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School-Based Mental Health Services in the United States: History, Current Models and Needs

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ABSTRACT: Children's mental health needs continue to be largely unmet, even when community services are provided. On-site mental health services in schools address unmet needs by improving access to, and relevance of services. As schools have increasingly been mandated to serve the needs of all children (including those who are emotionally disturbed) general health and mental health services have been increasingly placed in them. Although the provision of basic health care in schools began in the early part of the century, the concept of providing comprehensive services, in which mental health services are integrated into primary medical care, has only been implemented recently. We review the background of school-based mental health services, compare various models of service delivery, and highlight issues important to the future development and advancement of these services.

The estimated prevalence of psychiatric disorders among children is 17–22% with a diagnosable mental disorder, and 12% clinically maladjusted, according to the United States (U.S.) Office of Technology Assessment (1986). The OTA report stated that the most conservative estimate is that 7.5 million out of 63 million children are in need of mental health services; half of these, about 3 million, are thought to present serious disturbance. The OTA estimated that of the above numbers, only two million children a year received mental health

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treatment, reporting: "The majority of children with mental health problems fail to receive appropriate treatment. Many of the six to eight million children in our nation who are in need of mental health interventions receive no care; other children, perhaps 50 percent of those in need of treatment, receive care that is inappropriate for their situation." More recent statistics from the OTA (1991) indicate that 12% to 15% of adolescents present emotional/behavioral problems at levels warranting intervention, but less than one third of these youth actually receive mental health services.

Partly to address problems related to limited access to mental health services for most children, these services have increasingly been placed in schools in the U.S. After slow but progressive development, a movement is now underway in which a literal proliferation of school-based mental health services are being planned and implemented. Historically, the development of more general health services for students in schools set the stage for the initiation of mental health services. In the following, we provide a brief historical overview of the development of health, and then mental health services in schools.

THE DEVELOPMENT OF HEALTH AND MENTAL HEALTH SERVICES IN SCHOOLS

In the early part of the 20th century, the placement of nurses in schools began related to the realization that children in poor health cannot learn. Gradually, services were added in middle schools and high schools, and by 1980 school-based health services were institutionalized in the U.S., with over 45,000 nurses placed in schools. The general focus of these health services was on ensuring that students had complete immunizations, screening for vision and hearing problems, and referring children with more intensive problems for outside medical services (Lear, Gleicher, St. Germaine, & Porter, 1991).

Attention to adolescent health issues increased in the late 1960s and early 1970s when the population in the 15 to 24 age group increased markedly associated with the aging of the baby boom generation, with a concomitant increase in mortality for this age group (Lear et al., 1991). At least partially related to the increased focus on adolescent health issues, there were calls for the provision of *comprehensive* health services for teenagers in schools. Following some early efforts to initiate these services (see Porter, Avery & Fellows, 1974), the provision of comprehensive services began in earnest in the 1980s associated with the initiation and growth of school-based health clinics. The

school-based clinic movement began related to general concerns about the health of adolescents, and particular concerns regarding psychological and educational risks associated with adolescent pregnancy and parenting (Dryfoos, 1988).

By 1987, there were approximately 150 school-based clinics (SBCs) operating in junior and senior high schools throughout the country (Dryfoos, 1988). In 1990, Hyche-Williams and Waszak reported that there were 178 SBCs operating in junior and senior high schools in 32 states. More recently, a survey conducted by the Center for Population Options (1993) reported around 500 SBCs in almost every state in the U.S.

Reports of positive impacts of selected comprehensive school health programs (e.g., decreased teenage pregnancies and obstetric problems) led to endorsement by a number of professional societies (e.g., the American Academy of Pediatrics, the American Medical Association) for the continued development of school health centers (Lear et al., 1991). In its 1991 report, the OTA recommended expansion of SBCs as part of the U.S. Public Health Service's Healthy People 2000 program, which strives to make significant improvements in the health of our nation's children by the year 2000. The continued growth of SBCs has received support from both the Bush and Clinton administrations (U.S. Department of Health and Human Services, 1994).

A number of factors influenced the initiation and expansion of mental health services in schools. In some areas, these services have augmented existing health services (e.g., as part of SBCs) and in other areas, mental health programs have predated the implementation of comprehensive health services. These factors included: 1) rising rates of problems associated with risk taking such as teen pregnancy, sexually transmitted diseases (including HIV infection), and drug and alcohol abuse (Blum, 1987; Lear et al., 1991); 2) increasing levels of adolescent suicide (the second leading cause of death for teenagers) and homicide (the leading cause of death for black males between the ages of 15 to 24) (Puskar, Lamb, & Norton, 1990); and 3) drop-out rates that approach 80% in some urban areas (Rhodes & Jason, 1988). Widespread recognition that mental health programming is necessary to address these challenging problems provided a considerable boost to the development of school-based mental health services.

Legal mandates have also served to encourage the development of school-based mental health services. For example, Public Law 94-142, the Education for All Handicapped Children Act of 1975, states that each school system must provide an appropriate educational program for all handicapped children in the least restrictive setting possible.

This law strengthened the obligation of schools to provide appropriate educational services to children with emotional problems, leading to expanded mental health services for youth in special education (Thomas & Texidor, 1987). However, due to increasing costs of special education services and budget reductions in recent years, school systems have been looking for ways to reduce the number of students with emotional/behavioral problems who are placed in special education. One important mechanism to accomplish this end is to offer intensive mental health services to youth in schools through partnerships between educational and community mental health systems. Since these services are offered by the community mental health clinic, university or hospital, students (including those in regular education) can typically gain access to them much faster than special education services, and often brief treatments will address the presenting problems, which serves to avoid the labeling of the child as a "special ed" student.

It is important to note the distinction between school psychology services, which have existed for many years, and more comprehensive mental health services for students that have recently been initiated in schools. Partially related to requirements of PL 94-142 and associated legislation, the role of school psychologists is often limited to students who are placed in special education, and services primarily focus on assessment (with emphasis on intellectual and academic achievement testing), with ancillary foci of consultation with parents and teachers, and time-limited counseling (Conoley & Conoley, 1991; Thomas, 1987; Tingstrom, Little, & Stewart, 1990). Thus, more intensive treatment services (e.g., individual, group and family therapy) offered to all students (including those in regular education) by outside clinical therapists fill a significant void in school mental health services.

We now provide a review of various models of school mental health service delivery, beginning with programs associated with school-based health clinics.

REPRESENTATIVE PROGRAMS PROVIDING SCHOOL-BASED MENTAL HEALTH SERVICES

School-Based Clinics

Mental health services offered in school-based clinics (SBCs) occur in the context of a range of other health services including medical screening and physical examinations on site, treatment for accidents

and minor illnesses, and counseling for family planning and personal problems. Commonly, staff in SBCs include a medical assistant/receptionist, nurse practitioner or physician assistant, and a master's level clinician (usually a masters level social worker) to address mental health needs of the students.

Lear et al. (1991) reported on a project funded by the Robert Wood Johnson Foundation which assisted in the development of 23 SBCs in 11 states. Descriptive analysis of the programs indicated that mental health concerns were the second most frequent reason for visits to the health clinic (21% of visits) behind acute illness/accidents (26% of visits).

In Baltimore City, administrative staff from the Departments of Health (BCHD) and Education played a key role in the initiation and subsequent support of school-based clinics (Feroli et al. 1992). Impetus for the development of the clinics was related to recognition by these leaders of the intensive needs of teenagers in city schools (e.g., very high rates of adolescent pregnancy, sexually transmitted diseases, substance abuse, traumatization from violence, school failure and dropout). There are currently eight school-based clinics in Baltimore, placed in four middle schools, three high schools, and a middle/high school for expectant mothers. These clinics serve as the primary source of health care for many of the students, and even provide supportive medical services for problems such as diabetes and seizure disorders. In recent years, mental health services including various therapies, crisis intervention, and substance abuse counseling have been added to the clinics.

Other School Mental Health Programs

In addition to programs that operate in conjunction with SBCs, there are a number of programs not connected to health clinics that offer mental health services to students in schools. For example, a program that has been in the forefront of the development of these services is the School Mental Health Project of the University of California in Los Angeles (Adelman & Taylor, 1991). This program focuses on addressing psychoeducational problems to increase the likelihood of students' success in school. The Kindergarten and Elementary Intervention Program (KEIP) contains three primary components: 1) use of volunteer aids who work one-on-one with the students three to five hours per week in their classrooms providing support and assisting in problem solving, 2) provision of school-based discussion and support groups to

parents, and 3) consultation with teachers by mental health professionals on assisting and motivating targeted students.

The School-Based Youth Services Program of the New Jersey Department of Human Services provides a range of health (including mental health), recreation and employment services to students in high schools and vocational schools. All students in the schools can access program services, with around one out of three students choosing to do so. Mental health services, including individual and group therapy, and substance abuse counseling are the most frequently used services in the program (Dolan, 1992).

Increasingly, mental health programs designed to replicate those available to youth in community mental health clinics are being provided to youth in schools. In our program, we provide focused mental health evaluation; psychological and psychiatric consultation; individual, family, and group therapy; and referral of students for more intensive services (e.g., medication, inpatient treatment) in 12 Baltimore City schools. We also provide a range of preventive services for students who have not been formally identified with emotional or behavioral difficulties, such as classroom presentations on mental health issues, and support groups for students in transition (e.g., from elementary to middle school). Programs sharing this focus of providing intensive and preventive mental health services to youth in schools are operational in many other cities (e.g., Denver, CO; New Haven, CT; New York, NY; Memphis, TN), with formal reports on these programs beginning to be circulated at national level planning meetings.

An important point is that in any given area mental health services may be provided to students in schools through various funding mechanisms and program models. For example, in Baltimore City, programs are funded through at least five mechanisms: 1) monies from the Maryland Department of Health and Mental Hygiene (DHMH) for community mental health programs, 2) funds from the Baltimore City Health Department for SBCs, 3) funds from the City Department of Education, 4) combined funding sources (e.g., cooperative efforts by City and private agencies), and 5) foundation and federal research grants. However, there is considerable overlap in funding sources, and many of the local streams have state or federal support underpinning them. Typically related to funding streams, mental health programs have different constellations. For example, for the above streams 1 and 2, mental health clinicians operate in conjunction with SBCs as reviewed earlier, and receive most of the mental health referrals from health professionals in the clinic. In streams 3 and 4, clinicians are typically work-

ing without other health professionals, and therefore receive most of their referrals from teachers and other school staff. Obviously, there is considerable variability in research programs funded through stream 5. Our program at the University of Maryland operates with mixed funding streams, with services at schools funded by stream 1, 2, 3, *or* 4. While enabling mental health services in more schools, this mixed funding pattern creates administrative problems related to different contractual and reporting requirements for each of the funding streams.

We must emphasize that school-based mental health services are developing at such a rapid rate that our review has undoubtedly neglected a number of important programs nationwide. However, the above does provide a sample of programs based on various models.

EVALUATION OF SCHOOL-BASED MENTAL HEALTH SERVICES

Most efforts to evaluate school-based health and mental health services have been at the descriptive level. For example, the U.S. Department of Health and Human Services (1994) recently reported findings from an evaluation of seven SBCs in rural and urban areas of the U.S. The report highlighted the limited access to health and mental health resources for many of the students. Substance abuse and mental health problems were reported to be particularly prevalent; strikingly, half of the students in a Jackson, MS high school were estimated to have emotional difficulties that served to impair their school performance.

In terms of *treatment outcome*, there has been some limited evaluation of the impact of school-based *health* services (e.g., on the impact of reproductive health programs; Kirby, Waszak, & Ziegler, 1991), but evaluation of the impact of mental health services (other than services associated with grant funded research programs) has been scant.

We conducted a Literature review and found no studies evaluating the impact of school-based mental health services other than guidance counseling services (cf. Lavoritano & Segal, 1992). However, in a recently completed study, we (Weist, Paskewitz, Warner, & Flaherty; in press) assessed the treatment outcome of mental health services provided to high school students enrolled in a comprehensive school-based clinics in Baltimore. From students who used the health clinic, a group who received mental health services (n = 39) was compared with a group who received general health services (n = 34) on

measures of emotional distress (anger, anxiety and depression) and self-concept before and following treatment. Compared to students who received only general health services, students who received mental health services reported decreased depression and improved self-concept from pre to post testing. However, this study must be viewed as preliminary, since students were not randomly assigned to mental health versus general health treatment conditions, and some sociodemographic differences were detected between the groups (students in the mental health treatment group were slightly younger and more likely to be female). This pilot study will hopefully spur more controlled outcome investigations.

CURRENT PROBLEMS AND NEEDS OF SCHOOL MENTAL HEALTH SERVICES

As is evident from the foregoing discussion, a major deficiency in school programs has been limited program evaluation. In discussing school-based mental health programs, Barnett, Niebuhr, Baldwin, and Levine (1992) pointed out: ". . . outcomes often have been poorly documented because of the public demand for quick remedies. As a result, these programs consume time and energy of school staff without producing convincing results" (p. 246). There is a crucial need for well designed outcome research. In addition to comparing treatment groups with controls, various types of treatment should be compared. For example, there have been no studies comparing services received in school-based programs with those received in community mental health clinics.

A related problem is that the cost efficiency of various models of school-based mental health services has not been formally evaluated. Limited data that are available suggest costs of around $8,000 per pupil per year for children receiving special education services under the classification "severely emotionally disturbed" (Butler, 1988). Clearly, services provided by outside clinical therapists in schools cost much less than this amount, and the diversion of children from special education to these outside services is viewed as cost saving by special education administrators. Further, we have seen a decrease in referrals for special education services by around one third after outside clinical therapists are placed in schools. However, we cannot as yet document that this represents actual cost saving versus cost shifting. Efforts are needed to formally analyze costs of services provided to stu-

dents by outside clinical therapists as compared to mental health staff working in special education.

Ironically, schools may suffer from a multiplicity of programs that overlap but are not coordinated with each other. The result is unnecessary duplication of services in some areas but gaps in others. For example, the school and the SBC may both offer substance abuse programs, but neither offers a suicide prevention program. Alternatively, students may be receiving services from multiple providers, with none of the providers aware of this situation. We found that in the Baltimore City schools, for example, students could potentially receive services from a program designed to prevent school drop-out, a pregnancy prevention program, a substance abuse counseling program, the school's guidance counselor and psychologist, special education classes, and the local community mental health center, in addition to the mental health services offered by the school based health clinic. The other (more serious) side of this problem is the inability of many students to access any mental health services in their community. We have found that around 80% of youth presenting noteworthy behavioral/emotional problems upon referral for services in our program have had *no* prior mental health involvement. This statistic speaks to the value of providing mental health services in schools, that is, significantly improved accessibility of services for students who truly need them.

Both overlaps and gaps in mental health programs for youth may be attributable in part to deficiencies in planning and design, but are more likely due to inadequate funding for such crucial tasks as administration and program evaluation. In the face of pressing clinical needs and community pressures, funding sources tend to put all their money into salaries for direct services, the most immediately visible component of the programs. The initial funding for the Baltimore City programs, for example, did not include any funding for staff supervision, let alone administrative coordination or outcome measurement.

Still another problem has to do with case finding. Teachers are likely to refer children for externalizing behaviors such as talking out of turn, being out of seat, noncompliance, and disruptiveness (Conoley & Conoley, 1991). In contrast, internalizing problems such as depression, anxiety and social withdrawal do not consistently lead to referral for services (Ritter, 1989) as these behaviors are not as observable, and are less likely to interfere with teaching. This leads to lack of intervention for a large group of children who need it, even when the service is readily available. Our experience in the programs that operate in conjunction with primary health clinics is that youngsters with internalizing

problems are regularly referred by the health team, who screen all youngsters they see for depression and family problems, and will refer any youngster who repeatedly presents with somatic complaints without a physical basis. However, there are many youngsters who do not utilize mental health services offered through the health clinic. For example, in a recent study (Weist, Proescher, Freedman, Paskewitz, & Flaherty, in press), we found that only 4 of 14 intensive clinic users who reported high levels of emotional distress were actually receiving mental health services. As such, outreach efforts are needed to identify internalizing mental health problems in students in schools that do not have SBCs (and for students not enrolled in the clinic in schools that have them).

Lack of meaningful involvement of families has been a complex issue for school-based programs. In essence, school-based programs developed as schools took on more and more social welfare functions and began to attempt to do what had been the province of families. The provision of mental health services directly to students in schools, often with little or no family involvement other than to give consent for treatment, represents an acknowledgment that for many youngsters, families are not able to carry out basic support functions. There is a need to explore methods of increasing family involvement in the programs and to evaluate the effectiveness of interventions in the absence of family involvement.

An additional problem is the failure of most school-based health and mental health services to be integrated into their local communities. Many issues are germane here. For example, research driven mental health interventions are often conceived, planned and implemented by academicians who fail to seek guidance from local communities on aspects or targets of the intervention. Similarly, health and mental health services are commonly initiated with little, if any, meaningful input from community members. Another side of this problem is that even when services are developed with community input, they are often not effectively integrated with the array of available community resources and programs.

While comprehensive mental health services are being increasingly implemented in schools, because of the complexity of problems of high risk teenagers, there is a need to expand the range of services even further. Adelman and Taylor (1993) suggest that ideally, school mental health services should include the functions of: 1) direct intervention (e.g., providing evaluation or therapy services), 2) consultation (e.g., with teachers about classroom behavioral problems), 3) mental health

education (e.g., presentations to groups of students, parents or teachers on issues such as common mental health problems of adolescents), 4) outreach (e.g., developing close relationships with social service agencies in the area), 5) resource identification and development (e.g., enhancing resources for referral of students to address particular problem areas), and 6) networking (e.g., facilitating coordination of services by mental health providers who work within and outside of the school).

CONCLUDING COMMENT

After slow but progressive development for almost a century, school-based health and mental health services are now undergoing very significant expansion in the 1990s related to recognition by educators, health service providers, and policy makers of the important niche that these services fill. Schools are in many ways the ideal sites for providing services to address students' psychosocial difficulties. They provide a single point of access to services in a non-threatening atmosphere, and reduce barriers to meeting the needs of children and their families. School-based mental health programs are commonly among the first linkages that schools make to outside human services. After these programs are established, they often serve as a broker to other community services (Dolan, 1992). The health service delivery system will face increasing demands in the future as problems such as poverty, teenage parenthood, single parent families, exposure to violence, and abuse and neglect are expected to rise. The provision of comprehensive mental health services to youth in schools can serve to decrease the impact of these problems that are so costly monetarily, and in terms of human potential.

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