Reaching Graduate Students at Risk for Suicidal Behavior Through the Interactive Screening Program

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PLEASE SCROLL DOWN FOR ARTICLE
Suicidal behavior is a significant concern among graduate students. Because many suicidal graduate students do not access mental health services, programs to connect them to resources are essential. This article describes the Interactive Screening Program (ISP), an anonymous, Web-based tool for screening and engaging at-risk graduate school students. We include qualitative responses from participating graduate students providing information on their symptoms or circumstances, desire for treatment, and gratitude for services. Concluding remarks highlight ISP’s benefits for graduate students and ways to implement this protocol for other graduate student populations.

KEYWORDS at-risk graduate students, referrals, screening, suicide

Data on the mental health concerns, including suicidal behaviors, of university students suggest that it is imperative that institutions of higher education find new and creative ways to reach out and offer relief to them. According to the Centers for Disease Control and Prevention, suicide is the third leading
cause of death for young adults in the United States (Centers for Disease Control and Prevention, 2012). The Big-10 Suicide Study, which examined suicides at 12 Midwestern universities between 1980 and 1990, found an overall student suicide rate of 7.5 suicides per 100,000 (Silverman, Meyer, Sloane, Raffel, & Pratt, 1997). Further, the highest suicide rates were found among students enrolled in graduate school and those over the age of 25. Among graduate students, the rate of suicide per 100,000 was 9.1 for women and 11.6 for men, compared to 3.4/100,000 for undergraduate women and 9.1/100,000 for undergraduate men.

More recently, a large epidemiological surveillance study of undergraduate ($n = 15,010$) and graduate ($n = 11,441$) students at 70 colleges and universities found that 4% of graduate students acknowledged they seriously considered suicide in the prior 12 months (Drum, Brownson, Denmark, & Smith, 2009). Of those who seriously contemplated ending their lives, 90% had a specific plan, most commonly involving overdose. Among graduate students with serious suicidal ideation, 8%—about 0.3% of all graduate students—reported making a suicide attempt, with over a quarter of these requiring medical care (Drum et al., 2009).

Data from surveys of student mental health conducted on two University of California campuses identified somewhat larger percentages of graduate students who reported suicidal ideation and behavior. On the Berkeley campus, 10% of the 3,121 graduate student respondents reported seriously considering suicide in the previous year, slightly higher than the percentage of undergraduate students from other studies, and 0.5% of graduate students had attempted suicide during that same period of time (Madon, 2006). On the Irvine campus, a survey of the mental health of 1,025 graduate students revealed that 30% of these students had contemplated suicide at some point in their lives and 8% had attempted suicide; no past year data were available (Louden & Skeem, 2008). Not surprisingly, lifetime rates of suicidal ideation and attempts as reported in this study were higher than rates in the prior year as reported in the previously mentioned two reports.

There is considerable research evidence that emotional distress among graduate students is both widespread and undertreated. One study of 3,121 graduate students found that 45% of the respondents had experienced significant emotional distress over the previous 12 months, and 58% said they knew a similarly distressed fellow student (Hyun, Quinn, Madon, & Lustig, 2006). A quarter of all graduate students, however, were not aware of counseling services on campus. Only half of those who were aware had considered seeking counseling, and slightly less than one third (31%) had utilized services since starting graduate school. Female graduate students were more likely than their male counterparts to be aware of and utilize mental health services (Hyun et al., 2006).

In addition to male gender, other demographic characteristics found to be associated with low levels of utilization of mental health services among
both graduate and undergraduate students include low socioeconomic background, Asian or Pacific Islander ethnicity, a lack of perceived need, lack of awareness of services, lack of insurance coverage and skepticism about treatment effectiveness (Eisenberg, Golberstein, Gollust, & Hefner, 2007). Additional barriers to mental health service utilization identified among professional school students include time constraints, lack of convenient access, confidentiality concerns, and a desire to handle their problems on their own (Guille, Speller, Laff, Epperson, & Sen, 2010). Further, one study found that the overwhelming majority of graduate students who worked in off-campus professional centers would not travel to the main campus to seek counseling services (McCarthy, Bruno, & Sherman, 2010). Graduate students’ reluctance to seek mental health services may have serious consequences, ranging from dropping out of school to suicidal behavior (Turner & Berry, 2000).

To better access students in distress, particularly those considering suicide, and to address barriers to seeking mental health assistance, the American Foundation for Suicide Prevention (AFSP) developed the Interactive Screening Project (ISP), formerly known as the College Screening Project. First implemented in 2002 in partnership with two participating universities, the ISP is an interactive, anonymous, Web-based method of identifying students with untreated mental health concerns, encouraging them to get help, and connecting them with appropriate mental health services on or off campus. Assuming that often strongly held beliefs, attitudes, fears, and concerns about treatment prevent many distressed students from seeking mental health support, the ISP reduces these barriers by ensuring anonymity in students’ online communications. Anonymous online screening is consistent with the preferences of graduate and professional school students, who are partial to anonymous surveying of mental health symptoms (Levine, Breitkopf, Sierles, & Camp, 2003). In 2013–2014, the ISP is being implemented in over 70 U.S. colleges and universities, many of which are targeting graduate and professional students (American Foundation for Suicide Prevention, 2013).

The effectiveness of the ISP for undergraduate students has been documented in a 3-year study of undergraduates on two southeastern campuses: a private, urban university with an undergraduate population of 6,000 and the main campus of a large state university with 17,000 undergraduates (Garlow et al., 2008; Haas et al., 2008). Overall, about 8% of students invited to participate in the program submitted an online Stress and Depression Questionnaire, with over 90% of respondents indicating a clinically meaningful level of emotional distress. Most students with moderate to severe levels of depressive symptoms and/or current suicidal ideation were not currently receiving mental health services. About 40% of such students engaged in anonymous online dialogues with the counselor, 20% attended an in-person evaluation session, and almost 14% entered treatment as suggested. Students who engaged in the online dialogues with a counselor
were three times more likely than others to receive in-person evaluation and treatment.

In one medical school where the ISP has been implemented as part of a Suicide Prevention and Depression Awareness Program, the program has been well received and garnered an overall response rate of 13% among medical students and residents (Moutier et al., 2012). Data from this study revealed relatively high rates of risk for depression and suicidal behavior in the target population, as well as an openness to receiving mental health referrals from the ISP counselor. At the present time, however, no data have been published on the outcomes for the ISP for graduate and professional students in disciplines other than medicine.

Given the documented levels of emotional distress and suicide risk among graduate students overall, not only medical students, and the reluctance of many of them to utilize mental health services, the ISP would appear to have considerable potential for this population. No data have been published on the outcomes for the ISP for graduate and professional students in disciplines other than medicine. The purpose of this report is to present findings about the clinical utility of this anonymous online screening and referral program in a general graduate student population.

ISP IMPLEMENTATION

At Emory University, the ISP was implemented through a campus-wide suicide prevention program, Emory Cares 4 U, which was funded through a Garrett Lee Smith Grant from the Substance Abuse and Mental Health Services Administration. In addition to the ISP, program components included: building a campus-wide suicide prevention coalition; conducting gatekeeper training; creating an educational Web site for students, faculty, staff, family members (www.emorycaresforyou.emory.edu); offering educational programming; and expanding the peer-run mental health hotline (Kaslow et al., 2012). The program was administered by a leadership team that worked in close collaboration with key graduate school administrators.

Approximately monthly for 9 months during the 2010–2011 academic year, 16 graduate school departments were engaged in the ISP process. Departments were listed in alphabetical order, and then divided into groups based upon the number of enrolled students. Between 100 to 300 invitations were sent each month to individual graduate students in those departments. For example, in one batch, 172 students in the following departments were sent invitations: Art History, Anthropology, Behavioral Sciences and Health Education, and Biochemistry/Cell and Developmental Biology. During the time period of the active outreach to graduate students, the ISP counselor
devoted approximately 5 hours each week to services associated with the ISP protocol, including engaging in the online dialogues and meeting with students in person to assist with referrals.

To increase response rates beyond those found in previous studies, the Emory protocol also included administrative and peer support for the ISP program in the form of a number of preparatory steps before students were invited via e-mail to participate in the ISP. First, we provided informational presentations about the program to key administrators, faculty, and graduate student leaders. The goal of these presentations was to increase buy-in and connect the ISP outcomes to greater aspirational goals for the entire university community and to specific benefits for various constituency groups. Second, the Dean of Academic Affairs of Graduate Studies sent a personalized letter to the Graduate School Heads and Directors of Graduate Studies for relevant departments 1 week prior to the student invitations, notifying them of the upcoming release date and asking them to encourage student participation. Third, the Assistant Dean for Student Progress of Graduate Studies sent a personal e-mail to the Graduate School Heads and Directors of Graduate Studies for relevant departments on the day in which students were issued ISP invitations. That e-mail reiterated the importance of students’ participation and again requested that students be encouraged to participate.

In addition to administrative support, shortly after each round of invitational e-mails targeted students received a personal e-mail from the President of the Graduate Student Council, a fellow graduate student, encouraging participation in the ISP. Throughout the year, the Emory Cares 4 U Program leadership team provided feedback to key stakeholders about the needs that graduate students were communicating over the ISP Web site, and engaged in discussions about the implications for the university’s response.

In all other respects, Emory implemented the standard ISP protocol. Specifically, an e-mail inviting graduate students to participate in the ISP came from the codirectors of the Emory Cares 4 U Program, both of whom are key personnel on campus. The invitation reminded students of previous correspondence they had been sent by other administrators, and recapped the key program goal of providing students the opportunity to learn about how stress, anxiety, and depression may be impacting them and about available treatments and resources. The anonymous, voluntary nature of the program was emphasized, and students were told that would get a personalized response from a counselor and after that could correspond online with the counselor or access various in-person services, as needed.

The invitation provided a link to the ISP secure Web site and indicated that once graduate students accessed the Web site, they would be able to complete and then submit, using a self-selected user name and password, a simple, brief online Stress and Depression Questionnaire. A free-text space was provided for respondents to comment on “anything that might
be particularly stressful lately or anything else that might be contributing to how you are feeling.” Only through this User ID could their responses be identified, and as such this was a confidential and anonymous process. Students also were informed that an experienced mental health professional would review their responses to the questionnaire in a timely fashion and that they would receive a personal response via the Web site with the counselor’s assessment of their stress level and appropriate follow-up plan, if one was indicated. The availability of effective treatments for depression and other mental health problems, both on and off campus, also was highlighted. Contact information for the key personnel was provided.

Although the ISP protocol has an expected time frame for the counselor’s response based on the severity of the students’ answers, this information was not provided to potential participants in the e-mail invitation. However, immediately after submitting the Stress & Depression Questionnaire, students saw a “thank you” page that included the timeframe within which they could expect to hear back from the counselor. This ranged from 24 to 48 hours, depending on the student’s “risk tier,” which was computer-determined based on an algorithm using answers to specific questionnaire items (Garlow et al., 2008; Haas et al., 2008). Risk tiers were defined as: Tier 1A (high risk with indication of suicidal thinking or behavior), Tier 1B (high risk), Tier 2 (moderate risk), and Tier 3 (low risk). Within time frames specified for the various tiers (24 hours for Tier 1A and 1B, 36 hours for Tier 2, 48 hours for Tier 3), each student received a personal response from an ISP counselor over the secure Web site.

The counselor’s response was posted to the student’s User ID on the secure ISP Web site. The response identified specific areas of concern; expressed empathy and a willingness to help; made suggestions about follow-up services, if indicated; and encouraged students to contact the counselor through the anonymous dialogue feature if they had any questions or concerns. When students’ distress appeared minimal, they were referred to peer support groups, academic resources and other nonclinical campus services.

Students with significant mental health problems, high distress, or suicide risk were given crisis numbers and urged to come for an in-person meeting with the ISP counselor. Sessions were held at various confidential campus locations. The counselor who originally responded to the student’s screening and dialogues was the person who met with the student individually. In the evaluation meeting, the counselor further assessed the student’s problems and risk status, and facilitated access to appropriate services. Unfortunately, no data are available with regard to follow-up on these services.

The following sections describe the students who participated in the ISP in the first program year and summarize what we were able to discern about how they regarded the program.
DESCRIPTION OF PARTICIPATING GRADUATE STUDENTS

During the 9-month time frame that is the focus of this article, 1,713 students received the e-mail encouraging them to participate in the ISP protocol. Of this total, 176 (9.8% response rate) completed the online questionnaire. Of these respondents, 13.7% were in Tier 1A (very high risk with suicide concern), 32.5% in Tier 1B (high risk), 54.2% in Tier 2 (moderate risk), and .6% in Tier 3 (low risk). In this study, follow-up data were not collected on mental health service utilization following participation in the screening or dialogue process in order to protect students’ sense of anonymity and confidentiality. Thus, it is not possible to know how many respondents later made appointments for mental health services.

However, anecdotal evidence showed that a number of the most troubled students (Tier 1A) who engaged in dialogue with the counselor came for in-person meetings and received assistance for their suicidal concerns. For example, one student with a family history of suicidal behavior noted in a counseling session that he had never before been willing to get assistance for his depression or suicidality, concerned that doing so would frighten his family. He noted that the outreach from the ISP made it easier to acknowledge to himself that a combination of therapy and medication might alleviate his long-standing depression and enable him to function better at school and socially. We have no information on whether or not this program actually “saved” any students’ lives, but examples like this one suggest that the program was able to support quite a few graduate students in accessing appropriate mental health services.

Unfortunately, 11 Tier 1A students (47.8% of Tier 1A respondents) did not respond to the counselor’s recommendations for follow-up contact. Given that these students were deemed to be at very high risk for experiencing stress and depression and potentially being suicidal, this finding is of concern and highlights the continued reluctance of this population to seek and receive much needed services, even in the face of engagement efforts and their ability to remain anonymous. It should be noted that our protocol was to reach out repeatedly to these students via the online dialogue process in an effort to engage them.

DIALOGUE INFORMATION

For this project, students’ online dialogues with the counselor were downloaded for qualitative review and analysis, using a thematic approach similar to that employed in other studies of the ISP (Haas et al., 2008). This content analysis methodology identified key themes in graduate student dialogues.

The vast majority of dialogues focused on obtaining information about the next step in treatment and making follow-up appointments with the
dialoguing clinician. Aside from a scheduling tool, the most common elements in the notes were the themes of symptom or circumstance elaboration, expression of a desire for treatment, and gratitude for the service. The following dialogue illustrates the latter two themes:

First, I’m very glad that this project came to fruition. I took the initial survey that got sent out maybe a month ago, and felt the project would be a good first step for a lot of people like myself that might know that speaking with someone in the student counseling center could be of great help, but have yet to reach out for various reasons. I’ve had several points over the past year that I’ve known I needed to and I haven’t. I’m really grateful for the chance to get to use this program. All this said, it would be good to set up a time to talk. I think taking the survey again, even just a month later, has made me realize how much a lot of this stress has started to affect me. I’m not sure what steps I need to take, but please let me know. Thanks.

Most of the attempts to elaborate on symptoms and life circumstances appeared to be efforts to help the dialoging clinician gain a greater understanding of the graduate student’s situation. However, in some instances, students’ dialogues appeared defensive in nature, downplaying their distress and indicating that their quantitative responses were not accurate and/or that the program overreacted: “Hello, I don’t think you truly comprehend that you just described a typical week in a research-based PhD graduate student’s life.” In other words, this graduate student felt that the counselor was overreacting to the stress and anxiety she was feeling, which the student herself perceived to be an expected and normal, albeit challenging, part of life as a graduate student.

These apparently defensive elaborations often preceded termination of the dialogue. However, in several instances the dialogue continued and over time the student expressed more awareness of the impact of their symptoms on their functioning, asked for advice, or voiced a desire for treatment.

According to the graduate students’ responses, the online nature of the ISP provided several benefits. First, many dialogues included a theme of preferring to keep communication anonymous: “I would prefer to remain anonymous, so I would rather just exchange messages online.” Other dialogues emphasized the busy nature of students’ lives and expressed hesitation about adding another time commitment that treatment would involve: “Hi! Thank you for your quick response. I’d like to talk to you in this way if possible since I really do not have time to go to the student counseling center.” Finally, the dialogues offered students a safety net and a potential method to get help in the future: “Thank you again. I appreciate your openness to discussion, and I will keep you in mind in the future.” And, “Thank you for understanding . . . I would like to continue this every now and then, if possible. Thank you for listening.”
CONCLUDING COMMENTS

This report describes the process of successfully implementing the ISP protocol with graduate students. Specifically, the ISP allows clinicians and administrators to identify distressed students and to assist them in securing much needed mental health resources. To do this, however, aspects of campus culture need to be changed. Campus administrations can encourage clinicians to recognize the benefits of this online screening modality, as many university counseling services have limited experience with outreach. University administrators also can play key roles in supporting graduate school leaders to convey to students the value of participating in the online screening program, and ensuring that adequate mental health resources are available to all graduate students who need mental health treatment. Such institutional support and buy-in is essential for the highest quality mental health care for graduate students, who are at risk for psychological difficulties that negatively impact their academic and social performance (Nogueira-Martins, Neto, Macedo, Cittero, & Mari, 2004).

The ISP protocol as implemented by Emory University helped ensure that response rates were relatively high, so that many graduate students were able to take advantage of this service. In addition, connecting graduate school faculty and staff to the ISP, as was done here, appears to be valuable in light of the fact that some graduate students are more likely to access sources of institutional or academic support (e.g., faculty members, advisors, peer counselors) than the university counseling center (Backels & Wheeler, 2001; Hyune et al., 2006). Furthermore, institutional influences, such as discipline-specific norms or academic culture, can impact graduate students’ attitudes towards mental health and the likelihood that they seek out mental health services (Nogueira-Martins et al., 2004), including the ISP. It is likely that both students’ awareness of and openness towards mental health concerns and wellness resources increase as a result of faculty and staff involvement in the ISP process.

Future research using the ISP should explore factors that may contribute to graduate students’ utilization of the online dialogues, their ability to engage with the counselor, and their perception of the helpfulness of the online interactions. Because only one counselor responded to all of the students in the present study, we were unable to assess counselor-related factors that may have influenced students’ rates of dialogue, an important topic for future research. (However, previous ISP data using different clinicians with dissimilar levels of education and prior clinical experience yielded no differences in students’ responses). In general, discovering ways to increase the rate of students who dialogue with a clinician after completing the Stress and Depression Questionnaire is essential given that the primary benefit of the ISP lies in the interaction between student and clinician, not simply in the completion of the questionnaire. This information could then be utilized...
to create training in Web-based mental health communication with students, both through the ISP and similar programs. The need for this clinical training is clear given the rapid increase in the use of technology by student health and counseling professionals (e.g., Point and Click, Titanium, and other electronic health records) and the increasing use of technology in general to address mental health concerns (e.g., online therapy, Internet-based support groups, and even the addition of self-harm reporting on Facebook).

We recommend a number of strategies for successfully implementing the ISP protocol for graduate student populations at other universities. First, each university should tailor its own ISP protocol based on the campus culture, student body composition, and financial resources. Second, the use of this protocol requires administrative cooperation, clear communication between the responding clinicians and administrators, strong interpersonal skills on the part of the clinicians, and the clinicians’ knowledge of relevant referral sources. For example, the clinicians and administrators must work collaboratively to determine the schedule of invitations, as well as to compose reminder e-mails to be sent to faculty. Communication must be clear so that the clinicians are aware of when invitations are sent out in order to be prepared to allocate the appropriate amount of time to respond. Third, clinicians need to think through how they plan to respond to difficult or unforeseen situations and outline response guidelines related to specifically identified situations. Along with that, campuses must think through liability implications of introducing this program.

In closing, suicidal ideation and behaviors are a significant concern within the graduate student population, causing considerable apprehension to healthcare providers, university leadership, families, and students themselves. The continuum of suicidal behavior in this population is particularly concerning given their overall relatively low utilization of mental health services. The ISP offers a way to reach out to at-risk students, clarify their needs and concerns, and connect them to appropriate treatment. The systematic implementation of such a protocol is consistent with the growing expectation that universities take a highly proactive approach toward assisting those at high risk and preventing suicide on campuses (Lake & Tribbensee, 2002–2003).

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