ABSTRACT: Nurses and other healthcare workers in the United States are at increased risk of suicide compared to non-healthcare workers. College students also experience high suicide risk. To impact suicide prevention in these populations, a Question, Persuade, Refer (QPR) 1-hour gatekeeper suicide prevention training program was implemented at the University of Detroit Mercy for faculty, staff, and administrators in the College of Health Professions (N = 43). Knowledge in seven areas of suicide significantly increased after the training (p < .001). Sixteen attitudes about suicide improved; however, only two showed a statistically significant change. Results support that 1-hour QPR training can be effectively implemented in a large organization.

KEY WORDS: Attitudes Toward Suicide Prevention Scale (ATSPS); college student; gatekeeper training; healthcare worker; mental health; nursing; Question, Persuade, Refer; QPR; suicide prevention

"Student mental health is in crisis," according to the American Psychological Association (Abrams, 2022, p. 60). An increasing number of university students have reported worsening mental health across the years (2013, 2020, and 2021), suggesting “an overall deterioration in psychological well-being” (Emmerton et al., 2024, p. 6). In the United States, suicide ranks as the second leading cause of death for people ages 10 to 34 years (Garnett & Curtin, 2023). Globally, suicide is the fourth leading cause of death among 15- to 29-year-olds (World Health Organization, 2023). In the 2022 National College Health Assessment, 30% of respondents had a positive screening score on the Suicide Behavior Questionnaire-Revised (SBQR; American College Health Association, 2022). Even before the COVID-19 pandemic, college counseling centers were experiencing significant increases in demand (Abrams, 2022). The full ramifications of the pandemic on the mental health of college students are not clearly known, but educators...
must be prepared to manage the mental health sequelae of the pandemic in their classrooms, clinics, and laboratories.

Addressing the mental health needs of future healthcare professionals is of particular importance. Analyses of pre-COVID data show registered nurses, health technicians, and healthcare support workers in the United States are at increased risk of suicide compared to non-healthcare workers (Davis et al., 2021; Olfson et al., 2023). Additionally, Kelsey et al. (2021) found nurses were less likely than other employees to seek treatment when they did feel suicidal. Healthcare workers endured significant challenges related to the COVID-19 pandemic including stress, burnout, depression, anxiety, and suicidal ideation (Centers for Disease Control and Prevention [CDC], 2022; da Silva et al., 2024). Although these issues are not new, the pandemic exacerbated such concerns. According to Lee and Friese (2021), “We can no longer ignore the troubling data: registered nurses are at an alarmingly high risk for serious mental health threats and deaths by suicide. Without urgent, multi-faceted actions, nurses will continue to suffer, threatening overall population health” (p. 3).

Educators who teach future healthcare professionals must have an awareness that suicide and suicidal ideation disproportionately impact healthcare workers. Yet, awareness does not suffice. Jesus’ teachings include loving our neighbor (Matthew 22:39) and caring for those in need (Matthew 25:31-40). Gatekeeper training—regardless of the training program selected—is a known intervention for suicide prevention (Stone et al., 2017) and a way to express love and care to those who are struggling.

The purpose of this article is to describe the process of a Question, Persuade, Refer (QPR) gatekeeper training suicide prevention program at the University of Detroit Mercy (UDM), and knowledge and attitude changes of faculty, staff, and administrators at UDM after participating in a QPR training. The following research question was explored: Does QPR gatekeeper training improve knowledge and attitudes related to suicide prevention?

**REVIEW OF LITERATURE**

**Gatekeeper Training for Suicide Prevention**

Suicide in the United States has been recognized for 25 years as a serious, preventable public health issue since The Surgeon General’s Call to Action to Prevent Suicide 1999 (U.S. Public Health Service, 1999). Soon after, the surgeon general identified gatekeeper training, with a range of approaches to this training, as a key tool for suicide prevention (U.S. Department of Health and Human Services, 2001). With the Garrett Lee Smith Memorial Act of 2004, annual federal funding became available for youth- and young-adult-focused community-based suicide prevention programs (Goldston et al., 2010). Since passage, the Garrett Lee Smith (GLS) Suicide Prevention Program has been utilized to provide funding in all 50 states and 50 tribes, with gatekeeper training being a primary component (Stone et al., 2017). Grant awards are made every year to start suicide prevention programs across the country.

Researchers have found that gatekeeper training is a valuable component of the comprehensive public health approach to the prevention of suicide (Stone et al., 2017). In a study by Walrath et al. (2015), counties implementing GLS gatekeeper training had significantly lower suicide rates.
Suicide Prevention

What are the warning signs of suicide?
Signs that someone may be at immediate risk for attempting suicide:

• Talking about wanting to die or wanting to kill themselves
• Talking about feeling empty or hopeless or having no reason to live
• Talking about feeling trapped or feeling that there are no solutions
• Feeling unbearable emotional or physical pain
• Talking about being a burden to others
• Withdrawing from family and friends
• Giving away important possessions
• Saying goodbye to friends and family
• Putting affairs in order, such as making a will
• Taking great risks that could lead to death, such as driving extremely fast
• Talking or thinking about death often

Other serious signs that someone may be at risk for attempting suicide:

• Displaying extreme mood swings, suddenly changing from incredibly sad to very calm or happy
• Making a plan or looking for ways to kill themselves, such as searching for lethal methods online, stockpiling pills, or buying a gun
• Talking about feeling great guilt or shame
• Using alcohol or drugs more often
• Acting anxious or agitated
• Changing eating or sleeping habits
• Showing rage or talking about seeking revenge

Suicide is not a normal response to stress. Suicidal thoughts or actions are a sign of extreme distress and should not be ignored. If these warning signs apply to you or someone you know, get help as soon as possible, particularly if the behavior is new or has increased recently.

Five Action Steps for Helping Someone in Emotional Pain

1. **ASK:** “Are you thinking about killing yourself?” It is not an easy question, but studies show that asking at-risk individuals if they are suicidal does not increase suicides or suicidal thoughts.

2. **KEEP THEM SAFE:** Reducing a suicidal person’s access to highly lethal items or places is an important part of suicide prevention. Although this is not always easy, asking if the at-risk person has a plan and removing or disabling the lethal means can make a difference.

3. **BE THERE:** Listen carefully and learn what the individual is thinking and feeling. Research suggests acknowledging and talking about suicide may reduce rather than increase suicidal thoughts.

4. **HELP THEM CONNECT:** Save the 988 Suicide & Crisis Lifeline number (call or text 988) in your phone so you have the number if needed. You can also help make a connection with a trusted individual like a family member, friend, spiritual advisor, or mental health professional.

5. **STAY CONNECTED:** Staying in touch after a crisis or after being discharged from care can make a difference. Studies have shown the number of suicide deaths goes down when someone follows up with the at-risk person.


among those ages 10 to 24 the year after the training compared to similar counties that did not implement GLS gatekeeper training. In a randomized controlled trial, Gould et al. (2013) examined the impact of the Applied Suicide Intervention Skills Training (ASIST) gatekeeper program across the National Suicide Prevention Lifeline network of crisis hotlines. Data from 1,410 suicidal individuals who called 17 Lifeline centers revealed that callers were significantly more likely to feel less depressed, less suicidal, less overwhelmed, and more hopeful by the end of calls handled by ASIST-trained counselors, compared to callers who spoke to non-ASIST-trained counselors (Gould et al., 2013). In a scoping review of 30 years of suicide prevention literature about university students, Cecchin et al. (2022) discovered that the gatekeeper strategy delivered to peer counselors is the most effective, especially in short- and long-term knowledge about suicide prevention literature and self-efficacy in suicide prevention. Researchers also found gatekeeper interventions are more efficacious when they combine education and skills training to intervene in suicidal behavior.

The Suicide Prevention Resource Center (2018) describes a variety of gatekeeper training programs based on audience, setting, and duration of training. All programs are focused on engaging and educating individuals in suicide prevention (see Web Resources). LivingWorks is a global company that provides ASIST, safeTALK, Start, and Faith training programs for individuals and companies (LivingWorks, 2023). The UDM team chose the QPR gatekeeper training program as it can be applied to a broader audience and has a shorter duration training format.

**QPR Gatekeeper Training**

Question, Persuade, Refer gatekeeper training teaches lay and professional gatekeepers to recognize the warning signs of a suicide crisis and how to respond appropriately (QPR Institute, n.d.-b; see Sidebar: Suicide Prevention). A gatekeeper is any
community member who is likely to encounter individuals in crisis and includes teachers, school staff, parents, friends, clergy, neighbors, healthcare providers, police officers, and more (U.S. Department of Health and Human Services, 2001). Question, Persuade, Refer, an emergency mental health intervention for suicidal persons, was created in 1995 by Paul Quinnett and resulted in the establishment of the QPR Institute in 1999 (QPR Institute, n.d.-b). The QPR methodology and Institute have garnered support from national organizations, such as the American Association of Suicidology (QPR Institute, n.d.-b). Much like cardiopulmonary resuscitation, QPR can be administered by any trained individual and is not meant to be professional intervention. More than 5 million people worldwide have received QPR gatekeeper training since it was established (QPR Institute, n.d.-a, n.d.-b). The goal of QPR gatekeeper training is to teach participants how to question, persuade, and refer someone who may be suicidal, learn how to get help for oneself or others, and prevent suicide by understanding the common cues and warning signs of suicidal behavior (QPR Institute, n.d.-b).

**QPR Relevance to Jesuit and Mercy Principles**

The University of Detroit Mercy is uniquely rooted in the ideals of both the Society of Jesus and the Sisters of Mercy. Notably, the values of each support the training of staff and faculty in QPR. Though our primary task as educators is to nurture and develop the intellectual strengths of our students, our Jesuit values encourage us to consider each learner’s *cura personalis*, or “care or education of the whole person” (Peters, 2022, p. 26). A UDM education seeks “to integrate the intellectual, spiritual, ethical, and social development of students” (UDM, n.d., para. 1). When our students are suffering from mental health crises that lead them to contemplate suicide, we cannot care for them as whole persons if we are not trained to recognize early warning signs of distress, intervene with appropriate questions, and assist them to obtain care. James, the brother of Jesus, wrote in the New Testament book named after him to put our faith into action. Although James wrote of physical needs, the same principle can be applied to mental health needs:

> Suppose a brother or a sister is without clothes and daily food. If one of you says to them, “Go in peace; keep warm and well fed,” but does nothing about their physical needs, what good is it? In the same way, faith by itself, if it is not accompanied by action, is dead. (James 2:15-17, NIV)

Once trained, QPR gatekeepers are well equipped to put their faith into action concerning the mental health of their students, patients, and colleagues.

One value of our Sisters of Mercy is to meet the needs of the vulnerable through compassion and service. Catherine McAuley, founder of the Sisters of Mercy, and her “walking nuns” left cloistered life traditions to help poor communities of Dublin, Ireland (Mercy Care, n.d.). Similarly, being student-centered and recognizing the dignity of each person is a critical part of a Mercy education (UDM, n.d.). Caring for those in need, as Jesus teaches us in the gospel of Matthew, is an essential attribute of a faith-filled life. When we care for others, it is as if we are caring for Christ:

> For I was hungry and you gave me something to eat, I was thirsty and you gave me something to drink, I was a stranger and you invited me in. I needed clothes and you clothed me, I was sick and you looked after me. (Matthew 25:35-36, NIV)

We know physical sickness does not affect just the body, but also the mind. The University of Detroit Mercy is invested in providing a range of opportunities to maintain physical, mental, and spiritual health. Though mental health resources are available, schools have been facing a surge in demand for care that is far outpacing capacity (Abrams, 2022). Burnout, depression, and suicide cannot be addressed unless help is sought, or a gatekeeper intervenes. With suicide being the second leading cause of death in college students, the implementation of gatekeeper training programs like QPR is one way faculty, staff, and administrators can begin to address this problem (Cecchin et al., 2022).

The QPR team at UDM was initially formed in the College of Health Professions by an interdisciplinary group of faculty and administrators after attending a QPR gatekeeper training at a University Suicide Prevention Task Force meeting. Financial support for QPR gatekeeper training certification was provided by the college dean in 2019. After a successful first year of educating faculty, staff, administrators, and students in the QPR methodology, the dean of the College of Health Professions recognized the QPR interdisciplinary team as an official ad hoc committee within the college.

**METHODOLOGY**

The UDM committee members became certified trainers through the QPR Institute with the goal of educating as many individuals as possible within the College of Health Professions. Disciplines that participated in the training included the following programs: graduate and undergraduate nursing, graduate physician assistant, nurse anesthesia, health services administration, and health information management.

This study was approved by the UDM Institutional Review Board. Participants attended one training session. Five educational sessions were offered to faculty and staff between October 7, 2020, and February 25,
2021. Two additional sessions were offered in February and March of 2022 for new faculty/staff. Sessions were held via Zoom due to the COVID-19 pandemic and all sessions were voluntary. Each session lasted between 60 and 90 minutes, depending on the questions and discussion generated by the participants. Following the recommendation of the QPR Institute, at least two members of the QPR committee were present for each presentation. The committee members presented the information (using a slide presentation adapted from the QPR Institute) and monitored the Zoom chat feature for comments. Committee members also followed up with any participant who left the session early to assess if the departure was due to the sensitive nature of the topics being discussed, and to provide support and resources.

Combining and adapting material from the QPR Institute training manual and website and the Attitudes Toward Suicide Prevention Scale (ATSPS; Herron et al., 2001), the researchers developed a pre- and post-training survey to assess the knowledge and attitudes of the faculty, staff, and administrators attending QPR training. The pre-training survey began by asking participants for general demographic information; otherwise, the pre- and post-training surveys were identical. Knowledge about suicide was assessed with seven questions using a Likert-style format ranging from Poor (scored 1; see Figure 1). Items on the ATSPS were scored using a 5-point Likert scale ranging from strongly agree (rated 5) to strongly disagree (rated 5). Two questions were added to the ATSP scale for a total of 16 questions regarding attitudes toward suicide and its prevention (see Table 3 online as supplemental digital content [SDC] at http://links.lww.com/NCF-JCN/A113). At the beginning and end of the QPR training session, participants were given an online link to the survey using Microsoft Outlook Forms.

RESULTS
A total of 51 educators, staff, and administrators in the College of Health Professions, or 78% of all eligible participants, attended one of the educational sessions. Fifty-one participants completed the pre-survey and 43 completed the post-survey (N = 43). Data were entered into SPSS® (IBM SPSS Statistics, version 27).

As seen in Table 1 (available as SDC at http://links.lww.com/NCF-JCN/A113), most participants identified as female (84.3%); age ranged from 27 to 70 years. Participants were from numerous ethnicities, with Caucasian (72.5%) and African American (11.8%) being the most common racial backgrounds. Many participants (41.2%) reported they had family members/friends who had attempted suicide, and a similar percentage reported they had family members/friends complete suicide. Approximately 25% of participants reported having a student who completed suicide during the participant’s career in education. The survey did not ask for specific role at the university due to the sensitive nature of the content and trying to guard participant anonymity; however, most were faculty members.

Changes on items in the Attitudes Toward Suicide Prevention Scale (ATSPS; Herron et al., 2001) were assessed using a paired samples t-test to compare mean scores before and after the training. Although responses on all

FIGURE 1. QPR Gatekeeper Pre-Training and Post-Training Survey Questions

Please rate your knowledge of suicide in the following areas:

<table>
<thead>
<tr>
<th>Score assigned to the rating:</th>
<th>Outstanding</th>
<th>Above Average</th>
<th>Average</th>
<th>Below Average</th>
<th>Poor</th>
</tr>
</thead>
<tbody>
<tr>
<td>Facts concerning suicide</td>
<td>5</td>
<td>4</td>
<td>3</td>
<td>2</td>
<td>1</td>
</tr>
<tr>
<td>Warning signs of suicide</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>How to ask someone about suicide</td>
<td></td>
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<tr>
<td>Persuading someone to get help</td>
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<tr>
<td>How to get help for someone</td>
<td></td>
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<td></td>
</tr>
<tr>
<td>Information about local resources for help with suicide</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Your level of understanding about suicide prevention</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

*Partial list of QPR survey questions, adapted from “QPR Pre-training Survey” by QPR Institute (n.d.-c). Reprinted with permission.

Registered nurses are at an alarmingly high risk for serious mental health threats and deaths by suicide.
and someone in the community who may be experiencing a mental health emergency.

There were several limitations to this study. First, most of the participants had some current or prior experience with the healthcare environment, which may have influenced existing knowledge and attitudes about suicide and suicide prevention. Additionally, although the survey was anonymous, demographic data were collected. Stigma related to the topic of suicide may have made participants reluctant to answer some of the questions honestly out of concern they would be identified. Moreover, the training sessions were held via Zoom. Sessions originally were intended to be held face-to-face in small group settings to promote discussion, but the COVID-19 pandemic prevented this. Although participants did appear engaged while attending the training, they were able to turn their cameras off if they chose to, which may or may not have influenced their participation in the training sessions. An additional limitation is that the evaluation survey was self-reported, and that post-testing was completed right after the training. Further testing months to years later is needed to accurately assess if the knowledge and attitude changes were retained.

16 attitudes changed in a positive direction, only these two attitudes showed a statistically significant change (see Table 3 at http://links.lww.com/NCF-JCN/A113):

- If people are serious about committing suicide, they do not tell anyone (changed from strongly agree to strongly disagree; \( p = .004 \))
- I am likely to ask someone if they are thinking about suicide (changed from strongly disagree to strongly agree; \( p = .033 \))

Changes on two other statements approached statistical significance:

- Suicide prevention is not my responsibility (changed from strongly agree to strongly disagree; \( p = .051 \))
- There is no way of knowing who is going to commit suicide (changed from strongly agree to strongly disagree; \( p = .058 \))

DISCUSSION

The number of people suffering from mental illness has been increasing steadily, particularly since the COVID-19 pandemic started (Mullins et al., 2022). It is important to understand the risk factors that may prompt someone to consider suicide, to identify those at risk, initiate a conversation, and refer to treatment. This is key for all people in a community, but due to the reported rates of suicide attempts and completions in young adults, it is essential for those who work with this age group to be comfortable having these difficult conversations.

Feedback from the faculty and staff who participated in the gatekeeper training sessions at UDM was positive. Several participants shared personal experiences related to suicidality that had occurred with family members, friends, and/or students. A few participants attended more than one session (although they completed surveys only at the initial session).

The biggest change in participants was related to knowledge about suicide and how to assist someone who may be contemplating suicide. In contrast, only two attitudes about suicide prevention had a statistically significant change. This is not surprising as attitudes about a topic take time to form, and changes in attitudes may require a longer period than one 60- to 90-minute training session.

Based on the differences found in the pre- and post-survey results, participants became better able to recognize cues and warning signs and are more comfortable approaching someone they believe may be contemplating suicide. As a result, they should be better prepared to intervene with students, colleagues, and someone in the community who may be experiencing a mental health emergency.

There were several limitations to this study. First, most of the participants had some current or prior experience with the healthcare environment, which may have influenced existing knowledge and attitudes about suicide and suicide prevention. Additionally, although the survey was anonymous, demographic data were collected. Stigma related to the topic of suicide may have made participants reluctant to answer some of the questions honestly out of concern they would be identified. Moreover, the training sessions were held via Zoom. Sessions originally were intended to be held face-to-face in small group settings to promote discussion, but the COVID-19 pandemic prevented this. Although participants did appear engaged while attending the training, they were able to turn their cameras off if they chose to, which may or may not have influenced their participation in the training sessions. An additional limitation is that the evaluation survey was self-reported, and that post-testing was completed right after the training. Further testing months to years later is needed to accurately assess if the knowledge and attitude changes were retained.
The mental health problems that have negatively impacted people throughout the country also have impacted healthcare professionals who may be even more at risk, as they work in stressful conditions due to staffing shortages and high acuity levels (Bismark et al., 2022; Crowe et al., 2022; da Silva et al., 2024).

In addition to caring for patients and families, healthcare workers need to be encouraged to care for themselves and their co-workers. This can include spending time talking with colleagues and letting them know you care and have organized programs at the workplace for all providers. A culture shift must occur for healthcare professionals to become comfortable discussing sensitive topics with co-workers, including discussions of potential suicidal ideation. Education toward culture change can begin in academia for all healthcare students. The QPR gatekeeper training is one way to teach both future and current healthcare professionals (along with the rest of society) how to initiate those difficult conversations.

Recommendations for improving the overall well-being of healthcare professionals include

- Universally adopt QPR gatekeeper training (or another similar gatekeeper program) for suicide prevention.
- Make resources for overall well-being available to all healthcare professionals and students, such as the Well-Being Initiative established by the American Psychiatric Nurses Association (APNA, n.d.) and the Healthy Nurse/Healthy Nation initiative established by the American Nurses Association (ANA, n.d.; see Web Resources).
- Healthcare organizations and universities should ensure resources are available and promoted to all students and healthcare profession- als, focusing on physical, emotional, mental, and spiritual care of students, faculty, and employees.

CONCLUSION

Steeped in our mission of caring for the whole person, both colleagues and students, the QPR committee at UDM is working toward educating all faculty, staff, administrators, and students within the College of Health Professions to be certified QPR gatekeepers. All employees within the College of Health Professions have a responsibility greater than tending to academic excellence. As mentors in the classroom and clinical environments, we nurture the spiritual, ethical, and social development of our students. This includes tending to students’ mental health needs when such needs arise, and questioning, persuading, and referring individuals to appropriate resources through the campus Wellness Center or to outside resources when appropriate. The Question, Persuade, Refer program can equip individuals with the knowledge and language to have difficult and sensitive conversations that could save a life. We have added QPR training for all undergraduate and graduate level health professions students.

Psalm 34:18-19 (NIV) shares, “The Lord is close to the brokenhearted and saves those who are crushed in spirit. The righteous person may have many troubles, but the Lord delivers him from them all.” Training QPR gatekeepers is one way to provide skills that open a dialogue and assist others to find hope in their darkest of times. Question, Persuade, Refer training has improved knowledge and attitudes about suicide and suicide prevention among the faculty, staff, and administrators at UDM. The overarching hope of the QPR committee is that providing gatekeeper training will make it easier for faculty and staff to engage in conversations to address the emotional needs of students and colleagues. Future work includes providing gatekeeper training to as many people as possible, as well as collaborating with other colleges and universities to continue to measure the effectiveness of the QPR methodology in suicide prevention education.

IMPLICATIONS FOR HEALTHCARE PROFESSIONALS

There have been numerous reports of the increased burdens placed on healthcare professionals throughout the world because of the COVID-19 pandemic (Bismark et al., 2022; Crowe et al., 2022; da Silva et al., 2024; Letourneau et al., 2022). Prior to the COVID-19 pandemic, nurses had higher rates of suicide than non-nurses (Davis et al., 2021; Gary, 2022). The pandemic dramatically exacerbated already stressful working conditions in healthcare, as well as exacerbating mental health needs among the general population. It is reasonable to assume the mental health problems that have