



# Sexual health programs for gay and bisexual men in rural and suburban regions



## Question

What are effective sexual health programs for gay and bisexual men in rural and suburban regions?

## Key Take-Home Messages

- ◆ The internet has been to be an effective tool to reach populations that are geographically and/or socially isolated.(1-4) Rural men who sex with men (MSM) typically have access to the internet and already use the internet to socialize, meet sexual partners, and access health information.(1-4)
- ◆ Structural interventions in rural and suburban regions may increase opportunities for MSM to access sexual health services. These interventions could target gay community infrastructure, religious institutions, and funding allocation decisions.(5)
- ◆ Behavioural interventions designed to promote changes in sexual behaviour, like increased condom use, decreased unprotected anal intercourse, and fewer sexual partners, have been widely used in urban settings and may be effective when translated to rural and suburban settings.(6,7)
- ◆ Educational programs for providers of sexual health programs in rural and suburban regions may increase the capacity of service providers to serve this population effectively, and may increase the willingness of MSM in these areas to access sexual health resources.(8,9)
- ◆ Gay and bisexual men in rural and suburban regions are not a homogenous population. All sexual health programming must consider the demographic makeup of the local population, including cultural, socioeconomic, age, and educational context.(9,10)

## EVIDENCE INTO ACTION

The OHTN Rapid Response Service offers HIV/AIDS programs and services in Ontario 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 brief fact sheet summarizing the current evidence and its implications for policy and practice.

### Suggested Citation:

Rapid Response Service. Rapid response: Rapid response: Sexual health program for gay and bisexual men in rural and suburban regions. Toronto, ON: Ontario HIV Treatment Network; April 2012.

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## References

1. Bowen A, Williams M, Horvath K. Using the internet to recruit rural MSM for HIV risk assessment: sampling issues. *AIDS and Behaviour*. 2004;8(3):311-9.
2. Bowen AM, Williams ML, Daniel CM, Clayton S. Internet based HIV prevention research targeting rural MSM: feasibility, acceptability, and preliminary efficacy. *Journal of Behavioural Medicine*. 2008;31(6):463-77.
3. Bowen AM, Horvath K, Williams ML. A randomized control trial of internet-delivered HIV prevention targeting rural MSM. *Health Education Research*. 2007;22(1):120-7.
4. Williams M, Bowen A, Ei S. An evaluation of the experiences of rural MSM who accessed an online HIV/AIDS health promotion intervention. *Health Promotion Practice*. 2010;11(4):474-82.
5. Rosser BRS, Horvath KJ. Predictors of success in implementing HIV prevention in rural America: a state-level structural factor analysis of HIV prevention targeting men who have sex with men. *AIDS and Behaviour*. 2008;12(2):159-68.
6. Herbst JH, Beeker C, Mathew A, McNally T, Passin WF, Kay LS, et al. The effectiveness of individual-, group-, and community-level HIV behavioral risk-reduction interventions for adult men who have sex with men: a systematic review. *American Journal of Preventative Medicine*. 2007;32(4 Suppl):S38-67.
7. Lyles CM, Kay LS, Crepaz N, Herbst JH, Passin WF, Kim AS, et al. Best-evidence interventions: findings from a systematic review of HIV behavioral interventions for US populations at high risk, 2000-2004. *American Journal of Public Health*. 2007;97(1):133-43.
8. Eliason MJ, Hughes T. Treatment counselor's attitudes about lesbian, gay, bisexual, and transgendered clients: urban vs. rural settings. *Substance Use & Misuse*. 2004;39(4):625-44.
9. Willging CE, Salvador M, Kano M. Pragmatic help seeking: how sexual and gender minority groups access mental health care in a rural state. *Psychiatric Services*. 2006;57(6):871-4.

## The Issue and Why It's Important

Gay and bisexual men living in rural and suburban regions lack many of the opportunities that urban MSM have to engage with their community and access sexual health resources that acknowledge their unique needs. Even when sexual health programming is available, stigma, discrimination, and concerns about revealing their sexuality may prevent MSM from accessing these services. When compared to their urban and heterosexual counterparts, there is evidence that rural gay and bisexual men may have significantly less knowledge about sexual health, more sexual partners, and are less likely to be tested for HIV.(1,10) If men from rural or suburban regions travel to urban regions to access sexual health resources, they may find the content inapplicable to the contexts of their lives.(4) Similar issues may arise if interventions developed for urban regions are simply implemented in a rural setting (4). Many of the strategies that are commonly employed in urban settings are impractical or ineffective in rural settings (4).

## What We Found

### Findings related to the use of the internet interventions

Gay and bisexual men in rural and suburban areas lack the social infrastructure to engage with their communities face-to-face and commonly seek sexual interactions online.(1,2) Reports suggest that men who seek sexual interactions on the internet are more likely to engage in risky sexual behaviour.(6) The internet has been used as a delivery format for many interventions targeting HIV prevention among rural MSM.(1) The most commonly employed strategy involves staff of AIDS service organizations passively lurking in the chat rooms of websites frequented by MSM to deliver one-on-one advice to willing participants.(2) There are several limitations to this approach: one-on-one interaction is time consuming and reaches only a small number of participants, the intervention can only be delivered during the hours that an ASO staff member is online, there is little opportunity to evaluate the intervention, it is difficult to obtain informed consent, and chat rooms do not offer any opportunities to incorporate graphics or interactive activities into interventions.(2)

The Wyoming Rural AIDS Prevention Project (WRAPP) is the first intervention targeting HIV prevention among rural MSM that is delivered exclusively online and does not involve one-on-one chat room conversations.(2) We found four studies presenting findings from the WRAPP ([www.wrapphome.net](http://www.wrapphome.net)).(1-4) This project consists of 3 modules – Knowledge, Partner, and Contexts of Risk – delivered in the form of interactive, scripted conversations during which participants are given information, asked to make decisions, and build skills.(2) Questionnaires completed at different stages during the study provided insight into the acceptability, feasibility, and efficacy of the project.(2) At the conclusion of the study most outcome measures had significantly improved.(2) On average, participants reported more sexual partners but less anal sex and increased condom use.(2) The results of these studies indicate that randomized controlled trials can be successfully delivered online and that WRAPP, specifically, is acceptable to participants, feasible, and efficacious.(2-4)

The advantages of online program delivery include low cost, participant privacy and anonymity, and accessibility from many locations and at all times of the day. (2) With the exception of the WRAPP, few studies have undertaken recruitment, screening, randomization, consent, and evaluation exclusively online.(2) If parts of

the program are not conducted online, the opportunities to fully benefit from the advantages of online program delivery are limited.(2)

Online program delivery also poses challenges. If participants are offered a financial incentive, some may attempt to enrol more than once and others may falsely claim eligibility.(2) Challenges to participant retention have also been reported such as little social pressure to remain in the study as compared to face-to-face interventions.(2) The creators of the WRAPP have suggested increasing financial incentives at each stage of the study, and emphasize the importance of evaluation to ensure the intervention is sufficiently interesting, not overly technologically advanced, and useful to participants.(2) Additionally, caution should be used when assessing the generalizability of samples recruited online as it has been shown that online recruits may be more diverse, younger, less educated, more likely to be bisexual, and more likely to use the internet to find long-term partners and/or sex than conventionally recruited samples.(1)

### **Findings related to structural interventions**

Rural and suburban regions do not typically offer gay and bisexual men the same social, cultural, and health related infrastructure as men in urban regions. (5) We found one study in the United States that undertook structured interviews in 13 rural states with key stakeholders to determine the structural differences between states with more and less success in HIV prevention program implementation.(5) The states were divided into 7 'more successful' and 6 'less successful' states, all with similar demographics.(5) 'More successful' states had:

- ◆ significantly more MSM-targeted interventions and a wider variety of interventions.(5)
- ◆ significantly fewer religious adherents overall, and significantly fewer evangelical protestants.(5) The number of mainstream protestants, Catholics, and Mormons did not differ significantly.(5)
- ◆ significantly more gay community infrastructure, including gay cafes, guest houses, gay-affirming churches, adult bookstores, gay pride events, and gay news publications.(5) 'More successful' states were not associated with more gay bars, organizations, or community centres.(5)
- ◆ no significant difference in the amount of state and federal funding allocated to HIV prevention, but did spend significantly more funds on outsourcing, HIV prevention targeted to MSM, and community-based organizations targeting MSM.(5)

Potential targets for structural interventions include religious and political leaders who could work together with populations at risk for HIV, gay community infrastructure, and policy makers and legislators who can ensure that HIV prevention programs targeting rural MSM are funded.(5)

### **Findings related to behavioural interventions**

Interventions based on behavioural change theories have been widely used in a variety of contexts to alter high risk sexual behaviours among gay and bisexual men.(6,7) One systematic review conducted a meta-analysis of person-to-person behavioural interventions at the individual, group, and community level for MSM in the United States, Canada, New Zealand, UK, and Brazil.(6) Behavioural

10. Williams PB, Sallar AM. HIV/AIDS and African American men: urban-rural differentials in sexual behavior, HIV knowledge, and attitude towards condoms use. *Journal of the National Medical Association.* 2010;102(12):1139-49.

interventions at the individual level could take the form of counselling or motivational interviewing and may include modifying participant's attitudes, beliefs, motivation, or self-efficacy; providing information about STIs or HIV; influencing moods or emotions; encouraging participants to evaluate their behaviour on an ongoing basis; or facilitating participant's efforts to obtain services.(6) At the group level, behavioural interventions could include group counselling, peer influence, or the development of skills through live demonstrations and role playing.(6) Community level interventions typically aim to modify the attitudes and norms of entire communities, for example, peer outreach or small publicity campaigns.(6)

For all of the 25 interventions at different levels considered in this systematic review and the 3 interventions considered in another systematic review, it was found that participants were significantly less likely to engage in unprotected anal intercourse.(6,7) The most effective interventions were delivered by MSM, had multiple sessions, and included skills building through role playing, live demonstrations, or practice.(6) Behavioural interventions were also found to result in net economic benefits through their prevention of HIV infection.(6) Another study found that increased knowledge may not necessarily translate to a decrease in risky sexual behaviour.(10) The majority of these interventions were implemented in urban settings and may pose some challenges in rural or suburban settings: recruitment and enrolment, participant's potential fear of being exposed as gay or bisexual, failure of the interventions to address the cultural values of the local community, time constraints, competing interests, availability of trained professionals to deliver the interventions, and the lack of support of key community stakeholders.(6) Some of these behavioural interventions could be modified for delivery by phone or internet, or by peer leaders who are already members of the target communities. The authors noted that individual-level interventions may be most appropriate for men who are hard-to-reach or who wish to remain anonymous.(6)

### **Findings related to the need for better informed service providers**

Two studies addressed the cultural competency of people who provide services to MSM.(8,9) One qualitative study in rural New Mexico assessed the mental health care seeking behaviours of sexual and gender minority populations. It found that homophobia, discrimination, distrust of professional service providers, lack of culturally relevant knowledge of service providers, the lack of gay social networks, distance, and financial constraints can play a pivotal role in help seeking behaviours.(9) When professional services were sought, participants often did not disclose their sexual orientation.(9) In rural regions, help is commonly sought from family members and other nonprofessional services.(9) Religious institutions were commonly cited nonprofessional services, but several accounts noted extremely detrimental experiences when disclosing sexual orientation to rural religious leaders.(9)

Another study, comparing the attitudes of counsellors toward sexual minority populations in drug and alcohol abuse interventions in urban Chicago and rural Iowa, found that counsellors attitudes can significantly affect a client's chance of recovery.(8) While urban counsellors were found to be more diverse than rural counsellors and to have significantly more education about the issues facing sexual minority populations, the study found that urban versus rural counsellors did not have different levels of experience working with sexual minority clients and did not have different level of comfort in working with these clients.(8) This study also found that the majority of New York City counsellors

had no specific training on the issues of sexual minority clients and believed that there was no reason that these clients should have different treatment outcomes than others.(8) Very little research geared specifically toward bisexual clients was found.(8)

The second study showed that education on sexual minority issues is not sufficient to alter the attitudes of service providers.(8) Homophobia can be deep rooted and highly resistant to change, and can require multiple long-term intervention strategies in order to change.(8) Homophobic counsellors may be more likely to 'blame the victim', and should be trained to focus on individual clients, rather than stereotypes.(8) Anti-discrimination policies that include sexual orientation should be in place to protect sexual minority clients in any place where sexual health services may be provided.(8)

## Factors That May Impact Local Applicability

Rural and suburban communities in Ontario are unlikely to be identical to any of the community's features in these studies. Any intervention implemented in these communities should take the local context into account.

General limitations of the studies presented here include:

- ◆ some studies recruited men belonging primarily to certain age groups, educational or economic backgrounds, or cultural groups
- ◆ not every study consulted the MSM population during its development and implementation
- ◆ substance abuse is a relevant issue among gay and bisexual men, but is not addressed in most of the studies discussed here
- ◆ biological outcomes, like STI and HIV incidence, were considered very infrequently
- ◆ most studies relied on self-reported changes to assess outcomes
- ◆ the majority of studies addressed HIV prevention specifically, and not sexual health more broadly
- ◆ other issues that may affect populations in these regions, like poverty and homelessness, were rarely considered
- ◆ all studies addressed adults only
- ◆ studies considered rural and/or urban regions but none specifically considered suburban regions

## What We Did

We conducted searches of the Cochrane Library and the Database of Abstracts of Reviews of Effects (DARE) for systematic reviews using the following combination of terms: (sexual health or health promotion) AND (gay OR men who have sex with men OR MSM OR bisexual OR bi-sexual). We also searched Health-Evidence.ca by combining the LGBTTTQ (lesbian, gay, bisexual, transgender, transsexual, two-spirited, queer) category (under 'Focus of Review') with the Rural/remote category (under 'Intervention Location'). For primary literature, we searched PubMed using a slightly modified set of search terms to narrow the search results (limited to the last 10 years and to articles published in English): (sexual health or health promotion) AND (gay OR men who have sex with men OR MSM OR bisexual OR bi-sexual) AND (rural OR remote OR suburban OR sub-urban).