To explore the barriers to and facilitators of adolescents in Low-Middle-Income-Countries (LMICs) seeking mental health care: Protocol for a Mixed-Methods Systematic Review

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Protocol

Keywords: Stigma, Discrimination, help seeking, mental health, adolescents, facilitators, barriers, Low-Middle-Income Countries

DOI: https://doi.org/10.21203/rs.3.rs-215110/v1

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Abstract

Background: Adolescence is a very important transitional phase for an individual as they move from childhood to adulthood. In 2007, the World Health Organization reported that 16% of the global burden of disease and injuries occur among adolescents i.e. those aged between 10 and 19 years, most of them starting by the age of 14 years and usually become serious; if left unrecognised or unattended at that point in time. Several risk factors are associated with increases in the mental health disorders. It is pertinent to promote interventions which teach life skills like regulating one’s emotions, building resilience, and dealing with difficult situations with confidence and strength. This mixed-methods systematic review aims to synthesise best available evidence on the barriers and facilitators to help seeking for mental illnesses among adolescents in Low-Middle-Income Countries

Methods and Analyses: The systematic review will be conducted in accordance with the Preferred Reporting Items for Systematic Reviews and Meta-Analyses guidelines. Systematic searches will be carried out in electronic databases like PubMed, EMBASE, PsychINFO, Sociofile, CINAHL to identify studies relevant to the review question. At the first stage, titles and abstracts of articles retrieved through the searches will be examined against the eligibility criteria. The second stage will involve independent full-text screening of included articles by two reviewers. All qualitative, quantitative, and mixed method research studies which explicitly answer the research questions will be considered in this review. Methodological appraisal (Risk of Bias) will be conducted using the Joanna Briggs Institute’s standardized critical appraisal tools or other standardized critical appraisal tools contingent on the study design by two reviewers. Data will be extracted on the aims/purpose, study design, geographical location, study population, study duration, interventions (if applicable) outcomes, and results of included studies. Data analyses will be conducted using the convergent approach to analysis of mixed methods research using JBI guidance.

Discussion: The research will help to identify gaps in knowledge and generate evidence for health departments to look more specifically at the mental health of adolescents and challenges of addressing them.

Systematic Review Registration: PROSPERO: CRD42020214349

Background: Adolescence is a very important transitional phase for an individual as they move from childhood to adulthood. The physical and mental changes associated with puberty, exposure to new environments, different lifestyles, increasing responsibilities, changes in thought processes, eating habits and learning to cope with difficult situations all may influence mental wellbeing [2]. During this phase, maintaining social and emotional connections with people and friends and family becomes especially important [1]. In 2007, the World Health Organization (WHO) reported that 16% of the global burden of disease and injuries occur among adolescents i.e. those aged between 10 and 19 years, amounting to [3]. It is also
estimated that most mental health problems start by the age of 14 years and usually become serious if left unrecognised or unattended [3].

Globally, about 10–20% of adolescents experience mental health problems, however, most remain undiagnosed and untreated [3]. Depression is the fourth leading cause of illness and disability among adolescents aged 15–19 years and fifteenth for those aged 10–14 years, globally. Depression, when it persists or increases in severity, may lead to suicide. Suicide is the third leading cause of death among adolescents [3]. There is a large treatment gap for mental disorders in low- and middle-income countries [4, 5]. Studies suggest barriers such as limited or absent mental health services, scarcity of trained mental health professionals, and stigma related to help seeking for mental disorders contribute to this large treatment gap for mental disorders [6–10].

Several risk factors are associated with increases in the mental health disorders [11, 12]. These include, but are not limited to, exposure to stress faced by adolescents in tackling challenges of everyday life, domestic violence, low socio-economic status and lack of proper parental support during these times of transition [13]. Certain risk factors increase the presence and severity of symptoms, which may in turn reduce an individual's ability to cope in their environment. A lack of support and resources in their environment can further compound the problem. These issues may be different in different settings, leading to a wide variation in mental health outcomes. This increases the treatment gap for mental illness(es) among adolescents living in these high-risk environments with limited or no proper guidance for seeking help [14, 15].

Though there have been attempts to improve the living conditions and reduce the burden of mental illnesses among adolescents, there is a need to design culturally appropriate interventions/programmes [16]. Ideally these programmes should be adapted to the local setting to increase access to mental health services by adolescents during crisis situations [17]. There is a need to promote interventions which teach life skills like regulating one's emotions, building resilience, and dealing with difficult situations with confidence and strength [18].

In order to develop successful interventions, we must first understand the facilitators and barriers from the perspectives of adolescents who seek help for coping with mental illnesses. Previous studies including systematic reviews on adult populations have highlighted that barriers to mental healthcare include demand and supply factors such as lack of awareness of needing mental health services, public and internalised stigma which discourage use of services, and few accessible health staff and services [19]. Stigma reduction interventions in community settings have effectively increased mental health service use among adult populations [20, 21, 22]. However, these cannot be generalised to all populations in all settings as the types of challenges faced may differ in each setting. To the best of our knowledge, no previous SR has synthesized barriers for seeking mental healthcare among adolescents in low-middle-income countries (LMICs) and hence we aim to systematically review the peer-reviewed published evidence describing the same. in.

Research Question:
Objectives: This systematic review aims to gather evidence on the barriers and facilitators to ‘help seeking’ for mental illnesses among adolescents specific to LMICs.

Methods:

We will conduct the systematic review according to the Preferred Reporting Items for Systematic Reviews and Meta-Analyses (PRISMA) guidelines and standards [23].

Study Eligibility

Inclusion Criteria:

Quantitative

We will include studies which meet the following eligibility criteria:

Population: Studies including adolescents aged 10 to 19 years residing in LMICs as defined by the World Bank [24]. Participants from any study setting such as homes, schools, healthcare facilities, online, or across community will be considered.

Intervention: Any intervention targeted to improve mental health care

Condition: Mental illnesses/conditions (Depression, stress, suicide, alcohol and substance use, drug disorders)

Comparator: Usual care, control group, no control, as defined in the study

Outcomes: Facilitators and barriers to seeking mental health care

The primary outcome is facilitators for adolescents to seek mental health care. A facilitator can be any strategy/process/event that improves the ease with which adolescents seek care for their mental health. Examples of facilitators include mental health, use of technology-driven tools to seek help for mental illnesses. This includes the results of clinical trials where the intervention of interest has increased the number of people seeking appropriate care, accessing care, studies with clinical outcomes, which would be considered a facilitator. Studies will be included if this information is provided regardless of whether this was the primary aim of the published research.

The secondary outcome is barriers for adolescents who seek mental health care. A barrier can be any strategy/process/event that reduces the ease with which adolescents seek care for their mental health. Examples of barriers include but are not limited to but not limited to unavailability of resources to seek help, resources or facilities which offer help and are of poor quality and do not have any improvement among people who seek help, stigma for seeking help, socio economic determinants like poverty, unemployment, use of substance use, migration, access to healthcare facilities etc.
Study Types: We will include primary peer-reviewed published study designs relevant to the scope of our review. Quantitative studies; including retrospective cohort; prospective cohort and cross-sectional studies; experimental designs, or mixed-methods studies with quantitative data relevant to the review.

Qualitative

Types of participants: Studies including adolescents aged 10 to 19 years residing in LMICs as defined by the World Bank [24].

Phenomenon of Interest: Adolescents’ perceptions, experiences of facilitators and barriers to seeking mental health care, knowledge, attitudes, behaviours towards getting treated for mental illnesses etc.

Context: Participants from any study setting such as homes, schools, healthcare facilities, online, or across community, from low-middle income countries will be considered.

Study Types: Qualitative studies using grounded theory approach, phenomenology, ethnography, action research or any qualitative research designs, which explicitly answer the research questions in this review. We will also include descriptive qualitative studies. Qualitative data from mixed-methods designs will also be considered.

Exclusion criteria: Studies which do not have primary data on facilitators or barriers to help seeking, which do not specifically answer the research question. We will exclude case studies, case-reports, case series, editorials/commentaries/overviews and systematic reviews (though their reference lists will be screened for eligible studies). Studies reporting on children (age below 10 years) or adults (age above 18 years) will also be excluded, unless disaggregated data for adolescents is available. Conditions such as personality disorders, post-traumatic stress disorder, major depressive disorder, anxiety and other acute mental health conditions will not be considered within the scope of this review. Language will be limited to only English only. We will also screen the reference lists of all the review articles that have been included for additional relevant articles. Studies conducted in nations not considered on by World Bank as a part of LMICs will be excluded. Studies conducted before 2010 will not be included for the study.

Search Strategy:

Electronic databases:

Databases such as PubMed, Embase, PsychINFO and CINAHL will be searched. Searches will be conducted from inception; no date cut-off will be employed. A wide array of search terms will be used in order to detect relevant articles. Search strategies aimed at maximising both sensitivity and specificity will be customised to each database, where possible using Medical Subject Headings (MeSH) and key words. A detailed sample search strategy is presented in Appendix 1. Studies published in English will only be included in this review. Studies conducted in nations not considered on by World Bank as a part of LMICs will be excluded. Studies conducted before 2010 will not be included for the study.
Additional Resources:

We will also screen the reference lists of all the review articles that have been included for any additional information.

Data Collection and Analysis:

Study selection:

All research articles (titles and abstracts) identified during the search will be imported into EndNote library and transferred to Rayyan for screening after removal of duplicates. Two reviewers (SK) and (PK) will review titles and abstracts according to the pre-defined criteria, to screen articles relevant to the review. Full text articles will be retrieved, and articles included at screening at the title and abstract levels will be independently examined by two reviewers for eligibility.

Any disagreements will be resolved by discussion or reviewed by a third reviewer (MH or PM), if a consensus cannot be reached. Reason(s) for exclusion will be recorded.

Quality Appraisal:

Methodological quality of studies included in the review will be assessed using standardized critical appraisal tools from Joanna Briggs Institute (JBI) or other tools, contingent on the research design. Risk of bias assessments will be conducted by two reviewers (SK and PK), independently. Any disagreements will be resolved by discussion or reviewed by a third reviewer (MH or PM), if a consensus cannot be reached. We will not exclude any studies based on methodological or reporting quality.

Data Extraction:

Data will be extracted on the aims/purpose, study design, LMIC, study population, study duration, interventions (if applicable), outcomes, and results of included studies.

If there is a lack of clarity surrounding the research project or program, up to three attempts will be made to contact the authors, via phone or email, to determine if further documents are publicly available.

For studies reporting on the effectiveness of interventions, the definition of facilitators and barriers to accessing services as described by the authors of the original article will be used.

Data extraction will be completed by one reviewer SK and will be validated for accuracy by another reviewer PK.

Data Synthesis

Characteristics of all included studies and risk of bias assessments will be presented in a tabulated form. The main findings will be presented as funnel plots, in tables, figures or as a narrative summary, as appropriate. We will adopt JBI's methodological guidance for conducting mixed methods systematic
reviews which uses a convergent approach to data synthesis and integration [26]. The convergent segregated approach consists of conducting separate quantitative synthesis and qualitative synthesis, followed by integration of evidence derived from both syntheses. By integrating the quantitative and qualitative synthesized findings, a greater depth of understanding of the phenomena of interest can be obtained, compared to undertaking two separate component syntheses without formally linking the two sets of evidence. We will interpret the findings in consideration of study quality. For the quantitative evidence a meta-analysis (fixed or random effects depending on data) will be performed if scientifically admissible studies do not have significant heterogeneity; clinically, methodologically and statistically. Heterogeneity of included studies will be assessed using $I^2$ statistic (>50% representing significant heterogeneity). If we are unable to conduct a meta-analysis, we will synthesise abstracted findings using a narrative approach. For the qualitative synthesis, in the case of significant heterogeneity, a thematic synthesis of findings from the empirical qualitative studies will be performed to develop evidence statements.

We will then compare the synthesized quantitative results with the synthesized qualitative findings and link these findings into a line of argument to produce an overall configured analysis. Two reviewers will then independently code each line of text and develop descriptive themes according to its meaning and content, and subsequently generate analytical themes to answer our review questions. Reviewers will finalize the descriptive and analytical themes through discussion. Findings will be triangulated with the findings of the quantitative synthesis to understand the fit between end-user perspective (e.g., adolescents) of studies conducted and the appropriateness of the evaluation of those studies to address those perspectives.

**Dissemination information**

We will publish the results of this review through peer-reviewed publications and will disseminate the data through evidence policy briefs to stakeholders in governments, public institutions and communities through open access.

**Study status**

Preliminary search Strategies have been developed and executed.

**Data availability**

There are no data additional data that have been published as a part of this article.

This paper contains the following extended dataset:

Study search strategy

Prisma-P flowchart
Presentation of data: This data will be presented as series of systematic reviews, depending on the extent and range of results identified in the searches.

Discussion:

This review will help to understand first understand the facilitators and barriers for adolescents with respect to help-seeking for coping with their mental illness thereby will help to develop successful interventions in LIMCs. The research will help to identify gaps in knowledge and generate evidence for health departments to look more specifically at the mental health of adolescents and challenges of addressing them. It will synthesise the best available evidence to highlight effective strategies to overcome such challenges using evidence from strategies used in other low resource settings.

Strengths and limitations:

- This protocol minimizes the possibility of duplication.
- It also provides a transparent and detailed guidance into the methods that will be adopted in this review, resulting in evidence synthesis devoid of any biases
- Our searches have focused on countries classified as 'Low-middle-income' by World Bank. It is possible that we may miss out on evidence that has not explicitly reported on 'geographical locations'.
- The review is focused exclusively on studies published in English; might possibly contribute to publication bias. Nonetheless, we will make attempts to assess this.

Declarations

Acknowledgements:

We would like to thank Kim Taylor, the librarian at University of New South Wales, Sydney for assisting the authors to design the search strategies we will use for the review.

Ethics and dissemination: As this research are a systematic review, devoid of human involvement, there will be no requirement for ethical approval. Findings will be disseminated through peer-reviewed publications and through conferences, as appropriate.

Funding: Since this protocol is a part of a PhD thesis of Ms Sudha Kallakuri, there is no funding support for the publication of the same.

Competing interests: The authors declare that they have no competing interests.

Authors’ Contributions: All review authors have contributed to the production of the protocol, and all authors read and approved the manuscript. SK led the writing of the protocol and all the other authors provided comments and feedback.
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