

Pharmacists' attitudes, interest, and perceived skills regarding suicide prevention

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How to cite: Cates ME, Cochran Hodges JR, Woolley TW. Pharmacists' attitudes, interest, and perceived skills regarding suicide prevention. *Ment Health Clin* [Internet]. 2019;9(1):30-5. DOI: 10.9740/mhc.2019.01.030.

Abstract

Introduction: Pharmacists have been called upon to be involved in suicide prevention efforts, but little is known regarding their attitudes, interest, and perceived skills in the area.

Methods: The study was a voluntary, anonymous survey of pharmacists who attended a large end-of-year continuing education program sponsored by a school of pharmacy. The survey included the Attitudes to Suicide Prevention (ASP) Scale, items concerning interest in suicide prevention, and items from the suicide skills section of the Suicide Knowledge and Skills Questionnaire.

Results: The survey was completed by 227/297 (76.4%) pharmacists. The percentage of participants who expressed interest in direct involvement, indirect involvement, and receiving training in suicide prevention were 25%, 46%, and 56%, respectively. The mean total score on the ASP was 32.2 ± 5.5 . Approximately 4% to 8% of participants agreed that they had the requisite training, skills, or support/supervision to engage and assist suicidal patients, and 22% agreed to feeling comfortable asking their patients direct and open questions about suicide. The ASP scores and items relating to perceived skills were correlated with interest in direct involvement in suicide prevention.

Discussion: There were some positive findings, but overall, the pharmacists who participated in this survey felt unprepared to be frontline clinicians in suicide prevention efforts. Further studies should be conducted to determine if these findings are generally reflective of the broader pharmacy community. If the profession is to have a serious role in suicide prevention, then adequate suicide prevention training for pharmacy students and pharmacists may be necessary.

Keywords: pharmacists, suicide, attitudes, knowledge, clinical skills

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Disclosures: M.E.C. is a speaker on behalf of Otsuka Pharmaceutical. Otherwise the authors have nothing else to disclose.

Introduction

Suicide is a significant public health problem. It is the tenth leading cause of death in the United States, claiming the lives of approximately 45 000 people in 2016. Alarming, the age-adjusted suicide rate in the United States increased from 10.4/100 000 in 2000 to 13.4/100 000 in 2016.¹

Pharmacists could play a key role in suicide prevention. They are uniquely accessible health care professionals, and they routinely interact with at-risk individuals, and they

are the gatekeepers of medications that are commonly used in suicide attempts/deaths.² The potential role of pharmacists in suicide prevention was recognized nearly 50 years ago.³ However, the depth of the public health problem as well as the expansion of pharmacists' roles in screening and managing other disease states have led to several recent appeals within the profession for pharmacists to be involved in suicide prevention efforts.⁴⁻⁷ Notably, starting in January 2017, pharmacists were among health care professionals in the state of Washington who were required to complete training in suicide prevention. This included a 1-time, 3-hour course that covers suicide screening and referral and assessment of issues related to imminent harm via lethal means.⁸

Despite the movement to earnestly include pharmacists in suicide prevention efforts, a recently published scoping review revealed very limited research involving community pharmacists and patients at risk of suicide.⁹ For example, little is known about pharmacists' attitudes and perceived skills in the area of suicide prevention. Most pharmacists who participated in an Australian survey held erroneous beliefs about the risk of suicide in depression.¹⁰ Japanese pharmacists who had registered for a psychiatric pharmacist seminar took a self-administered Attitudes Toward Suicide questionnaire, and the results indicated that those who had previously received training in suicide prevention had more positive attitudes toward suicide prevention.¹¹ American pharmacists who attended a continuing education program on suicide and suicide prevention experienced improved scores on the Attitudes to Suicide Prevention (ASP) Scale.² Most European pharmacists self-rated their skills in dealing with suicidal patients as very poor to poor.¹² German pharmacists scored below average on the Morriss Confidence Scale, which measures confidence in detecting suicidal persons.¹³ Finally, American pharmacists who participated in a suicide prevention training program experienced greater confidence in skills.¹⁴

Deficiencies in the area of suicide prevention are certainly not limited to pharmacists. It is a well-known problem in other health care professions as well.¹⁵⁻¹⁸ How pharmacists compare to other health care professions in this regard is largely unknown, but Cates et al² compared ASP scores of pharmacists in their study to those of other health care professionals as documented in prior studies and concluded that pharmacists' scores were intermediate between those of mental health professionals and those of non-mental health professionals.

The purpose of the current study was to determine pharmacists' attitudes, interest, and perceived skills in the area of suicide prevention. Also, we sought to evaluate the relationships between attitudes, interest, and perceived skills regarding suicide prevention.

Methods

The study was a voluntary, anonymous survey of pharmacists who attended a large end-of-year continuing education (CE) program sponsored by a school of pharmacy. The CE program was worth 3 CE credits and included topics pertaining to prescription drug monitoring program, diabetes education, and health screening in community pharmacies (ie, none pertaining to mental health or suicide). The survey was comprised of demographic questions and items relating to attitudes toward suicide prevention, interest in suicide prevention, and perceived skills in suicide prevention (see below).

Suicide prevention attitudes were measured using the ASP Scale (see Table 1).¹⁹ The ASP Scale is a 14-item scale with 12 negative statements and 1 positive statement (which is reverse scored) about suicide prevention. There is an additional statement concerning the proportion of suicides that one considers preventable (which is reverse scored). Scoring is through a 5-point Likert scale from 1 (*strongly disagree*) to 5 (*strongly agree*). Total scores range from 14 to 70, with higher scores indicating more negative attitudes.

There were 3 questions relating to interest in suicide prevention: being directly involved (eg, screening, counseling at-risk patient), being indirectly involved (eg, distributing patient literature), and receiving training (eg, CE program, workshop). These items were also rated on a Likert scale from 1 (*strongly disagree*) to 5 (*strongly agree*).

Perceived skills in suicide prevention were measured using items in the suicide skills section of the Suicide Knowledge and Skills Questionnaire.²⁰ Four items regarding suicide skills are rated on a Likert scale from 1 (*strongly disagree*) to 5 (*strongly agree*). Items include: "I have received the training I need to engage and assist those with suicidal desire and/or intent," "I have the skills I need to engage and assist those with suicidal desire and/or intent," "I have the support/supervision I need to engage and assist those with suicidal desire and/or intent," and "I am comfortable asking direct and open questions about suicide."

The study was approved by the university's institutional review board. Permission to use the aforementioned scales was granted by the original authors.

All statistical analyses were conducted using the Minitab 18.1 software (Minitab, Inc, State College, PA). This included means, SDs, and relative frequencies in the realm of descriptive statistics, as well as Pearson product-moment bivariate correlations with corresponding hypothesis tests that the true population correlation was zero (ie, $H_0: \rho = 0$).

TABLE 1: Attitudes toward suicide prevention (n = 227)

Item	Mean ± SD ^a
I resent being asked to do more about suicide	1.80 ± 0.63
Suicide prevention is not my responsibility	2.00 ± 0.70
Making more funds available to the appropriate health services would make no difference to the suicide rate	2.15 ± 0.78
Working with suicidal patients is rewarding ^b	2.59 ± 0.69
If people are serious about committing suicide they don't tell anyone	2.44 ± 0.91
I feel defensive when people offer advice about suicide prevention	1.99 ± 0.63
It is easy for people not involved in clinical practice to make judgments about suicide prevention	3.28 ± 0.90
If a person survives a suicide attempt, then this was a ploy for attention	2.01 ± 0.73
People have the right to take their own lives	2.21 ± 1.01
Since unemployment and poverty are the main causes of suicide, there is little that an individual can do to prevent it	1.85 ± 0.62
I don't feel comfortable assessing someone for suicide risk	3.11 ± 0.97
Suicide prevention measures are a drain on resources, which would be more useful elsewhere	2.05 ± 0.66
There is no way of knowing who is going to commit suicide	2.49 ± 0.85
What proportion of suicides do you consider preventable? ^{b,c}	2.43 ± 0.88
Total	32.18 ± 5.46

^aScoring is from 1 (*strongly disagree*) to 5 (*strongly agree*).

^bItem is reverse-scored.

^cScale is none → all.

Results

The survey was completed by 227/297 (76.4%) pharmacists who attended the CE program. Most pharmacists who participated in the survey were 26 to 45 years old (56%), followed by 46 to 65 years old (32%). The remaining participants were under 26 years old or over 65 years old (12%). The ratio of females to males was 1.7:1. Approximately 88% of participants were white, 8% were black, and 4% were Hispanic/other. Almost two-thirds of the participants worked in the community pharmacy setting, approximately one-eighth in the hospital setting, and approximately one-fifth in various other practice settings. Ten percent of the participants had prior educational or work experience in a psychiatric setting, and 4.4% had prior education or training relating to suicide or suicide prevention. Approximately one-third of the participants acknowledged having known a patient who had expressed suicidal thoughts or who had attempted suicide, and approximately one-fourth acknowledged having known a patient who died by suicide. Similarly, approximately one-third of the participants acknowledged having known a close family member/friend who had expressed suicidal thoughts, and approximately one-fifth acknowledged having known a close family member/friend who died by suicide.

More participants expressed disagreement (29%) than agreement (25%) with interest in being directly involved in suicide prevention (eg, screening, counseling at-risk patient). Most commonly (46%), participants were neutral

on this item. Conversely, there was more agreement (48%) than disagreement (13%) with interest in being indirectly involved in suicide prevention (eg, distributing patient literature). Fifty-six percent of participants agreed that they had an interest in receiving training in suicide prevention (eg, CE program, workshop), and 12% disagreed.

The ASP Scale scores are shown in Table 1. The most positive attitude was on the item, “I resent being asked to do more about suicide.” Only 2 items (“It is easy for people not involved in clinical practice to make judgments about suicide prevention” and “I don't feel comfortable assessing someone for suicide risk”) had means above 3/5, which indicates more negative attitudes overall as opposed to positive attitudes. The mean total score on the ASP was 32.2 ± 5.5.

Approximately 4% to 8% of participants strongly agreed or agreed that they had the requisite training, skills, or support/supervision to engage and assist suicidal patients. Conversely, 90% of participants strongly disagreed or disagreed that they had the necessary training, and 76% to 77% strongly disagreed or disagreed that they had the necessary skills or support/supervision. As to feeling comfortable asking their patients direct and open questions about suicide, 22% of participants strongly agreed or agreed, whereas 52% strongly disagreed or disagreed.

TABLE 2: Statistically significant correlations between attitude, interest, and perceived skills regarding suicide prevention

Items	Pearson Correlation	P Value
Attitude score vs interest: being directly involved in suicide prevention in practice setting	-0.366	<.001
Attitude score vs interest: being indirectly involved in suicide prevention in practice setting	-0.264	<.001
Attitude score vs interest: receiving training in suicide prevention	-0.354	<.001
Attitude score vs perceived skill: comfort in asking direct and open questions about suicide	-0.163	.028
Perceived skill: received the training needed to engage and assist those with suicidal desire and/or intent vs interest: being directly involved in suicide prevention in practice setting	0.203	.002
Perceived skill: have the skills needed to engage and assist those with suicidal desire and/or intent vs interest: being directly involved in suicide prevention in practice setting	0.246	<.001
Perceived skill: have the skills needed to engage and assist those with suicidal desire and/or intent vs interest: being indirectly involved in suicide prevention in practice setting	0.150	.024
Perceived skill: have the support/supervision needed to engage and assist those with suicidal desire and/or intent vs interest: being directly involved in suicide prevention in practice setting	0.161	.015
Perceived skill: comfort in asking direct and open questions about suicide vs interest: being directly involved in suicide prevention in practice setting	0.193	.004
Perceived skill: comfort in asking direct and open questions about suicide vs interest: receiving training in suicide prevention	0.132	.048

Statistically significant correlations between attitude, interest, and perceived skills regarding suicide prevention are shown in Table 2. There was an inverse correlation between ASP scores and participants' interest in direct involvement in suicide prevention, indirect involvement in suicide prevention, and receiving training in suicide prevention. Notably, all 4 items relating to perceived skills in suicide prevention had statistically significant correlations with interest in being directly involved in suicide prevention.

Discussion

The pharmacists' mean ASP score in the present study (32.2) is similar to that found in a previous study² of pharmacists in the United States (33.1, pre-CE). Approximately twice as many pharmacists in this survey expressed interest in being indirectly involved in suicide prevention efforts than in being directly involved in suicide prevention. The most negative findings in the survey dealt with perceived skills in suicide prevention. Those findings are unsurprising given that very few of the pharmacists in this study had any prior education or training relating to suicide or suicide prevention. Traditionally, adequate coverage of suicide and suicide prevention has not been included in pharmacy school curricula. Importantly, a recently published article²¹ endorsed by the College of Psychiatric and Neurologic Pharmacists, included a recommendation that pharmacy students be taught to analyze and take appropriate actions in psychiatric emergencies such as suicidality. Of course, currently practicing pharmacists would need instruction as well, so CE programs and workshops should be offered to improve

attitudes and perceived skills regarding suicide prevention.^{2,14}

While some of our findings were disconcerting, it should be noted that there were some rather positive findings in the survey as well. For example, the majority of pharmacists expressed an interest in receiving training in suicide prevention. Also, there were highly favorable responses on various items on the ASP, such as those relating to resentment at being asked to do more about suicide and responsibility for suicide prevention.

We found various correlations between ASP scores, interest in suicide prevention, and perceived skills regarding suicide prevention. The most prominent finding was that pharmacists' willingness to be directly involved in suicide prevention was correlated with more favorable attitudes and with greater perceived skills. These findings suggest that training for pharmacy students and pharmacists should emphasize the attitudes and practical clinical skills that are needed when dealing with suicidal patients.

There are currently more than 1000 Board of Pharmacy Specialties Board Certified Psychiatric Pharmacists.²² These pharmacists would have extensive training and experience in suicide and suicide prevention. However, there are more than 300 000 pharmacists in the United States, the majority of whom practice in the community pharmacy setting.²³ About two-thirds of the pharmacists in our survey practiced in the community pharmacy setting, and we found a low percentage of pharmacists with prior educational or work experience in a psychiatric setting or prior education or training relating to suicide or suicide prevention. Nearly one-half of those who die by

suicide have contact with primary care providers within 1 month of suicide.²⁴ While it is unknown how many suicides occur within a particular time frame of visiting a community pharmacy, we can speculate that highly engaged and well-trained pharmacists could have quite an impact on the suicide rate given how frequently people visit community pharmacies. One poll found that 69% of participants visited the pharmacy at least once a month.²⁵ Thus, pharmacists have many opportunities to participate in suicide prevention efforts.

One strength of the study was the comprehensiveness of the survey, which examined correlations between attitudes, interest, and perceived skills regarding suicide prevention. Despite the length of the survey, the response rate was relatively high. Finally, items concerning attitudes and perceived skills regarding suicide prevention were derived from validated scales. There were various limitations to the study. It involved a convenience sample of pharmacists who were attending a live CE program, so those attending the CE program might not be representative of other pharmacists. Second, the demographic characteristics of the pharmacists were fairly homogeneous, especially in regard to race, which can limit generalizability. Finally, items concerning interest in direct involvement, indirect involvement, and receiving training in suicide prevention were not derived from a validated scale.

Conclusion

There were some positive findings in this survey, but overall, pharmacists in this study felt unprepared to be frontline clinicians in suicide prevention efforts. Further studies should be conducted to determine if these findings are generally reflective of the broader pharmacy community. If the profession is to have a serious role in suicide prevention, then adequate suicide prevention training for pharmacy students and pharmacists may be necessary.

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