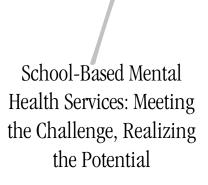
Current Status of School-Based Mental Health

There is a long history in this country, going back to the end of the 19th century, of providing mental health services to children in their schools. Now, as we enter the 21st century, there is an increased interest in and hope that SBMH services may play a larger role in better meeting the needs of the literally millions of children who have emotional disturbances and need mental health intervention. Through more effective implementation of these services, the academic and social/emotional outcomes for these children are expected to improve, leading to an adulthood that is healthier and marked by a better quality of life.

The literature reviewed and the program models described in this monograph reveal that the field of SBMH services can be characterized as fragmented, under-developed, and emerging. It suffers from confusion that comes from the different languages and terminologies used by the various agencies that provide SBMH, especially the education and mental health systems. On the other hand, there is a strong multi-disciplinary and multiagency presence in the field, there is a growing evidence base for specific programs, and a growing recognition of the need for a comprehensive, integrated approach in order to "scale up" the localized successes that emerge to a level that will have significant national impact. In this chapter we will recommend that a public health model approach be adopted to meet this need.

Among the many barriers that impede the fruition of SBMH's promise, financing issues play a major role. It may be surprising to many that over \$12 billion is spent annually on children's mental health services in this country. Unfortunately, there is a paucity of research on financing children's mental health services in general, and even less for SBMH services. This leaves many important questions unanswered concerning how these billions are spent. We know that the majority of children who receive any mental health service at all, receive it in their school. We also know that two-thirds of all schools use some IDEA funds to pay for SBMH services and Medicaid funds support



Through more effective

implementation of these services, the academic and social/emotional outcomes for these children are expected to improve, leading to an adulthood that is healthier and marked by a better quality of life. An analysis of federal policies reveals a common thread, the need to implement the "public health model" more fully. over half of all mental health services received by children. Finally, the few studies that have been conducted reveal great disparity between states in terms of the numbers of children who receive services that are funded by Medicaid as well as in the amount of money spent on them. Many schools have developed home-grown strategies with collaborating community agencies to blend the available pool of federal, state, and local funds in order to achieve maximum support for SBMH programs.

While the knowledge base describing the funding of SBMH may be sparse, we found no lack of policies bearing on SBMH. Most federal agencies that have some responsibility for the welfare of children have policy initiatives related to capitalizing on the potential advantages afforded by locating services in the schools. These federal policies are passed down to the states and ultimately local level bureaucracies.

Interestingly, an analysis of federal policies reveals a common thread: the need to implement the "public health model" more fully. This view is a central characteristic in policy reports ranging from special education (see the President's Commission on Excellence in Special Education, U.S. Department of Education-Office of Special Education and Rehabilitative Services, 2002) to mental health (the report of the President's New Freedom Commission on Mental Health, 2003). We view this as an encouraging prospect and support the use of the public health model as a framework for the implementation of effective SBMH services.

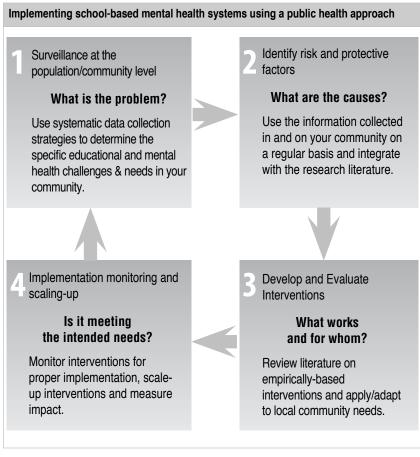
In spite of the wide-spread reference to the public health model, there are very few citations in which this model is fully elaborated. Consequently, before applying the model to SBMH, we present a brief overview.

The Public Health Approach

In many reports in the literature, the discussion of the public health model does not go beyond the emphasis on the development of strategies for prevention through the implementation of universal, selective, and indicated interventions. While prevention certainly is a fundamental principle, the model is richer and more encompassing. The public health model has its focus on populations rather than individuals, that is, society is the client (Strein, Hoagwood, & Cohn, 2003). The interaction of risk and protective factors in individuals are examined at the community level. Decisions are data-based and the goal of public health research is to develop specific interventions that are targeted toward enhancing protective factors and reducing the risk factors that lead to undesirable outcomes.

The public health model may be conceived of as having four components or steps (see Figure 7.1). The first component is a focus on the population as opposed to individuals. Surveillance, which entails defining

Figure 7.1



a specific problem through systematic information collection at the population level, is the major mechanism used in this component. The goal is to be able to describe the scope, characteristics, and the consequences of a problem facing the community. In the second step, the causes are identified through an analysis of the risk and protective factors, their correlates, and how these factors could be modified to decrease the risk. In the third step interventions are developed and evaluated. The interventions are on a continuum that includes health promotion/positive individual development, universal prevention interventions, selective interventions, and indicated interventions. The fourth step consists of activities to scale up implementation at a level that will have significant positive impact on the population. In this step effective practices are implemented and monitored and their cost effectiveness is evaluated.

This is a comprehensive approach aimed at reducing the negative consequences of a condition or behavior. However, it is also practical, makes

Surveillance entails systematic data collection to produce information for action.

use of multi-disciplinary involvement, and monitors costs and benefit. In the following sections each of the four components of the public health model will be described in terms of how a community may use this model to develop and implement a comprehensive system of school-based mental health services.

Focus on the Population

When a community decides to use a public health model to guide the implementation of school-based mental health services for its school age children and youth, the first step involves surveillance. That is, the community will seek answers to the question, "What is the problem in our community?" Surveillance entails systematic data collection to produce information for action. The community would want to know the degree to which the mental health needs of its children are being met, the gaps in service delivery, and the potential for effective SBMH services to contribute to meeting the needs. In a public health approach, the focus is on all the school-aged children, not just those with the most severe emotional disturbances or those who may be at-risk for suicide, for example. Consequently, the school district is a major player in the surveillance process as opposed to individual schools or classrooms.

Surveillance information can be derived from district-wide data, census information, county health department data, and other similar databases. This information will help produce estimates of the magnitude of the problem, possible geographic and demographic relationships, and lead to the development of strategies for improved outcomes. High quality surveillance in a community will facilitate progress to the next step that attempts to identify the risk and protective factors that contribute to the manifestation of undesirable conditions.

Risk/Protective Factors

In the public health model potential causes of problems are identified through analysis of risk and protective factors. It should be noted that risk and protective factors are not causes or cures themselves but rather are statistical predictors that have a theoretical and empirical base. Risk factors are personal characteristics or environmental conditions that have been empirically demonstrated to increase the likelihood of problem behavior. Some examples of risk factors are gender, family history, lack of social support, reading disabilities, and exposure to bullying. These factors vary in terms of their malleability to change. Protective factors are personal characteristics or environmental conditions that have been empirically established to interact with risk factors to reduce the likelihood of the occurrence of problem behavior. Examples of protective factors include caring parents and teachers, social competence and problem solving skills, schools that establish high expectations for all students and supply the supports necessary for all students to achieve these expectations, and the opportunity to participate in positive activities in school and the community. As in the case of risk factors, these protective factors vary in the degree to which schools and child-serving agencies can promote them, but they all have been empirically demonstrated to reduce the effects of risk factors.

As the research base on risk and protective factors expands, it is becoming clear that there needs to be a balance in addressing the reduction of risk factors, a deficit approach, and promoting protective factors, a strengthsbased approach. Schools and community partners need to keep in mind that the hallmark of the public health model is data-based decision making and a commitment to using the best available interventions, the next component of the model. Effective surveillance and information on the population will lead to the identification of local risk and protective factors. This will enable the community to apply and adapt the most relevant evidence-based innovations in the next step of implementing the model.

Develop and Evaluate Interventions

The past several decades have seen a plethora of innovative and empirically-based interventions developed and aimed at meeting the emotional and behavioral needs of youth. Most of these interventions and strategies are dependent upon schools for implementation. Efforts also have been made to distill these interventions into the level of prevention they address (i.e., universal, selective, indicated/treatment) and an assessment of the empirical strength of each. While we seem to have many options, we probably do not have a perfect match between the array of problems presented by youth covering the entire developmental continuum and empirically-supported approaches. Plus, it is widely recognized that many youth have multiple or co-occurring problems that are not adequately addressed by the current selection of interventions.

On the other hand, many of the effective strategies available are not being implemented. This is especially true in the area of universal prevention. Prevention is an area in which we have a long history of empirical support, see for example, Neurons to Neighborhoods (National Research Council and Institute of Medicine, 2000), and Greenberg et al. (2003). There are two school-based universal programs, PATHS and school-wide use of positive behavior support (PBS), that are beginning to be implemented in schools nationwide. We need to document the use of these strategies and their effectiveness in various types of communities.

Another challenge is to get empirically-supported selective and indicated programs integrated into schools. Communities are creating interesting strategies to increase the awareness of the various empirically-supported

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communities actively building school-based mental health services is the evaluation of these services and documentation of the student outcomes resulting from these services. programs. The state of Hawaii formed work groups to study empirically-based programs and determine which programs would be most applicable to their populations (Chorpita & Taylor, 2001; Chorpita et al., 2002). Ohio has a state-wide initiative to increase awareness of evidence-based practices (Ohio Department of Mental Health, 2001), as well as an initiative to increase the empowerment of teachers in delivering school-based mental health services (Paternite, 2003). A growing literature shows that many communities nationwide are active in building school-based mental health services (Vernberg, Jacobs, Nyre, Puddy, & Roberts, 2004). As reported in Chapter 6, close to half of all schools have multidisciplinary teams of various compositions that meet at least on a monthly basis and approximately 55% of schools report having a contract with an outside agency to provide mental health services.

What is missing from the communities actively building school-based mental health services is the evaluation of these services and documentation of the student outcomes resulting from these services. This type of information is critical to informing policy and practice. This is especially needed in the area of students with emotional disturbances (ED) who are served in special education settings. This population of students continues to experience low levels of academic achievement, high drop out rates, and few support services (Wagner & Sumi, 2006; Wagner et al., in press).

In our discussion of the development and evaluation of SBMH practices in this monograph, we have given space to a discussion of the system of care model (SOC) and PBS while pointing out that neither yet appears on any listing of evidence-based practice. As noted in Chapter 3, PBS is in its infancy as a systems strategy. Building the research base is not static, it evolves and we hope the field heeds the recommendations of Forness and colleagues (2005) to conduct tests of PBS that use empirical designs that meet criteria for establishing designation as an evidence-based program. In the case of the system of care, much of the evaluation and research has focused on systems level outcomes such as reduction in rates of residential placements and increased interagency agreements to pool funding of mental health services. In addition, there continues to be wide-spread support for SOCs at the practice level. SAMHSA continues to invest tens of millions of dollars to establish community-based SOCs. It may be that the ultimate contribution of SOC will be at the systems, rather than the client level. The SOC may provide the kind of "host environment" proposed by Zins and Ponti (1990), that is necessary to facilitate the implementation of evidencebased practices at a sustainable and scaled-up level. Communities that desire to implement a data-driven public health model of SBMH may find that the existence of a system of care in the community provides a level of interagency collaboration, and shared values and vision that are necessary to implement state-of-the-art evidence-based interventions for their children and youth.

Focus on Educational Outcomes. An additional challenge inherent in the delivery of school-based mental health services is the need to direct our attention to improving academic outcomes for students with ED. Until recently, little attention has been directed to the academic issues for students with emotional and behavioral disorders. This may be partly due to teacher preparation programs focusing predominantly on the social and behavioral characteristics and needs of this population and the misconception held by many educators that students must behave properly before academic learning is possible (Lane, 2004). Recent research suggests that, in some instances, students may act out to avoid aversive academic tasks—tasks that do not match the students' level, either being too easy or too difficult (Lane, 2004).

Other research is beginning to explore the therapeutic relationship of academic interventions and the reciprocal relationship between academic success and decreases in negative behavior. In a study of the efficacy of psychotherapy, Catron, Harris and Weiss (1998) revealed that students with behavior disorders who received academic tutoring improved their behaviors as much as the students who received individual counseling. In addition, there is a growing body of research that academic success is associated with a decrease in problem behavior (Gottfredson, Gottfredson, & Skroban, 1996; Lane, O'Shaughnessy, Lambros, Graham, & Beebe-Frankenberger, 2001; Lane et al., 2002). This research suggests that mental health professionals may need to come to the classroom to support teachers in instructional activities and classroom management to a greater degree than previously recognized.

Implementation Monitoring and Scaling up

The final step in the public health model addresses the issue of implementation. Recently, numerous efforts have been initiated to better understand the factors associated with the successful implementation of evidence-based practices in community-based settings. We are currently just beginning to understand the complexity of scaling-up innovative interventions for wide-scale community adoption. Both the National Implementation Research Network (Fixsen et al., 2005) and the Prevention Research Center for the Promotion of Human Development at Penn State (Greenberg, Domitrovich, Graczyk, & Zins, 2004) have conducted extensive reviews of the literature in this area and their conclusions are summarized below.

The research results are clear: providing training on innovative techniques to staff without adequate follow-up (e.g. coaching and supervision) is not effective and will result in flawed implementation and outcomes that do not match those achieved by program developers. While most program developers provide manuals and initial training sessions for their programs, very few offer mechanisms for the ongoing monitoring of implementation quality.

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providing training on innovative techniques to staff without adequate follow-up is not effective and will result in flawed implementation and outcomes that do not match those achieved by program developers. Without continued support of staff as they implement these new approaches and without the ongoing monitoring of implementation, most programs will not be implemented as planned and the promised outcomes will not materialize. Fixsen et al., (2005) suggest the key to successful implementation is a combination of supportive policies, community involvement, and an organizational infrastructure able to supply post-training support and conduct process and outcome evaluations (see Table 7.1).

table 7.1

Four factors to successful implementation (Fixsen et al., 2005)

Implementation is most successful when:

- Carefully selected practitioners receive coordinated training, coaching, and frequent performance assessments;
- Organizations provide the infrastructure necessary for timely training, skillful supervision and coaching, and regular process and outcome evaluations;
- Communities and consumers are fully involved in the selection and evaluation of programs and practices; and
- State and federal funding avenues, policies, and regulations create hospitable environment for implementation and program operations.

Greenberg and colleagues (2004) remind us in their review that for innovations implemented in schools, factors at the school-, district-, and community-level influence the quality of program delivery. Without support and active involvement of the community and district, most innovations adopted at the school level will not succeed. Additionally, along with collecting information on the level of implementation of an innovation, school personnel and practitioners should examine and record factors that substantially affect the quality of implementation in their setting and share this information with the developers of the program and the field. It is through the collection and dissemination of information on implementation in a variety of schools that the field will move forward. Daleiden and Chorpita (2005) present an extended discussion of how evidence-based services have been integrated into information system, performance measurement, and feedback tools. They offer an excellent framework for schools and communities to use as they start this important process.

The various factors associated with the proper implementation of innovative interventions will call for new roles for school staff and community workers, new partnership with parents and family members, and new activities for the various stakeholders involved in implementing SBMH programs. While the tasks may be formidable, it is achievable with good planning and attention to outcomes, and the results will be most rewarding.