ONTARIO HIV TREATMENT NETWORK

Interventions to reduce social isolation and loneliness among men who have sex with men

Questions

- What interventions have been helpful to reduce social isolation and loneliness among men who have sex with men?

Key Take-Home Messages

- Social isolation and loneliness are significantly associated with all-cause mortality in the general population (1).
- A recent study among gay and bisexual men who have sex with men in Vancouver found that 61% of the sample reported some degree of loneliness (2).
- While there are a number of studies and reviews that focus on loneliness and/or social isolation among older adults in the general population (3–5), there appear to be few interventions designed to target loneliness among sexual minority individuals specifically.
- The Friendly Caller Program (6) and Telefriending (7) are telephone buddy programs that target social isolation and loneliness among older adults who identify as a sexual minority.
- Gay Poz Sex, a small-group counselling intervention for gay and bisexual men living with HIV, reported reductions in condomless anal intercourse and reduced mental health problems, including loneliness (8).
- Interventions targeting minority stress (9) and social anxiety (10) have been found to reduce loneliness among men who have sex with men.

The Issue and Why it's Important

Social relationships, loneliness, & health outcomes

Social relationships refer to "...connections that exist between people who have recurring interactions that are perceived by the participants to have personal meaning" (11). This includes

References

1. Leigh-Hunt N, Bagguley D, Bash K, Turner V, Turnbull S, Valtorta N, et al. An overview of systematic reviews on the public health consequences of social isolation and loneliness. Public Health. 2017;152:157–71.

2. Marziali ME, Armstrong HL, Closson K, McLinden T, Wang L, Barath J, et al. Loneliness and self-rated physical health among gay, bisexual and other men who have sex with men in Vancouver, Canada. Journal of Epidemiology & Community Health. 2020;0:1–7.

3. Fakoya OA, McCorry NK, Donnelly M. Loneliness and social isolation interventions for older adults: A scoping review of reviews. BMC Public Health. 2020;20(1):1–14.

4. O'Rourke HM, Collins L, Sidani S. Interventions to address social connectedness and loneliness for older adults: A scoping review. BMC Geriatrics. 2018;18(1):214.

5. Poscia A, Stojanovic J, La Milia DI, Duplaga M, Grysztar M, Moscato U, et al. Interventions targeting loneliness and social isolation among the older people: An update systematic review. Experimental Gerontology. 2018;102:133–44.

6. Perone AK, Ingersoll-Dayton B, Watkins-Dukhie K. Social isolation loneliness among LGBT older adults: Lessons learned from a pilot friendly caller program. Clinical Social Work Journal. 2020;48(1):126–39.

relationships between family, friends, coworkers, and neighbours, and is exclusive of interactions that are short-lived or incidental, such as those with service providers or employees in retail environments (11). Research evidence has demonstrated that in the general population social relationships have the potential to impact health outcomes, including mental health, health behaviour, physical health, and risk of mortality (12).

One aspect of social relationships that can influence health outcomes is social isolation (12), a term that can generally be used to describe an individual who lacks interaction with social contacts (13). Social isolation can be both objective and subjective (14). Objective social isolation refers to a measurable lack of social connection (14): living alone (15), irregular contact with others (15, 16), and lack of involvement in social organizations (16). Some individuals are content in this state; they are satisfied with minimal social contact, and prefer to be alone (15). The subjective experience of social isolation – otherwise known as loneliness (17) – refers to a perceived lack of emotional closeness between an individual and members of their network (14). Some individuals may have frequent social contact but still feel lonely (15).

Loneliness can have both social and emotional dimensions (18), as different types of relationships serve unique functions (19). Researchers Dahlberg and McKee note that "[s]ocial loneliness refers to the absence of an acceptable social network, that is, a wider circle of friends and acquaintances that can provide a sense of belonging, of companionship and of being a member of a community; whereas emotional loneliness refers to the absence of an attachment figure in one's life and someone to turn to" (20). Some researchers utilize tools that encompass a multidimensional perspective when evaluating loneliness, such as the de Jong Gierveld Loneliness Scale, which measures social, emotional, and overall loneliness (21, 22). Other researchers use single questions, answered with a dichotomous *yes* or *no*, to measure only the feeling of loneliness (e.g. use of a select question from the Center for Epidemiologic Studies Depression Scale) (22). The use of different measurement scales is one reason why accurate estimates for the prevalence of loneliness and social isolation are difficult to obtain (1): one study by Valtorta *et al.* identified 54 unique instruments used to measure loneliness and social isolation (23). Furthermore, it is not always clear what these tools are designed to measure (23).

Valtorta *et al.* also found that terms including social integration, social ties, and social isolation were used loosely and interchangeably (23). Other authors note this as well: Marziali *et al.* state that there are multiple variations used to describe social isolation (24), while Yanguas *et al.* note that researchers use the terms social isolation and loneliness indistinctly (22). Due to the interchangeable nature of these terms in the literature, the terms used in this review will reflect what is used in the cited studies.

7. Opening Doors London. Our services: Telefriending. 2020. Available from: https://www.openingdoorslondon.org.uk/telefriending. Accessed May 13, 2020.

8. Hart TA, Stratton N, Coleman TA, Wilson HA, Simpson SH, Julien RE, et al. A pilot trial of a sexual health counseling intervention for HIV-positive gay and bisexual men who report anal sex without condoms. PLoS ONE. 2016;11(4):e0152762.

9. Smith NG, Hart TA, Kidwai A, Vernon JRG, Blais M, Adam B. Results of a pilot study to ameliorate psychological and behavioral outcomes of minority stress among young gay and bisexual men. Behavior Therapy. 2017;48(5):664–77.

10. Hart TA, Noor SW, Vernon JR, Antony MM, Gardner S, O'Cleirigh C. Integrated cognitive-behavioral therapy for social anxiety and HIV/STI prevention for gay and bisexual men: A pilot intervention trial. Behavior Therapy. 2020(51):503–17.

11. August KJ, Rook KS. Social relationships. In: Gellman MD, Turner JR, editors. Encyclopedia of Behavioral Medicine. New York, NY: Springer New York; 2013.

12. Umberson D, Karas Montez J. Social relationships and health: A flashpoint for health policy. Journal of Health and Social Behavior. 2010;51(S):S54–S66.

13. Perissinotto CM, Covinsky KE. Living alone, socially isolated or lonely — What are we measuring? Journal of General Internal Medicine. 2014;29(11):1429–31.

14. Nguyen AW, Taylor RJ, Taylor HO, Chatters LM. Objective and subjective social Isolation and psychiatric disorders among African Americans. Clinical Social Work Journal. 2020;48(1):87–98.

Loneliness, health outcomes, & sexual minorities

Various systematic reviews and meta-analyses have identified specific health impacts associated with social isolation and loneliness in general (1). For example, in an overview of 40 systematic reviews of studies conducted primarily in high-income countries, with individuals from any population of any age or gender, Leigh-Hunt *et al.* (2017) found that meta-analyses identified a significant association between social isolation and loneliness, and all-cause mortality (1). Additionally, authors concluded that overall, social isolation and loneliness were consistently linked to poor cardiovascular and mental health outcomes (1).

Researchers have also found that social variation (e.g. age, gender, race, socioeconomic status) can impact the link between social relationships and health outcomes (12). This is especially true for groups that are marginalized, as the inherent nature of marginalization "...brings about a sense of disconnection, dissociation from society at large, and a sense of aloneness and loneliness" (25). One marginalized group where social isolation and loneliness have been well-documented is sexual minorities (2, 25–27).

A recent study from Vancouver by Marziali *et al.* describes the prevalence of loneliness among a sample of gay and bisexual men who have sex with men (2). Published in March of 2020, the Momentum Health Study utilized longitudinal data to determine the prevalence of loneliness among gay and bisexual men, and to explore the association between loneliness and self-rated physical health (2). Authors used the six-item Loneliness Scale for Emotional and Social Loneliness to assess loneliness, and a single question, *How would you rate your current physical health?*, to assess physical health (2). The final analytical sample included 770 individuals; descriptive analysis revealed that 61% of the sample (n=471) reported some degree of loneliness at baseline. Eighty-eight percent (n=674) of participants reported *good*, *very good*, or *excellent* physical health; of these, 59% (n=391) reported loneliness (2). This is compared to those who rated their physical health as *poor* or *fair* (12%, n=96), of which 87% (n=80) reported loneliness. Furthermore, after adjusting for confounding variables, loneliness was associated with poor self-rated physical health (2).

Another study by Marziali *et al.* from 2020 aimed to define and identify social isolation among residents of British Columbia living with HIV (24). Sampled between 2007 and 2010, data from the Longitudinal Investigation into Supportive and Ancillary health services (LISA) study provided a cross-sectional sample of 996 individuals; marginalized and vulnerable individuals were oversampled. Five indicators of social isolation were included; participants were asked about their living arrangements, relationship status, social networks, and satisfaction with social activity (24). Authors used latent class analysis to identify three

15. Holt-Lunstad J, Smith TB, Baker M, Harris T, Stephenson D. Loneliness and social isolation as risk factors for mortality: A meta-analytic review. Perspectives on Psychological Science. 2015;10(2):227–37.

16. Schrempft S, Jackowska M, Hamer M, Steptoe A. Associations between social isolation, loneliness, and objective physical activity in older men and women. BMC Public Health. 2019;19(1):74.

17. Cacioppo JT, Patrick W. Loneliness: Human nature and the need for social connection: WW Norton & Company; 2008.

18. Weiss RS. Loneliness: The experience of emotional and social isolation. Cambridge: MIT Press; 1973.

19. Dykstra PA, Fokkema T. Social and emotional loneliness among divorced and married men and women: Comparing the deficit and cognitive perspectives. Basic and Applied Social Psychology. 2007;29(1):1–12.

20. Dahlberg L, McKee KJ. Correlates of social and emotional loneliness in older people: Evidence from an English community study. Aging & Mental Health. 2014;18(4):504–14.

21. Gierveld JDJ, Tilburg TV. A 6-item scale for overall, emotional, and social loneliness: Confirmatory tests on survey data. Research on Aging. 2006;28(5):582–98.

22. Yanguas J, Pinazo-Henandis S, Tarazona-Santabalbina FJ. The complexity of loneliness. Acta Bio-Medica. 2018;89(2):302–14.

23. Valtorta NK, Kanaan M, Gilbody S, Hanratty B. Loneliness, social isolation and social relationships: What are we measuring? A novel framework for classifying and comparing tools. BMJ Open. 2016;6(4):e010799.

groups: Socially Connected, Minimally Isolated, and Socially Isolated. Compared to those who were Socially Connected, correlates of participants who were classified as Minimally Isolated and Socially Isolated included recent violence and a mental health diagnosis. Women, individuals of Indigenous ancestry, and individuals identifying as gay or lesbian were less likely to experience social isolation (24). In the discussion, authors draw on other research, and suggest that findings regarding women and gay men may be related to social networks, as women receive greater familial support and create networks that extend beyond the family, and gay men are more likely to form extensive social networks compared to straight men (24).

Minority stress & the mediating role of loneliness

For members of the lesbian, gay, bisexual, and transgender community, disconnect and loneliness has been examined through the lens of the minority stress theory (26–29), which posits that "…stigma, prejudice, and discrimination create a hostile and stressful social environment that causes mental health problems" (30). The relationship between minority stress and suboptimal mental health has been furthered by means of the psychological mediation framework (31, 32). This framework proposes that sexual minorities experience increased stress caused by stigma and their marginalized status, which creates elevations in:

- emotional regulation (i.e. strategies that increase, maintain, or decrease the components – including the feelings, behaviours, and psychological responses – of an emotional response (33), such as rumination);
- social or interpersonal processes (i.e. the dynamics of social interaction; for example, stigma can cause social isolation);
- and cognitive processes (i.e. thought processes that exacerbate or perpetuate symptoms of anxiety and depression, such as hopelessness and pessimism) (32).

This, in turn, confers increased risk for psychopathologies (31, 32). To illustrate, stigma-related stress can cause an individual to experience an interpersonal problem, such as loneliness; loneliness, in turn, creates risk for poor mental and physical health outcomes (29). This mediating role of loneliness is illustrated in the following studies:

- Research published in 2001 among Latino gay men (n=912) in Miami, Los Angeles, and New York found that experiences of homophobia, racism, financial hardship, and low resiliency were strong predictors of social isolation (34). After controlling for social discrimination

24. Marziali ME, Card KG, McLinden T, Closson K, Wang L, Trigg J, et al. Correlates of social isolation among people living with HIV in British Columbia, Canada. AIDS Care. 2020:1–9.

25. Rokach A. The psychological journey to and from loneliness: Development, causes, and effects of social and emotional isolation. Academic Press; 2019.

26. Garcia J, Vargas N, Clark JL, Magaña Álvarez M, Nelons DA, Parker RG. Social isolation and connectedness as determinants of well-being: Global evidence mapping focused on LGBTQ youth. Global Public Health. 2020;15(4):497–519.

27. Kuyper L, Fokkema T. Loneliness among older lesbian, gay, and bisexual adults: The role of minority stress. Archives of Sexual Behavior. 2010;39(5):1171–80.

28. Mereish EH, Katz-Wise SL, Woulfe J. Bisexual-specific minority stressors, psychological distress, and suicidality in bisexual individuals: The mediating role of loneliness. Prevention Science. 2017;18(6):716–25.

29. Mereish EH, Poteat VP. A relational model of sexual minority mental and physical health: The negative effects of shame on relationships, loneliness, and health. Journal of Counseling Psychology. 2015;62(3):425–37.

30. Meyer IH. Prejudice, social stress, and mental health in lesbian, gay, and bisexual populations: Conceptual issues and research evidence. Psychological Bulletin. 2003;129(5):674–97.

and resiliency, authors found that loneliness and low self-esteem were significant predictors of psychological distress, which included anxiety, depression, and suicidal ideation (34).

- A more recent study (2015) among a web-based sample of American sexual minority adults (n=719) found that the associations between distal stressors (e.g. discrimination, victimization) as well as proximal stressors (e.g. internalized homophobia, sexual orientation concealment), and health outcomes were mediated by shame, loneliness, and poor relationships (29).

Thus, some authors suggest that considering both minority stress theory and the psychological mediation framework are foundational for comprehensive approaches to clinical practice (35) and for intervention design (32) among sexual minorities.

What We Found

There are a number of literature reviews that summarize and describe the current knowledge on loneliness and social isolation interventions, particularly among older adults in the general population:

- One scoping review of reviews (search date: inception to June 15, 2018) describes the range of interventions to reduce social isolation and loneliness among older adults; 33 studies were included in the final analysis (3). Authors concluded that there is no one-size-fits all approach to addressing loneliness, highlighting the need for tailored interventions.

- A scoping review of interventions (search date: inception to July 2015) describes the literature on interventions and strategies to affect loneliness/social connectedness of older adults (4). From the 44 studies that were included in the analysis, authors identified nine distinct intervention types, with each type presenting different theories about what factors were targeted (e.g. caring, belonging, social network, social support). Authors conclude that theory-informed intervention evaluation would strengthen the evidence base (4).

- A systematic review sought to summarize the knowledge on existing interventions to alleviate loneliness and social isolation among older people (search date: January 2011–January 2016) (5). Authors identified 20 studies in their analysis, and concluded that new technologies (e.g. a telephone befriending intervention or internet use) and

31. Alessi EJ, Hartman E. Incorporating minority stress theory into clinical practice with sexual-minority populations. In: Dentato MP, editor. Social work practice with the LGBTQ community: The intersection of history, health, mental health, and policy factors. New York, NY: Oxford University Press; 2017.

32. Hatzenbuehler ML, Nolen-Hoeksema S, Dovidio J. How does stigma "get under the skin"?: The mediating role of emotion regulation. Psychological Science. 2009;20(10):1282–9.

33. Gross JJ. Emotion regulation in adulthood: Timing is everything. Current Directions in Psychological Science. 2001;10(6):214–9.

34. Díaz RM, Ayala G, Bein E, Henne J, Marin BV. The impact of homophobia, poverty, and racism on the mental health of gay and bisexual Latino men: Findings from 3 US cities. American Journal of Public Health. 2001;91(6):927–32.

35. Alessi EJ. A framework for incorporating minority stress theory into treatment with sexual minority clients. Journal of Gay & Lesbian Mental Health. 2014;18(1):47–66.

36. Fredriksen-Goldsen KI, Simoni JM, Kim H-J, Lehavot K, Walters KL, Yang J, et al. The health equity promotion model: Reconceptualization of lesbian, gay, bisexual, and transgender (LGBT) health disparities. American Journal of Orthopsychiatry. 2014;84(6):653–63.

37. Cattan M, Kime N, Bagnall AM. The use of telephone befriending in low level support for socially isolated older people–An evaluation. Health & Social Care in the Community. 2011;19(2):198–206.

> community engaged arts might be useful tools for older individuals who are socially isolated and lonely (5).

However, there appear to be a limited number of interventions that specifically address loneliness among sexual minority individuals.

One pilot intervention, the Friendly Caller Program, is a telephone buddy program designed for lesbian, gay, bisexual, and transgender (LGBTQ+) older adults that aimed to reduce social isolation and loneliness by connecting participants with volunteer callers (6). The program is grounded in minority stress theory and the Health Equity Promotion Model, the latter being a model that emphasizes the importance of agency and resiliency in health promotion in addition to accounting for the negative influence of structural barriers (6, 36). Authors note that past research has not examined the impact of telephone buddy programs for LGBTQ+ populations, though they do cite previous intervention research among older adults in the general population (37, 38) that has explored this.

The Friendly Caller Program was developed in a large Mid-western city in the U.S. Participants had to reside in one of the four counties served by the program, identify as LGTBQ+, and be at least 45 years old (6). More than one-third of participants identified as people of colour, and more than 20% identified as transgender or gender non-binary. Twenty-one volunteers were expected to accumulate 45 minutes of time per week talking to their matched LGBTQ+ older adult. Volunteers represented a diverse group within the LGBTQ+ community; additionally, eight volunteers identified as people of colour, and five identified as African American or Black (6). Initially, quantitative data was collected by means of four standardized measurement tools; however, this was later abandoned as participants expressed reservations about answering some questions over the phone. Additionally, there was confusion in answering scales over the phone. Ultimately, the standardized measures were eliminated, and the evaluation was based on participants' answers to qualitative open-ended questions (6). Analysis revealed several key themes, which included: the importance of LGBTQ+ community, the promise of intergenerational buddy matches, and barriers to social connectedness and belonging among LGBTQ+ participants (6).

Opening Doors London is a UK based charity that aims to reduce social isolation among the older LGBTQ+ population in England (39). The program began in 2008 as an older gay men's group with 15–20 members, but has since expanded to provide social support, advocacy, and information for individuals in the lesbian, gay, bisexual, and transgender community (LGBT) (39). The aim of the program is to reduce social isolation and improve well-being and mental health in the older LGBT population.

The charity's website describes a service similar to the previously mentioned Friendly Caller Program, called Telefriending.

38. Preston C, Moore S. Ringing the changes: The role of telephone communication in a helpline and befriending service targeting loneliness in older people. Ageing & Society. 2019;39(7):1528–51.

39. Lomas C. You've got a friend. Nursing Standard. 2013;27(23):20–1.

40. Opening Doors London. Our services: Befriending. 2020. Available from: https://www.openingdoorslondon.org.uk/befriending. Accessed May 20, 2020.

41. Alden S, Wigfied A. Reducing social isolation amongst older LGBT people: A case study of the Sage project. 2018. Available from: https://s3-eu-west-1.amazonaws.com/assets.timetoshine.co.uk/Sage-Case-Study-2018.pdf. Accessed May 20, 2020.

42. LeGrand S, Muessig KE, Pike EC, Baltierra N, Hightow-Weidman LB. If you build it will they come? Addressing social isolation within a technology-based HIV intervention for young black men who have sex with men. AIDS Care. 2014;26(9):1194–200.

43. Olesen J, Campbell J, Gross M. Using action methods to counter social isolation and shame among gay men. Journal of Gay & Lesbian Social Services. 2017;29(2):91–108.

44. Cruz A, Sales C, Alves P, Moita G. The core techniques of Morenian psychodrama: A systematic review of literature. Frontiers in Psychology. 2018;29(1):1–12.

45. Fung K, Paterson D, Alden LE. Are social anxiety and loneliness best conceptualized as a unitary trait? Journal of Social and Clinical Psychology. 2017;36(4):335–45.

46. The CTN: CIHR Canadian HIV Trials Network. Dr. Shaya Skakoon-Sparling. Available from: http://www.hivnet.ubc.ca/portfolio/dr-shayna-skakoon-sparling/. Accessed May 20, 2020.

Telefriending is a free telephone buddy service by Opening Doors London designed for adults that are over 50, identify as LGBT+, and feel lonely and isolated (7). Additionally, the charity runs a service called Befriending, which aims to reduce the stress of loneliness and isolation, increase an individual's confidence, and enable members to continue an independent lifestyle (40). Befriending is an in-person buddy service that involves regular, in-person social contact with another member of LGBT+ community every one or two weeks, and might include outings to exhibitions, social events, or simply conversation over a cup of tea (40). Similar to Telefriending, Befriending is open to adults that are over 50, identify as LGBT+, and who are isolated or housebound. A similar program in Leeds (UK), known as the Sage project, works with socially isolated older LGBT people in the community by offering social events and activities, including a volunteer buddy program (41). The program has successfully facilitated intergenerational links, reduced social isolation through the development of meaningful relationships, and has helped older LGBT people build confidence and resilience (41).

One study assessed the need for an online community building component in an HIV prevention intervention for young Black men who have sex with men (42). Three focus groups were conducted with 22 young Black men who have sex with men in California to explore their experiences of social isolation, existing outlets, and challenges for social networking. Qualitative analysis revealed that homophobia, few opportunities to socialize with their peers, and relationships that focused on sex opposed to shared interests, contributed to social isolation and a lack of a sense of community (42). Focus group participants were supportive of an online mechanism that supported community, endorsing features such as: facilitated communication with their peers and health professionals, provision of health information, and promotion of positive social norms around sex and men's health. Participants also noted the inclusion of an external facilitator to monitor the website or app to ensure that it would not devolve into a hook-up app, or be used to advertise events like sex or drug parties (42). Authors concluded that integrating a social networking feature (which includes facilitating communication with other young Black men who have sex with men and health professionals) into the HIV prevention intervention could potentially reduce social isolation, increase social support, and build a community that promotes healthy behaviours (42).

Additionally, one drop-in program in San Francisco among gay men, many who are living with HIV or AIDS, utilizes Moreno's therapeutic model of sociometry, psychodrama, and group psychotherapy to address shame, internalized homophobia, and increase peer support among gay men (43). Psychodrama is psychotherapy in a group format that is rooted in theatre, psychology, and sociology, focusing on the "…particularities of the individual as the intersection of various relational roles, (e.g., being a son and a spouse) and roles related to difficulties and potentialities (e.g., fears, like fear of flying…)" (44). Originally proposed by J. L. Moreno in 1921, use of this theory has since been explored in a 2018 systematic review which identified contemporary core techniques consensually used for psychodramatists (44). Some of these techniques include soliloquy (where the protagonist expresses feelings, thoughts, or intentions), mirror (where a group member imitates the role of the protagonist), role reversal (where the protagonist places themselves in the shoes of another), and doubling (where a group member expresses the unspoken thoughts and feelings of the protagonist) (44). Typically, a psychodrama session has three parts: applied sociometry (methods that build safety and trust, encourage self-disclosure, increase intimacy, etc.), the enactment or drama (i.e. use of doubling, soliloquoy, etc), and a final phase, where group members share how they identify with the experiences and feelings in the drama. This final phase allows the protagonist to feel as though they are understood by fellow group members without judgement or advice-giving (43).

Qualitative analysis revealed that psychodramatic techniques had an impact on social isolation. Participants noted that it gave them the chance to experience discomfort with strangers, feel the importance of group sharing, and that the group helped to "pull" them out of social isolation (43).

A small, one-armed pilot test of the intervention Project PRIDE (Promoting Resilience In Discriminatory Environments) aimed to reduce

outcomes resulting from minority stress among young gay and bisexual men who have sex with men (9). While loneliness was not specifically targeted, the authors did hypothesize that there would be decreases in negative mental health outcomes, including depression, anxiety, and loneliness (9). The intervention was eight sessions long, delivered twice weekly, for 2.5 hours in duration. Sessions focused on minority stress theory, stress and coping models, SMART (specific, measurable, attainable, realistic, time-bound) goals, and psychoeducation about safer sex (9). The final session reinforced healthy emotion-focused, problem-focused, and group coping strategies. Twenty-eight participants attended the intervention in three small groups: two in Montreal, and one in Toronto. Twenty-two participants completed exit interviews, and three-month follow-up was completed by 19 participants. Loneliness was measured using the 20-item UCLA Loneliness Scale; various other tools were used to measure depression, anxiety, self-esteem, internalized homonegativity, sexual orientation concealment, gay/bisexual identity, condomless sex and number of sex partners, and alcohol and drug use frequency. Authors found that reductions in sexual orientation concealment and acceptance concerns were related to reductions in loneliness. Overall, participants reported small decreases in loneliness (9).

A second small pilot intervention, the Sexual Confidence Study, provided initial evidence of efficacy for a ten-session integrated cognitive-behavioural therapy trial among HIV-negative gay and bisexual men who have sex with men (10). The trial addressed social anxiety, substances use management in sexual situations, and sexual risk reduction HIV (10). Participants who completed treatment included 21 gay or bisexual men, aged 21–65 years, not living with HIV, who reported condomless anal intercourse with one male sexual partner who was living with HIV or was of unknown status. While participants were screened for social anxiety, they did not need to have clinically significant social anxiety to be included in the trial. One measurement tool used in the baseline assessment was the UCLA Loneliness Scale Version 3 (UCLA). Authors hypothesized that the intervention might also be associated with reductions in depression and loneliness, citing other research which found associations between social anxiety, depression, and loneliness (45). At six-month follow-up, authors observed a 50% reduction in engagement in HIV and sexually transmitted infection risk behaviour, as well as reductions in social anxiety and problematic alcohol use. Furthermore, authors also found that the reduction of the average scores on the UCLA scale was statistically significant (10).

Another pilot trial looked at the effectiveness of a small-group counselling intervention for gay and bisexual men who have sex with men who report condomless anal intercourse (8). The intervention, Gay Poz Sex, consisted of peer counsellors administering seven 2-hour sessions to participants (n=59) in small groups of five to eight. Sessions included information provision, motivational interviewing, and behavioural skills building to reduce sexual risk behaviour. To assess how lonely the participants felt at baseline, the UCLA Loneliness Scale was administered. Post-intervention, reductions in condomless anal intercourse with HIV-negative and unknown status HIV-partners were observed, as were improvements in psychosocial measures (8). Scores on the UCLA Loneliness Scale were significantly lower post-intervention and at three-month follow-up; additionally, significant reductions were seen in sexual compulsivity and in fear of being rejected for insisting on condom use (8). Authors concluded that the trial offered preliminary evidence of an efficient way to reduce condomless anal intercourse and mental health problems for gay and bisexual men who have sex with men living with HIV (8).

Finally, Dr Shayna Skakoon-Sparling, a CIHR Canadian Research Trials Postdoctoral Research fellow and Sessional Instructor at Ryerson University in Toronto, is currently researching loneliness and sexual risk among gay and bisexual men who have sex with men (46). Supervised by Dr Trevor Hart (a co-author on the aforementioned Sexual Confidence Study), Dr Skakoon-Sparling is examining loneliness (emotional vs. social) and the negative impact this has on HIV risk and preventative behaviours. Additionally, she is investigating whether pre-exposure prophylaxis and treatment as prevention play a mitigating role in loneliness-related sexual risk behaviours. Ultimately, Dr Skakoon-Sparling will determine whether emotion-focused or problem-focused

coping strategies are most effective, and develop a peer-led intervention that promotes community engagement and develops coping strategies for loneliness to facilitate safer sexual practices.

Factors That May Impact Local Applicability

As mentioned in this Rapid Response, the terminology used when describing social relationships is often used interchangeably by researchers (22–24). Thus, some definitions utilized by the authors of the included studies may differ slightly from the definitions of social relationships, social isolation, and loneliness, as defined at the outset of this synthesis. Additionally, the interventions among sexual minorities presented in the What We Found section (with the exception of the Hart et al. study from 2020) were included because they specifically sought to address loneliness. It should be noted that other interventions were identified in the search results that included 'social support' as a tertiary component, but did not specifically aim to reduce social isolation or loneliness. Thus, these interventions were not included in this review.

What We Did

We searched Medline (including Epub Ahead of Print, In-Process & Other Non-Indexed Citations) and PsycInfo using text terms (social isolation or social exclusion or social inclusion or social support or social connection* or connectedness or social environment or relationship skill* or loneliness or peer support*) AND (gay or MSM or men who have sex or transgender or trans men). Searches were conducted on April 23, 2020 and results limited to English articles published from 1996 to present. Google searches using various combinations of the above listed terms were also conducted. We also contacted Dr. Shayna Skakoon-Sparling to receive information about an ongoing study at the Ryerson University on loneliness intervention among men who have sex with men. Reference lists of identified articles were also searched. The searches yielded 4,079 references from which 46 were included.

Rapid Response: Evidence into Action

The OHTN Rapid Response Service offers quick access to research evidence to help inform decision making, service delivery and advocacy. In response to a question from the field, the Rapid Response Team reviews the scientific and grey literature, consults with experts, and prepares a review summarizing the current evidence and its implications for policy and practice.

Suggested Citation
Rapid Response Service. Interventions to reduce social isolation and loneliness among men who have sex with men. Toronto, ON: Ontario HIV Treatment Network; June 2020.

Prepared by
Danielle Giliauskas

Program Leads / Editors
David Gogolishvili

Contact
rapidresponse@ohtn.on.ca

For more information visit
www.ohtn.on.ca/rapid-response-service

THE ONTARIO HIV TREATMENT NETWORK

The Ontario HIV Treatment Network
1300 Yonge Street, Suite 600
Toronto ON M4T 1X3
www.ohtn.on.ca