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See table of contents

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Article abstract

Implication Statement

When equipped with the skills to recognize and intervene effectively, peers are well positioned to be early responders to near-peers in mental distress. This pilot study provides a framework for providing suicide prevention skills training to pre-clerkship medical students with the aim to improve early peer-to-peer detection and initial aid for mental health crises. This training is effective in improving students' self-reported comfort to provide early intervention to peers with declining mental health. Participants felt strongly that this training merits integration into core medical education and did not identify the added courseload as a major burden. Other programs should consider adopting such an initiative.

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You Should Try This!

Suicide prevention skills training in pre-clerkship medical students: a pilot study

Formation à la prévention du suicide chez les étudiants en médecine au préclinique : une étude pilote

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When equipped with the skills to recognize and intervene effectively, peers are well positioned to be early responders to near-peers in mental distress. This pilot study provides a framework for providing suicide prevention skills training to pre-clerkship medical students with the aim to improve early peer-to-peer detection and initial aid for mental health crises. This training is effective in improving students' self-reported comfort to provide early intervention to peers with declining mental health. Participants felt strongly that this training merits integration into core medical education and did not identify the added courseload as a major burden. Other programs should consider adopting such an initiative.

Énoncé des implications de la recherche

Lorsqu'ils possèdent les compétences nécessaires pour reconnaître et intervenir efficacement, les pairs sont bien placés pour intervenir rapidement auprès de leurs proches en détresse mentale. Cette étude pilote fournit un cadre pour la formation à la prévention du suicide des étudiants en médecine au préclinique, en vue d'améliorer la détection précoce entre pairs et l'aide initiale en cas de crise de santé mentale. Cette formation est efficace pour améliorer le niveau de confort des étudiants à intervenir rapidement auprès de leurs pairs dont la santé mentale est en déclin. Les participants sont convaincus que cette formation mérite d'être intégrée à l'enseignement médical de base et n'ont pas identifié la charge de cours supplémentaire comme un fardeau majeur. D'autres programmes devraient envisager d'adopter une telle initiative.

Introduction

Suicidal ideation affects about 11.1% of medical students, over double the general population.[1,2,3] Peer-based social support interventions are an effective suicide prevention strategy[4] and confer fewer barriers to access as perceived by medical students.[5] The objectives of this study were to pilot a suicide prevention skills training program alongside the pre-clinical medical school curriculum and assess the efficacy and feasibility of such training for a medical student cohort.

Description of Innovation

We selected the Mental Health First Aid (MHFA) program for its demonstrated efficacy[6] and alignment with our targeted competencies, including: recognition of declining mental health, initiating peer-support conversations, and resource referral. The course had a 15-participant capacity and totaled 10 hours. The course features virtual and in-person modules on recognizing and approaching declining mental health with practice scenarios featuring peer-based support conversations from initial management and referral to appropriate support resources. Participants were volunteer pre-clerkship medical students at the University of Alberta (Canada) and received pre-clerkship elective credit. Funding was received through the University of Alberta Medical Students' Association and the Alberta Medical Association Committee on Student Affairs. This study was approved by the Research Ethics Board at the University of Alberta (Study ID: Pro00113969).

Outcomes

Among 30 participants enrolled in either of two course iterations in the 2021-2022 academic year, 26 participants completed training. There were 17 pre-training and 18 post-training survey responses, of which 12 were paired. The majority of participants identified as female (73.9%), 20-24 years old (56.5%), and first-year students (65.2%). Eight of twenty-three (34.8%) participants reported previous mental health training. Primary motivations were application to patient (35.3%; 6/17) and peer contexts (29.4%; 5/17).

Voluntary anonymous feedback via pre- and post- surveys using a 5-point Likert scale was linked through unique identifiers. Paired pre-post comparisons using a Wilcoxon signed rank tests revealed statistically significant increases in perceived knowledge and confidence across target competencies. Post-survey responses unanimously agreed/strongly agreed that suicide prevention skills training should be implemented into the curriculum. Qualitative feedback highlighted the appropriate depth of content, judgment-free environment, and high-quality instruction. Key criticisms included the superficiality of role-play scenarios (16.7%; 3/18) and long duration (16.7%; 3/18). The main future recommendation was to provide additional information on local resources.

Students perceived significant benefits from the training. As this program aimed to improve peer support provision between students, provider comfort/confidence may function as a proxy for willingness/ability to provide support. The program was readily implemented alongside the academic schedule. Barriers to implementation were low course capacity and cost. Additionally, peer-support systems require adequate resources available to those receiving support. Study limitations were the small sample size and low survey response rate. As this course was voluntary, a self-selection bias exists towards participants who already value mental health training.

Next steps

Future studies should measure knowledge acquisition and retention via formal assessments to appraise objectively the benefits of training. Systems-based analysis should assess changes in support service utilization. Alternate training modalities to accommodate larger groups in a cost-effective format should be explored. The authors propose collaborating with undergraduate medicine curriculum committees and student affairs offices to support embedding this training into the formal curriculum for universal access.

Table 1. Participants' self-reported survey responses before and after the elective

Item	Pre-Elective Median (Range)	Post-Elective Median (Range)	P value
Familiarity with warning signs of suicide or mental health crisis	2 (2-5)	4 (2-5)	0.014
Confidence in identifying someone at risk of suicide	2 (1-5)	4 (2-5)	0.01
Confidence in asking about suicidal thoughts	2 (1-5)	4 (1-5)	0.047
Understanding of next steps to take in someone with suicidal thoughts	2 (1-5)	4 (2-5)	0.017
Awareness of resources to help someone at risk of suicide	2 (1-4)	4 (1-5)	0.008
Comfort/confidence in approaching mental health issues in patients	2 (1-5)	4 (1-5)	0.017
Comfort/confidence in approaching mental health issues in colleagues/classmates	2 (1-5)	4 (2-5)	0.011
I am comfortable providing initial help to a patient at risk of suicide	2 (1-5)	4 (3-5)	0.011
I am comfortable providing initial help to a peer/colleague at risk of suicide	3 (1-5)	4 (3-5)	0.004
I feel that this elective has improved my ability to help someone struggling with mental health concerns in general		5 (3-5)	<0.001
I feel that this elective has improved my ability to help someone at risk of suicide		5 (3-5)	<0.001
I feel that this elective has improved my knowledge of mental health resources in general		5 (3-5)	<0.001
I feel that this elective has improved my knowledge of resources specific to suicide prevention		4 (3-5)	<0.001
I am interested in pursuing additional training on this subject		5 (3-5)	<0.001
I intend to incorporate suicide prevention skills into my future career		5 (4-5)	<0.001
Suicide prevention skills training is important for medical student education		5 (4-5)	<0.001
General training into mental health issues is important for medical student education		5 (4-5)	<0.001
Formalized mental health first aid training should be implemented into the pre-clerkship medical curriculum		5 (4-5)	<0.001

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References

1. Schernhammer ES, Colditz GA. (Suicide rates among physicians: a quantitative and gender assessment (meta-analysis). *Amer J Psych.* 2004;161(12), 2295-2302. https://doi.org/10.1176/appi.ajp.161.12.2295
2. Garelick AI. Doctors' health: stigma and the professional discomfort in seeking help. *The Psychiatrist*. 2012;36(3), 81-84. https://doi.org/10.1192/pb.bp.111.037903
3. Rotenstein LS, Ramos MA, Torre M, et al. Prevalence of depression, depressive symptoms, and suicidal ideation among medical students: a systematic review and meta-analysis. *JAMA*. 2016;316(21), 2214-2236. https://doi.org/10.1001/jama.2016.17324
4. Hou X, Wang J, Guo J, et al. Methods and efficacy of social support interventions in preventing suicide: a systematic review and meta-analysis. *BMJ Ment Health*. 2022;25(1), 29. https://doi.org/10.1136/ebmental-2021-300318
5. Mongrain K, Simmons A, Shore I, Prinja X, Reaume M. Side-by-side: a one-on-one peer support program for medical students. *Acad Med.* 2022;97(8), 1170-1174. https://doi.org/10.1097/ACM.0000000000004704
6. Maslowski AK, LaCaille RA, LaCaille LJ, Reich CM, Klingner J. Effectiveness of mental health first aid: a meta-analysis. *Mental Health Rev J*, 2019;24(4), 245-261. https://doi.org/10.1108/mhrj-05-2019-0016