

Feasibility of Incorporating the Applied Suicide Intervention Skills Training Program into Nursing Education

Athena Liu

Mentors: Jennifer Smith, Dr. Jacqueline Smith
Faculty of Nursing, University of Calgary

Abstract

Suicide and mental health are both relevant topics that impact a diverse number of individuals in both personal and professional contexts, such as patients in healthcare. Therefore, it is important that healthcare workers, such as nurses, are trained and well equipped to intervene with at-risk individuals. There is a need for nurses to develop competency to better support and provide the appropriate care for patients with suicidal ideation. The objective of this study is to determine the feasibility of offering Applied Suicide Intervention Skills Training (ASIST) in the Faculty of Nursing at the University of BLINDED, and to measure the impact of the workshop on students, staff, and faculty. Post and pre workshop surveys were collected and analyzed using descriptive quantitative and thematic qualitative data. Participants showed overwhelming support by strongly agreeing that suicide intervention program should be included in nursing education. Results suggest the potential benefits of incorporating suicide intervention training for nursing students such as improved knowledge and understanding of suicide. Participants reported improved confidence and preparedness to intervene with at-risk individuals. Participants can apply their skills professionally with patients, or personally with supporting friends and family. Similarly, faculty and staff can support students and colleagues on campus.

Keywords:

Suicide Intervention, Post-secondary education, Nursing, ASIST

Introduction

The Applied Suicide Intervention Skills Training (ASIST) program was created by researchers from the University of BLINDED

during the period of 1981-1985 at Suicide Information and Education Center (SIEC)/ Suicide Prevention Training Program (SPTP) (forerunner of Centre for Suicide Prevention) under the umbrella of the Canadian Mental Health Association (CMHA). ASIST empowers anyone to provide lifesaving suicide intervention (Ramsay et al., 1990). Currently, it is offered at the BLINDED in partnership with the Centre for Suicide Prevention (CSP). The two-day interactive training consists of teaching participants to recognize signs of suicidal ideation and creating a safety plan to support individuals with suicidal ideation. Videos, discussions, and the utilization of scenarios help participants to gain a further understanding on how to approach and work with individuals with suicidal ideation. There is evidence to suggest that ASIST is the better alternative compared to other gatekeeper programs such as QPR (Question, Persuade, Refer) and SafeTalk. In a study by Condrón et al. (2015), gatekeepers who participated in longer training (more than eight hours such as ASIST) identified proportionately more at-risk youths than participants in shorter training (like QPR <3 hours and SafeTalk 3-8 hours). Those with less than three hours of training identified 0.81 at-risk youths while those with more than eight hours of training identified 1.05 at-risk youths (Condrón et al., 2015). Similarly, Silva et al. (2016) found that individuals with gatekeeper training such as ASIST and QPR demonstrated greater suicide knowledge and confidence than those with no such training. However, individuals with ASIST training reported greater confidence in working with suicidal individuals, compared to all other suicide related training (Silva et al., 2016).

There were noticeable gaps in literature after conducting a review. Although there were numerous articles about ASIST, very few focused on nurses and nursing education. Most articles about ASIST were focused on gatekeepers such as teachers, counsellors, and social workers. Articles also focused on health care professionals (HCPs), which was used as a general umbrella term to include nurses, physicians, case managers, clinicians, administrators, and support staff. Smith et al. (2014) found that the above HCPs who took part in ASIST training demonstrated greater knowledge and outperformed those without ASIST training. They were more knowledgeable about suicidal behavior and more confident in their skills (Smith et al., 2014). Pompili et al. (2017) conducted a study to examine

the correlation between gatekeeper training such as ASIST and suicide related knowledge among a diverse set of health care workers (psychiatrists, nurses, psychologists, educators) and students enrolled in medical and psychological schools. Results indicated a difference in knowledge and skills in suicide assessment and that suicide awareness should be promoted among the health care workers and students (Pompili et al., 2017).

A systematic review conducted by Ferguson et al. (2020) examined eight peer reviewed articles on the effectiveness of providing suicide prevention education to nursing students and found that suicide prevention education contributes to improved skills, abilities, and self-confidence, as well as positive shifts in attitudes regarding suicide. A qualitative study by Tallaksen et al. (2013) found that public health nurses who attended ASIST workshops and worked with adolescents for at least half a year after the workshop experienced increased professional competency, proficiency in actions, and dialogue competency. The nurses were able to better target and offer faster locally based assessments of diverse situations and contexts (Tallaksen et al., 2013). Heyman et al. (2015) conducted a phenomenological study to examine the experiences of second year Bachelor of Nursing (mental health) students who participated in ASIST and found that it benefitted students by building their confidence through experience. They also praised the ASIST program as an evidence-based, student-centered approach providing a pedagogically sound and impactful learning opportunity, suggesting that it may be beneficial in nursing education (Heyman et al., 2015). Similarly, Shannonhouse et al. (2017), examined the impact of ASIST on graduate assistants, faculty members, and support staff who have frequent contact with students on a US university campus and found that ASIST fostered knowledge and skills about suicide intervention demonstrating the importance of having university faculty and staff trained to support students and colleagues at potential risk of suicide.

The current study was conducted to address the gap in literature regarding ASIST and nursing education. Nurses are in a unique position to interact and intervene with patients on an everyday basis. Furthermore, mental health education and suicide intervention training can better prepare nursing students to support patients with suicidal ideation during clinical practice. The objective of this study is to determine the feasibility of offering ASIST in the Faculty of

Nursing (FON) and to measure the impact of ASIST workshops on students, staff, and faculty. Specifically, this study will evaluate the feasibility of offering the ASIST workshop to nursing students and faculty and staff in the Faculty of Nursing, and determine if there is evidence to integrate the ASIST workshop as a co-curricular activity for nursing students. The study will also evaluate the impact of ASIST training on nursing students' clinical practice, staff/faculty professional interactions, and on personal life experiences and relationships of students, faculty, and staff.

Methods

ASIST workshops were offered by the Faculty of Nursing beginning in October 2021. All Faculty of Nursing members, including undergraduate and graduate students, staff, and faculty were invited to attend the free, two-day week-end workshop. Upon registration, participants were informed of an opportunity to participate in a research study that would evaluate the workshop. Prior to the beginning of the workshop all participants were asked to complete the Centre for Suicide Prevention evaluation questions. If participants chose to be a part of the study, they were also asked to complete the research consent form, demographic questions, as well as Faculty of Nursing questions. This study was approved by the BLINDED Conjoint Health Research Ethics Board (REB20-1640). Due to low enrollment, some workshops were opened to all faculties. However, as the research study was focused on nursing participants only, workshop participants from other faculties were not invited to complete any surveys.

Measures

Centre for Suicide Prevention Evaluation Questions

CSP evaluation questions included a pre and post survey where participants used a 1 to 10 scale with 1 indicating low and 10 indicating high. CSP1, CSP2, and CSP 3 assessed if participants were ready, confident, and skilled to intervene with someone at risk of suicide. CSP4 assessed if participants knew how to connect someone to mental health resources in the community. All participants were asked to complete the CSP evaluation questions, regardless of if participants gave their consent to be part of the study.

Demographic Questions

Pre workshop demographic surveys were used to collect participant age, gender, ethnicity, term of study, program route, expected graduation year, and role in the FON. Other demographic questions related specifically to the workshop and included whether participants had ever heard of the ASIST workshop, if they had taken an ASIST workshop and/or another suicidal intervention program before, if they took the workshop because it was free, if they took the workshop because it was offered by the FON, and if they took the workshop because they were personally and/or professionally interested.

Faculty of Nursing Questions

Participants who consented to participate in the study answered the additional Faculty of Nursing (FON) survey questions also using a scale from 1 to 10. FON1 to FON4 similarly assessed the same questions as CSP1 to CSP4, with the FON questions focused on the professional perspective of a nurse and the CSP questions focused on personal perspective. The additional FON5 used a Likert Scale with Strongly Agree, Somewhat Agree, Neither Agree nor Disagree, Somewhat Disagree, and Strongly Disagree to assess whether participants believed that suicide intervention training should be included in nursing education. For FON6 to FON8 participants were asked to write a short response. FON6 pre workshop and FON6 post workshop asked participants to comment or expand on their experience. In the post workshop surveys, FON7 assessed if participants believed that the workshop helped them develop professionally and FON8 assessed if participants believed the workshop helped them develop personally. The post FON survey asked additional feasibility questions (FON9) with a Likert Scale. 9a to 9i assessed participant's satisfaction with the workshop, asking if participants learnt more about suicide, if they would recommend it to a friend, if they believed the workshop would be relevant to current/future clinical/professional practice, and whether participants felt they were able to share their opinion and personal experiences. For FON10 to FON12, participants were asked to write a short response on future improved offerings, other topics that could be included, and additional feedback.

Data Analysis

The SPSS program was used to analyze the quantitative data and NVivo was used to analyze the qualitative data. SPSS was used to find the mean age of participants and other descriptive statistics. Paired t-tests were done with pre and post workshop, post workshop and three month follow up, three month follow up and six month follow up to find if they were statistically significant by looking at the p-value of at least less than 0.01. Nodes and subthemes were coded using NVivo. Two individuals, the research associate and research assistant, went through the themes individually and reviewed them together to establish intercoder reliability. Themes were organized by question and further split into subthemes if necessary. Thematic analysis was informed by Braun and Clarke's (2006) six phases of 1) becoming familiar with the data; 2) generating initial codes; 3) searching for themes; 4) reviewing themes; 5) defining and making themes; and 6) producing the report.

Results

Workshop Attendance

Shown below are the eligible Faculty of Nursing participants for each workshop (Table 1). Not every ASIST participant consented to the research study, however all participants who attended the ASIST workshop were asked to complete the CSP questions.

Table 1. Workshop Attendance to Date.

Workshop Date	Eligible attendees	Consent for Research
October 23 & 24 2021	23	19
Feb 26 & 27 2022	23	22
Mar 19 & 20 2022	22	22
Apr 2 & 3 2022	6	6
June 11 & 12 2022	13	12
Total	87	81

Demographics

Pre-Workshop General Demographics

Of the nursing participants that consented to participate in the research (n=81), a majority were undergraduate student (82.7%) and identify as female (86.4%). Most identified as either a visible minority (61.7%) or white (32.1%) The mean age of participants was 25.57 years with a range from 18 to 57 years old. Of undergraduate students (n=66), over half of participants were direct entry students (51.5%). Students from all terms seemed interested in the workshop with the most students from Term 6 (27.3%). For expected graduation year, the largest number of students would graduate in 2024 (25.8%). See Table 2.

Table 2. Demographics.

	Frequency	Percent
Role	(n=81)	
Undergraduate Student	67	82.7
Graduate Student	9	11.1
Faculty	4	4.9
Staff	1	1.2
Ethnicity	(n=81)	
Indigenous/Aboriginal	2	2.5
White	26	32.1
Visible Minority	50	61.7
Prefer not to answer	3	3.7
Gender	(n=81)	
Male	9	11.1
Female	70	86.4
Non-Binary	2	2.5
Term of Study (n=66)		
Term 1	2	3
Term 2	9	13.6
Term 3	13	19.7
Term 4	2	3
Term 5	5	7.6
Term 6	18	27.3
Term 7	9	13.6
Term 8	8	12.1
Program Route	(n=66)	
Direct Entry	34	51.5
Degree Holder	23	34.8
Transfer	9	13.6
Expected Graduation Year	(n=66)	
2021	4	6.1
2022	19	28.8
2023	15	22.7
2024	17	25.8
2025	11	16.7
Age	M: 26.57 SD: 10.02	Range 18-57

Pre-Workshop ASIST Demographics

Prior to completing the workshop, 66.7% of participants (n=81) had heard of ASIST before registering, with 93.8% of participants responding they had never taken ASIST. Some participants (18.5%) had taken other suicide intervention programs, including QPR and SafeTalk. Participants took ASIST because they were professionally interested (16.0%) and personally interested (19.8%). See Table 3.

Table 3. ASIST Demographics.

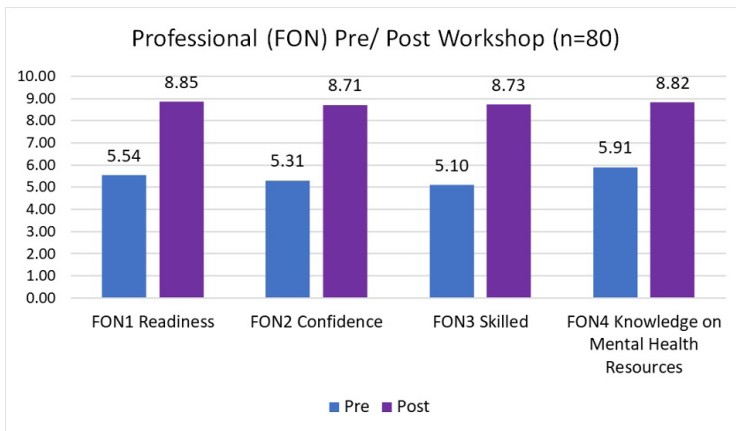
	Frequency	Percent
Heard of ASIST before	(n=81)	
Yes	27	33.3
No	54	66.7
Taken ASIST before	(n=81)	
Yes	5	6.2
No	76	93.8
Training from Other Programs	(n=81)	
Yes	66	81.5
No	15	18.5
Take ASIST because free	(n=81)	
Yes	49	60.5
No	32	39.5
Take ASIST because offered by FON	(n=81)	
Yes	26	32.1
No	55	67.9
Take ASIST because professionally interested	(n=81)	
Yes	13	16.0
No	68	84.0
Take ASIST because personally interested	(n=81)	
Yes	16	19.8
No	65	80.2
Take ASIST because other reason	(n=80)	
Yes	0	0
No	80	100

Quantitative Results

Pre and Post Workshop

A paired t-test for FON1 to FON4 (n=80) indicated a significant difference in readiness to intervene with someone at risk of suicide pre workshop (M=5.54, SD=2.33) and post workshop (M=8.85, SD=1.14) conditions, $t(79)=-13.31$, $p<0.001$; confidence to intervene with someone at risk of suicide in their career as FON pre workshop (M=5.31, SD=2.41) and post workshop (M=8.71, SD=1.22) conditions, $t(79)=-13.20$, $p<0.001$; skilled to intervene with someone at risk of suicide in their career as FON pre workshop (M=5.10, SD=2.46) and post workshop (M=8.73, SD=1.30) conditions, $t(79)=-13.79$, $p<0.001$; and knowledge of connecting someone to mental health resources pre workshop (M=5.91, SD=2.43) and post workshop (M=8.82, SD=1.38) conditions, $t(79)=-11.63$, $p<0.001$. See Figure 1. This indicates that participants had improved professional readiness, confidence, skills, and knowledge on suicide intervention and mental health resources after completing the workshop compared to before the workshop.

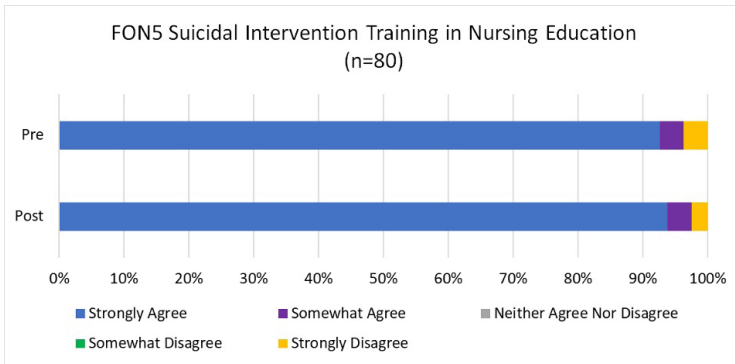
Figure 1. FON1 to FON4 Pre and Post Results.



The t-test for FON5 (n=80) indicated no significant difference pre workshop (M=1.19, SD=0.78) compared to post workshop (M=1.14, SD=0.65) conditions, $t(79)=0.587$, $p=0.559$, indicating that participants already believed prior to the start of the workshop that the content of the workshop was worth including in nursing education. FON5 assessed participants desire for suicide intervention

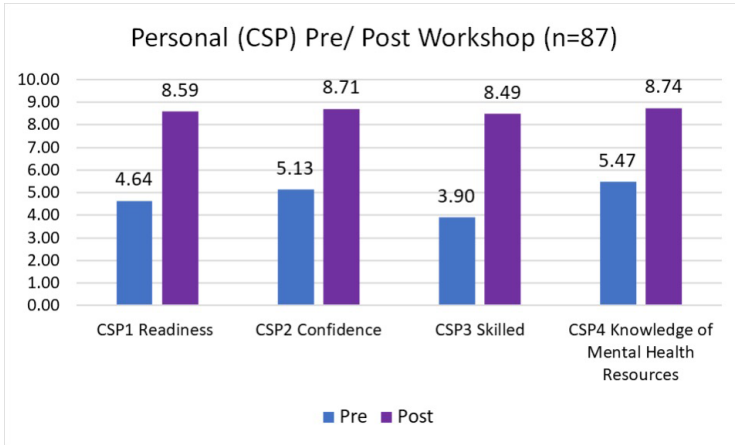
training to be included in nursing education using the Likert Scale. Pre FON5 had 92.6% of participants for Strongly Agree, 3.7% for Somewhat Agree and 3.7% for Strongly Disagree. Post FON5 had 93.8% of participants for Strongly Agree, 3.8% for Somewhat Agree, and 2.5% for Strongly Disagree. See Figure 2.

Figure 2. FON5 Pre and Post Results.



A paired t-test for pre and post workshop for CSP1 to CSP4 (n=87) indicated a similar significant difference in readiness to intervene with someone at risk of suicide pre workshop (M=4.64, SD=2.26) and post workshop (M=8.59, SD=1.17) conditions, $t(86)=-16.28, p<0.001$; confidence to intervene with someone at risk of suicide in their career as FON pre workshop (M=5.13, SD=2.16) and post workshop (M=8.71, SD=1.30) conditions, $t(86)=-16.28, p<0.001$; skilled to intervene with someone at risk of suicide in their career as FON pre workshop (M=3.90, SD=2.02) and post workshop (M=8.49, SD=1.28) conditions $t(86)=-19.67, p<0.001$; and knowledge of connecting someone to mental health resources pre workshop (M=5.47, SD=2.45) and post workshop (M=8.74, SD=1.38) conditions, $t(86)=-13.21, p<0.001$. See Figure 3. This indicates that participants had improved personal readiness, confidence, skills, and knowledge on suicide intervention and mental health resources after completing the workshop compared to before the workshop.

Figure 3. CSP1 to CSP4 Pre and Post Results.



Post-workshop and 3 months

A paired t-test for FON1 to FON4 at post workshop and 3 months follow up (n=54) indicated a significant difference in readiness to intervene with someone at risk of suicide post workshop (M=8.76, SD=1.21) and at 3 months (M=8.17, SD=1.34) conditions, $t(53) = 3.44$, $p < 0.001$; confidence to intervene with someone at risk of suicide in their career as FON post workshop (M=8.61, SD=1.32) and at 3 months (M=7.96, SD=1.68) conditions, $t(53) = 3.24$, $p = 0.002$; skilled to intervene with someone at risk of suicide in their career as FON post workshop (M=8.63, SD=1.43) and at 3 months (M=8.04, SD=1.63) conditions, $t(53) = 2.86$, $p = 0.006$; and knowledge of resources post workshop (M=8.72, SD=1.46) and at 3 months (M=8.13, SD=1.64) conditions, $t(53) = 2.69$, $p = 0.010$. This suggests that between the post-workshop and 3 month follow up, participants' professional readiness, confidence, skills, and knowledge of connecting someone to mental health resources decreased slightly. However, it was still significantly higher overall than prior to attending the workshop. The t-test for FON5 indicated no significant difference post workshop (M=1.19, SD=0.78) compared to at 3 months (M=1.37, SD=1.07) conditions, $t(53) = -1.20$, $p = 0.235$, indicating that participants post workshop and at the 3 months follow up believed that the content of the workshop was worth including in nursing education.

A paired t-test for CSP1, CSP3, and CSP4 at post workshop and 3 months follow up (n=54) indicated a significant difference in readiness to intervene with someone at risk of suicide post workshop (M=8.48, SD=1.19) and at 3 months (M=7.78, SD=1.49) conditions, $t(53)=4.08$, $p<0.001$; skilled to intervene with someone at risk of suicide in their career as FON post workshop (M=8.40, SD=1.35) and at 3 months (M=7.67, SD=1.60) conditions, $t(53)=3.97$, $p<0.001$; and knowledge of connecting someone to mental health resources post workshop (M=8.56, SD=1.49) and at 3 months (M=7.76, SD=1.82) conditions, $t(53)=3.64$, $p<0.001$. This indicates that participants' personal readiness, skills, and knowledge on suicide intervention and mental health resources decreased slightly. However, it was still significantly higher overall than prior to attending the workshop. There was no significant difference in participants' confidence to intervene with someone at risk of suicide at post workshop (M=8.48, SD=1.37) and at 3 months (M=7.94, SD=1.70) conditions, $t(53)=2.55$, $p=0.014$. This suggests that participants felt that their personal confidence related to suicide intervention was retained.

3 months and 6 months

A paired t-test for FON1 to FON4 3 months and 6 months (n=14) follow up indicated no significant difference in readiness to intervene with someone at risk of suicide at 3 months (M=7.86, SD=1.88) and at 6 months (M=7.93, SD=2.27) conditions, $t(13)=-0.186$, $p=0.856$; confidence to intervene with someone at risk of suicide in their career as FON at 3 months (M=7.71, SD=2.16) and at 6 months (M=7.50, SD=2.53) conditions, $t(13)=0.641$, $p=0.533$; skilled to intervene with someone at risk of suicide in their career as FON at 3 months (M=7.86, SD=2.11) and at 6 months (M=7.36, SD=2.17) conditions, $t(13)=1.61$, $p=0.131$; and knowledge of connecting someone to mental health resources at 3 months (M=7.86, SD=1.70) and at 6 months (M=8.29, SD=2.16) conditions, $t(13)=-1.10$, $p=0.290$. This suggests that between the 3 months and 6 months follow up, participants' professional readiness, confidence, skills, and knowledge on suicide intervention and mental health resources were retained. A paired t-test for FON5 for if suicide intervention training should be included in nursing education indicated no significant difference at 3 months (M=1.43, SD=1.09)

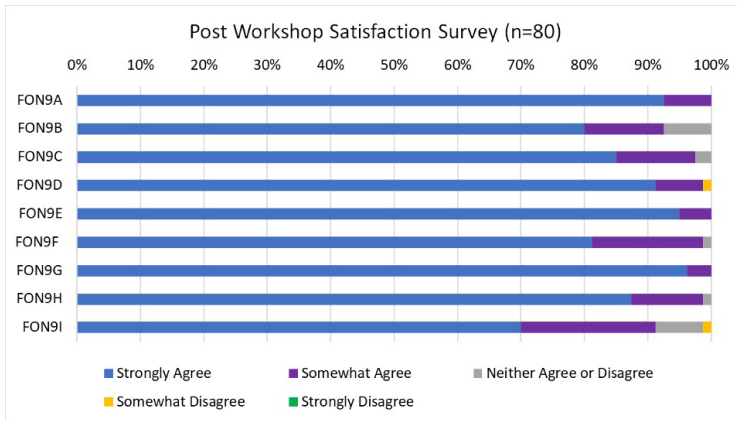
and at 6 months (M=1.71, SD= 1.44) conditions, $t(13)=-0.563$, $p=0.583$. This indicates that participants believed that the suicide intervention program should be included in nursing education even after 3 and 6 months of completing the workshop.

A paired t-test for CSP1 to CSP4 at 3 months and 6 months (n=14) follow up indicated no significant difference in readiness to intervene with someone at risk of suicide at 3 months (M=7.57, SD=1.87) and at 6 months (M=7.64, SD=1.95) conditions, $t(13)=-0.179$, $p=0.861$; confidence to intervene with someone at risk of suicide in their career as FON at 3 months (M=7.64, SD=2.02) and at 6 months (M=7.29, SD=2.16) conditions, $t(13)=0.924$, $p=0.373$; skilled to intervene with someone at risk of suicide in their career as FON at 3 months (M=7.64, SD=1.91) and at 6 months (M=7.29, SD=2.09) conditions, $t(13)=1.01$, $p=0.292$; and knowledge of connecting someone to mental health resources at 3 months (M=7.71, SD=1.86) and at 6 months (M=8.21, SD=2.05) conditions, $t(13)=-1.24$, $p=0.236$. This suggests that participants' personal readiness, confidence, skills, and knowledge on suicide intervention and mental health resources were retained at 6 months post workshop.

Post Workshop Satisfaction Survey

For FON 9a to 9i, participants (n=80) used the Likert Scale with Strongly Agree, Somewhat Agree, Neither Agree nor Disagree, Somewhat Disagree, and Strongly Disagree. For all satisfaction questions, a large majority (70.0%-96.3%) of participants strongly agreed, indicating immense satisfaction and very strong support for the ASIST program. The next largest majority of participants responded somewhat agree, and no participants strongly disagreed for any of the satisfaction questions. Overall, participants felt that the workshop was interesting, informative, and relevant to their practice. Participants learnt a great deal on suicidal ideation, even more than they anticipated, and were very likely to recommend the ASIST workshop to a friend. Furthermore, participants felt like they were able to share their opinions and personal experiences openly during discussion. See Figure 4.

Figure 4. Post Workshop Satisfaction Survey



Qualitative Results

Qualitative data results below are based on pre and post workshop data only. Qualitative data collection and analysis at the 3 months or the 6 months follow up is ongoing.

FON6 Pre-workshop: Expand on responses

Importance of Nursing Education. Participants (n=16) believe that suicide intervention should be included in nursing education and curriculum to give students the necessary fundamental knowledge and skills to better approach patients in clinicals. A few participants mentioned that patients with mental health issues are found in every area of nursing practice and as such suicide intervention is a necessary skill for nurses to “develop competency” to ensure that they “provide the best care possible”. Another participant stressed the importance of suicide intervention program stating that, “As nurses our job is to help people and get them healthy. Someone considering suicide is most likely not healthy (mental health) and needs help. This 100% applies to nurses so we need to be ready. Also, people come to us because nurses are trusted.”

Insufficient Tools and Lack of Preparation. Participants (n=7) reported feeling unprepared and lacking the “necessary tools to intervene”. One participant mentioned their lack of exposure to the topic of suicide, which is impeding their opportunity to learn more. Another participant stated, “Students will be exposed to human behavior and struggles with their first clinical experience, they will need to have the skills to help them work with patients and provide self-care for themselves.”

Additional Themes. Other participants (n=5) stressed the lack of focus on the important topic of mental health in their current education. Three participants reflected on their current knowledge and skills related to suicide, which they believed to be lacking, and two participants mentioned the importance of self-care. One participant suggested how ASIST could be improved, such as including how to de-stress after suicide intervention and focusing not only on self-harm, but potential harm to others. One participant mentioned the expectation for nurses to have knowledge on suicide.

FON6 Post-workshop: Expand on Responses

Importance of Nursing Education. Nine participants reported that suicide intervention is important and should be included in nursing education and curriculum. Participants felt that prior to the training, they were unprepared to help their patients. This is supported by a participant who said, “This should be mandatory (part of curriculum) for nursing students. I felt unprepared before this.” Similarly, another participant said, “Absolutely necessary before going into clinical. I came across this in Term 4 & was totally unprepared.” One participant stated, “mental health isn’t taken seriously” and are only self-study modules compared to other content. They added, “At least knowing ASIST will help with stressful patient situations.”

Improved Knowledge and Skills. Participants (n=9) reported increased knowledge on how to approach and intervene with people at risk of suicide. Also, participants feel they now have an organized way to respond to people with immediate suicidal ideation. Participants reported that the workshop helped with improving clinical thinking and communication skills on how to approach and work with patients or people with suicidal ideation.

Confident or Comfortable. Eight participants reported feeling more confident about suicide and engaging with people with suicidal ideation. This also extends to clinical practice as one participant said, “The training will relate to my clinical practice as I will feel more comfortable to provide intervention and ask the difficult questions that may arise in a situation.” The same participant mentioned feeling more confident to ask the difficult question about suicide, and another participant similarly reported, “I feel more comfortable with the discussion of suicide and promoting conversations”.

Prepared for Suicide Intervention. After attending the workshop, participants (n=7) reported feeling, “a lot more prepared overall in all aspects of suicide intervention”. Participants also felt, “more prepared and confident to help someone who is contemplating suicide”. One participant stated, “having this program more so allows students to be prepared especially with the reality of the presence of suicide in society.”

Additional Comments. Some participants (n=5) mentioned the helpfulness of the ASIST framework and pathway assisting life (PAL) because it served as an organized guide for participants to approach individuals at risk of suicide. Improved mental health (n=1), real life application of the ASIST workshop (n=1), and reduced stigma around suicide (n=1) were also mentioned.

FON7: Impact of ASIST on Professional Development

Prepared. Participants (n=37) reported feeling more prepared to intervene if they ever come across a situation where patients have suicidal ideation. “I feel much more prepared to intervene and even just knowledgeable about suicide. I will be a better nurse by knowing how to help people with thoughts of suicide because it is so prevalent.” A faculty member also reported feeling, “more prepared to manage at risk students and feel that I will be much more skillful in the act.”

Confident. Overall, participants (n=22) reported feeling confident and comfortable to help, intervene, and interact with people with suicidal ideation. Participants also reported feeling confident to ask about suicide and navigate those conversation. A participant reported feeling confident because they had the required knowledge at hand, “I will be more confident when talking to my clients/patients. I won’t have to try and find someone else to talk about it since I know how to approach things now.” Another patient stated, “I feel confident, knowledgeable, skilled and ready to help a patient through suicide intervention if I sense a patient with thoughts of suicide.”

More Positive as HCP. Participants (n=12) reported a more positive perspective of nursing and providing care for patients. The workshop allowed participants to, “examine relational practice and understand the significance of rapport building with our clients. These skills are essential to working as a future health care provider.”

Participants feel more competent as they pointed out that nurses in different specialties will come across patients who struggle with mental health or have suicidal ideation.

Framework or Process. Participants (n=9) feel they have benefited from the workshop because they have a solid understanding of the ASIST framework or PAL pathway, to guide them as they work through the process of intervening with individuals with suicidal ideation. A participant stated, “I feel more confident learning more about suicide & having a framework rather than guessing about what I should be saying/doing when intervening in suicide.”

Additional Comments. Participants (n=5) mentioned improved ability to recognize risk factors for someone at risk of suicide. Participants (n=3) also felt that the workshop helped with their relational practice and improving their ability to form connection with patients. Two participants reported the need for suicide intervention training to be included in nursing. Participants also reported improved empathy (n=1) or feeling empowered to help someone at risk of suicide (n=1).

FON8: Impact of ASIST on Personal Development

Confident. Participants (n=20) reported feeling more confident with “identifying the signs in people” and “being a support system”. Participants had improved awareness and confidence in recognizing and intervening people with suicidal ideation. Two participants reported feeling more confident or motivated to, “help people in the community”.

Awareness and Reflection. Participants (n=14) had a deeper understanding of suicide and how they feel about suicide after the workshop as shown through this participant who stated that, “I can further explore my personal perspective and attitudes and have/create a realistic direction to grow and further develop in this genre.” Two participants reported that they now, “understand the complexity of suicide.”. One participant said they have become “more informed and compassionate”, and the other participant reported realizing “how complicated mental health can be” and becoming “a more understanding person when it comes to mental health concerns/suicide.”.

Prepared. Participants (n=14) feel prepared to intervene in their professional and personal life, with one participant stating that they “also feel supported personally.” A participant stated besides being better equipped to respond to situations they have encountered before in clinical, they also feel that they could, “be a leader in incidences like this.” Also, participants felt prepared to connect others to resources and to use appropriate vocabulary when approaching individuals with suicidal ideation.

Support for Family and Friends. Many participants (n=14) reported that they felt confident and comfortable to intervene with family and friends. Participants reported feeling confident to reach out, can recognize signs when their loved one is struggling, and starting a conversation about suicide. Participants also mentioned being more open and able to be a lend an ear for family and friends. One participant stated that they feel, “more comfortable with the possibility of a loved one sharing that they are considering suicide.”

Additional Comments. Participants also noted improved communication skills (n=2), improved knowledge and understanding (n=5), improved knowledge about mental health (n=4), and feeling that the workshop would help them not only personally, but also professionally (n=5). Two participants mentioned reduced stigma around suicide and four participants felt that they gained a new experience. Five participants also mentioned their appreciation for having the ASIST framework and learning the process of how to approach individuals at risk for suicide.

FON10: Improved Upon in Future Offerings

Workshop Content. Participants felt they would have benefited from more interactive scenarios or more interaction between participants and their trainers. One participant believed that interaction may help people stay engaged when there were not enough opportunities to participate. Participants also wanted to see more scenarios for them to practice their intervention skills. One participant suggested scenarios in a video format followed by a discussion.

Workshop Logistics. Nine participants expressed their desire for a shorter workshop, as they believed the content could be delivered over a shorter amount of time and take up less of their personal time. Two participants wanted a longer workshop, to include,

“more discussion” and “practical (hands on) experience.” Three participants believed that smaller groups would have facilitated more discussion and a participant stated, “smaller groups of similar range in knowledge/experience would be more beneficial, since I had pressure from people who had more experience dealing with suicide situations & didn’t want to share as much.”

Positive Feedback. A number of participants (n=11) gave general positive feedback which included “great”, “wonderful”, “perfect”, “well done” and “enjoyed it”. Four participants believed that the workshop was fine as is and had nothing to improve on.

Additional Comments. Participants (n=4) would have liked to see more links to the nursing curriculum and suggested adjusting the group and content to only nursing students to make the workshop even more relevant with one participant stating, “Linking some of the content to the nursing curriculum. Esp: Term 3, N289 - Nightingale Values, bias & assumptions. Everyone in attendance who is an undergraduate program would already have that content before course.”. Participants also wanted to see a focus on diverse and vulnerable populations (n=1) and more on caregivers and their wellbeing (n=1).

FON11: Topics to Include

Satisfied with Topics. Many participants (n=15) were satisfied with the topics already included in the ASIST workshop, stating, “I think that the topics included were very informative and cannot think of anything else to add on” and “I felt like all important topics were covered”.

Knowledge. Participants would like to see a brief overview of MAID or the difference between suicide and MAID. Participants indicated they would like to learn more about postpartum depression, child labour, immigration, people who use substance or drugs, people who are religious, Indigenous population, and the BIPOC community.

Resources and Self Care. Participants (n=12) wanted to see topics about self-care and debriefing for ASIST providers post intervention. For example, “How do you unpack & process what you’ve just done - especially if it goes wrong?”. They also wanted more details on resources such as who to reach out in the community, helplines, and the cost of counselling and wellness resources outside the BLINDED.

More Practice Scenarios. Participants wanted to see extreme situations such as person calling 911 or an individual at immediate risk of suicide. Participants wanted to see scenarios with unsupportive family members, when suicide is brushed off or joked about, and what to do if an individual denies suicidal ideation.

Additional Comments. Five participants wanted to see more communication skills including, “at risk behaviour/language” or “Vocabulary use when talking to someone thinking of suicide.” Two participants reported wanting to see scenarios in terms of nursing or Alberta Health Services (AHS) context. Participants also reported wanting more focus on recognizing risk factors and symptoms of people at risk of suicide (n=4).

FON12: Feedback

General Positive Feedback. A large number of participants (n=23) indicated general positive feedback about the workshop stating it was “great”, “worth it”, “enlightening”, and that they “loved it” or “enjoyed the workshop”.

Prepared or Knowledgeable. Participants (n=12) feel better prepared and knowledgeable about suicidal intervention and having the chance to consolidate those skills through conversations and scenarios with roleplay. Many participants believed the beneficial skills they learned will be lifelong with a participant stating, “I really valued this! Will carry the knowledge learnt in life and clinical practice.”.

Relevant in Nursing Education. Five participants believe the suicide intervention program was relevant and hope to see it offered as part of the nursing curriculum or, “offer[ed] to all students within lab!”

Additional Comments. Participants also gave positive instructor feedback which included praising the instructors for their friendliness, passion, expertise, and vulnerability (n=5). Participants also reported feeling confident or comfortable about suicide intervention (n=4), that the workshop was a safe space (n=3), and that participants would be able to put theory to practice with their newly gained knowledge and skills on suicide intervention (n=3).

Discussion

This study is still in the process of collecting all relevant data such as the three and six month follow up responses. However, our current results suggest that there is a significant number of nursing students and faculty members who believe that the current mental health content is lacking in the nursing curriculum, and that suicidal intervention training should be implemented into nursing education. Currently, there is a dearth of articles specific to the impact of suicide intervention programs, such as ASIST, on nurses. Our study adds to the current literature. We concur with Heyman et al. (2015) who found the ASIST program to be an evidence based, pedagogically driven learning opportunity that could benefit nursing students by improving their confidence to work with people at risk of suicide. We agree with Ferguson et al. (2020) who looked at the effectiveness of providing suicide prevention education to nursing students, and consistent with our results, found that suicide prevention education contributes to improved skills, abilities, and self-confidence, as well as positive shifts in attitudes regarding suicide. However, we also want to acknowledge that Ferguson et al. (2020) had concerns with their short-term evaluation time frames. Our study follows up after three and six months which can give us a better idea of how participants use their knowledge and skills of ASIST post workshop.

Based on the responses for FON7 and FON8, there is evidence to suggest that the ASIST workshops have impacted nursing student's clinical practice in a positive manner. Students reported feeling more confident and equipped with communication skills to deal with patients at risk of suicide. Also, students reported feeling better prepared with the right tools, such as the ASIST PAL framework, to support at risk patients, and to talk about suicide openly or to directly ask patients if they were considering suicide instead of "dancing around the topic".

Many participants felt confident about their skills and abilities to navigate conversations about suicide and to intervene if necessary. Participants also reported feeling that they knew how to use correct vocabulary and body language to approach individuals at risk of suicide. This is a critical skillset as suicide is a highly stigmatized topic and as such, using the correct language helps to reduce distress and encourage rather than discourage individuals to seek help for suicidal ideation (Padmanathan et al., 2019). In addition, participants

reported that they had improved skills on recognizing risk factors, symptoms, and behaviour of individuals at risk of suicide, which would be beneficial to help identify patients at risk during clinical. This is significant based on Hagen et al.'s (2017) qualitative study with mental health nurses, who found that the ability to pick up on suicide cues may prevent patients from self-harm and other suicidal acts, and how recognizing symptoms and cues is a critical skill for all nurses.

The ASIST workshop has also impacted the personal life experiences and relationship of nursing student, faculty and staff. Participants gained knowledge and understanding about suicidal intervention and believe it would benefit them personally with supporting family and friends, and professionally with the skills learned to approach patients. Participants also reported feeling increased confidence to connect their friends and family members to mental health resources if necessary. Participants felt that they could listen and start conversations about suicide to their friends and family and become a support system for them. Faculty members also expressed confidence to work with students or coworkers if they have suicidal ideation, suggesting a positive impact on staff/faculty professional interactions. This can promote a healthier workspace for students and faculty alike if there is focus on mental health. This aligns with Shannonhouse et al. (2017) who also found that university employees and staff gained knowledge and skills about suicide intervention which could be used to support students and colleagues who may be at risk. Our participants also indicated that they had increased understanding of the complexities of suicide and mental health, which has led to reduced stigma. This is important because often, individuals are afraid to seek out help for resources and counselling because of mental health stigma and fear of being judged by others (Vidourek et al., 2014).

Our results suggests that it is feasible for suicidal intervention programs such as ASIST to be included in nursing education, and that it would positively impact and benefit nursing students. In the post workshop survey, a large majority of participants (78.0%-96.3%) strongly agreed with all satisfaction survey questions, indicating immense satisfaction and strong support for the program. Participants praised the workshop as interesting, informative, and relevant to their practice. Participants reported that they gained significant knowledge

on suicide intervention and were very likely to recommend the ASIST workshop to a friend. Furthermore, participants felt like they were able to share their opinions and personal experiences openly during discussion. If ASIST was offered to nursing students as co-curricular record (CCR), it may act as an incentive to encourage students to take ASIST training. Alternatively, it could be offered through the nursing curriculum during clinical lab time. Nursing students with suicide prevention training would be better prepared for clinical if they encounter patients with suicidal ideation. Not only would the training be beneficial in a professional context, it would also benefit them in a personal context, with most participants reporting being able to support their friends and family. The ASIST program would help nursing students develop competency in suicide intervention, which would benefit them in all areas of nursing and empower nursing students to provide the best care possible to diverse and vulnerable populations.

Limitations

A limitation that may impact the internal validity of the study was the method used to collect the quantitative data for FON5. The Likert Scale was inverted, with Strongly Agree on the far left and Strongly Disagree on the far right. This may have caused participants who were quickly going down the question to circle everything on the far right, suggesting that participants meant to circle Strongly Agreed for the workshop to be included as part of nursing education, but misread and circled Strongly Disagreed instead (n=5).

Another limitation was the effects of Covid-19 and the timing of the workshop, which resulted in lower enrollment than expected. For example, the April workshop took place close to final exam dates, and the workshop was consequently opened to other faculties besides nursing to fill in the workshop slots.

Also, in the pre workshop survey, there were “how to improve” comments regarding ASIST which would normally appear post workshop. This may suggest bias against the workshop and links back to a few participants (5) who had taken ASIST previously. The comment was focused on how ASIST could be improved by including how ASIST providers can de-stress after suicidal intervention.

Conclusion

In conclusion, considering the relevance and importance of mental health, the ASIST program would be a worthwhile addition to the curriculum that will impact nursing students and faculty in a positive and meaningful way. It provides nursing students, staff, and faculty the necessary suicidal intervention skills to intervene in both their professional lives as healthcare providers, and in their personal lives with family and friends. It creates a community of skilled individuals who can support each other and act as a mental health resource. For future research, further data collection on post 3 months and 6 months will be conducted to add on and provide a better representation of the participants from the ASIST workshops.

References

- Braun, V., & Clarke, V. (2006). Using thematic analysis in psychology. *Qualitative Research in Psychology*, 3(2), 77–101. <https://doi.org/10.1191/1478088706qp063oa>
- Condrón, D., Garraza, L. G., Walrath, C. M., McKeon, R., Goldston, D. B., & Heilbron, N. S. (2015). Identifying and Referring youths at risk for suicide following participation in school-based gatekeeper training. *Suicide and Life-Threatening Behavior*, 45(4), 461–476. <https://doi.org/10.1111/sltb.12142>
- Ferguson, M., Reis, J., Rabbetts, L., McCracken, T., Loughhead, M., Rhodes, K., Wepa, D., & Procter, N. (2020). The impact of suicide prevention education programmes for nursing students: A systematic review. *International Journal of Mental Health Nursing*, 29(5), 756–771. <https://doi.org/10.1111/inm.12753>
- Hagen, J., Knizek, B. L., & Hjelmeland, H. (2017). Mental Health Nurses' Experiences of Caring for Suicidal Patients in Psychiatric Wards: An Emotional Endeavor. *Archives of Psychiatric Nursing*, 31(1), 31–37. <https://doi.org/10.1016/j.apnu.2016.07.018>
- Heyman, I., Webster, B. J., & Tee, S. (2015). Curriculum development through understanding the student nurse experience of suicide intervention education – A phenomenographic study. *Nurse Education in Practice*, 15(6), 498–506. <https://doi.org/10.1016/j.nepr.2015.04.008>
- Padmanathan, P., Biddle, L., Hall, K., Scowcroft, E., Nielsen, E., & Knipe, D. (2019). Language use and suicide: An online cross-sectional survey. *PLOS ONE*, 14(6), e0217473. <https://doi.org/10.1371/journal.pone.0217473>
- Pompili, M., Erbutto, D., Innamorati, M., Migliorati, M., & Girardi, P. (2017). Assessment of suicide-related knowledge and skills in a sample of health professionals and students. *European Psychiatry*, 41(S1), S300–S301. <https://doi.org/10.1016/j.eurpsy.2017.02.186>

- Ramsay R.F, Cooke, M.A, Lang W.A. (1990). Alberta's suicide prevention training programs: A retrospective comparison with Rothman's developmental research model. *Suicide and Life-Threatening Behavior*, 20(4),355-351. <http://doi.org/10.1111/j.1943-278X.1990.tb00221.x>
- Shannonhouse, L., Lin, Y.-W. D., Shaw, K., Wanna, R., & Porter, M. (2017). Suicide intervention training for college staff: Program evaluation and intervention skill measurement. *Journal of American College Health*, 65(7), 450–456. <https://doi.org/10.1080/07448481.2017.1341893>
- Silva, C., Smith, A. R., Dodd, D. R., Covington, D. W., & Joiner, T. E. (2016). Suicide-related knowledge and confidence among behavioral health care staff in seven states. *Psychiatric Services*, 67(11), 1240–1245. <https://doi.org/10.1176/appi.ps.201500271>
- Smith, A. R., Silva, C., Covington, D. W., & Joiner, T. E. (2014). An assessment of suicide-related knowledge and skills among health professionals. *Health Psychology*, 33(2), 110–119. <https://doi.org/10.1037/a0031062>
- Tallaksen, D. W., Bråten, K., Tveiten, S. (2013). "... You are Not Particularly Helpful as a Helper When You are Helpless": A Qualitative Study of Public Health Nurses and Their Professional Competence Related to Suicidal Adolescents. *Nordic Journal of Nursing Research*, 33(1), 46-50. <https://doi.org/10.1177/010740831303300110>
- Vidourek, R. A., King, K. A., Nabors, L. A., & Merianos, A. L. (2014). Students' benefits and barriers to mental health help-seeking. *Health Psychology and Behavioral Medicine*, 2(1), 1009–1022. <https://doi.org/10.1080/21642850.2014.963586>