The Columbia TeenScreen™ Program: Providing Mental Health Checkups to Youth

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Addressing the Problem of Unidentified Mental Illness in Youth

In 2000, the Carmel Hill Center in the Department of Child and Adolescent Psychiatry at Columbia University launched a national initiative to identify untreated mental illness and prevent suicide in youth. We are working to accomplish this goal by collaborating with communities throughout the country to implement screening programs in schools and other settings that serve youth. Our mission is to ensure that youth are screened routinely for mental illness and the risk factors for suicide. Ideally, mental health checkups will be as commonplace as screenings for vision and hearing problems at school and for scoliosis and tuberculosis at pediatricians' offices.

The problems of unidentified mental illness and suicide in youth have reached crisis proportions. It is estimated that one in 10 American children and adolescents suffers from mental illness and experiences impairment, but only one in five receives treatment (OTSG, 2000). Suicide is now the third leading cause of death in 15- to 19-year-olds. A recent survey from the Substance Abuse and Mental Health Services Administration revealed that three million American youth are at risk for suicide, yet only 36% of them receive treatment (SAMHSA, 2002). In the last 15 years, a variety of new and effective screening tools and medications have been developed. Although we have the ability to find and successfully treat youth with mental illness, the unmet need for children's mental health services remains virtually the same as 20 years ago.

The Columbia TeenScreen™ Program

Mental Illness-Suicide Nexus. The Columbia TeenScreen™ Program was designed to address the problems of untreated mental illness and suicide in youth. It was developed 11 years ago in response to psychological autopsy research that revealed the most significant and predictive risk factors for suicide in youth. The study examined 120 youth from the Metropolitan New York area who had committed suicide. The results revealed that 90% of youth who commit suicide suffer from mental illness (Shaffer et al., 1996a). Among the boys in this sample, 60% had a mood disorder, 42% had an alcohol or substance abuse disorder, and 28% had made a past suicide attempt. Among the girls, 68% had a mood disorder and 50% had made a past suicide attempt. It was also shown that most (63%) of the suicide victims had been symptomatic for more than a year prior to their deaths. Information gleaned from this study was among the first to prove that suicide was not a random or unpredictable event in youth, as previously thought. As a result, new methods of prevention became an important area to explore.

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Identifying At-Risk Youth. A unique approach, screening youth directly for the risk factors associated with youth suicide, was then developed, the Columbia TeenScreen™ Program. The goal of the program is to identify youth who are suffering from undiagnosed mental illness and/or at risk for suicide and then help secure treatment for them. This is accomplished through a three-stage process:

1. ***Screening questionnaire:*** All youth who have parental consent, and who themselves assent to participation, complete a brief paper-and-pencil survey, the Columbia TeenScreen™ Questionnaire. This survey questions youth regarding the risk factors for suicide: depression, alcohol and substance use, and suicidal thinking and behavior. Research on the instrument reveals it to be highly sensitive, i.e. it misses very few teens at risk, but it is relatively non-specific, i.e. it identifies many false positives (Shaffer et al., in press; Shaffer et al., 1996b). Youth who are negative on the Columbia TeenScreen™ Questionnaire are then dismissed from the screening.
2. ***Computerized psychiatric interview:*** Youth who are positive are advanced to a second stage where they complete a computerized psychiatric interview, the Voice Diagnostic Interview Schedule for Children (Voice DISC) (Shaffer et al., 2000). The DISC instrument, which was first developed in 1979, is a DSM-IV based diagnostic interview for 9- to 17-year-olds that has the ability to screen for more than 30 mental health disorders, such as anxiety, mood, substance, and disruptive behavior disorders. The voice version was released in 1999 and it allows users to complete the interview independently, as the computer "speaks" the questions to the youth through headphones. If no DISC disorder, either positive or sub-threshold, or suicidality are present, then the youth is dismissed from the screening.
3. ***In-person professional evaluation:*** If these indicators are present, however, or if the youth requests a meeting with the clinician, he/she is then advanced to the third and final stage of the screening for an evaluation with a mental health clinician to determine if professional services would be beneficial. If further evaluation or treatment is recommended, the youth and his/her family are then connected with a case manager to help facilitate the referral process.

Evidence Base for the Program

The Columbia TeenScreen™ Program began as a research endeavor, as it was

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important to first determine if it could accomplish its goals. The program was tested on approximately 2,000 high school students, and it was proven that it did effectively identify at-risk youth. The study also revealed the program's ability to identify youth whose problems were not already known to school personnel (Shaffer et al, 1996b). In fact, only 31% of those with major depression, 26% of those with recent suicide ideation, and 50% of those who had made a past suicide attempt were known by school personnel to have significant problems and were receiving help.

A four- to six-year follow-up of 533 participants from the original TeenScreen™ study was conducted and found that the effects of high school screening extend into young adulthood (Shaffer et al., in press). This study revealed that the Columbia TeenScreen™ Program had identified 64% of the subjects who were currently depressed or suicidal or had made a suicide attempt since participating in the program. It can be deduced, then, that two-thirds of young adults who experience depression or suicidality could be identified as teenagers through mental health screening.

After the program was demonstrated to be effective and evidence based, it was expanded to a public health program for a number of schools in the Metropolitan New York area. Between 1991 and 1999, 24 projects were conducted and thousands of students were screened.

The National TeenScreen™ Program

In 2000, the program expanded nationally and took on the charge of screening every child in America. To date, 45 groups representing 23 states and the territory of Guam have been trained to implement screening programs. These programs can take place in a variety of settings, and typically target middle- and high-school age youth. Most screening programs take place in schools, as schools offer an opportune environment to reach large numbers of youth. Within schools, a variety of implementation models are available since lay people can administer both the Columbia TeenScreen™ Questionnaire and Voice DISC. For example, a school nurse or guidance counselor may conduct the first two stages of screening and then refer positive students on to the school social worker, psychologist, or school-based health center staff to complete the third-stage clinical evaluation.

The program's flexibility, however, allows implementation in other youth-oriented settings. Programs are currently taking place in juvenile assessment centers, residential treatment facilities, mental health clinics, juvenile justice facilities, drop-in centers, shelters, and summer camps.

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Community Outreach

Information Sharing. Our goal to screen every child is an ambitious one. To achieve this goal we recognized that developing community collaborations is essential. Our staff offers workshops and presentations at various conferences and we are beginning to work with the media to educate the public about the importance of early identification. Each month we field dozens of calls from mental health professionals and lay advocates about our screening program. We also have a web site, *www.teenscreen.org*, where a wealth of information is available, and we have developed a range of technical assistance and educational materials. Inquirers receive our "Tool Kit" after an exploratory conversation to determine their level of readiness and capability to implement a screening program. Our "Tool Kit" includes:

- A four-page overview of the program;
- *Helping Troubled Youth*, a monograph that gives an in-depth description of the structure of the screening program;
- Brochures about the program, suitable for sharing with other members of the community, including parents and schools;
- Frequently Asked Questions and Answers;
- One-page summaries of the screening and assessment tools we use and the research behind them;
- A Teen Suicide Fact Sheet developed by Columbia University's Division of Child and Adolescent Psychiatry; and
- *Help and Hope*, a booklet that discusses the psychiatric disorders that affect children and adolescents and how they can best be treated and managed.

On-Site Local Collaboration. Our experience in working with 45 local sites has taught us that each community is unique. We have structured the community collaboration process to enable us to offer maximum flexibility. Some schools have many on-site resources and strong parent and teacher involvement. Others are in rural areas or educating disadvantaged children and must find ways to add "one more thing" to the many competing priorities. Our staff has developed descriptions of a range of implementation models, based on real-world experience. We work with the specific local needs and concerns to craft a plan that can succeed. Often this means a smaller pilot project is the first step, usually screening a few hundred kids. This approach permits local partners to "work the bugs out" and increases community awareness and support.

Grant Funding. Some sites are able to offer interest and enthusiasm but need a small grant to get things moving. We are fortunate that we can provide up to $10,000 upon approval of a simple grant request. This funding can be used to support education and outreach in the community, volunteer expenses, equipment purchases, and miscellaneous local start up costs. We also offer all sites consultation, on-site training, screening tools and materials, and technical assistance free-of-charge.

Ongoing Program Evaluation Strategies

Research Rationale. Studies of the Columbia TeenScreen™ Program in the New York area have demonstrated the validity and reliability of the TeenScreen™ and DISC instruments, as well as the program's effectiveness at identifying teens in need of mental health services (Shaffer et al., 1996b). Within the past two years, different schools across the country have begun to shape the Columbia TeenScreen™ Program according to their own needs and abilities. It has become apparent that the schools implement the program based upon the amount and types of resources available to them. Hence,

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cost is a significant factor in how each site determines the number of adolescents to screen, the number and types of personnel who will run the program, the amount of equipment and materials to use, and how long the program will last. For instance, sites with moderate levels of available resources may have the capacity to implement the program through a school-based health center or student assistance program, whereas sites with fewer resources may recruit community volunteers or establish an internship program to reduce program costs. Sites may also differ on the number of adolescents they can screen and the amount of time and equipment they can devote to the task.

What have emerged are unique "models" for implementing the program based on the methods schools have developed in order to successfully put into operation the screening procedures within the constraints of their budget. To date, sites have provided anecdotal feedback about the way they run the screening program, as well as their satisfaction with the process and the success of their implementation. This feedback is important to the continued growth and dissemination of the program. Our recent research efforts focus on a process evaluation of the implementation models that have been developed at sites in different parts of the country. We propose to evaluate and describe the unique implementation models based on resource allocation.

Model Evaluations. The primary purpose of our research is to evaluate the cost efficiency of different implementation models having either moderate or low available resources. Distinct models will be characterized so that we can help new sites determine the best model for their needs. These program evaluations will characterize each model according to how much it would cost to screen a single adolescent, as well as allow for the calculation of total projected costs for screening any number of teens over a specific period of time. This will help new screening sites to determine the implementation model best suited to their needs. The goals of our program evaluation efforts are to make the Columbia TeenScreen™ Program:

- Easy to implement independently by a school or other institution;
- Effective at identifying at-risk teens needing treatment;
- Cost efficient according to available resources; and
- Adaptable to various settings and resource capacities.

Additionally, the current program evaluations are collecting information on how satisfied the school and agency personnel are with the program. We will also evaluate attitudes of the school personnel toward the program and attempt to replicate earlier find-

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Policy Agenda

Making the Need Visible

As we become increasingly involved in building community connections, the urgent need for our program becomes ever clearer. Former Surgeon General David Satcher in his ground- breaking "Call to Action for Children's Mental Health" (OTSG, 2000) specifically urged adoption of universal child and adolescent screening for mental disorders. Sound public health principles teach us that early diagnosis and effective treatment is the best way to reduce suffering and disability. We find that our local leaders are eager to support our initiative to identify kids at risk. A larger policy agenda is recognizing that until the unmet need for treatment is made visible, we cannot reasonably expect our policymakers to provide needed service dollars.

Our Washington staff helps us engage legislators at both state and federal levels. Once a screening program is implemented, we visit the federal representative and senators to inform them of this unique initiative in their district. We encourage the officials to visit their local screening site and become familiar with the implementation team. We ask our communications staff to help gain positive media coverage in local areas when the TeenScreen™ effort begins. To politicians, it makes a good story and a fine photo opportunity. For the local team, the interest of policymakers helps keep the program growing. Over time, the awareness and value of early identification through school-based screening will help assure funding for services and public health supports for treatment. Many elected officials are especially pleased to note that the Mental Health Check Up for Kids Campaign is working to move research into practice. As the investment in National Institutes of Health (NIH) science has nearly doubled over the past decade, federal leaders are seeking tangible public health benefits from this investment. Our screening models, firmly based in research, offer proof that our nation can translate the advances in knowledge into improved lives for children and families. And especially in the wake of the September 11 terrorist attacks, concern for the mental health of youth is higher on the nation's health agenda.

National TeenScreen™ Partners.

Our strategic plan for national dissemination of screening for mental disorders requires us to work closely with organizations that have a community presence. We have made a point of linking with grass roots advocacy organizations like the National Alliance for the Mentally Ill, the National Mental Health Association, the American Foundation for Suicide Prevention, and the National Depressive and Manic-Depressive Association. We also are connecting with key professional groups including the American Academy of Child and Adolescent Psychiatry, the National Association of School Psychologists, the School Social Work Association of America, the National Assembly on School Based Health Care, the Center for Health and Health Care in Schools, and the National Academy for State Health Policy.

One of our most efficient strategies has been to link up with state mental health officials. Several state mental health commissioners have been strong partners in helping us accelerate the dissemination from one site to many across the state. These public officials are eager to forge ties in the community and are often pleased to support a science-based prevention program. Many publicly funded community mental health centers are already working with schools and offer treatment to seriously emotionally disturbed children and adolescents. In a number of states there are new commissions focused on youth suicide, which offers our program an important base of support. And President George W. Bush recently named the "New Freedom Commission on Mental Health" to address service and treatment challenges. Each of these public policy opportunities gives us a chance to reach key decision makers and leaders. ■

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ings that the program is effective at identifying teens needing mental health services. The data from our program evaluations will be utilized to communicate to grassroots community organizations, school districts, and policymakers that "the Columbia TeenScreen™ Program is clinically effective, cost efficient, and valued by the schools using it."

Conclusion

Untreated mental illness and suicide in youth are public health crises. The Columbia TeenScreen™ Program is an effective, evidence-based way of identifying and assisting youth with these problems. It is our hope that mental health check ups for youth will become as routinely implemented and accepted as physical health screenings and checkups. The Columbia TeenScreen™ Program is seeking partners from throughout the country to help us reach this large and important goal. Groups that are interested in implementing screening programs in their communities are provided with free consultation, on-site training, screening tools and materials, technical assistance, and, in some instances, small grants. We currently do not have the resources available to treat all of the children who would be uncovered through universal screening. We hope, though, that the results of our national sites and the evidence from our research will help demonstrate the need for additional mental health services for youth.

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