The growing mental health needs of students at colleges and universities continue to garner considerable attention as well as challenge institutions of higher education (IHEs) regarding how to respond. Providing access to mental health services on campus is one key component to responding to these issues, however, it is not sufficient. An effective response requires a broader public health approach that focuses on reducing the risk of suicide and promoting mental health for the entire student population. This article will examine various public health approaches to suicide prevention and mental health promotion and will outline Cornell University’s broad-based framework applicable to any IHE.

There is growing evidence that more students are coming to Institutions of Higher Education (IHEs) with complex mental health challenges. In the National College Health Assessment (2006), 4 in 10 students reported that they were unable to function due to depression, 1 in 10 reported seriously considering suicide, and 1.3% reported having attempted suicide. The Center for Disease Control’s Youth Risk Surveillance: National College Health Risk Survey reports that more teenagers and young adults die from suicide than from all medical illnesses combined. Even more troubling for IHEs, the suicide rate peaks among young adults aged twenty to twenty-four. A completed suicide is tragic and devastating for family, friends, and the campus community. The provision of mental health services is an essential component in responding to this reality. Schwartz (2006) in a review of college student suicide in the United States found that counseling centers reduce the suicide rate for the clients they see to one sixth of what it would be if the students were not in treatment. However, even when students are in treatment it is very difficult to predict a specific suicide (Kanapeaux, 2004) and the majority of students reporting the highest levels of distress do not seek treatment (NCHA, 2006).

Effective treatment is not enough. For an IHE to respond effectively it must examine ways to implement a broader public health approach that focuses on reducing the risk of suicide and promoting the mental health for the entire student population. This article will examine ways to shift this risk curve for all students, by examining public health approaches to suicide prevention and mental health promotion. The article will outline a broad-based public health framework developed and implemented at Cornell University. The discussion of this framework will include suggestions for adaptation to any IHE.

A public health approach is best defined by “Rose’s Theorem,” named for British epidemiologist Geoffrey Rose, which states, “...a large number of people at small risk may give rise to more cases of disease than a small number who are at high risk.” This theorem is highly applicable to student suicide and mental health. All of us struggle with events and environmental stressors that can place us at risk of experiencing mental health challenges. A public health approach seeks to modify those environmental factors to decrease risk for the entire population. The goal of prevention strategies is to intervene before a person gets to a place of great risk. Murray Levine, a distinguished service professor of psychology and adjunct professor of law at the University at Buffalo, summarized this approach by saying, “Prevention goes beyond changing individuals—it changes cultural norms.”

How do we go about changing cultural norms at an IHE? In a landmark article, Nation et al. (2003) outlined nine principles of effective prevention programs. First, the program should be comprehensive. Strategies ideally include multiple components and affect multiple settings. Second, they should employ varied teaching methods including some type of active, skills-based component. Third, there should be sufficient dosage so participants are exposed to enough of the activity for it to have an effect. Fourth, the effort must be theory driven, meaning strategies should have a scientific justification or logical rationale. Fifth, the program must be based on positive relationships, meaning programs should foster strong, stable, relationships between students and the faculty and staff in the community. Sixth, interventions must be appropriately timed (developmentally), in order to have maximal impact in a participant’s life. Seventh, the program should be socio-culturally relevant and tailored to fit students’ cultural beliefs and practices as well as the local campus and community norms. Eighth, there should be some outcome evaluation to determine whether a program or strategy worked. Finally, there should be well-trained staff that are sensitive, competent, and have received sufficient training, support, and supervision to implement the program.

These principles were applied in one of the only outcome studies conducted on a suicide prevention program, a program implemented by the United States Air Force. It included the surveillance of fatal and non-fatal self-injuries, mental health screening, messages from senior leaders, community training, public affairs initiatives, career development education, primary prevention activities for mental health professionals, integrating community preventive services, gatekeeper training, critical incident stress management, and targeted interventions for predictable high stress events. Outcome evaluation of this program compared 5-year cohorts before and after the program was implemented. There was a 33% relative risk reduction for suicide. Reductions ranging between 18% and 54% were reported for other outcome measures. These risk reduction percentages were highly significant and provided evidence that a population-based strategy can be effective at decreasing the mean population risk for suicide as well as other relevant risk factors (Knox, Litrs, Talcott, Feig, & Caine, 2003).

Shortly after this study was published, staff at Cornell University began to examine ways to develop a comprehensive suicide prevention and mental health promotion strategy that would be applicable specifically to an IHE. We worked with and provided feedback to The Jed Foundation and the American Foundation for Suicide Prevention when they developed their comprehensive model (see Figure 1) as a resource to IHEs. The model includes components similar to the Air Force such as identifying students at risk, increasing help-seeking behavior, providing mental health services, following crisis management procedures, restricting access to potentially lethal means of suicide, providing developmental and medical health services, delivering coordinated crisis management, and restricting access to lethal means of suicide.

**Foster a Healthy Educational Environment**

One of the most important ways to foster a healthier educational environment is to get a commitment from senior leadership at the IHE that mental health promotion and suicide prevention is a priority. One manifestation of this commitment is the development of a campus mental health council charged with the purpose of regularly examining relevant mental health issues on campus.
These councils are often composed of faculty members, administrators, and students and their conversations can effectively raise the consciousness of people on the campus and shift the larger culture. The Provost or President calling on faculty members to examine the classroom environment including grading practices, restructuring the academic calendar, examining diversity issues related to respect and inclusion, and reviewing academic advising systems can have a strong impact on the overall educational environment. IHEs can also encourage students to engage in grassroots efforts to address issues related to the educational environment. Student advocacy groups, like Active Minds, develop and support student chapters around the country to help reduce stigma on campus and provide activities that can shape the larger campus environment in a healthy way.

**Promote Life Skills and Resilience**

IHEs are distinct communities that provide a broad range of services to their students—housing, dining, health care, and many others. This creates the unique opportunity to develop programs that encourage students to develop skills in a variety of non-academic areas. The primary way to promote life skills and develop resilience in the face of environmental stressors is to focus on training and experiential programs that enhance social connectedness, developing study, time and stress management, and leadership skills. All of these combined can help foster resilience among students and shift behavioral norms to lower overall risk of suicide (Whitlock et al, 2010).

**Increase Help Seeking Behavior**

Increasing help seeking behaviors among students at greatest risk is one of the most effective ways to reduce suicide risk. As previously mentioned, Schwartz (2006) concludes counseling centers reduce the suicide rate for clients to one sixth of what otherwise would be expected. He believes that this degree of effectiveness exceeds the benefits of means restriction efforts such as banning firearms. Modeling is a particularly effective way of reducing the stigma of help seeking. If a student or faculty member is willing to report a successful personal experience with counseling this can have a significant impact on a campus that values academic achievement. At Cornell we developed a video called “Real Students, Real Stories” where faculty staff and students talk about their struggles and how they sought help from various resources. Groups like Active Minds and peer counseling programs can also normalize help seeking by offering strong messages of peer acceptance. Finally, implementation of the Suicide Prevention Resource Center’s Interactive Screening Program can be an effective way to reach students through electronic communication, and is applicable on any campus.

**Identify People in Need of Care**

Despite the above interventions, some students in need will not take the initiative to get help. In these cases a complimentary strategy is to educate all members of the community about ways to identify struggling students and connect them with resources. At Cornell we have developed a series of videos called “Notice & Respond,” in which professors and staff members are confronted with a troubled student. The videos depict initially hesitant faculty and staff successfully connecting with and relaying information about campus resources to a distressed student. A facilitated discussion of the videos includes an acknowledgement of the understandable ambivalence inherent in such interventions with students and how this process is relevant to their position on campus. The videos are shown in faculty and staff meetings as well as at training sessions for teaching assistants. We have also developed a similar video entitled “Friend to Friend” showing students in a similar situation, struggling with how to offer support and direct a fellow student to appropriate resources. After each showing a facilitator engages the audience in a conversation about themes and support resources at Cornell. These sessions have proven effective in conveying the importance of the role of each member of the community in supporting students.

Other institutions have similar programs, such as the Campus Connect program at Syracuse University. Other IHEs have purchased programs from organizations such as “Kognito” (www.kognito.com), which offers interactive games and simulations to identify distressed students, or “Question, Persuade, Refer” (QPR) (www.qprinstitute.com), which trains campus members specifically in suicide prevention.

At Cornell we developed complimentary web and print materials including handbooks for faculty and staff that provide basic information about mental health, offer community members’ perspectives, and list local resources. These handbooks can be found at: http://dos.cornell.edu/faculty_bridge.cfm. We have also developed an outreach program called Let’s Talk staffed by Gannett Health Services psychologists and social workers. This program provides easy access to informal confidential consultations scheduled for various walk-in sites across campus. More information about the program can be found at http://www.gannett.cornell.edu/services/counseling/caps/talk/index.cfm.

Gannett provides another approach, Community Consultation and Intervention, which dedicates several psychologists to provide consultation to key campus partners such as academic advisors, faculty, and residence life staff. These psychologists provide direction around difficult student situations, training, advocacy, and case-management services, as well as crisis intervention.

A final component, now a standard practice on many campuses, is a student of concern/threat assessment team. These teams work to bridge departmental separation through regular meetings where standard case management decisions are made regarding students with behavioral concerns. More than 85 percent of counseling center directors’ reports have some type of team that examines threats, provides behavioral interventions, or offers student support on their campuses (AUCCCD, 2010).

**Provide Mental and Medical Health Services**

At Cornell, we have been fortunate to be able to increase staffing levels to meet increased student demand. IHEs across the country report growing numbers of students seeking care with increasing levels of pathology. This situation leads many IHEs to question what constitutes an adequately staffed counseling service. The International Association of Counseling Services (IACS), an accrediting body for many college and university counseling services, suggests having one counselor for every 1,000 to 1,500 students. That ratio is an excellent foundation, but does not consider a number of relevant variables, such as whether or not the institution is located in a rural or urban environment, alternative support resources, and other factors. Urban environments generally have more referral options, and students may be more likely to seek out those resources on their own. Urban areas also provide more options for off-campus psychiatry services, an important factor to consider when deciding whether or not to make those services available on campus. Other variables include the size of the institution and its public or private status. Small private colleges tend to have different expectations among students, alumni, parents, faculty and staff. A ratio of one counselor for every 500 to 700 students may be appropriate, whereas a larger state institution may be able to meet the demand with one counselor for every 2,000 or 2,500 students.
Benchmarking data at comparable institutions is helpful in determining the best counselor-to-student ratio for a specific IHE.

Another key question related to counseling services is how those services are provided. In the past decade Cornell started offering brief assessments over the phone, thus allowing therapists to make determinations about students most in need of care. We have also integrated offering of phone and walk-in assessments in the evenings and on weekends.

A final consideration is the relationship of the counseling service to the health service. An integrated approach to treating whole students opens the door for primary care settings to be an entry option to counseling services for ambivalent students. At Cornell, we screen for depression, alcohol abuse, and anxiety in primary care visits and encourage collaboration among treatment providers through interdisciplinary teams.

**Deliver Coordinated Crisis Management**

When a crisis does happen on campus it is very important to have a coordinated response. The 24/7 availability of the IHE health and counseling staff and their maintenance of a strong working relationship with the mental health unit at the local hospital or hospitals are essential for this coordinated response. If the community has a local suicide hotline, this can augment the campus network of support. At Cornell we have a crisis management program based in student affairs with support staff across the university serving as point people whenever there is a student crisis, death, or suicide. These individuals coordinate travel arrangements with families and manage other logistical issues related to the crisis. A critical component of Cornell’s response is the Community Support Team. This team is comprised of student and academic support staff, religious life staff, and mental health professionals. The purpose of the team is to arrange community support meetings to share information, begin the grieving process, and offer support resources to the community. Specifics of this team’s functioning are outlined in Meilman and Hall (2006).

**Restrict Access to Means of Suicide**

The final component of a comprehensive approach is restriction of access to lethal means to complete suicide. The Harvard School of Public Health on its Means Matters web page states, “A number of studies have indicated that when lethal means are made less available or less deadly, suicide rates by that method decline, and frequently suicide rates overall decline. This has been demonstrated in a number of areas: bridge barriers, detoxification of domestic gas, pesticides, medication packaging, and others.” They go on to state, “While some suicides are deliberate and involve careful planning, many appear to have an impulsive component and occur during a short-term crisis,” advancing the argument for the importance of means restriction.

On most campuses, this means restricting access to high places (such as rooftops, windows, and balconies), prohibiting firearms or offering lockers for gun owners to store their firearms, and closely tracking, monitoring, and controlling access to toxic substances found in laboratories, pharmacies, and other departments. At New York University plexiglass barriers were erected in the Bobst Library tower after several suicides. At Cornell, this has meant focusing on erecting barriers on the bridges and gorge edges that surround our campus. Jumping deaths have accounted for 48% of Cornell student suicides over the last 20 years and we decided it was crucial to erect these barriers after three students jumped to their deaths within a one month period. This final step was essential and had been a gap in Cornell’s comprehensive suicide prevention approach.

This framework as well as the resources that support it can serve as a guide to other IHEs as they develop their own comprehensive approaches to preventing suicide and promoting the mental health of all students, staff, and faculty. As more schools develop these approaches there will be more opportunities to study their effectiveness. Though all IHEs continue to confront challenges around student mental health issues, many schools are realizing that each member of the community has a role in changing the cultural norms on his campus.

**References**

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