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Exploring Youths' Barriers to Contraception in High-Income Countries: A Scoping Review

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ADMINISTRATIVE INFORMATION

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Conflicts of interest - None declared.

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Amendments - This protocol was registered with the International Platform of Registered Systematic Review and Meta-Analysis Protocols (INPLASY) on 20 October 2023 and was last updated on 20 October 2023.

INTRODUCTION

Review question / Objective What is reported in the literature related to youths' barriers to contraception in high-income countries from 2013-2023?

* For this scoping review, a contraception barrier is defined as the inaccessibility of family planning methods and health care. For example, youth may need an intrauterine device, but they do not have the money to pay for the prescription, therefore they have a barrier to care. A social barrier is youth do not use oral contraception because their family disapproves of this medication usage.

Background The World Health Organization (WHO) has set a target for global universal contraception access by 2030 to work towards sexual and reproductive healthcare for all.¹⁻⁵ But contraception uptake and accessibility is still poor

in underserved populations such as youth (aged 15-29), persons living in rural locations, and marginalized populations (e.g. racialized groups) around the world.⁷⁻¹⁰ Contraception prevents over 272,000 global maternal deaths from childbirth each year because family planning reduces a country's fertility rate which in turn prevents high risk pregnancies and mortality risk.¹¹ In Canada, 60.7% of maternal deaths are averted through contraceptives.¹¹ There are an estimated 180,700 unplanned pregnancies in Canada per-year, with youth aged 20-29 accounting for approximately 58% of them and \$320 million in associated direct healthcare costs.¹¹ However, youth contraception barriers are poorly understood in the current literature. Of the few published studies, Canadian youth are not using contraceptives, because of inaccessibility due to cost, inconsistent sexual health education, practitioner bias against

contraception usage.^{10,12,13} For example, approximately 35% of youth (aged 15-24) at risk for an unintended pregnancy from low socioeconomic backgrounds (total household income of \$21,000 to \$41,100 CAD) are not using contraception. This is 10% higher than those from a total household income of \$146,000 and \$90,300 CAD.¹² In the United States, youth of colour experience more contraception care barriers in comparison to white counterparts because of the systemic racism intertwined in medicine that impede the quality, accessibility, and culturally sensitive care received by racialized populations.^{9,14} Identifying and working to improve youth contraception barriers will provide more contraception equity. In turn, this will help to ensure more wanted pregnancies, reduce maternal death rates, and youth are able to receive contraception care in HIC nations. This scoping review aims to synthesize the existing research on youth contraception barriers in high income countries (HIC) to inform future research and actions focused on addressing cited issues. HIC will be defined as a country with a developed economy as per the 2022 World Economic Situation and Prospects report from the United Nations.¹⁵

Rationale Based on preliminary literature searches, there have been eight systematic reviews that focus on contraception barriers for youth globally over the last ten years (2013-2023).¹⁶⁻²³ Among these, five focus on low- and middle-income countries (LMIC) such as Sub-Saharan Africa, only three systematic reviews focus on HIC youth contraception barriers.¹⁶⁻²³ However, the differences in healthcare infrastructure, including availability of sexual health resources within HIC and LIC vary significantly and therefore are not comparable.^{16-19,21}

The topics of the three HIC systematic reviews focus on the perspectives of youth-friendly care, LGBTQIA youth, and young male partners' influences on family planning decisions respectively.²¹⁻²³ The findings from these three reviews outline how HIC youth prefer centres that emphasize confidential and youth focused contraception care.²¹ Barriers to family planning services among LGBTQIA communities include stigma by healthcare practitioners and lack of knowledge regarding LGBTQIA peoples' unique needs.²² Young male partners were found to be large influences on partners' contraception use.²³ Outside of these three topics, insights into the current literature state of HIC youth contraception barriers remains unknown. A review explicitly focused on HIC youth contraception barriers is needed to comprehensively understand current

issues in these countries so positive change can be made to help reach the WHO 2030 goal of universal contraception access.

This scoping review will identify peer-reviewed primary research, including qualitative, quantitative, multi-methods, and mixed methods that address youths' barriers to contraception within HIC from 2013-2023. The inclusion of qualitative and quantitative studies will provide a holistic understanding to this minimally researched healthcare issue by capturing the different research methods posed by these designs. For example, qualitative questions are often exploratory while quantitative studies focus on statistical measurements. Incorporating both designs in this review will establish stronger validity, assess study bias, and address the limitations within the studies to represent the existing literature more accurately. Mixed and multi methods studies will also be included. These designs will add richness to the review as triangulation allows quantitative and qualitative findings to be compared for similarities, differences, and how they expand on each other to robustly answer their respective research questions. Sample study designs that may be included for this scoping review are randomized control trials, prospective and retrospective cohort studies, ecological studies, cross-sectional studies, grounded theory, phenomenology, and ethnography. Example mixed method study designs include convergent parallel, embedded, explanatory sequential, and exploratory sequential.

METHODS

Strategy of data synthesis The scoping review will follow the Joanna Briggs Institute methodology.^{24,25} Identification: With a University of British Columbia academic librarian's support, a search strategy was developed. Databases MEDLINE (Ovid), EMBASE (Ovid), and CINAHL will be searched in Fall 2023.

Eligibility criteria Inclusion Criteria: 1) Youth must comprise at least 75% of the study population; 2) primary research objectives or research questions must focus on contraception barriers and youth; 3) English or French full-text articles, as reviewers are proficient in these languages; 4) published within the last 10 years (2013-2023); 5) primary qualitative, observational [cross-sectional studies, prospective cohort, retrospective cohort, case-control], experimental studies [randomized control trials], quasi-experimental studies [interrupted time-series], mixed/multi methods studies will be included. Exclusion Criteria: 1) Unpublished research, non-peer reviewed articles, partially available articles, conference proceedings, and

abstracts will be excluded; 2) countries not outlined as HIC by the United Nations;²⁵ 3) work previous to 2013; 4) literature syntheses [systematic, rapid, narrative, and scoping literature reviews] will be excluded.

Source of evidence screening and selection

Screening: Reviewers (BKJ, MO, CP, and ZK) will screen relevant articles on the systematic review management program Covidence.²⁶ Covidence will remove all study duplicates. Titles and abstracts will then be read and retained or removed based on the inclusion and exclusion criteria. After abstract review, relevant articles will be read in full for potential inclusion. Discrepancies in choices of articles will be examined by the reviewers and if need be, by the lead investigators (KS or PJ). Consensus of the included articles will be achieved when all reviewers agree on the article selections. Citation Chaser²⁷ will be used on selected articles to search for potentially relevant articles that did not appear in the search strategy.

Data management Data Extraction: All included studies will be stored in an EndNote Library.²⁸ A data extraction table will be created a priori in Covidence²⁶ for the reviewers to organize and review selected articles. Sample columns in the extraction table will include study characteristics (year of publication, study design and methods), study sample size and demographics, GRADE principles,²⁹ the Risk of Bias in Non-Randomised Studies - of Interventions (ROBINS-I),³⁰ and key findings such as described contraception barriers. The extraction table will undergo updates iteratively as required during the extraction phase to better reflect the topics of the included articles.

Reporting results / Analysis of the evidence

Study reporting and presentation will be done in accordance to the PRISMA-ScR guidelines to ensure transparency and rigor of the scoping review.³¹ Included articles will be narratively reviewed based on GRADE principles to assess evidence quality, risk of bias, and associations to the research question.³² The quality of included non-randomized observational studies with an intervention will be assessed using the ROBINS-I tool.³⁰ Assessing the quality of findings through GRADE³² and ROBINS-I tool³⁰ will ensure a thorough appraisal of included articles to clearly identify the state and rigour of the current literature. Quantitative findings will also be grouped by the primary research topic as described in each article's title and abstract, each group will be descriptively analyzed, for example highlighting key trends, to empirically understand youths' barriers to contraception. Qualitative studies will

be organized by primary research topic to evaluate the common themes within the articles. Mixed/multi-methods studies will also be grouped by topic and the findings summarized, such as how the findings converge or diverge between the quantitative and qualitative methods. Final review analyses will summarize key findings and outline areas of future research to reduce the number contraception barriers for HIC youth.

Language restriction Only articles in English and French will be included because of authors' language skills.

Country(ies) involved Canada.

Keywords Youth Contraception, Family Planning, Healthcare Barriers, High Income Countries.

Dissemination plans The results of this scoping review will be prepared for publication in an open-access peer reviewed journal. We will share review findings to academics through local conferences to also inform academics and promote discussion of this review with what further research needs to be done. Community partners and researchers associated with the CIHR funded BC Youth Sexual Health Project will be invited to engage in collaboratively sharing the review findings and discuss how they connect to BC communities. Together, researchers and community members will mobilize knowledge findings by co-constructing how to improve local programming and health policies to address key contraception barriers for youth with the results of this scoping review and other research work.^{33,34}

Youth are struggling to access family planning services; more research is needed to address this issue. The results of this scoping review will compile the existing evidence to summarize current knowledge on youths' contraception barriers across HIC. These findings will outline frequent barriers that can be addressed in future research and health policy changes to improve contraception equity for youth.

Contributions of each author

Author 1 - Bronte K. Johnston - Bronte conceptualized this scoping review. She wrote the first draft of this protocol and applied collaborator feedback to amend the proposal. She will be the primary lead in the scoping review by organizing and conducting data screening, extraction, and analyses; she will also write the first manuscript draft.

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Author 2 - Patricia Janssen - Dr. Janssen provided feedback on the scoping review protocol. She is an

academic supervisor for this project and will provide guidance with all process of this scoping review.

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Author 3 - Mika Ohtsuka - Mika provided feedback on the scoping review protocol. They are a PhD student in this topic area and will assist with screening of the scoping review.

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Author 4 - Zeba Khan - Zeba provided feedback on the scoping review protocol. She is a PhD student in this topic area and will assist with screening of the scoping review.

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Author 5 - Chelsey Perry - Chelsey provided feedback on the scoping review protocol. They are a PhD student in this topic area and will assist with screening of the scoping review.

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Author 6 - Kate Shannon - Dr. Shannon provided feedback on the scoping review protocol. She is an academic supervisor for this project and will continue to oversee and provide feedback on all aspects of this scoping review.

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