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The intersection of cannabis use and oral health among 2SLGBTQI+ youth: a qualitative study protocol

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Abstract

Background Two-Spirit, lesbian, gay, bisexual, transgender, queer or questioning, intersex, or other sexual orientations and gender identities (2SLGBTQI+) youth face multiple social and structural disparities and barriers that contribute to a sense of mistrust in the provision of healthcare services, including oral health. Cannabis use is also high among 2SLGBTQI+ individuals; however, unknowns exist regarding recreational use and its impact on oral health. Our research aims to explore the intersectionality of 2SLGBTQI+ youth, oral health, and cannabis consumption.

Methods This qualitative study, guided by community-based participatory research and interpretative phenomenological approaches, will recruit consenting 2SLGBTQI+ youth, aged 19 and older, accessing services at Youth Opportunities Unlimited in London, Canada. Approximately 25 to 30 participants will be recruited to complete a one-on-one in-depth interview or focus group to collect information on their perception about the relationships between cannabis use and oral health.

Discussion Recognizing the self-perceived pathways through which cannabis impacts oral health will prompt the development of theories, raise awareness, and support advocacy efforts for and by 2SLGBTQI+ youth, while also providing valuable insights for the community and healthcare providers at large.

Keywords Oral health, Cannabis, 2SLGBTQI+, Youth, Sexual and gender minorities, Intersectional Framework

Introduction

Two-Spirit, lesbian, gay, bisexual, transgender, queer or questioning, intersex, or other sexual orientations and gender identities (2SLGBTQI+), face multiple social and structural disparities and barriers [1–6]. Research suggests that 2SLGBTQI+ youth face an increased risk of suicidal episodes (ideation and attempt), psychological distress, and substance abuse compared to their non-sexual and gender minority counterparts [6–9]. Challenges related to familial rejection and societal and peer harassment often accompany the experiences of many community members during their adolescent and early adult years [6–9]. This is perpetuated by the adverse encounters that 2SLGBTQI+ individuals experience when

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seeking healthcare services, primarily due to their sexual orientation and gender identity.

Accessing healthcare becomes a prevalent barrier for these communities that have been made vulnerable by systems of oppression and are characterized by limited-service availability; perceived stigma and discrimination from healthcare providers; a lack of risk-based, person-centred care; and a lack of employment and dental insurance [9, 10]. Such adversities are compounded by a limited number of culturally competent healthcare providers trained in 2SLGBTQI+ health needs, resulting in many 2SLGBTQI+ individuals to delay, avoid, or completely forgo seeking essential healthcare services due to anticipated stigma and discrimination and the fear of judgement and mistreatment [11, 12]. Several studies have reported that sexual and gender minority are more likely than their non-sexual and gender minority counterparts to delay care and more likely to experience inadequate care [12]. These barriers to care often intersect with barriers related with socio-demographic characteristics such as gender, race, and ethnicity, further limiting the ability to access adequate, quality care [12].

Consequently, these barriers contribute to a sense of mistrust in the provision of healthcare services, including oral health. Available research suggests that 2SLGBTQI+ individuals tend to experience increased oral disease risk compared to their non-sexual and gender minority counterparts because of heightened rates of mental health issues, including substance use disorders, side effects of medications, harmful eating behaviours, and homelessness [13]. Human papillomavirus associated oropharyngeal cancers and human immunodeficiency virus are also more prevalent among the 2SLGBTQI+ community, decreasing the body's ability to overcome oral health inflections [13]. Unfortunately, the oral health status of 2SLGBTQI+ individuals remain widely underreported, emphasizing the need for further research.

A topic that has been garnering Canadian interest is that of recreational cannabis use and its impact, marked by the landmark 2018 recreational legalization of the substance by the *Cannabis Act* (Bill C- 45). The adverse effects of cannabis on health have been studied and reported in the cardiovascular, pulmonary, and psychosocial fields of knowledge [14, 15]. However, much of this research has focused on medical cannabis use, as opposed to recreational, highlighting the presence of many "unknowns" regarding the situation in which oral health currently exists [16]. Existing research into the impact of cannabis on oral health suggests associations related to the development of dental caries, higher periodontal disease prevalence, and elevated rates of oral mucosal lesions [15, 17–20]. This is relevant to the broader Canadian society as it has been reported that recreational cannabis use has increased from 22% in 2017 to 27% in 2022 in persons 16 years or older since its legalization [21, 22]. This data becomes even more pertinent within the 2SLGBTQI+ community, as literature suggests that cannabis use is higher within sexual and gender minority individuals [23–25]. The 2022 Canadian Cannabis Survey reported higher cannabis uses within the self-identified bisexual (61%), other sexuality (55%), and lesbian/gay (39%) populations, compared to their heterosexual counterparts (25%) [21]. Additionally, alarming data suggest that Canadian LGBT youth with depressive symptoms face a five-fold increased risk of escalating cannabis use over time [26].

While most 2SLGBTQI+ individuals do not develop substance use disorders, those who do seem to experience multilevel "minority" and "gender minority" stressors. These stressors include proximal factors like identity formation, internalized stigma, and the fear of identity disclosure, as well as distal factors derived from the social ecology and relationships during sexual identity development [27, 28]. The unique challenges to self-development [29], socio-cultural influences [28, 30], and structural stigma [31], often exacerbated in persons of colour or racial minority groups [32, 33], contribute to this phenomenon's complexity.

The Canadian House of Commons, the Canadian Institutes for Health Research, and the Canadian Government's Federal 2SLGBTQI+ Action Plan have highlighted the need to address the health and social disparities that exist across different 2SLGBTQI+ populations [2, 33, 34]. The sexual and gender minority stressors intersect with the existing gaps in knowledge regarding the oral health (status and care) of the 2SLGBTQI+ Canadian youth population, as well as the lack of understanding of the pathways through which cannabis impacts oral health. Coupled with the reported higher use of this substance within the youth population, these factors collectively underscore the need to understand the nature of these potentially interlocking components to develop theories, raise awareness, and support advocacy efforts for and by the 2SLGBTQI+ population, while also providing valuable insights for the community and healthcare providers at large. This, in turn, will facilitate engagement in prevention-based measures to decrease potentially negative outcomes and improve the overall health of the community.

Research questions

Our research question aims to answer this knowledge gap by attending to the overarching research question (RQ): What intersectionality exists in 2SLGBTQI+ youth, oral health, and cannabis use?

RQ1

To investigate the individual and psychosocial pathways related to 2SLGBTQI+ youth, their oral health, and their self-described cannabis perceptions and consumption.

RQ2

To investigate the self-described experiences of cannabis, use and perceived oral health needs.

Methods

This study utilizes a qualitative design to uncover the intersectionality of oral health and cannabis use among 2SLGBTQI+ youth in Southwestern Ontario (refer to Additional file 1: Figure S1 for study design). This study has been approved by the Western University Research Ethics Board (REB Study Number: 125629).

Community partners & engagement

A community-based participatory research (CBPR) approach will ground this study. CBPR has emerged as a transformative method that emphasizes community engagement and social action at every stage of the research process to collaboratively bridge the gap between research and the identification and addressal of community priorities and needs [35, 36]. The inception of this study originated from the field observations made by the Principal Investigator (AJ) during the oral health outreach and Community Service-Learning placement of undergraduate dental learners at Youth Opportunities Unlimited (YOU) in London, Canada [37]. A substantial number of high-risk youths disclosed cannabis use during oral health screenings, prompting the need to further investigate this topic. Several community engagement sessions were held with knowledge users from YOU with the aim of exploring the needs and perspectives of the knowledge users within the proposed research questions and design. The Pride Outreach Facilitator from YOU and Co-Investigator (KK) played an active role in developing the interview guide to ensure the holistic representation of the values and cultural norms of the 2SLGBTQI+ youth community.

The study emphasizes capacity building and community engagement. A peer-facilitator, self-identifying as a 2SLGBTQI+ community member, will be recruited from YOU. This peer-facilitator will act as a liaison between research participants, community organization, and researchers. Collaborating with knowledge users, the facilitator will be actively involved in conducting the one-on-one interviews or focus groups, data collection, data analysis, and supporting knowledge mobilization tasks, including community forums and manuscript writing. Given the lived experiences of the peer-facilitator as queer person, a safe, non-judgmental environment for participants will be encouraged by removing the traditional power dynamics between researchers and participants.

Theoretical underpinning and approach

An interpretative phenomenological approach (IPA) will be employed to address the research questions. Phenomenology is used to explore the lived experiences of individuals or groups [38, 39], while its interpretative approach is used to understand these experiences from the consciousness of the person, considering their individual history, influencing factors, and surrounding culture [39–42]. The researchers' positionality and previous work, complemented by the peer-facilitators' experiences, will contribute to the achievement of the IPA goal [43, 44]. Within the analytical framework, an intersectionality lens will be utilized, enabling the portrayal of societal oppressions shaped by the convergence of various social locations, including age, gender, and sexual orientation [42]. By recognizing the significance of intersectionality, there is a call to study its application in the realm of oral health. Such approach to an investigation permits the examination of the different intersecting topics within a community-based participatory approach.

Sampling and sample size

The targeted population for this study will be self-identifying 2SLGBTQI+ consenting youth aged 19 years and older. The selected age cohort is reflective of the reported health disparities and the gaps of knowledge currently reported in the literature. Purposive sampling will be carried out to capture experiences that resonate within the 2SLGBTQI+ community [39]. The sample size will be guided by the concept of information power [45], considering the aim of our study (exploratory), sample specificity (capturing 2SLGBTQI+ experiences), the use of established theory (interpretative phenomenological approach and intersectionality), the analysis strategy (thematic analysis), and the quality of dialogue (still to be captured). Approximately 25 to 30 participants will be recruited for one-on-one interviews or focus groups (or until information power). The literature suggests that qualitative IPA studies are guided by sample sizes of five to 25 participants [46–48].

Participant recruitment and consent

Potential participants will be invited to participate directly at YOU London, Canada and its community-based partners (Atlohsa Family Healing Services, Ark Aid Mission, London InterCommunity Health Centre, Cannabis & Mental Health). YOU supports youth aged 15 to 30 in London and Middlesex County by providing services that address their needs, including basic necessities; housing; physical, mental, and dental health care; as well as education and employment assistance. A poster with basic study information has been created for recruitment purposes (Additional file 1. Figure S2). Once participants express interest and contact the peer-facilitator, they will be provided with verbal (over the phone) or digital (textual) explanations regarding the study's aims, participation, and rights as a participant. The study's consent form will be made available to participants in paper form before the day of their participation to ensure they have had sufficient time to comprehend what participation entails.

Data collection

Data collection will occur in-person at YOU and its community-based partners. Participants will have the choice of participating in either a one-on-one interview or a focus group, both facilitated by the peer-facilitator. Demographic data, including self-identified gender, race, cultural group, perceived general and oral health, access to medical doctors and dentists, and cannabis use, will be collected from each participant through a survey prior to the one-on-one interviews and focus groups. This information is relevant to the intersectionality analysis to be utilized and for a basic understanding of the participating population (Additional file 1. Figure S3). However, no identification will be used; participation will be anonymous.

A semi-structured interview guide was created to elicit participants'views and experiences in matters regarding their 2SLGBTQI+ identity, their self-perceptions of oral health and social support, and self-disclosed cannabis use. The guide was founded on previous researcher's experience with the subject matter, as well as themes that have emerged during field observations. The guide will include open-ended questions addressing four main themes, each of which will address one or more RQ: (1) oral health (RQ1), (2) social support (RQ1), (3) cannabis use (RQ2), and (4) cannabis use and oral health (RQ2) (Additional file 1. Figure S4).

One-on-one interviews and focus groups were chosen as the data collection strategy as to the topics being explored (i.e., health, social support, cannabis consumption, and identity) can be personal to the study's 2SLGBTQI+ youth population. By recognizing that some may prefer not to participate in a group setting, offering diverse participation options will ensure inclusivity and accommodate varying comfort levels—allowing all participants the opportunity to share genuine responses. Additionally, given that the nature of the IPA approach calls to understand individual phenomena, one-on-one interviews and focus groups are often the most common data collection structures followed [52]. Importantly, one-on-one interviews and focus groups can provide similar insights but differ in how they elicit data and depth. In one-on-one interviews, a more private environment is provided, potentially allowing for more personal insights to be shared. Focus groups, on the other hand, generate rich discussions with a diverse range of perspectives; however, must be effectively mediated to ensure that all participants are provided a moment to expresses their thoughts and opinions and conformity is avoided.

Data analysis

The qualitative data will be analyzed simultaneously and iteratively after each one-on-one interview and focus group session. Data collection will continue until information power is reached, meaning that the data is rich enough to support meaningful analysis and address the research questions. Once no new insights or major themes are emerging from the data, further data collection will end.

One-on-one interviews and focus groups will be audio-recorded for accurate transcription, and field notes will be taken by peer-facilitators. Thematic analysis will be conducted using NVivo 14 software program, following Braun and Clarke's 2006 six-step approach [49]. This process involves: (1) familiarizing oneself with the data, (2) generating initial codes for relevant data features, (3) identifying potential themes, (4) reviewing and refining these themes into a thematic map, (5) defining and naming the themes, and (6) selecting key excerpts, and compiling the final report [49]. The key themes will be categorized into intrapersonal, interpersonal, organizational, environmental, and policy factors that affect oral health and cannabis use [50–52]. IPA will allow for a deep understanding of how participants understand their personal and social experiences, reducing the risk of applying pre-existing theoretical preconceptions of researchers. While intersectionality will allow the analysis to understand how these experiences are shaped by intersecting social identities, including sexual orientation, gender identity, race, and socio-economic status.

The peer-facilitator will have an active role in analysis by offering local insights into the context of the data to ensure that the research findings resonate with the lived experiences of the participating 2SLGBTQI+ youth population—not just the researcher's perspectives. After initial coding and theme development, the facilitator will help organize and lead a peer debriefing session with participants to collaboratively discuss the emerging themes from the data as a means to gain feedback on the accuracy and credibility of the research data. This will ensure that the themes effectively represent the experiences, feelings, and meanings of the participants.

Reliability and trustworthiness

To ensure the dependability and credibility of the data, several strategies will be used. Long-term interaction with community knowledge users will assist in the credibility of the data by allowing for the assessment and validation of the initial findings and the proper representation of perspectives. Information power will continue until no new themes or patterns of information emerge as means to ensure that the data has been carefully analyzed and conclusions are reliable. Lastly, conceptual depth will be preserved by prioritizing detailed data collection through one-on-one interviews and focus groups, using questions designed to encourage discussion pertaining to personal and social experiences.

Knowledge mobilization & dissemination

The knowledge mobilization and dissemination plan will involve a comprehensive approach to ensuring the study's results and conclusions are effectively communicated and accurately interpreted. This will include the development of peer debriefing sessions, where researchers, the peer-facilitator, and participants can engage in discussions to reflect on the findings. These sessions will help ensure that the experiences, perspectives, and emotions of participants are faithfully represented in the research outcomes and that results are understood within the proper context before final conclusions are drawn.

To further disseminate the study's findings, the results will be used to create infographics highlighting the intersection of oral health and cannabis use, which will be prominently displayed at YOU. Additionally, the study's outcomes will inform the creation of abstracts and oral presentations for national, regional, and international conferences, providing opportunities to share key insights with broader academic and professional communities. The findings will also be used to develop manuscripts for publication in peer-reviewed journals, contributing to the broader body of knowledge in the field. The peer-facilitator will have an active role in writing the manuscript and co-authoring it as well. Finally, the research outcomes will help inform professional development guidelines for practicing professionals as well as members of the Network for Canadian Oral Health Research and serve as a foundation for integrating the connection between oral health and cannabis use into the dental curriculum at Schulich Dentistry, Western University.

Abbreviations

CBPR	Community-based participatory research
IPA	Interpretative phenomenological approach
RQ	Research question
YOU	Youth Opportunities Unlimited
2SLGBTQI+	Two-Spirt, lesbian, gay, bisexual, transgender, queer or questioning, intersex, or other sexual orientations and gender identities

Supplementary Information

The online version contains supplementary material available at https://doi.org/10.1186/s12903-025-05906-6.

Additional file 1: Figure S1: Study design. Figure S2: Recruitment poster. Figure S3: Demographic survey. Figure S4: Interview guide.

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Authors' contributions

All authors have contributed equally to the draft.

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Data availability

No datasets were generated or analysed during the current study.

Declarations

Ethics approval and consent to participate

This study has been approved by the Western University Research Ethics Board (REB Study Number: 125629). Participation in this study is entirely voluntary. Participants will be informed in advance about the nature and implications of this study using a compressive Letter of Information. Their consent will be documented through their signature on the Letter of Consent. Participants retain the right to withdraw without explanation and/or penalty. However, participants will not be able to withdraw once the interview or focus group is complete.

Consent for publication

Not applicable.

Competing interests

The authors declare no competing interests.

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