IV

THE SERVICE DELIVERY SYSTEM

Models of Service Delivery

Models for mental health service delivery systems have been changing in Europe and America for hundreds of years. Most of the trends and ideas related to the delivery of mental health services are not new, and can be traced through cyclic trends for several hundred years. Three centuries ago in Europe the mentally ill were imprisoned along with criminals. The inhumanity and injustice of this practice led to the "asylum" movement. Before that movement, mentally ill people were either tolerated or killed by their communities, sometimes being burned as witches or as being seen as possessed by devils as in the American Salem witchcraft trials. However, even in the earlier times there have been effective mental health programs, such as one European agricultural community for the mentally ill that has been a model of effective and humane care for the mentally ill since the middle ages.

The era of "moral treatment" in America closely parallels many current trends driving the planning and operation of Indian mental health programs. About a century and a half ago it was assumed that the mentally ill were morally deficient, and that this deficiency could be remedied by removing the person from the community, placing the person in a treatment facility, and giving the person lectures on the correct morals and ways of living. This was supposed to cause mentally ill people to mend their thinking and actions. This change was expected to cure mental illness. This was an educational approach to mental illness and resembles some of the health education "self-esteem building" programs currently used by IHS. The moral era treatment is considered to have been a humane period which did produce some beneficial results, though moral treatment was not a cure-all. The moral treatment movement died for lack of results, although it gave rise to a more humane approach to the mentally ill and to the first uses of group therapy. The next phase of mental health system development was the increase in "medicalization" of the diagnosis and treatment of the mentally ill, in which the infirmities of the mind were considered to be largely the product of neurological disease. This, in turn, lead to the era of psychoanalysis and later the psychotherapies. The influence of these different historical movements can all be seen in today's mental health movements, from the criminalization of the mentally ill, to the educationally based "prevention" movements or the current trend toward "biological" psychiatry.

The community mental health movement began after World War II, with the substantial success of crisis intervention developed to help treat

mental health problems associated with soldiers in combat. These techniques were brought into communities for the first time in the late 1940s and early 1950s, providing access for the average citizen to mental health services for the first time. This movement, which included the formation of child guidance clinics, failed to live up to expectations of major positive changes in the mental health of the country for a number of reasons, including the reliance of the therapists upon relatively ponderous and long-term therapeutic techniques. The community mental health movement was rejuvenated in the 1960s and had several peaks. Perhaps the zenith of the community mental health movement was the Mental Health Systems Act formulated by a commission chaired by Rosalyn Carter, during the Carter administration. Because of the economic recession, however, this act was never put into effect with adequate funding. Since that time there has been an increasing problem with funding of the community mental health centers, and an increasing problem with the "deinstitutionalized" mentally ill who have no treatment and who represent a major component of the population of the homeless "street people".

Indian mental health programs have not fared badly in comparison to the programs funded by many states. Although funding for Indian mental health programs has never supported the level of services seen in most American communities during the height of the community mental health movement, Indian programs have generally not suffered from the precipitous declines in funding of mental health programs suffered by many non-Indian communities. Nor has the Indian political system generated the intolerance for the mentally ill resulting in the "criminalization" of the mentally ill population currently experienced in many cities and states. As a result, when the review of Indian mental health programs under the auspices of Dr. Everett Rhoades and former Assistant Secretary for Health Graham took place, the recommendations of the group included the adoption of a community mental health model, which was still within reach of Indian mental health programs, unlike many non-Indian mental health programs in the 1980s.

There are, however, several models of community mental health services, and several types of service components in any community mental health system. It is not only the quality and types of services offered by a community mental health program, but the quality and type of relationships and communications among the service components that create the effectiveness of community mental health programs. In large part, the administration and management models of community mental health programs create a "glue" that holds a mental health system together. For this reason, several of the models place a strong emphasis upon working out details of the administrative system and interagency communications. In considering the various models of community mental health services, the reader should keep in mind that many of these models are far more detailed than can be recounted in this monograph, and is encouraged to review the models included in suggested readings.

The JCAH Model

The Joint Commission for Accreditation of Hospitals (JCAH) model of community mental health is thought to be one of the most sophisticated models of community mental health services ever devised, although it was dropped as an accreditation standard in the early 1980s. It is a complex model for integrating a wide variety of services for the mentally ill. The Balanced Service System model upon which it is built is a particularly strong system for providing for the care for the seriously mentally ill with chronic courses. The administrative principles for operating this system are well developed and articulated and are based upon the philosophical principle of the least restrictive treatment setting. Administration is also based on encouraging the patient not to become more dependent upon the treatment system than absolutely necessary.

The organization of the JCAH community mental health system is based upon five functional areas. Two of the five functional areas are lacking entirely in most Indian mental health programs, and so are particularly worthy of note. The components of the JCAH Balanced Service System are as follows:

The Service Functional Area

This component is the main service delivery arm of the organization. It provides, in the JCAH model, a wide variety of actual patient care services, ranging from physical health services to prevention. These services include:

Identification services: Activities aimed at determining the need for, or establishment of service relationships between patient/client and provider.

Crisis Stabilization: Activities aimed at reducing acute emotional disabilities and their physical and social manifestations in order to ensure the safety of an individual or society.

Growth: Activities aimed at enhancing intellectual, intrapersonal, interpersonal and instrumental skills.

Sustenance: Activities aimed at maintaining intrapersonal, interpersonal, and instrumental skills.

Case Management: Activities aimed at linking the service system to a patient/client and coordinating various system components.

Prevention: Activities aimed at substantially reducing the probability of the occurrence of mental disabilities resulting from social, emotional, intellectual, or biological disorders.

General Health: Activities aimed at promoting or restoring physical health.

Ancillary: Activities that complement the provision of other services.

The Administration Functional Area

This category includes all enabling executive activities that provide the system with the means, opportunity and sanction to operate, and to provide the organizational structure which binds the system together as an integral unit. It includes:

Planning: The process of establishing the system's mission and methods of achievement.

Management: The process of organizing, directing, and coordinating the functions of the system to achieve its goals.

Control: The process of regulating system activities to ensure achievement of goals.

The Citizen Participation Functional Area

The goal of citizen participation is to increase the system's responsiveness to citizen needs, and thereby increase the assistance, sanction, and support for community mental health programs from citizens, their folk-support networks and their communities. It includes the following activities:

Community Development: The process of increasing problem-solving skills of the local citizens in order to enhance their capacity to influence those political and economic factors that affect the mental health of the citizens in that area.

Community Planning: The process of incorporating citizen goals, values, and expectations into the planning mechanism of the delivery system.

The Research and Evaluation Functional Area

This is one of the two functional areas which the Indian Health Service has not had in any formal way, until recently. It is a particularly critical area for Indian mental health programs to develop. In the JCAH model the following functions are included in this functional area:

Research: The process of creating new functional capacities.

Evaluation: The process of determining the effectiveness and efficiency of existing functional capacities to meet total needs and stated objectives.

The Staff Development Functional Area

This is the other functional area in which the IHS mental health programs are conspicuously lacking, although this has also improved in the last several years. Rather than being a luxury or chance for a vacation, the JCAH considers ongoing training and career development of staff to be of such potential benefit to the patient population that it is one of the five basic program components. It includes:

Career Development: The process of creating a framework for qualifying and deploying personnel.

Education and Training: The process of augmenting the knowledge, understanding, and skills necessary to perform the system functions.

This outline constitutes only the first two levels of organization of the JCAH model for community mental health services. It is elaborated to at least two more levels of complexity, and provides a detailed blueprint for organization down to the level of the technical skill of the provider. In addition to the functional areas, the JCAH model relies on several other critical concepts. The use of case managers to help the patients obtain the correct services, and to advocate for the patient is critical to the effective operation of this system. In addition, the reliance of the system on individualized treatment plans is a critical component of the service delivery system. The services provided through the JCAH model are very comprehensive, and may change from the patient's perspective to keep pace with changing patient needs.

There are several drawbacks to the direct application of the JCAH model to Indian mental health programs. The most significant limitation is the level of resources and population needed to support the full JCAH program. It relies on a system with much more specialized services available to the population than Indian Health Service programs can

currently afford. Second, it is not highly adaptable to systems of services that are spread over vast geographical distances. The Indian Health Service could accomplish some of the JCAH program objectives by regionalizing and sharing specialized resources among various reservations. However, this sharing of resources has not been particularly popular with either administrators or tribal communities to date. Third, the JCAH system is oriented toward chronic mental illness and chronic care. The patterns of service utilization are currently oriented toward less severe problems on most reservations. The transition of the targeting of resources toward the more severely ill members of the community would deprive the healthier people of resources that they currently use and from which they are receiving appreciable benefit. The quandary of whether to serve the most debilitated or the most easily treatable patients in larger numbers continues in mental health systems throughout the country, and not simply in Indian programs.

Nevertheless, the JCAH model of community mental health services is perhaps the best constructed and most tightly conceived current model of community mental health services according to many community mental health planners.

The Private Practice Office Model

In the absence of more comprehensive program planning efforts in Indian mental health programs, the system that often operates on individual reservations is the model that most mental health professionals are taught in their training: the office practice model. In this model, the professional therapist sits in his or her office and spends an hour with each scheduled appointment. Patients who come into the office are either self-referrals, or are sometimes referrals from other agencies or portions of the health care system. The varieties of therapy used in the office mental health practice depend upon the training and special skills of the mental health professional. Usually patients enter treatment after an evaluation period of several sessions, and treatment may last from one session to an ongoing weekly series of appointments that may continue for years. This system has several strengths, particularly in that it is one model of service delivery that can be managed by a single professional without a high degree of interaction with the rest of the treatment system.

The office based private practice model is also valuable when there are too many patients in the system for a provider to reasonably handle. Given the finite number of hours per day, the office practice model allows the professional to make certain that each patient who comes into the system receives adequate attention, or else none at all (which is then a clear message to administrators from the patients and community that there needs to be more mental health staff). Many very good therapists provide therapeutic services of a high quality in Indian country using this model, depending upon the level of skills that they bring to the therapy session.

Psychologists and psychiatrists, in particular, are taught to use this model most often. This model has the added advantage of having a generally high level of patient initiative in assisting the course of therapy. A wide range of techniques of office based psychotherapy take advantage of the patient's motivation, such as forming the therapeutic contract, the use of homework and reading assignments, and allowing the patient to primarily direct the therapy with the therapist in more or less the role of a consultant to the patient.

In a community mental health setting there are also disadvantages to this model. The office-based private practice model does not always address the needs of patients who may have difficulty taking advantage of the services of the office-based therapist. These patients may be too mistrustful, poor, disorganized or misinformed to use a walk-in office. In addition, it is difficult (though by no means impossible) to use office- based therapists with a team in which different types of professionals plan together in order to help with difficult or complex patients, or to have conferences and support each other in adapting therapeutic techniques to their patients. It is perhaps more difficult for the office-based therapist to learn from colleagues than in other models because of the isolation of this style of practice. Without working in teams, there may be little of the mutual inspiration and assistance that takes place among mental health care providers in other settings.

Providers who come fresh from a training program to practice on reservations may often try to open a practice in a general health clinic. Because the new practitioner is not well known in the community he or she fails to attract patients. The numbers of contacts for these practitioners may remain low for over a year before the rumor system in the community has time to confirm that they can provide a useful service, and that they are good people. By this time the Service Unit is ready to fire the practitioner, or else he or she is ready to resign. Other models of service may be more useful as a practitioner is building a practice on the reservation.

Nevertheless, office based practice will continue to be an effective part of the practice of Indian mental health into the future. Even for a single provider in an isolated station, it should not continue to be the only form of practice, however.

The Consultation/Liaison Model

This model of services is a very powerful model for getting critical services to patients who can benefit very significantly from them. The consultation/liaison model of services can provide substantial economic benefit to the medical system, and to the families of patients, as well as providing very helpful services to the patient. However, the skills involved in consultation/liaison mental health may be very specialized in some cases, and mental health staff without the specific inclination and training tend to dislike the practice of consultation/liaison mental health.

The most common setting for the practice of consultation mental health is on inpatient medical/surgical services in hospitals. The mental health consultant may be asked to evaluate the patient and suggest mental health treatment for patients on these units. The specialized skills needed for mental health consultations are often complex and difficult. Medical and nursing staff may most often mistake organic mental syndromes for schizophrenia or just "bad acting." By the time the consultant is called, medical staff may be very angry and entrenched in their views of the patient. Frequently the role of the mental health consultant is to determine the actual cause of the organic mental syndrome and to participate in discussions with other providers about the medical diagnosis and treatment of the patient. Patients with other major mental health problems also require specialized treatment while on surgical units. The consultant must have a solid knowledge of pharmacology and the mechanisms of illness in order to work with medical practitioners.

Other roles for the consultant include helping the patient cope emotionally with serious illnesses, to help families deal with difficulties and losses, and arranging for needed services for the patient after hospitalization. As has been noted elsewhere in this monograph, the value of even talking to seriously ill patients is great. Patients with such daily interpersonal contact from someone other than the immediate caretaker have been noted to have reduced hospital stays, reduced post-operative complications, and improved speed and quality of recovery.

Another valuable role for the consultant on a medical service is to help manage psychosomatic and psychophysiological disorders. The long-term management of somatization disorder is one of the most valuable roles for the mental health consultant to the medical and surgical service. One increasing trend is to have Indian Health Service and tribal mental health professionals consult to local non-Indian hospitals when eligible patients are on the inpatient units in order to hasten appropriate discharges.

The traditional profession which routinely performs the first type of inpatient hospital mental health consultation is psychiatry, although nurses and psychologists have also performed this role admirably. Masters level psychiatric nurses have demonstrated substantial skills in this type of work in the last decade. Consultation around family issues, disposition of the patient and financial planning have often been carried out by social workers, over many decades. Increasingly, in Indian hospitals the role of daily contact with the patient is being performed by specially trained mental health technicians and specialist Community Health Representatives.

Consultations are also valuable to a number of other agencies and services as well. Mental health consultations to jails, schools, and other institutions may be helpful. Each of the consultation relationships is carried out as a response to specific requests of the consultees (the persons or agencies initiating the consultation), and each type of consultation requires special skills. For some practitioners, consultations are a good way of quickly building a challenging and rewarding practice. However, because

of the various difficulties involved in consultations, the new and inexperienced mental health practitioner is ill advised to embark upon this type of practice without adequate training.

Without going into elaborate detail, it should be known that there are nine types of mental health consultative relationships, with a focus on either the case, program, or administration. Liaison relationships imply an ongoing relationship with another program. Rather than being requested to make individual contacts on a case-by-case basis, the mental health liaison worker maintains a periodic visiting schedule with the program. This ongoing relationship minimizes the need to go through the formal consultation request/negotiation process with each consultation. The liaison relationship is particularly valuable for programs with a high concentration of people with mental health problems, or environments with a high stress level. Productive programs for mental health liaison relationships include dialysis units, cardiovascular surgical units, jails, and schools, depending upon the particular skills of the mental health worker.

Consultation/liaison relationships are valuable for a number of reasons. They provide significant savings to the health care system that must pay for the comprehensive care of patients, whether by an organization like IHS or by other third party providers. The work performed by mental health consultation/liaison workers provides services that are among the most effective in all of mental health. One added benefit of these relationships is that talking with patients has been proven to increase patients' satisfaction with their care.

The Inpatient Model

Throughout the history of mental health programs in Europe and America, inpatient mental health programs have figured prominently as an alternative of last resort for the mental health system. In times of sparse resources, inpatient hospitals, sometimes poorly staffed and with few resources, provide a place for the seriously mentally ill to live and survive in relative safety. In other cases, when patients are grossly psychotic, the inpatient unit may be required to diagnose, stabilize, and treat the patient. Likewise, patients who require ongoing intensive supervision because their behavior is so unacceptable to their communities that they cannot live on the outside have few places to go except the inpatient hospital.

There are two major types of psychiatric hospitalization for adult patients. The short term psychiatric inpatient unit is usually a ward in a local general hospital. Stays on such a ward are generally short, and the patient is likely to get good intensive diagnostic and treatment services. These programs attempt to stabilize patients quickly, and to return them to functioning in the community. The costs are quite high in these short-term units because of the high number of diagnostic examinations given in a short period of time, and because staffing is intensive compared to the number of patients.

State hospitals and other longer term hospitals tend to be much less oriented to returning the patient quickly to the community, although there are some significant exceptions among state hospitals. Depending upon the particular hospital, staffing may be adequate or poor, and diagnostic services may be very limited. Treatment for acute conditions may be only fair or poor (with, again, some exceptions). However, the patient that is violent on a chronic basis, or who must be hospitalized on a more or less permanent basis has little reason to be in an acute hospital at a high cost per day. In addition, some state hospitals, such as the Colorado State Hospital which ranked number one in the country according to the report by Fuller-Torey and colleagues, have specialized care that may be better than many private general psychiatric units.

Hospitalization for children and adolescents serves different purposes than the hospitalization of adults, as well as providing some of the same functions as adult hospitalization. For severely disturbed children, the inpatient unit provides a refuge from violent, abusive or severely disordered families. The inpatient staff must provide relationships between staff and the children which help to repair damage suffered in previous family relationships. These services for children and adolescents are often very hard to find for Indian children, although recent years have witnessed the proliferation of adolescent programs available in the private sector. These programs are a last resort and cannot substitute for adequate community-based programs. For the Indian Health Service to concentrate on developing inpatient childrens' programs when the community mental health needs are so great would be a questionable priority. At best a network of contract inpatient childrens' and adolescents' mental health programs sensitive to the needs of Indian children and adolescents is the best we can reasonably expect.

It is critical for Indian programs to have access to a variety of inpatient mental health programs. It may even be appropriate for the IHS to run several inpatient mental health programs in the future, of either regional or national focus. It may even be appropriate to convert reservation-based general hospitals with low average daily patient loads to specialized mental health referral programs such as chronic pain programs, or a program for the treatment of adults with mixed substance abuse and major mental health problems.

To those in community mental health, it is critical to have good hospitals that are willing to work with the community programs. However, hospitals remove the person from his or her family and accustomed environment. Except for very severe cases the hospital should not be the only treatment system available to patients in communities and should be partners with good community mental health programs.

The Pyramid (Chinese) Model

Several years ago the author attended a meeting of the Society for the Study of Culture and Psychiatry. I had an opportunity to speak at length with a psychiatrist from the Peoples Republic of China about models for the delivery of mental health services in our respective countries and organizations. One of the most exciting insights that we had was that the problems of the rural Indian reservations in the United States are very similar to the problems in China. Indian Health Service faces the problems of delivering services in isolated rural areas much like those posed by shortages of trained mental health professionals in China. Neither program has a large number of technical resources or staff for the number of people served. Inpatient resources are at a premium in both, and must be reserved for only the most severally ill patients. Both patient populations believe in several models of health care, including "western" and traditional concepts of health and illness. During the Cultural Revolution, psychiatry and the more biological approaches to illness were considered "counter-revolutionary" (and psychiatrists had been sent to the rice fields as workers) in favor of more social approaches to mental health. But since the end of the Cultural Revolution both approaches to mental health had been incorporated into the Chinese mental health system. This is very similar to the balancing of models and priorities so familiar to mental health professionals working in Indian programs.

In my discussion with psychiatrists from the Peoples Republic of China, the Chinese mental health care system seemed to be developed in greater complexity, and with greater internal consistency than the IHS mental health system, however. The Chinese system is organized as a pyramid. On the bottom level of the pyramid are the barefoot doctors. These people are respected community members who are thought to have a talent for health care. They are given a few months of training in basic issues of health care, including basic mental health training. They are then sent out into the community to provide health care using a well-written manual, a few psychotropic medications, and a well written set of instructions about which conditions they may attempt to treat, how to work through the differential diagnosis of specific symptoms, and when to refer the patient to the next level of the system.

The next level of the system is the equivalent of a community paraprofessional. After several years in the barefoot doctor roles, talented practitioners are sent back for more training, often for a year. The person comes back to the community as a supervisor of the first-line barefoot doctors, and to provide treatment and more sophisticated diagnosis beyond the skills of the first-line providers.

After going through the upward track, the former barefoot doctor may become one of a variety of health professions, including becoming a psychiatrist. In China, psychiatrists have the same levels of training as psychiatrists in the United States, but because of the shortages of

practitioners, usually practice in inpatient institutions. Usually patients who enter the inpatient unit are suffering from schizophrenia, organic mental syndromes, or epilepsy. Treatments tend to be highly biological at the inpatient level, utilizing drugs such as phenobarbital and Thorazine.

Although the illnesses are different from those in the United States, and social work is virtually unknown because the functions of the social worker are provided through the Party and residential officials, many other aspects of the patients' treatment are similar to techniques developed through the service delivery system of the IHS.

In order to work with this pyramidal system, there must be good career ladders, and very well thought-out manuals and basic training. The process of differential diagnosis is critical to the thinking of the mental health worker and must be a focus of training. There must also be a program of consultation among providers in the community as well as more specialized services available in the centralized locations such as inpatient programs. By the time a patient ascents each level of the pyramid, one can be certain that he or she is more seriously ill and in need of more specialized treatment than those who were not referred to the next level of the system. In a system with limited technical resources, this type of system uses the scarce technical and personnel resources with the greatest possible efficiency.

Systems like that in modern China have significant advantages for an organization that must develop local resource people into various types of specialized health providers, and must provide care for a large number of people with very limited resources. The disadvantage of this system is that patients who have contacts with the "barefoot doctor" level providers run a risk of misdiagnosis. It is not at all certain that the quality of the diagnosis and treatment of these patients is inferior to the treatment delivered by our current IHS system. In many ways this pyramidal system has a great deal to offer to the IHS and the tribes.

High Technology vs. "Humanistic" Systems

A number of contradictions exist in the Indian mental health system. Many mental health professionals may either see themselves as "humanistic" or "biological." They may define their skills according to very specific models that they encountered during their training. Unfortunately, these self definitions often cause professionals (and those whom they supervise and instruct) to define sets of skills other than those that they themselves possess as invalid, poorly conceived, or even morally corrupt. This is most unfortunate.

Most of the skills that any well-trained professional brings to the Indian Health Service or tribal programs can be used to great advantage. The experienced and successful mental health professional, Indian or non-Indian, who has been working on an isolated reservation tends to have gained a wide set of skills that defy categorization according to the standard groupings or "schools" of therapists. The social worker who has had a long

reservation experience, usually knows some skills of psychological testing and psychopharmacology. The psychologist may be quite competent at what are usually thought of as of traditional social work skills. Approaches to patients by these versatile professionals may sometimes appear to be very biological and "high tech", yet in other circumstances may appear to be very "humanistic".

It must be concluded that at least some of the distinctions made in categorizing mental health providers in training programs may be artifacts of the inexperienced therapist. These distinctions may not be particularly useful in trying to plan a well-rounded, comprehensive mental health program.

Types and Levels of Prevention

The ultimate goal of any health system, including a mental health system must be prevention of illnesses that damage the lives and health of the patient population. However, there are a variety of types and strategies of prevention, each one of which is either appropriate or grossly inappropriate depending upon the circumstances in which it is used. In the history of public health, there have been great victories over disease and premature death through the use of prevention technology. The substantial reductions in infant mortality accomplished by the Indian Health Service in the last thirty years, and the control of tuberculosis on reservations must surely be considered among these great victories of different types of prevention.

Inappropriate uses of prevention have been devastating on a similarly grand scale. As has been noted elsewhere in this report, the deaths of hundreds of thousands on the Asian subcontinent were due to mis-planned efforts to eradicate malaria. Education efforts to prevent drug abuse among American young people which actually have been shown to increase drug abuse may also have been one of the great failures in public health history.

Mental health systems have a long history of designing programs intended to solve various problems. A number of well-publicized prevention efforts, such as the Child Guidance Movement and the original community mental health centers movement, did not prove as successful as originally intended. For 30 years, a variety of prevention efforts in mental health have been attempted. In some cases there have been successes. In other cases, promises of great reductions in problems made to Congress and to the public have not been kept, and the mental health system has suffered from a loss of credibility as a result. The demise of the first post-War community mental health movement resulted from exaggerated enthusiasm for unproven methods by the psychoanalytic school of psychiatry, which promised that disorders could be prevented in adulthood by treating the problems of childhood. This promise did not bear fruit. Well-trained mental health professionals are currently trained to be very

cautious in designing and "selling" prevention programs because of these unkept promises of the past.

Many health professionals continue to believe that prevention efforts are the only way to ultimately conquer the major mental health problems of America and Indian people. However, in mental health we have learned to ask questions about the effectiveness of prevention efforts. Are these programs designed to prevent a specific problem among an identified risk group or is the program a vague non-specific effort with little chance of success? Does the prevention effort take advantage of the current technology and thinking in the field or is it based on an unproven "pet" theory of a single provider or group? Is the timing of the prevention effort conceived well and appropriate to the level of the understanding of the problem?

In the history of health care, the timing of the prevention efforts has been critical. Successful prevention programs and efforts to conquer disease and major health problems have most often begun at the tertiary prevention level, and as understanding increases, proceeded toward secondary and ultimately primary prevention and health promotion efforts. With this logical progression, each stage is well grounded in the previous prevention level. Some of the more unfortunate outcomes of prevention efforts have been the result of programs outrunning the technology and what is known at that phase in history about the specific disorder targeted. As unpopular as it often is, the role of the public mental health professionals is often to restrain the zeal of other mental health workers whose enthusiasm encourages such "leaps."

Tertiary Prevention

Tertiary prevention efforts are where most serious public health efforts begin. In the context of cost-effectiveness, tertiary prevention is the most primitive form of prevention. The aim of tertiary prevention programs is to reduce the complications and impact of an established disease or illness. Many "treatments" for diseases are, in fact, tertiary prevention efforts. For example, insulin for the treatment of diabetes prevents or delays many tertiary complications of diabetes, such as infections and neurological complications. Tertiary prevention begins with the process of isolating and classifying symptoms until a syndrome or disease entity is identified. Usually the clues to this process come from general clinicians whose powers of observation lead to the conclusion that a number of people are suffering from a similar problems or conditions. Diagnostic criteria, at least on a provisional basis, then lead the clinician to try to reduce the death, morbidity, and other consequences of the illness.

Many examples of tertiary prevention exist in mental health programs. For example, prevention efforts in a population of schizophrenic individuals may be designed to prevent suicides, repeated psychotic episodes, or a life in an inpatient unit. Other examples include the use of the tricyclic antidepressants with patients who suffer from panic disorder to

prevent panic attacks leading to phobias. Rehabilitation efforts are a good example of tertiary prevention.

Secondary Prevention

Secondary prevention is defined as activity aimed at reducing the prevalence of an illness through early diagnosis and treatment. The prevalence of the illnesses is lessened by reducing the amount of time that individuals are afflicted with these problems. In mental health, the best known intervention for many conditions may be at the level of secondary prevention, and may take the form of early identification, screening, and treatment. For example, the identification and early treatment of panic attacks has been observed by clinicians to prevent the formation of the severely limiting agoraphobic symptoms of the full illness.

The development of secondary prevention strategies may involve a number of types of work. Public awareness of signs and symptoms of early illness may bring community members to seek further screening and treatment in the health care system. The clinician may find him- or herself on the radio or on television talking about the illness in an effort to bring early cases to screening clinics. Health education technology may be brought to bear in this phase of prevention (a set of skills generally used poorly by mental health programs). The range of secondary preventions technology has a high level of diversity. If it is performed effectively, secondary prevention is clearly more cost-effective than tertiary prevention.

Primary Prevention

As secondary prevention efforts progress, the clinician may be able to identify groups of people who appear to be at-risk for the development of the first stages of an illness. The clinician may develop a theory of characteristics that appear to place a particular group of people at risk for developing the illness, even before the early signs of the illness have appeared.

The clinician will then design a prospective study to determine whether or not the observations about on at-risk group are indeed true, and to follow the group over time to see if individuals develop symptoms of the illness. The clinician then designs interventions that attempt to prevent the development of the illness in the suspected at-risk group. Of course, the responsible clinician sets up some study to determine whether or not the primary prevention intervention has its anticipated beneficial effects. Without such outcome measurements, the supposed prevention program may be ineffective and yet no one ever be aware of the wasted efforts. As an example of good primary prevention program, vaccination against polio or diphtheria is carried out among known risk groups. This technology was tested for both benefits for preventing infectious diseases, and to determine

possible side effects and negative outcomes. At-risk populations may in some cases be related to age, such as polio in the young, to occupation such as in the case of rabies in veterinarians, or to geographic location such as the case of cholera.

Some potential primary prevention programs in mental health include working with disadvantaged youth, to prevent the development of future criminal behavior. Another example of a primary prevention effort in mental health would be providing parenting skills training to young parents raised in boarding schools, in an effort to reduce mental health problems in their children. In all of these programs, the actual effectiveness of the prevention efforts would have to be demonstrated before the program was widely replicated.

Primary prevention activities are those related to reducing the incidence, or the development of new cases of a particular illness or disease process. In mental health, there have been few proven examples of true primary prevention programs. Reasons for the lack of effective primary prevention programs may be related to both the relative newness of mental health as a field of care, and the complex factors involved in the causation of mental illness. Other fields of health have had more concrete models of the causation of diseases in their fields for far longer. The scarcity of effective primary prevention programs in mental health may also be due in part to an historical lack of useful mental health diagnoses until recently. Other fields have progressed from tertiary to primary prevention of a variety of disorders over a period of decades or centuries. Primary prevention efforts are much newer in mental health. The systematic evolution of the chain of prevention programs requires substantial work over many projects and many program evaluation studies. It may be a tenuous proposition to devise primary prevention intervention strategies without this systematic work preparation. In mental health, it may well be that the technology can only support secondary prevention efforts, in general, given the current state of development of the field. However, in very specific instances, several proven primary prevention interventions in mental health are known.

Health Promotion

Unlike primary prevention, health promotion may be an appropriate forum for greater experimentation by mental health programs. Health promotion in mental health is based upon several different ideas. In some cases, information provided to the public may promote good mental health. In mental health, the effectiveness of this technology has not been well explored. One of the reasons that "educational" approaches have not been popular is that many mental health professionals trained as psychotherapists have had training that emphasizes that the therapist should avoid giving advice. As in the case of the "education" programs about drug abuse for adolescents, some information sharing may actually

have a harmful effect upon the patient, unless the purpose of giving such advice is well conceived and risks of this method understood fully.

However, other branches of mental health, particularly the fields of hypnosis and cognitive psychology, offer some of the best technology available for influencing opinion and changing attitudes. For reasons that are not entirely clear, the powerful tools used by professionals in the advertising field have not been investigated as tools for mental health promotion. This is particularly strange given the fact that these tools for influencing people's opinions were developed from a basis in mental health, particularly from experimental psychology.

There are probably several reasons for this failure of health promotion programs to take advantage of mental health technology. If mental health professionals mistrust "educational" approaches toward health promotion as ineffective, or productive of paradoxical results at times, are there potentially effective approaches to mental health promotion for Indian people? The answer has yet to be determined. The partnership of mental health and health promotion efforts may be an effective tool for behavioral change in Indian populations at some time in the future, although much remains to be done before even preliminary efforts begin.

Dr. Spero Manson of the National Center for American Indian and Alaska Native Mental Health Research and others speak of the need to study and try to duplicate strength-producing experiences in a person's life as a tool for health promotion. Dr. Manson observes that if a single traumatic incident in a person's life can produce long-term negative effects, it is reasonable to suppose that strength- producing experiences at critical times in development can have long-lasting strengthening effects. Given most people's life experiences, there must certainly be such strengthening experiences in the average life. Most of us can identify such events in our own lives. Yet the question of how to study and duplicate these experiences presents major research and program planning questions. The paradoxical results of some educational programs for adolescents should continually remind us to study such issues very carefully. It is anticipated that this technology will develop throughout the remainder of the century for both Indian and non-Indian people.

Another group of "educational" health promotion techniques involves teaching members of the general, non-patient population ways to deal with those identified as patients, clients, or at-risk people in the community. It appears that these health promotion techniques may be much more effective than current techniques which are oriented toward the potential "case." Examples are teaching parents about parenting skills, working with teachers to enhance the self-esteem of children, and working with employers on creating a psychologically healthy workplace. These "indirect" mental health promotion techniques may in some ways be the most immediately productive mental health promotion techniques in that they circumvent many of the mechanisms of resistance that are encountered in trying to promote mental health at the individual "case" level.

Certain programs in mental health make intuitive sense as likely candidates to be effective health promotion activities. These "common sense" programs include recreational programs for adolescents. However, we need to study the results carefully to make certain that the results of these programs are as we expect them to be.

Continuity of Mental Illness Prevention and Mental Health Promotion

One of the most important concepts in the delivery of mental health care is the concept of continuity of care. Continuity refers to completeness and lack of actual or conceptual breaks or interruptions in a network of services or activities. There are a multitude of ways in which the continuity of care must be considered. Continuity of care must be considered both over time, and within the system at any particular point in time; it will be discussed in a later section of this report.

Mental illness prevention and health promotion efforts also require the planner to consider continuity. Like the treatment of mental illness for the individual patient, prevention/promotion efforts also require that planning efforts incorporate continuity as a central feature.

In planning health promotion and disease prevention efforts there is a need for the efforts to evolve in a logical and systematic manner. The best prevention/promotion efforts are continuous in several dimensions. There are no "leaps" of thinking in such systems, either in jumping ahead of the epidemiological knowledge of the problems that the interventions are designed to meet, or away from the basic knowledge of causation and treatment of the disorder. When such programs do make major "leaps" on rare occasions, it is essential to recognize that such a conceptual leap is being made, and it is well to set up the program as an experiment in the initial developmental stages.

In mental health efforts, continuity of prevention/promotion efforts may be conceptualized along several dimensions:

Continuity of Knowledge of Pathology: As discussed above, prevention efforts that are effective in the long term tend to evolve in a logical sequence, from tertiary through primary prevention and health promotion efforts. The reason for this is the growing sophistication about the knowledge of the causes and course of the illness or disease over time. As field programs develop tertiary prevention efforts, the knowledge about the causes of the illness and its natural course and other information required for secondary prevention efforts are gained. Programs which develop interventions without continuity of information about pathology and some connection to the basic mechanism of the illness run the risk of targeting the incorrect causes or pathologic factors in the development of the illness, like people in the middle ages who sought to prevent malaria by not breathing the night air.

Continuity of Knowledge of Risk: As the knowledge of the pathology of a problem grows, knowledge of risk factors for the problems

associated with each level of prevention intervention also grows. For example, as tertiary prevention efforts grow in sophistication, knowledge of the risk factors for early cases advancing to more advanced stages also grows. Similarly, knowledge of early cases found in secondary prevention efforts leads to knowledge of people who have no symptoms of illness but who may be at risk for developing the illness. The professional who plans a primary prevention program that leaps from the knowledge gained in tertiary efforts, by-passing secondary prevention effort, risks incorrectly identifying the at-risk group in the general population, owing to the complexity of the conditions in their tertiary stages.

Continuity of Identification/Intervention: As knowledge of the pathologic process of a condition is gathered and risks for developing different stages are identified, there may be good identification of the pathologic process and risk factors, but a lack of matching the intervention with this knowledge. Several examples of this type of error are found in health care programs. In the first case, identification may be mistaken for intervention; planners may develop programs designed for identification of cases, but neglect the development of interventions for this phase of the illness or condition. An example has occurred in Indian mental health programs in the development of secondary prevention efforts for children in which a condition is identified and the child labeled with a diagnosis, but no intervention offered. This has happened often in Indian fetal alcohol syndrome programs.

The second type of mismatch is found if the intervention is offered but is inappropriate to the stage of the illness. For example, the treatment with chronic antibiotics of a potentially dangerous staphylococcus aureus bacterium in the noses of people who harbor these bacteria as non-harmful residents can reasonably be expected to produce more virulent, less treatable bacteria over the long run. The "prevention" effort in this case caused a problem worse than the sub-clinical case. In mental health, chronic treatment of a person who has had a single short-term psychotic episode with long-term neuroleptic therapy inappropriate to the condition is a similar mismatch. This long- term neuroleptic treatment poses a high risk for tardive dyskinesia, a serious movement disorder, in order to treat the relatively low risk of a second psychotic episode.

Continuity of Pathological Systems: Particularly in mental health, a variety of conditions, pathologic processes, and symptoms occur in association with each other. It is possible that a condition or symptom at one phase of a pathological process may be mistaken for a single disease entity, but may, in fact, be the symptom or pathological process of an entirely different condition (or several different conditions). For example, suicide attempts are known to be associated with a large number of major mental illnesses including depression and schizophrenia. In some cases, the suicide attempt may be associated with early stages of an illness, such as early psychotic illnesses, while in other cases it may be a relatively late or "tertiary" consequence of the illness, as in some cases of major depression.

Suicide attempts may be a relatively central feature in some conditions, while in others it may be a secondary feature of the pathological process, such as the risk of "impulsive" suicide attempts in delusional organic mental syndromes. In yet other conditions, the target behavior, such as suicide attempts, may be associated with one illness early in its course.

Risks for the target behavior may then be magnified by the development of a secondary pathological process which occurs "on top of" the main illness. The result is an additive or even multiplicative effect in producing the target behavior. For example, a man who comes to the emergency room with a suicide attempt may have initially had a major depressive episode, but then may have begun to drink to excess. In a heavy drinking episode he may then attempt suicide. A focus on any single element of this pathological process would leave other core conditions unresolved, such as perceiving that alcohol is the "cause" of the suicide attempts in this example.

Continuity of the pathological system in the design of prevention efforts ensures that the intervention will be at least related to the actual illness. A lack of continuity between mental health programs' work and pathological systems causing the illness may be the reason for the repeated failure of single-issue suicide prevention programs in Indian country. Conversely, the successes of a number of new treatment and intervention programs focused on target behaviors arises from the focus of such programs upon treatment and prevention of a variety of other conditions and illnesses. For example, programs which prevent suicide by treating depression have demonstrated effectiveness, where some self-esteem-promoting programs fail to achieve this result.

Continuity of Program Intervention: Prevention/promotion programs in mental health must be designed to provide continuity of interventions for ethical as well as program-planning reasons. As an ethical point, abandoning tertiary prevention efforts in favor of secondary or primary interventions may deprive the patient or client population of the only known effective interventions in favor of a possibly unproven and potentially ineffective prevention intervention of a higher level (e.g., primary). For example, if we abandoned established treatment of diabetics in factor of preventing diabetes, we would be abandoning known diabetics to death in favor of primary prevention interventions such as early diet control, that have not yet been shown to be effective. It we were to find in a number of years that dietary control in the early years had no effect upon the eventual development of diabetes, we would have allowed a number of people to die to no benefit for others. There is an ethical obligation to build higher level prevention programs on top of lower level prevention programs, rather than inventing the higher level programs as a complete substitute for lower level efforts. In days of limited funding of health care programs, these are very real issues.

Rather, given a limited resource base, efforts to design prevention efforts must be accompanied by efforts to continue to provide the services

at a lower prevention level (i.e., tertiary and secondary). Secondary and tertiary prevention should attempt to be as efficient as possible in order to provide funds for primary prevention efforts. If the primary prevention efforts are successful in this system of care, the volume of patients reaching the lower "tertiary" levels of the system, whose care is increasingly expensive as their illnesses get worse, should diminish over time--providing increasing resources for the higher levels of prevention and more services to more patients at a decreasing per/patient cost.

Continuity of Feedback: At every level of a health care system which offers prevention interventions, the need for the feedback of information is a primary requirement for continuity of effort. Results of prevention interventions must not only be studied, but these results must be used to modify existing and future prevention interventions. The system needs to be continually restructured in order to incorporate both positive and negative findings from past efforts. Without such feedback, the program runs the risk of becoming a juggernaut, with everyone knowing that the program is ineffective but no one knowing how to stop or modify it.

Feedback must be continuous in several dimensions. Feedback about outcomes of previous prevention interventions must become the basis for program modifications and future program planning efforts. However, the successes or failures of prevention interventions may also have significant implications for the scientific models of pathology and causes of disease processes. Unless these outcome data from programs based upon a particular theoretical model are fed back to the theoreticians, needed modifications or revisions of theory (which, after all, drives the whole prevention system) cannot be made. Nothing is sadder than seeing a program producing results that seem to disprove the basic theoretical model, yet being wedded to the theoretical model that has not changed. In these cases the program becomes a travesty, with work progressing even though the workers know the incorrectness or incompleteness of the model. This has taken place all too often in mental health and alcohol and drug programs, whose illness and treatment models are complex, and often poorly understood.

These feedback systems do not happen by accident. In fact, it may be far more comfortable to have no feedback system in a health care program. However, without adequate feedback systems the prevention efforts of mental health programs may be largely ineffective. As a result, feedback systems must be carefully structured into prevention programs as a part of their basic design.

Summary

A variety of models exist that can inform and strengthen efforts to devise effective mental health programs for Indians. Each of these models has unique strengths and liabilities. The JCAH model, while well designed, may be too expensive for existing funding and impractical for sparsely

populated areas because it depends upon centralized services. The office practice model is comfortable for newly-trained clinicians but may be ineffective in providing services to those who most need them and those who could gain the most from them. The consultation/liaison model is difficult and requires special skills and effort which would be beyond the scope of many Indian mental health programs. The inpatient model provides valuable shelter for the severely mentally ill from the rigors of the outside world, but risks "institutionalism" by patients. In addition, coping skills learned in the hospital may be difficult for patients to apply in the community. The Chinese "pyramid" model requires extensive training and career ladder opportunities that appear to be beyond the capabilities of federal and tribal personnel systems.

Prevention models offer powerful ways of conceptualizing Indian mental health systems. However, without adequate attention to measuring the effectiveness of prevention programs, these programs may waste resources by being ineffective. In spite of the tendency of health care planners to be seduced by the "common sense" prevention programs, careful attention to the continuity of design of prevention programs is needed to avoid these programs being harmful or ineffective.

All the models of mental health programs presented in this chapter may have something to offer Indian programs. None is sufficient to meet the needs of Indian communities for good mental health services in its own right.