social-cultural model is built on the assumption that all mankind is vulnerable to mental disorders and that given sufficient deprivation, stress-producing loads, or other alterations in our environment, our behavior will be altered to the point where our ability to continue living normally as independent individuals in society is endangered. The evidence for social-cultural-environmental pressures as etiological agents comes largely from studies of socio-economic status, isolation, educational and social deprivation and social-cultural uprooting in immigration or migration or rapid acculturation. Even the most sanguine environmentalist will not be satisfied with merely pointing to the above mentioned factors as "causal" agents, but will try to determine just how these malignant factors bring about their deleterious effect. While the story is far from told, there is already sufficient evidence to question at least whether these factors "cause" mental disorders.

A more thorough review of the evidence which has been presented elsewhere (Zubin, 1963) leads to the belief that social-cultural forces may elicit a mental disorder or even occlude it, but cannot cause it unaided. However, much more research is required to transform this belief into fact.

Despite this conclusion, the fact remains that the detection, diagnosis and even rehabilitation of the mentally ill rests on a social-cultural framework, deviations from which identify the mentally ill, and return to which constitutes the basis for improvement.

In summarizing the social-cultural model, we might point out that the current revolution in management in psychopathology with regard to hopefulness of treatment, reduction of patient population, rehabilitation, etc., is to a considerable extent a social-cultural change involving change of attitude on the part of patient, family and therapist. Hence, though social-cultural forces may not be so important in etiology of some disorders they are of great importance in detection, treatment, and rehabilitation.

The developmental model for etiology is built on the assumption that mental disease develops as a result of some specific deprivation or interference during a critical period in development when the specific deficit or interference is crucial. Evidence for this model is afforded by the recent investigation of Pasamanick (1961) and his collaborators on the role of intrauterine events on the continuum of "reproductive casualty." They postulate that certain untoward events, such as intercurrent illness, toxemia, and other interference with the foetus during the first 9 months of life will produce mental and physical disability ranging from stillbirth, through live births and epilepsy, cerebral palsy, mental deficiency. Finally, even those who appear unscathed at first may not escape entirely but develop such lesser ailments as reading disability. One of the most exciting events in the developmental area has been the investigation of the impact of early experience on subsequent personality and its deviations. While the
evidence from human infants remained controversial, the evidence from animal studies seemed at first to yield data which appeared too closely in keeping with Freud's hunches to give much comfort to those who had refused to accept his clinical surmises. Gentling of animals in their infancy, following the credo of tender love and care, actually introduced less emotionally unstable adults, but to the great surprise of most investigators, shocking the infants was equally effective and, most recently, Theodore Schaefer et al. at Columbia (1962) have found that merely lowering the temperature a few degrees is equally effective. Thompson's (1962) demonstration that emotional mother rats give rise to emotional pups, Harlow's (1962) demonstration that monkeys raised on surrogate mothers and not permitted to play with their peers tend to develop poorly in the psychosexual sphere, and Melzack's deprived dogs (1957) are still other triumphs for the developmental model as a possible causal factor in emotional disorders.

The conditioning or learning model postulates that the source of the deviant behavior of the mental patient is to be sought in his reinforcement history. An example of this theory is Bateson's (1956) double-bind model in which the mother's ambivalence in her relationship to her offspring evokes ambivalent behavior and other types of deviation in him which we recognize as schizophrenia. While Bateson's double-bind model has aroused considerable interest in psychodynamic circles, it has thus far defied experimental testing of any of its hypotheses. Several more experimentally oriented models have been provided by psychologists. Thus, Sarnoff Mednick (1958) bases his approach on the evidence that the early or acute schizophrenic conditions ins more quickly, and shows greater stimulus generalization (less steep gradients). These are related to the higher level of arousal which is attributed to early schizophrenia.

With regard to the genetic model, it should be recognized, that strictly speaking, there are probably no exclusively genetic or environmental disorders. All disorders are both genetically based and environmentally elicited. Without the hereditary-environmental interaction, no disease, in fact no development at all, would be possible. What then is meant by a hereditary disease and by an environmental disease? PKU is a hereditary disease in our particular social-cultural-physical environment because of the presence of phenylalanine in our diet. Had our diet been free of this substance the phenylketonurics in our society would never develop mental deficiency and, in fact, PKU would never have been discovered. On the other hand, if only the poor, or only the mountaineers had developed this illness, and the error of metabolism were unknown, we would have regarded this illness as environmentally produced.

Thus, a disease is regarded as definitely hereditary if we already have evidence of the presence of the specific genetic component and have not yet discovered the specific pattern of environmental components required for eliciting it. On the other hand, a disease is regarded as environmental if we have found the specific pattern of environmental components but have not yet discovered the pertinent genetic factors. In diseases where both the hereditary and environmental etiology is known the question never arises. In the end, however, all diseases will probably be found to require both a genetic as well as environmental component. Apparently, hereditary is no more the cause of an illness than the automobile is the cause of an automobile accident. The interaction
between specific hereditary and environmental factors required for the emergence of an illness must be sought if we are to detect the vulnerability of an individual before the illness overcomes him.

Genetics may be viewed as a biochemical mechanism in which the genes serve as precursors for the production of certain enzymes whose absence prevents the organism from prospering. There is, therefore, considerable hope that an investigation of the internal environment of the body may reveal the particular metabolic deficiency or excess which characterizes the patient. A particular error of metabolism may, of course, be inherited or acquired. A considerable amount of effort has been spent in the attempt to relate schizophrenia to metabolic error. Certain fractions of schizophrenic blood have produced metabolic changes and changes in such behavior as rope-climbing in rats as well as transitory changes in the psychomotor behavior or normal human subjects. Presumably similar fractions from the blood of normals do not produce such changes.

The final scientific model is the epidemiological model, which seems to be a super-model including each of the above models as partial factors in the explanation of the mental disorders but requiring careful field studies to determine the relative role of each of them. Mental disorder is conceived as the end result of a series of probabilistic events, each of which must occur in interaction with others to produce the disorder, although the threshold value for each factor may differ from person to person and from one disorder to another. Thus, two people may have inherited the same predisposition, but because of differential stress, nutritional or deprivational factors will not both develop the illness. The virtue of epidemiology is that it takes in all possible factors ranging from radiation, perinatal existence, genetics, to social-cultural environment, etc. Thus, the epidemiological model both permits and requires the weighing of each of the submodels in the total picture of causation; the difficulties of assessing their relative importance, and of devising studies which will not overlook some of the factors, are too well known to need re-emphasizing here.

While many of the social-cultural, developmental, learning, genetic, biochemical and neurophysiological claims remain somewhat in doubt, they nevertheless lend credence to the possibility that the mental disorders will be found to be characterized by either the deviations which are now postulated by these models, or by deviations of the same general scope that have not yet been postulated. Whether they are the cause or the effect of the disorder remains to be seen, but the testing of the hypotheses generated by these models depends to a large extent on the detection of some type of deviant behavior which characterizes the patient.

One question that is often raised regarding the behavior of the mentally deviant individual is the question of its continuity vs. discontinuity with normal behavior. This is an age-old issue which has never been dealt with conclusively. But it is interesting to inquire where the
discontinuity, if it exists, is to be sought: in the patient or in the
server -- i.e., in the behavior of the patient or in the behavior of
the community with regard to the patient? If the discontinuity exists
in the community so that, once a threshold of deviation is passed, the
individual in question is regarded as abnormal, it becomes clear that
we do not have to postulate a discontinuity in the patient's behavior.
Instead, the individual immediately adjacent to him on the continuum,
who differs by only a small degree from him, may still be regarded as
normal. Hence, it would be a vain hope ever to find universal character-
istics of mental disorder, since they are detected only by deviation
from local norms. Another possibility to consider is that the
 discontinuity in the community's behavior or in the patient's behavior
may rest not on a single dimension but on patterns of several dimensions.
In that case, no single dimension may exhibit any sharp discontinuity.
Instead, the patterning of the dimensions may identify the disorder
when all the individual dimensions remain continuous. Thus, an
individual who has an IQ of 70 may still be within the normal range.
As is true for social classifications, who has a social quotient of only 70 may also be within the normal
range. But given the combination of IQ 70 and social quotient of 70,
the individual may be regarded as retarded by a given community. Here
too, it would be a vain hope ever to find universal patterns of mental
disorder, since they can be detected only as deviations from local
normative patterns. On the other hand, if discontinuities exist in the
patient's behavior or in the patterning of his behavior, a search for
such discontinuities ought to be rewarding.

In order to examine hypotheses emanating from the social-cultural model,
cultural-dependent techniques are required. Specially devised
interviewing techniques which assess the degree of deviation of the
patient from the social-cultural norms have been developed.

The culture-dependent techniques are based on the assumption that
mental disorders reveal themselves through deviations from social-
cultural norms. The initial detection of mental disorders is usually
made by laymen -- the patient himself, his family, friends or public
officials. Since the identifying behavior is usually unexpected or
deviant, it is no wonder that different cultures will not recognize as
mentally disordered the same kinds of behaviors. This may be the reason
why such great differences are observed between cultures with regard
to the incidence of various forms of disorder. Once the deviation is
observed and the suspected patient is brought for diagnosis, the clinician
begins to interview the patient to determine whether he is in fact
mentally ill, how severe the condition is and what can be done about
alleviating it. We shall consider here only the diagnostic procedure.
What does it consist of? Here again, the chief concern of the
diagnostician is to determine whether the behavior exhibited by the
patient is the type you would expect from a normal individual. We probe
for feelings of hostility, depression, aggression, anxiety, apathy, affect,
delusions, hallucinations, but our probing is simply to determine
whether the patient deviates from the expected in these kinds of behaviors.
The best technique thus far developed for this probing is the interview,
despite its subjectivity and unstandardized character. However, it
need not remain as unstandardized and unreliable as it is now. The
introduction of standardized interviewing methods of the type provided
in the Mental Status Interview and Inventory (Spitzer et al., 1964),
is a first step in providing a biometric approach to assessment.

It is quite apparent that each member of the clinical team, the
clinical psychiatrist, clinical psychologist, ward nurse, attendant,
social worker, occupational and physical therapist, etc., makes some
unique contribution to the understanding of the patient's pathology.
Because of the different observational situations afforded each member,
a different technique is required for eliciting and recording the
observations in each clinical context. The development of such
techniques was begun by our Biometrics Research Group and the following
techniques are now available in various stages of completion: (1)
The Ward Behavior Inventory, (2) Mental Status Schedule, (3) Structured
Clinical Interview, (4) Children's Behavior Inventory, and (5) Social
Adaptation Inventory and Anamnesis.

It is not feasible to give the details for each of these interviews here.
We shall limit ourselves to only one of them, namely, the Mental Status
Schedule. It consists of an interview schedule and a matching inventory
of 248 dichotomous items descriptive of small units of pathological
behavior. The schedule contains questions arranged in a definite
sequence designed to provide for follow-up of incomplete responses.
Most of the questions are open-ended so as to encourage the patient to
reveal his own mentation. Properly administered, the interview has the
"feel" of the clinical evaluation. However, unlike the usual clinical
interview, the provision of a specific schedule of questions, a fixed
order of presentation, and a uniform coverage of the same areas of
psychopathology with each patient make it more likely that the
differences observed will be due to actual differences among patients
rather than to different interviewing procedures. This technique
has yielded reliabilities of the order of .90 or more then groups of
patients were evaluated independently by three psychiatrists. Moreover,
it has distinguished significantly between the amount of psychopathology
shown by inpatients, clinic outpatients, and former inpatients on
follow-up.

An example of the value of such systematic interviews is demonstrated
by the following experiment (Katz et al., unpublished). One of our
structured interviews was videotaped so that it could be presented to
groups of psychiatrists for their clinical judgment and diagnosis.

In addition to the over-all diagnosis the psychiatrists were asked to
fill out ratings on an inventory for such factors as excitement, paranoid
projection, anxious intropunitiveness, perceptual distortion, motor
disturbance, hostile belligerence, apathy and retardation, grandiose
expansiveness and thinking disorganization (Lorr, 1953). The psy-
chiatrists were all seasoned veterans of psychiatry; nevertheless, of
the 35 participants, 14 diagnosed the patient as neurotic and 21 as
psychotic. An examination of their ratings revealed however, that the
groups differed significantly only in one respect -- the rating on
aphathy. Those who rated the patient high on apathy diagnosed him as
psychotic, while those who rated him low on apathy diagnosed him as
neurotic.
For the hypotheses emanating from the developmental and learning models, specially devised culture-fair indicators have been provided. These techniques, though embedded in a given culture, nevertheless can be translated into other cultures. Examples of such culture-fair behaviors examined with these techniques are response to greeting, bereavement, reinforcement, or praise, etc. All cultures exhibit behavior response to such situations, but the type of behavior is colored by local norms.

In our attempt to reevaluate the level of affect characteristic of a patient, because of its importance in prognosis, the rate of emission of self-referred affect statements was examined through the technique of reinforcement. By reinforcing all affective utterances we were able to demonstrate that the affect utterances of the patient increases during the time when reinforcement is applied and that they declined after reinforcement is withdrawn. Furthermore, rate of conditioning of such utterances in these patients appears to be a prognostic indicator. Those patients who condition better are more likely to leave the hospital at the end of a 180 day period of follow-up. Another area that we investigated was the pattern of adolescent friendships, and here too it became quite clear that this is an important culture-fair indicator since the pattern of adolescent friendships in people who later become schizophrenic is quite different from those who remain normal and it varies with social-cultural milieu.

In our study, in which data were obtained by retrospection, it appeared that a fair proportion of the schizophrenics had had no friends in high school; most reported adolescence as a period of loneliness and dullness in which social intimacy was lacking; most of those who had friends reported that they had not been able to ask favors or help from even their best friends, and tended to reveal less to their friends and to be confided in less by their friends than the control group of normals. In general, schizophrenic boys had so little pleasure in contact with their peers that, when given a choice, they preferred to be by themselves. They saw themselves as having been not as good as boys their own age and, in comparison with their best friends, they felt disadvantaged in social, financial, and familial matters.

For the hypotheses emanating from the genetic, internal environment and brain function models, culture-free indicators have been sought. Among the techniques which have been found to indicate deviations among schizophrenics from the expected are certain aspects of reaction time, pupillography, evoked brain potentials. It was especially gratifying to note that the findings in which the schizophrenics differ from normals in this area are not attributable to the lack of motivation on the part of the schizophrenic. We are measuring events which come within the first three hundred milliseconds following stimulation and hence motivation can hardly be an important factor. Furthermore, we have found several functions in which the schizophrenic does better than the normal. That is to say he can distinguish sensory inputs which the normal glosses over or integrates, and hence the differences are not attributable to low motivation, but, if anything, to high motivation.
3. What the community mental health clinic can do by way of research.

The history of human welfare activity is replete with evidence that in the initial stages of every new humanitarian effort, the heart excels the mind in its bounty. In other words the desire to do good always exceeds the capacity to determine whether the results are good. This was the early history of social work, the early history of somatotherapy, psychotherapy, drug therapy, etc. Only when the mind finally catches up with the heart does it become possible to evaluate. We are now facing a revolution, an explosion if you will, in the field of community mental health. There is a grave danger that the desire to benefit people may overwhelm our better judgment, which requires objective evaluation. Such evaluation can not be conducted in every clinic or by every clinician. Nevertheless, unless we engage in systematic planning for evaluation, we may find that much human effort and money has been wasted and human welfare decreased rather than improved.

In order to safeguard the community mental health movement against such possibilities it may be necessary to introduce assessment centers in which the behavior of mental patients can be assessed objectively with the view of determining the degree of improvement or lack of it on follow-up. Such assessment centers cannot be installed everywhere, but, placed strategically, they can serve the mental health field in the same way that quality control stations serve industry.

In addition to over-all assessment it is essential that such movements as group therapy and family therapy be evaluated. Here the clinician must realize that social psychology, though dealing with situations other than therapeutic, has much to offer. The behavior of man in groups as contrasted with his behavior in isolation has been studied under the name of social facilitation. These experiments explain many of the changes that group therapists are struggling to understand. Research on the effects of social facilitation, verbal reinforcement, etc., will have to be introduced to understand the efficacy of group and family therapy. As an example of what the research-minded clinician can do with regard to group therapy, I wish to analyze one component of this type of therapy that has been the subject of psychological research ever since the turn of the century. I am referring to the social facilitation that is engendered by the presence of an audience. There are two aspects to social facilitation, as was pointed out by Zajonc in a recent article in Science. (Zajonc, 1965.) The two aspects of social facilitation are: (1) The effect on an individual of the presence of passive spectators, and (2) The effect on an individual of the presence of active spectators engaged in the same activity that he is performing. After surveying the literature on the effect of the audience Zajonc concludes that well learned responses are facilitated by the presence of spectators while the presence of such spectators interferes with acquisition of new responses. Thus performance is facilitated while learning is impaired by the presence or spectators. If one assumes that learned responses are dominant in the repertoire of the individual, then it may be pointed out that the audience enhances the emission of dominant responses but interferes with the emission of responses of low level of probability. Whether this effect is attributable to the arousal value produced by the presence of the group remains for further investigation. Viewed from the point of view of these two types of social facilitation, which represent only one aspect of the effect of the group, it may be concluded that the shaping of the behavior

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of the patient in order to get him to behave in new ways may be better
done in individual therapy, but practice in such behavior, once he has
acquired it, is enhanced by an audience. A thorough investigation of
social facilitation and its implications for group therapy are quite
obvious and need not be discussed any further here. Similar analyses
of the role of the family in family therapy also need to be made.

4. What the community can do.

It is not sufficient to provide care for all who ask for it. Even
though the satisfaction of the demand for care taxes the community's
capacity, it is even more important in many respects to engage in
preventive efforts. Unfortunately we do not know enough about pre-
vention yet, but we can discover the individuals who are probably in
need of help but do not realize it, or, if they realize it, find no
way of obtaining it. Sample surveys of communities can reveal pockets
of mental illness which should receive attention. Tools are required
for conducting such sample surveys and some of these tools are already
available. The stress on mental care for populations caught in "poverty
pockets" raises a very important issue, since most of our present day
tools and techniques for screening populations are geared to the middle
and upper class. Intelligence tests and even interview methods, not
to mention therapy methods, based on middle and upper class experience
can hardly serve populations in poverty pockets. New techniques and
methods must be developed, and at least part of the funds devoted to
care should go to research in this important area.

Another burgeoning area is geriatric mental disorders, and still another
is children's mental disorders. We are quite sure that the introduction
of Social Security and Medicare is going to alter the picture of the
care of the aged. Many a mentally normal geriatric case suffering from
a brief episode may have been forced into a mental hospital in the past
for lack of financial resources.

Now, with the provision of greater governmental aid, community mental
health clinics have to prepare for the avalanche of patients who will
storm their doors. Just how to deal with the problem is one of the
urgent issues before us. In our own work with residents of old age homes
(Walton, et al., 1964) we have found that the degree of pre-admission
isolation was an important factor in the adjustment to the old age home
and an important predictor of possible mental disturbance. Interviews
developed along these lines for diagnostic and prognostic purposes are
a sine qua non for dealing with the geriatric wave that is about to
inundate our clinics. With regard to children's disorders, they too
seem to be increasing. Here too we must prepare better methods of
diagnosis, prognosis and treatment.

In the practical everyday world, a distinction often arises between the
public health approach and the clinical approach. The public health
approach, imbued with the fact that it was able to reduce infectious
diseases by the introduction of physical hygiene even before the origin
of these disorders was known, has tried to intervene into the alleged
causes of mental disorder by providing measures to improve mental hygiene.
This has not yet been as effective with mental disorders as it was with physical disorders, for reasons still unknown. However, there is some virtue in intervention even if we are not sure of its efficacy. For example, John Cassel has suggested that by reducing poverty and increasing educational and occupational opportunities, he could reduce the rate of schizophrenia, tuberculosis and suicide in the county of North Carolina where he is working to the point where it was no greater than the national norm. Such efforts sound sensible and are certainly worthwhile. We can not, however, remain satisfied with the lumping of such disparate disorders into one basket unless we are ready to accept it as a complex. In that case we would have to call it schizotubercide.

5. What is the likely outcome?

In the last analysis, even research must pay off. What payoff can we expect?

In the first place, by providing assessment centers, we can determine at the very source the nature of a person's difficulties and allocate him to the proper agency for attention without subjecting him to the indignity of being shuffled around from pillar to post before treatment begins. Such assessment centers, once their usefulness has been demonstrated on a research basis, can be established to serve each community or a group of communities.

Once objective assessment of the patient becomes possible, the efficacy of the various therapies for each type of patient can be determined. Furthermore, the efficiency of the various clinics can be compared on such objective measures, since differences between the performances of two clinics can no longer be blamed on the differences in the original characteristics of the patient load, such differences having presumably been corrected for. On the basis of research done in certain selected centers, the special technique found to be most suitable for patient improvement can be determined.

Summary

The need for research in the field of mental illness has become increasingly apparent in recent years. As methods of clinical practice become well-established and more and more widely used, it becomes possible -- in fact, mandatory -- to compare them and to test their results in an objective, albeit humble, way. Only thus can we avoid premature self-satisfaction, which closes the door to progress. With the revolution in management of the mentally ill and in attitudes toward mental illness, the possibilities of new methods and practices loom large on the horizon, and research will be needed in order to choose among them judiciously. On a more basic exploratory level, research into the origins of mental illness, while it has not yet brought us conclusive answers, must not be allowed to lapse.

Along these exploratory lines, at least six scientific models have proved useful. These are the social-cultural, developmental, conditioning (learning), genetic, internal-environment, and neurophysiological
(brain-function) models. There is evidence for the continued usefulness of each of these approaches; certainly none of them has proved invalid. A final scientific super-model, the epidemiological one, takes all of these into account and attempts to weight the relative contribution and assess the interaction of each component with the others in the total picture of mental illness.

The behavioral changes that accompany mental disorder have been classified into two major divisions: culture-dependent and culture-free or culture-fair. Present-day methods of detecting and diagnosing mental disorder are largely based on culturally deviant types of behavior, so that there is a need for developing culture-free or -fair techniques. Even the culture-bound techniques, however, suffer unduly from variations in their application which produce diagnostic variability that could be reduced by proper controls. Methods for introducing such controls are provided through such techniques as standard interviews and inventories of behavior that can be objectively scored and evaluated. Advances in the development of culture-free techniques are not as great. Yet certain varieties of reaction time studies, pupillography, etc., promise to provide us with serviceable tools. When these objective methods are applied to populations of mentally ill persons, new techniques for fractionating populations into homogeneous subgroups may yield new and more meaningful classifications of the mentally ill.

Unless we engage in systematic planning for evaluation of current practice, we may find that much human effort and money has been wasted and human welfare decreased rather than improved. Community mental health clinics cannot, as a rule, be expected to provide such evaluation of their own efforts. It may be necessary to introduce cooperative assessment centers in which the behavior of mental patients can be assessed objectively with the view to determining the degree of improvement or lack of it on follow-up. Furthermore, once objective assessment of the patient becomes possible, the efficacy of the various therapies for each type of patient can be determined more precisely. The efficiency of the various clinics can be compared, and, on the basis of research done in selected centers, the special technique found to be most suitable for a patient's improvement can be determined.

The community mental health movement must shortly face the burgeoning demands for care in the areas of geriatric and childhood illness. In part this is due to demographic factors, in part to changing social attitudes toward illness in these groups. Here again, selectivity of means and clear-headed assessment of results, both founded on research, are essential. In addition, we must find means to deal with mental disorders in the fifth of our population who live in poverty. There is evidence that, not only do we not know realistically the extent of the need in this part of our population, but the methods of assessment and therapy that we ordinarily rely on are not well-suited to this task.

If we can succeed in injecting the research-minded attitude into our community mental health activities, we will go a long way towards not only justifying our expenditures but toward improving the mental health of our citizenry.
References


Conformity, Persuasibility and Counternormative Persuasion*

LUCILLE NAHEMOW AND RUTH BENNETT

New York State Department of Mental Hygiene

The relationship between conformity to social norms, persuasibility and counternormative persuasion was studied among residents of a home for aged. In general the residents were highly persuasible and some were clearly more persuasible than others. However, no relationship was found between the tendency to agree with the interviewers and conformity to the norms of the home. Furthermore, highly conforming residents were found to be most resistant to counternormative persuasive appeals. Conforming individuals evaluated the home highly and tended to regard it as a positive reference group while simultaneously indicating a lack of interest in people and events outside the home. It was concluded that conformity was less dependent upon a general compliance tendency than upon commitment to normative standards of the home.

This study was designed to determine whether individuals who conformed to the norms of an ongoing group also acquiesced under conditions of experimental persuasion. Parson's definition of conformity, "behavior enacted in accordance with the normative standards which have come to be set up as the common culture," was used. Elderly people who had resided in a home for aged for a year or more were studied. Their conformity to the normative standards of the home was assessed and related to two other forms of compliant behavior, persuasibility and counternormative persuasion, both of which concern the tendency of the individual to be persuaded or, at least, to express agreement with an opinion presented by an outside experimenter. The measures of experimental persuasion varied from those of little concern

* This paper is based on a portion of a doctoral dissertation submitted to the faculty of political science of Columbia University. The authors are indebted to the members of the dissertation committee, Richard Christie (Chairman), Joseph Zubin and Herbert Hyman for their assistance and advice during all stages of this research. We wish to thank Frederic Zeman and other personnel of the Jewish Home and Hospital for the Aged for the cooperation and interest offered so generously by them. We are very much indebted to Henry J. Walton of the University of Edinburgh, who conducted the psychiatric examinations under a U. S. Public Health Service research fellowship. This research was supported by NIMH predoctoral fellowship #14,144 C1 and NIMH grants MH02775 and CD00029.