


BMJ Open Peer support for youth suicide prevention: a scoping review protocol

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To cite: Hilario CT, Kamanzi J, Kennedy M, *et al*. Peer support for youth suicide prevention: a scoping review protocol. *BMJ Open* 2021;0:e048837. doi:10.1136/bmjopen-2021-048837

► Prepublication history and additional supplemental material for this paper are available online. To view these files, please visit the journal online (<http://dx.doi.org/10.1136/bmjopen-2021-048837>).

Received 09 January 2021

Accepted 11 November 2021



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ABSTRACT

Introduction Youth suicide is a significant public health priority, and is the second leading cause of death among young people between 15 and 29 years of age. An emerging intervention in suicide prevention programming with youth is peer support. Although increasingly used in other settings, the evidence for peer support interventions in youth suicide prevention remains nascent. This article presents a protocol for a scoping review aimed at systematically mapping the current evidence on peer support for youth suicide prevention.

Methods and analysis Arksey and O'Malley's scoping review framework will guide the review methods. The search strategy will be developed with guidance from a health sciences librarian. Multiple databases (Medline, Embase, PsycINFO, Cumulative Index for Nursing and Allied Health Literature) and grey literature will be identified using terms related to peer support and youth suicide prevention. Publication date restrictions will not be applied. All identified records of published literature will be collated and uploaded to a systematic review management software, Covidence, for review and selection. Screening will be completed in duplicate by two reviewers using predefined inclusion and exclusion criteria. Conflicts during screening will be resolved by a third reviewer. The title and abstract screening and full-text review will be completed in Covidence. Two reviewers will complete data extraction from the selected records, using a tailored extraction form. Screening and data extraction will be completed between January and April 2021. A narrative summary will be completed to synthesise key findings as well as contextual information about the use of peer support interventions in youth suicide prevention programming.

Ethics and dissemination The results will be disseminated through a community research report, presentations of findings at relevant conferences and academic publications of the scoping review protocol and results. The data used for this scoping review will be derived from published resources; therefore, ethics approval is not required for this study.

INTRODUCTION

Youth suicide prevention is a public health priority. Globally, suicide is the second leading cause of death among youth between 15 and 29 years of age.^{1–3} The established link between suicide and mental health has informed United Nations Sustainable Development Goals and strategies aimed at

Strengths and limitations of this study

- This scoping review will address a gap in the literature by mapping and synthesising existing literature on peer support services and programmes for suicide prevention among adolescents and youth.
- A rigorous scoping review methodology will be used with at least two independent study authors to conduct the records selection, data abstraction and synthesis of the results.
- The scoping review will identify knowledge gaps and inform future research on effective suicide prevention strategies with youth.
- The findings will inform the use of peer support in youth suicide prevention services and programme design.

treating and preventing mental illness, and promoting mental health and well-being (Goal 3, Strategy 3.4).⁴ While there is a growing body of literature on youth suicide prevention,^{5,6} there remains limited evidence on emergent strategies in community-based suicide prevention programming such as peer support models.

In recent years, there has been increasing interest in peer support as a strategy for addressing gaps in community health and mental healthcare. Peer workers or peer support workers are people who draw on their lived experience and experiential knowledge as well as formal training to deliver supports in service settings or programmes such as mutual support groups, peer-run services and clinical settings that employ peer workers as service providers.⁷ In a peer support model for mental health, youth with lived experiences of mental health challenges provide supports to peers who are experiencing similar challenges.⁸

Underpinning mechanisms of peer support include the application of lived experience (drawing on their experiences of what works); ensuring emotional safety within a peer support relationship; a bridging position to mental health services; and offering strengths-focused social and

practical support.⁹ Peer support has been described as a relationship based on shared circumstances, values and lived experiences; it has also been described as a system of mutual agreement where people give and receive help with a common understanding of psychological and emotional pain.¹⁰ Studies have shown that peer support can reduce the severity or alleviate symptoms of mental illness and improve empowerment, recovery and hope for people with suicidal ideation.^{11–14}

Peer support models are increasingly used in mental health programming and the delivery of services, particularly in settings with limited resources and service shortages.¹⁵ Beyond low resource settings, peer support models may also be valuable during public health emergencies such as the COVID-19 pandemic, which has been shown to negatively affect the mental health of young people.¹⁶ The COVID-19 pandemic has led to limited peer contact for youth and additional mental health stressors related to disrupted daily routines due to school and work closures.^{17 18} In addition, the pandemic has disrupted mental health services during a time when demand of mental health services may have increased due to public health measures including quarantine.¹⁹

Currently, the scope of the evidence for peer support interventions in youth suicide prevention programming has not been studied. A recent review examined the literature on the use of lived experience peer support programmes in preventing suicide in the general population and confirmed an evidence gap in research knowledge, including high-quality evaluations of such programmes.²⁰ Some research suggests that peer support programmes have not been supported by substantial evidence for widespread use.²¹ The evidence for the use of peer support programmes may also vary by population, including by age groups. Peer support may be particularly important in youth suicide prevention because of the important role of peers and peer groups during the period of adolescence. To date, there has not been a scoping review of the literature on peer support for youth suicide prevention. This article outlines a study protocol for a scoping review aimed at systematically mapping the literature on peer support for suicide prevention in youth, synthesising existing evidence and identifying knowledge gaps to guide further research.

METHODS

This protocol adheres to the Preferred Reporting Items for Systematic Reviews and Meta-Analyses extension for Scoping Reviews (PRISMA-ScR) guidelines.²² Given the emergent state of the evidence on peer support for suicide prevention, particularly for youth populations, a scoping review approach was selected for this study. Scoping review methods are suited to this research because the primary aims of the study are to synthesise evidence from studies that use a variety of research designs, identify knowledge gaps and determine the value of undertaking

a systematic review, including the appraisal of the methodological quality of studies.²³

The design of this study is based on scoping review methods outlined by Arksey and O'Malley and refined by Levac *et al.*^{24 25} Drawing on these scoping review methodologies, five stages will be undertaken in the review: (1) identifying the research question, (2) identifying relevant records, (3) selecting records, (4) abstracting the data and (5) collating, summarising and reporting the results. Rather than consulting with stakeholders as a sixth stage, our community partners will be involved at various stages in the review, including the development of this protocol. These stages will be applied in an iterative manner. The research team will revisit initial decisions and repeat steps, as necessary.

Patient and public involvement

This scoping review is a component of a broader research study that was developed in partnership with a community-based organisation in a rural region of western Canada, which is directed by one of the coauthors (LG). The second component of the study will engage youth and public stakeholders in informing the development of a peer support programme aimed at preventing youth suicide and improving the mental health and well-being of young people in their communities. Findings from the scoping review will inform the second component of the study. Integral to this project is the collaboration between the community organisation and the academic research team members.

Stage 1: identifying the research question

The main research question that will be addressed in this review is: 'What empirical evidence exists about the use of peer support models in youth suicide prevention programming?' This research question arose from a community-identified need to address unique challenges in promoting mental health and preventing suicide among youth living in that community.

Stage 2: identifying relevant records

Search strategy and information sources

In order to formulate an effective search strategy, the research team will work with a health sciences librarian (MK) to identify relevant keywords and phrases related to the three main concepts of the research question: (1) social support derived from peers, including students, volunteers and other lay-people or non-experts; (2) suicide prevention, including prevention of suicide attempts and suicide intent; and (3) adolescents or youth. A trial search will be conducted in Medline in order to assess the preliminary scope of the literature and to identify appropriate language required to conduct an exhaustive and systematic search (online supplemental material).

The preliminary search will provide the research team with a sample of 100 articles to test the sensitivity and specificity of the search strategy and facilitate training for

the title/abstract screening phase and testing of inclusion/exclusion criteria. The research team members will examine the articles independently for relevance, discuss their observations as a group and provide input about refining the search. Insights from this preliminary search will also inform the inclusion and exclusion criteria applied in the next stage of the review. Once the research team agrees that the preliminary Medline search is comprehensive and appropriate in scope, the search will be translated to other databases: Embase, PsycINFO, Cumulative Index for Nursing and Allied Health Literature and Scopus.

In order to increase search sensitivity, publication date, language and study type restrictions will not be applied. Other search methods will be employed in order to retrieve additional evidence. Scopus will be used to facilitate the search of reference lists and future citations (forward citation searching) of studies selected for synthesis in the review. To ensure that the review is as comprehensive as possible in scope, grey literature records will also be identified. A search of grey literature sources and databases (eg, OpenGrey) will be undertaken to identify studies and reports of relevance to this review. In addition, a targeted search of the grey literature on the websites of local, provincial, national and international suicide prevention-related organisations will be completed.

All identified records of published literature will be collated and uploaded to a systematic review management software called Covidence for review and selection. Covidence is a web-based software that facilitates the process of conducting systematic reviews and is particularly valuable in the screening and selection process.²⁶ Grey literature records will be managed and screened using a tailored Excel sheet.

Stage 3: selecting records

The selection of relevant records will involve two levels of screening: (1) initial title and abstract screening and (2) full-text review. The research team will determine the inclusion and exclusion criteria prior to screening. These criteria will be based on the research question and through discussion of the results from the trial search and review of 100 articles (in stage 2). In this study, youth are defined as young people between the ages of 15 and

24 years old. Suicide prevention includes any model/programme/intervention that includes a primary aim of preventing suicide, suicide attempts and suicide intent/ideation. Inclusion and exclusion criteria may be refined during the first level of screening. The preliminary inclusion and exclusion criteria are listed in the [table 1](#).

The title and abstract screening and full-text review will be completed in Covidence. Titles and abstracts of each article will be independently screened by two reviewers, using the inclusion and exclusion criteria tested and finalised using the sample of articles from the preliminary Medline search. The full-text articles of relevant records will be retrieved and imported into the Covidence software. Full texts of each article will be independently reviewed by two reviewers, and assessed against the inclusion and exclusion criteria. Conflicts during screening will be resolved by a third reviewer who will review the title and abstract (first level) and/or the full text (second level) for eligibility. Further disagreements about study eligibility during the full-text review will be resolved through discussion with the principal investigator (CTH) and the research team until full consensus is obtained.

Reasons for exclusion of full-text studies that do not meet the inclusion criteria will be recorded and reported in the final scoping review report. Exclusion reasons will be identified based on insights from the trial search, inclusion and exclusion criteria, and observations from the title and abstract screening process. Because Covidence only allows for the selection of one exclusion reason, the team will develop a schema for exclusion reasons and will refine this process as needed.

Records will be included if they describe the use of peer support in suicide prevention and are focused on youth and adolescent populations. The peer support must be delivered in a structured approach through a programme as a component of a suicide prevention programme. Records that focus on suicide prevention but that do not report evidence on peer support or report findings about informal peer or social support will be excluded. Any type of study design (eg, descriptive, quasi-experimental, etc) will be included. Discussion papers that do not report empirical research, commentaries and editorials will be excluded.

Table 1 Preliminary inclusion and exclusion criteria for screening

Criteria for inclusion	Criteria for exclusion
Sufficient focus on youth suicide prevention (ie, suicide prevention as a primary aim or focus).	Records that do not focus on youth suicide prevention will be excluded.
Sufficient focus on peer support delivered 'formally' as a component of a programme.	Records that do not include evidence on peer support, focusing on informal social support from peers, and/or report programmes delivered by professional service providers (eg, school nurses) will be excluded.
Records reporting empirical research.	Discussion papers or commentaries will be excluded.
Records reporting research with adolescents or youth populations.	Records reporting research or programmes for other age groups.

The selection of records will be reported according to the PRISMA-ScR guidelines.²¹ A PRISMA-ScR flow diagram will be generated using Covidence to provide a visual of the screening process.²⁵ The flow diagram will also facilitate the summary and reporting of the results.

Stage 4: abstracting data

A data extraction tool will be developed by the research team (CTH, JK, SR) to abstract key information from the included records. The data extracted will include, but not be limited to: publication year, location, study design, research purpose, participant characteristics, research methods, characteristics of peer support and key findings related to the use of peer support in suicide prevention programming for youth. The data extraction tool will be reviewed by the research team and pretested by the reviewers before use to ensure that it captures the information accurately. The tool may be revised as necessary during the data collection process. Modifications will be detailed in the full scoping review report.

Data abstraction will be completed in duplicate with two reviewers independently extracting data from included full-text records. To enhance accuracy and consistency, each reviewer's abstracted data will be compared and discrepancies will be discussed with the research team. The reviewers will review the records in Covidence and manage the data in a single shared Google Doc spreadsheet. Authors of selected records will be contacted, if necessary, to request missing or additional information.

Stage 5: collating, summarising and reporting the results

The purpose of this scoping review is to map and synthesise existing evidence about the use of peer support models in youth suicide prevention. Accordingly, a narrative summary will be completed to synthesise the abstracted data (in stage 4), including key findings as well as contextual information about the use of peer support interventions in suicide prevention programming for youth. Thematic analysis methods will be used to facilitate the identification of common patterns in the data.²⁷ From this process, key findings regarding peer support models in youth suicide prevention, including programme design and/or effectiveness, will be collated and summarised. As per scoping review methods, the quality of the included studies will not be appraised.^{24 25}

Rather than consulting with stakeholders as a sixth stage, our community partners will be involved at various stages in the scoping review. The research proposal and the protocol for this scoping review was developed in partnership with a community-based organisation. The research question was directly derived from a community-identified need to inform youth suicide prevention.

KNOWLEDGE MOBILISATION

Strategies to facilitate knowledge mobilisation include a community research report, presentations of findings at relevant conferences and publication of the protocol

and scoping review findings. Community partners will be involved throughout the project to further inform plans for knowledge mobilisation. This scoping review is an integral component of a broader research project aimed at engaging community stakeholders and youth in informing the use of peer support in their community.

LIMITATIONS OF THE REVIEW

Since scoping review methods are designed to provide an overview of current evidence on a topic, this review will outline the scope of the literature without an appraisal of the methodological quality of the research evidence. Therefore, this review will not be able to provide an assessment of the quality of the evidence in the area or estimates of the effect sizes of peer support interventions under review. In addition, by focusing exclusively on peer support models for adolescents and youth, there is a possibility that some relevant studies with age groups outside of this range may be missed.

ETHICS AND DISSEMINATION

This paper presents the protocol for a scoping review of academic and grey literature on the topic of peer support for suicide prevention in youth. It will provide a synthesis of existing empirical evidence and help to identify gaps in the literature to guide future research in this area. The results will be disseminated through a community research report, presentations of findings at relevant conferences and academic publications of the scoping review protocol and results. The data used for this scoping review will be derived from published resources; therefore, ethics approval is not required for this study.

Acknowledgements The authors would like to acknowledge the contributions of student trainees - Jackie Libon, Aakriti Pandit and Isabella Ng - who are part of the research team and who participated in discussions about the protocol.

Contributors CTH, LG and SR were involved in the conceptualisation of the study. CTH is the principal investigator of the study and led the development of the protocol and the preparation of the manuscript. JK assisted with preparing drafts of the manuscript. MK assisted with sections of the manuscript. All authors reviewed and provided input on drafts, and approved the final version for submission.

Funding This work was supported by PolicyWise for Children and Families grant number 19YSPP-Hilario.

Competing interests None declared.

Patient consent for publication Not applicable.

Ethics approval Not required.

Provenance and peer review Not commissioned; externally peer reviewed.

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REFERENCES

- Glenn CR, Kleiman EM, Kellerman J, *et al*. Annual research review: a meta-analytic review of worldwide suicide rates in adolescents. *J Child Psychol Psychiatry* 2020;61:294–308.
- World Health Organization (WHO). Disease and injury country mortality estimates, 2000–2015 [Data files], 2017. Available: http://www.who.int/healthinfo/global_burden_disease/estimates/en/index1.html [Accessed Oct 2020].
- Center for Disease Control and Prevention (CDC). Web-based Injury Statistics Query and Reporting System [Data file], 2017. Available: https://www.cdc.gov/injury/wisqars/fatal_injury_reports.html [Accessed Oct 2020].
- World Health Organization. Sustainable development goals (SDGs): Goal 3. Target 3.4-by 2030, by 2030, reduce by one third premature mortality from non-communicable diseases through prevention and treatment and promote mental health and well-being [poster], 2016. Available: <https://apps.who.int/iris/handle/10665/208282> [Accessed Dec 2020].
- Robinson J, Bailey E, Witt K, *et al*. What works in youth suicide prevention? A systematic review and meta-analysis. *EClinicalMedicine* 2018;4-5:52–91.
- Bennett K, Rhodes AE, Duda S, *et al*. A youth suicide prevention plan for Canada: a systematic review of reviews. *Can J Psychiatry* 2015;60:245–57.
- Gagne CA, Finch WL, Myrick KJ, *et al*. Peer workers in the behavioral and integrated health workforce: opportunities and future directions. *Am J Prev Med* 2018;54:S258–66.
- Gopalan G, Lee SJ, Harris R, *et al*. Utilization of peers in services for youth with emotional and behavioral challenges: a scoping review. *J Adolesc* 2017;55:88–115.
- Watson E. The mechanisms underpinning peer support: a literature review. *J Ment Health* 2019;28:1–12.
- Mead S, Hilton D, Curtis L. Peer support: a theoretical perspective. *Psychiatr Rehabil J* 2001;25:134–41.
- Fuhr DC, Salisbury TT, De Silva MJ, *et al*. Effectiveness of peer-delivered interventions for severe mental illness and depression on clinical and psychosocial outcomes: a systematic review and meta-analysis. *Soc Psychiatry Psychiatr Epidemiol* 2014;49:1691–702.
- Lloyd-Evans B, Mayo-Wilson E, Harrison B, *et al*. A systematic review and meta-analysis of randomised controlled trials of peer support for people with severe mental illness. *BMC Psychiatry* 2014;14:1–12.
- Repper J, Carter T. A review of the literature on peer support in mental health services. *J Ment Health* 2011;20:392–411.
- Chi M-T, Long A, Jeang S-R, *et al*. Healing and recovering after a suicide attempt: a grounded theory study. *J Clin Nurs* 2014;23:1751–9.
- Puschner B, Repper J, Mahlke C, *et al*. Using peer support in developing empowering mental health services (UPSIDES): background, rationale and methodology. *Ann Glob Health* 2019;85:1–10.
- Canadian Mental Health Association. . COVID-19 effects on the mental health of vulnerable populations-[internet] Toronto, ON: Canada., 2020. Available: <https://cmha.ca/documents/covid-mental-health-effects-on-vulnerablepopulation> [Accessed Dec 2020].
- Brooks SK, Webster RK, Smith LE, *et al*. The psychological impact of quarantine and how to reduce it: rapid review of the evidence. *Lancet* 2020;395:912–20.
- Pfefferbaum B, North CS. Mental health and the Covid-19 pandemic. *N Engl J Med* 2020;383:510–2.
- World Health Organization. COVID-19 disrupting mental health services in most countries: who survey, 2020. Available: <https://www.who.int/news/item/05-10-2020-covid-19-disrupting-mental-health-services-in-most-countries-who-survey> [Accessed Nov 2020].
- Schlichthorst M, Ozols I, Reifels L, *et al*. Lived experience peer support programs for suicide prevention: a systematic scoping review. *Int J Ment Health Syst* 2020;14:1–2.
- Kutcher SP, Szumilas M. Youth suicide prevention. *CMAJ* 2008;178:282–5.
- Tricco AC, Lillie E, Zarin W, *et al*. PRISMA extension for scoping reviews (PRISMA-ScR): checklist and explanation. *Ann Intern Med* 2018;169:467–73.
- Kastner M, Tricco AC, Soobiah C, *et al*. What is the most appropriate knowledge synthesis method to conduct a review? protocol for a scoping review. *BMC Med Res Methodol* 2012;12:1–10.
- Arksey H, O'Malley L. Scoping studies: towards a methodological framework. *Int J Soc Res Methodol* 2005;8:19–32.
- Levac D, Colquhoun H, O'Brien KK. Scoping studies: advancing the methodology. *Implementation Sci* 2010;5:1–9.
- Kennedy M, Kung J. Covidence: streamline workflows to save time in systematic reviews. In: *John W Scott health sciences library presentation*, 2020. <https://guides.library.ualberta.ca/covidence>
- Braun V, Clarke V. Using thematic analysis in psychology. *Qual Res Psychol* 2006;3:77–101.