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Conceptions of Sexual Health by Gay Men Living with HIV in Serodifferent Couples in Montreal, Canada: Results from a Qualitative Analysis

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ABSTRACT

Background: Gay, bisexual, and other men who have sex with men (GBM) living with HIV in serodifferent couples (one partner living with HIV, the other HIV-negative) may encounter unique sexual health challenges. This study aimed to explore their definition of sexual health which could improve service provision.

Methods: We interviewed 10 gay-identified men living with HIV from 2017 to 2019 as part of CTNPT013, a study on the sexual health of HIV serodifferent GBM couples conducted at two HIV-specialised clinics in Montreal, Canada. Participants partook in semi-structured interviews on the meaning of sexual health. We performed a content analysis of interview transcripts, coding them according to the 10 dimensions of Robinson's Sexual Health Model.

Results: Mean age of interviewees was 35.4 years (SD=10.2; Range:20–53). Every dimension of Robinson's model was spontaneously evoked, except for Body Image and Spirituality. All men indicated Intimacy/Relationships (e.g., sexual agreements) and Sexual Health Care/Safer Sex (e.g., HIV management, risk behaviours) as relevant aspects of sexual health. Other dimensions included: Positive Sexuality (n=7), such as pleasure and enjoyment during sex; Talking About Sex (n=5), which mainly concerned HIV disclosure; Sexual Functioning (n=4); Challenges to Sexual Health (n=3), including substance abuse; and Culture/Sexual Identity (n=3). Two participants (n=2) cited Masturbation/Fantasy.

Conclusion: This study emphasizes the multifaceted nature of sexual health for gay men with HIV in serodifferent couples and the pivotal roles of relationships, HIV, risk management (e.g., via healthcare, knowledge), and positive sexual experiences. These dimensions could be considered in sexual health promotion interventions targeting this population.

INTRODUCTION

Gay, bisexual, and other men who have sex with men (GBM) living with HIV are disproportionately affected by sexually transmitted infections (STIs) [1, 2] and other sexual problems, such as HIV transmission anxiety, poor self-image, and erectile dysfunction. [3-8] As compared to the sexual majority, GBM are also more likely to engage in sexual risk practices, including sexualised drug use[5,6] and having sexual partners beyond one's primary relationship. [9] Moreover, a significant minority of GBM in Europe and Canada report unhappiness with their sex life, [10] suggesting that their sexual problems are poorly addressed in health care and research.

GBM can get HIV via sexual intercourse with their main partner[11,12] and couples are a target group for HIV prevention and investigation. [11] GBM living with HIV in serodifferent couples (one partner living with HIV, the other HIV-negative) may encounter unique sexual health challenges and psychosocial stressors, including stigmatization[13] and anxiety about HIV transmission to their main partner. [14]

Exploring the perspectives on sexual health among GBM living with HIV in serodifferent couples can help understand their specific needs and challenges and improve service provision. [15] Qualitative sexual health research about GBM living with HIV has typically centred on specific dimensions of sexual health in combination with sexual risk reduction concerns: [15] HIV prevention options, [16] HIV stigma, [17] HIV serostatus disclosure, [8] and relationship arrangements. [9,18, 19] Few studies have explored other components of sexual health. [20] Consequently, to gain a more comprehensive perspective, this study aimed to investigate how GBM living with HIV in serodifferent couples define sexual health.

METHODS

We interviewed 10 serodifferent GBM couples between June 2017 and May 2019 as part of the CTNPT013 study conducted at the McGill University Health Centre and Clinic L'Actuel

in Montreal, Quebec, Canada. CTNPT013 aimed to assess the potential of tailored sex therapy (with JB) in these couples to improve sexual health. Couples were recruited through the two participating clinics. Eligible couples were 18 or older, with both members identifying as GBM in an enduring sexual relationship of at least 3 months and expecting to remain together for the next 6 months. Only one partner could be living with HIV and for a minimum duration of 3 months. Exclusions included serious mental illness affecting their ability to participate in the interviews, plans to relocate far from the study site, current use of psychotherapy, severe abuse in the past year (significant enough to require medical, psychological, and/or legal intervention), failure to meet the inclusion criteria, or the discovery of HIV in the presumed negative partner.

At baseline, participants completed a sociodemographic survey and a short, semi-structured interview on their definition of sexual health and its contributors (for the interview schedule, see Appendix 1). Interviews were conducted individually in French or English, transcribed, and then coded by FA based on Robinson's Sexual Health Model, [21] using content analysis. [22] Robinson's model offers a comprehensive view of sexuality with its 10 key dimensions: talking about sex; culture and sexual identity; sexual anatomy functioning; sexual healthcare and safer sex; challenges; body image; masturbation and fantasy; positive sexuality; intimate relationships; and spirituality. [22] It has been used to design interventions adapted to different populations, [23] including GBM[24] and GBM with HIV. [25] Thus, it was considered a good fit. Here, we present an analysis of only the interviews with participants living with HIV.

RESULTS

Characteristics of participants

Table 1 shows the sociodemographic characteristics of the 10 men with HIV. All identified as gay/homosexual. Their mean age was 35.4 years old (*SD*=10.2; range: 20–53). Two were born in Canada and eight migrated from other countries. Half were in a sexually exclusive

relationship, i.e., they agreed on not having sex outside of the relationship; the other half agreed on some level of sexual openness. All reported feeling sexually healthy at the time of the interview.

Sexual Health Model dimensions

Eight of Robinson's dimensions were spontaneously discussed in the interviews. Spirituality and Body Image were the exceptions. Results are presented in descending order of frequency, with the numbers of interviewees mentioning each dimension and sub-dimension indicated in parentheses. Uncertainties in coding were reviewed and discussed during periodic meetings with the second author (KE). Exemplary quotes by sub-dimension are provided in Table 2.

Intimacy and relationships

All participants indicated intimacy and relationships as relevant aspects of sexual health. Participants referred to receiving social support from their partners and peers in dealing with their HIV diagnosis. They also mentioned their emotions, sexual agreements with their partner/s, relational challenges, communication with partners, and need for togetherness.

The identified sub-dimensions were as follows.

- *Social support* (*n*=5) was considered a contributor to sexual health for half of participants. Support from their primary partner (most reported) helped them to deal with their HIV diagnosis, discuss sexuality and HIV, and seek help for mental health concerns. Additionally, participants stated receiving support to manage HIV from peers living with HIV in community organizations.
- *Emotions* (*n*=4). Over a third of participants mentioned that sexual health referred to their emotions, i.e., how they felt about their sex lives and relationships.
- *Sexual agreements* (*n*=4). For some participants, sexually open relationships were considered a component of their sexual health. These agreements, allowing sexual

partners outside their couple, came with challenges and opportunities, including negotiating desires and boundaries, and the risk of STI acquisition.

- *Relational challenges* (*n*=4) were identified by some. These referred to conflicts with their primary partner, such as adjusting to having little sex after several years together.
- *Communication* (*n*=3) between partners was raised by some as valuable, important to make their relationship work, and associated with feeling comfort within the couple.
- *Need for togetherness* (*n*=2) within the couple, for those who addressed it, was expressed as more important than sex itself.

Sexual health care and safer sex

This dimension, also raised by all participants, relates sexual health to access to healthcare services, risk behaviour, HIV management, and STIs. Additionally, it refers to associated information and knowledge and taking care of oneself.

- *Access/barriers to healthcare* (*n*=9). Most participants emphasised the importance of access to HIV prevention and care to ensure good sexual health. They believed that Canada offered quality healthcare services, with some noting that living with HIV provided an opportunity for regular medical follow-up. Barriers were inadequate insurance coverage for psychotherapy and antiretroviral therapy; lack of awareness about available resources; unfamiliarity with STI screening services; and long service waiting times.
- *Risk behaviour* (*n*=9). For most participants, a significant part of sexual health was being aware of STI risk associated with different sexual practices and having "safe sex" practices, such as using condoms. Some mentioned personally taking risks (e.g., having condomless anal intercourse), and subsequent rumination and guilt.
- *HIV management* (*n*=9) was an aspect of of sexual health for most participants mainly in terms of preventing transmission to their partners by taking medication to keep their

viral load undetectable, or by using condoms before reaching undetectability. They also highlighted that being sexually healthy is possible while living with HIV.

- *STIs* (*n*=8) were often the first thing that came to mind when participants were asked to define sexual health, in terms of awareness or management.
- *Information and knowledge* (*n*=6). Being able to access information and knowledge about HIV and sexual health, particularly through the internet, was commonly deemed a contributor to sexual health. Lack of HIV knowledge was considered a source of stigma at the societal level, detrimental to one's sexual health.
- *Self-care* (*n*=4). For those who addressed self-care, a sexually healthy person was someone who cares for themselves and their body by taking precautions while having sex, by feeling good about themselves, or by staying informed about sexuality-related practices.

Positive sexuality

Nearly three-quarters of participants (*n*=7) indicated that a positive framing of sexuality is a relevant aspect of sexual health. This involved being able to feel pleasure and enjoyment during sex (*n*=3), experiencing sexual satisfaction (*n*=2) or feeling confident and expressing oneself (*n*=3). The latter included being able to explore their sexuality and overcome challenges associated with this, such as feelings of guilt.

Talking about sex

Half of the participants evoked the dimension Talking About Sex (*n*=5). They underscored the importance of sexual communication to better bond with their main partner and the challenges of HIV disclosure to new sexual partners, such as having to educate people on HIV.

Sexual functioning

Sexual Functioning (*n*=4) was broached in relation to knowing oneself, one's body and how it functions, or to the detrimental effects of aging or of certain medications (e.g., on desire, erections).

Challenges

Challenges to sexual health (*n*=3) included references to substance/alcohol abuse (*n*=3) and to other issues such as transactional sex, feelings of guilt, and trauma.

Culture and sexual identity

This dimension (*n*=3) referred to cultural or personal acceptance of homosexuality as impacting sexual health (e.g., by affecting access to sexual health information and care).

Masturbation and fantasy

This dimension was reported by two participants. Fantasy was a component of sexual health that one mentioned discussing with his sexologist, while Masturbation was considered a way to compensate for the absence of sex within his relationship.

DISCUSSION

This qualitative analysis of interviews with ten gay men living with HIV in Montreal in serodifferent couples drew on Robinson's Sexual Health Model. [21] It found all participants identified Intimacy and Relationships and Safer Sex/Sexual Health Care as key features of their sexual health, with over two-thirds emphasizing Positive Sexuality. These results align with a UK study involving 12,129 GBM who were asked an open-ended question on their ideal sex life. Some of the main themes were: the importance of a significant primary relationship; emotional and sexual connection; and freedom from physical harm (e.g., STIs, coercion). [20] Men with HIV particularly indicated the wish to overcome psychological (e.g., lack of self-confidence) and social (e.g., HIV stigma) barriers to their ideal sex life. [20] Since living with HIV can lead to difficulty forming a steady relationship and decreased sexual

pleasure among GBM, [26] this highlights relationships and pleasure as important considerations in sexual health promotion interventions. [27, 28]

In our study, access to healthcare, as a component of sexual health, was raised by almost all participants, with HIV infection presented as a facilitator to receive consistent medical follow-up. While sexual health initiatives often target GBM and those with HIV, [29,30] several access barriers remain, such as stigma towards their sexual orientation, [31] provider sexual health training gaps, [32] and Quebec-specific issues, like insufficient insurance coverage for psychological services[33] and a family doctor shortage. [34] These barriers must be addressed, both socio-culturally and within the local healthcare system, to foster comprehensive sexual healthcare.

Most participants discussed HIV management, suggesting it becomes central to their sexual lives after diagnosis. [35] Interviews were conducted before "U=U" (undetectable = untransmittable) gained popularity (post-2019), but participants already knew consistent antiretroviral treatment kept their viral load undetectable, preventing transmission. [36,37] Staying "undetectable" was a form of self-care and protection for their serodifferent partners, allowing condomless sex with HIV-negative partners without transmission fears, thanks to antiretroviral therapy advancements. [38,39] "U=U" allows for a sort of "normalisation" of living in a serodifferent couples, despite the persistence of societal HIV stigma. [13]

Notably, no participant discussed body image dissatisfaction, despite being a common concern among GBM living with HIV. [40,41] This omission may be due to the fact that our participants were primarily in relationships and skewed towards a younger demographic, with only one participant aged over 50.

Study limitations include a small sample size and the sensitive nature of discussing sexuality with researchers and in healthcare settings. [32] The interview's duration (around 30 minutes) and occurrence early on in the study may not have allowed a full representation of

participants' views on sexual health, particularly on certain sub-dimensions (e.g., "Emotions", "Challenges").

While all participants were gay-identified and coupled men, the sample showed diversity in sociodemographic factors. This analysis could be further developed using a larger, more heterogeneous sample.

CONCLUSIONS

In contrast with past research, this study emphasizes the multifaceted nature of sexual health for gay men with HIV in serodifferent couples and the pivotal roles of Intimacy and Relationships, Safer Sex/Sexual Health Care (notably HIV risk management, e.g., via healthcare, self-care, knowledge), and Positive Sexuality. This argues for their consideration as integral components of sexual health promotion interventions, which often focused primarily on Safer Sex/Sexual Healthcare (e.g., sexual risk reduction, STI prevention). [7] The significance of "U=U" underscores the limitations of previous sexual health promotion interventions that narrowly defined risk behaviour as condomless anal sex. Recognizing these diverse aspects is essential to provide appropriate sexual health support and tailored services, which may prove more effective and better received compared to interventions solely focused on sexual risk reduction. [16]

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BL and his team, notably KE, designed the CTNPT013 study, collected the data, and provided input for the design of this analysis. DL and an employee at Clinic L'Actuel conducted the interviews, which were transcribed by Julie Bellingham.

DECLARATIONS

Data availability

Data available upon request to the corresponding author.

Ethics approval

The CTNPT013 study obtained ethical approval by the Research Institute of McGill University Health Centre Research Ethic Board.

Patient consent

All participants in the CTNPT013 study were completely informed concerning the pertinent details and purpose of the study. Written consent forms, approved by the appropriate Research Ethics Board, were supplied by the investigators and were understood and signed by each participant. The investigators explained the nature of the study and the risks involved to each participant prior to their inclusion in the study. Participants were also informed that they may withdraw at any time from the study without any loss regarding their usual medical care.

Permission to reproduce material from other sources

Not applicable.

Clinical trial registration

Not applicable.

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Conflict of interest disclosure

BL has received unrestricted research support from ViiV, Merck, and Gilead managed by the Research Institute of the MUHC, and consulting fees and speaker fees from ViiV Healthcare, Merck, and Gilead, all outside of the submitted work. The other authors declare that they have no conflict of interest.

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Table 1. Sociodemographic characteristics of participants

Participant #	Age range	Country of birth	Yearly income (Canadian dollars)	Sexual orientation	Sexual agreement
1	25-34	Honduras	$20,000 - 39,999	Homosexual/gay	Sexual exclusivity
2	35-44	United States	$20,000 - 39,999	Homosexual/gay	Sexual openness
3	45-54	Mexico	$40,000 - 59,999	Homosexual/gay	Sexual openness
4	18-24	Mexico	$10,000 -$14,999	Homosexual/gay	Sexual exclusivity
5	45-54	Canada	> $60,000	Homosexual/gay	Sexual exclusivity
6	25-34	France	$20,000 - 39,999	Homosexual/gay	Sexual openness
7	35-44	Philippines	$20,000 - 39,999	Homosexual/gay	Sexual exclusivity
8	25-34	Canada	> $60,000	Homosexual/gay	Sexual openness
9	35-44	Mexico	$20,000 - 39,999	Homosexual/gay	Sexual openness
10	35-44	Brazil	$20,000 - 39,999	Homosexual/gay	Sexual exclusivity

Table 2 Exemplary quotes by dimension and sub-dimension of sexual health addressed by gay men with HIV (n = 10).

Dimension	Sub-dimension	Quote
Intimacy and relationships	Social support	"[When I received my diagnosis] I was lucky that I was in a long-term relationship where my partner's response was very reassuring, 'everything's going to be ok'." (Participant #1)
	Emotions	"[Sexual health is] how I feel mentally in relation to sex, my sexual relations or my sex life." (Participant #6)
	Sexual agreements	"Since you're in a relationship, obviously you have to consider the other person, who has their whole other set of criteria that they might consider irrelevant to their sexual health, so finding the compatibility with the other person is another aspect of it." (Participant #1)
	Relational challenges	"I am not sure I want a boyfriend, someone with me. I know he loves me; he wants to give me everything, but I always sabotage the relationship to push him away." (Participant #3)
	Communication	"[Being sexually healthy means] having good, enjoyable sex with my partner and being able to express that, my desire and wants to him." (Participant #2)
	Need for togetherness	"For me, I need my stability, my security. It's childish, but it's like that […] We have threesomes regularly, but if [my partner] is not there, for me it's not interesting". (Participant #5)
Safer sex and sexual health care	Access/barriers to health	"I think that having access to counselling or psychological help is very important and critical at the very first stages of diagnosis. I don't know if it's common here, but I guess new HIV patients don't have access here to these things if they ask for them. But I think it's important that they have access to these things, to information and basically reassurance about their future, health prospects, these types of things that can really alleviate the burden of the psychological impact that the diagnosis can have on the patient." (Participant #1)

Dimension	Sub-dimension	Quote
	Risk behaviour	"If you don't protect yourself, you can catch something." (Participant #4)
	HIV management	"[Sexual health] also has [a] more clinical aspect to it. For me, it would be that if I'm not on the right treatment, if I'm not taking care of myself, then I can potentially cause an infection in someone that I care about." (Participant #1)
	STI	"Since I'm HIV-positive, [sexual health for me] is more about knowing if I have other STIs. It's like the first thing." (Participant #9)
	Information and knowledge	"Knowing what I can do safely with my partner, having the resources to… whether that be through toys or knowledge of safe practices and unsafe practices in regard to sex." (Participant #2)
	Self-care	"Sexual health to me is personally keeping, taking care of yourself whether it's for the health of your body." (Participant #2)
Positive sexuality	Pleasure and enjoyment	"Sexual health is to enjoy my sexuality, because it changed a lot after knowing I'm HIV positive." (Participant #9)
	Sexual satisfaction	"Compared to other people, I feel satisfied with my sex life." (Participant #3)
	Confidence	"It's very important for me to be healthy and, at the same time, to feel confident about my own sexuality, which is something that sometimes is taken from you for a little while when you first find out that you're positive that you're not really confident in your sexuality. But I guess it's finding the right place, gaining your confidence back." (Participant #1)

Dimension	Sub-dimension	Quote
Talking about sex	/	"There are people that I want to tell [my HIV status] to, and other times I don't. Sometimes I can talk about it and it goes super well. Other times, it goes really bad, too." (Participant #6)
Sexual Functioning	/	"[Sexual health is] the wellbeing of my body, its functioning, that everything functions perfectly in my body." (Participant #3)
Challenges	Substance/Alcohol abuse	"For me personally, not recently but in the past, there was a lot of alcohol use. Because I put myself in negative situations where I would almost be in situations where I wasn't necessarily always consenting to the sex, because I was really, really drunk or something. I put myself in situations where I'd have unsafe sex in an unsafe situation." (Participant #2)
	Other	"Sexual health is probably mental. If you have trauma or you're scared about something, that is not good sexual health." (Participant #3)
Culture and sexual identity	/	"Societal taboos are a sexual health problem, too." (Participant #3)
Masturbation and fantasy	/	"There's another way of pleasuring yourself. A person who doesn't have sex for a long time can masturbate. I'm ok with it because having sex and masturbation is something with no difference for me because it's just about releasing something." (Participant #4)