Using smartphone apps to learn about sexual behaviour

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As mentioned in a previous CATIE News article, rates of HIV and other sexually transmitted infections (STIs) have been rising in Canada and other high-income countries, particularly among some men who have sex with men (MSM). Such increases may in part be due to incorrect assumptions about HIV status among sexual partners and, subsequently, unprotected sex. Encouraging sexually active people to consider frequent testing for STIs and HIV may help uncover previously hidden infections and prevent the onward spread of HIV. In addition to injuring internal organs and tissues, STIs can cause inflammation as well as sores and lesions inside the anus, genitals, mouth and throat that act as entry points for HIV. Some STIs, such as human papilloma virus (HPV), can cause ano-genital warts as well as cancer of the anus, cervix, penis and mouth.

Social networking with apps

Increasingly, some MSM are using smartphone applications (commonly called “apps”) to meet other MSM. One example of such an app is called Grindr. A group of researchers in New York City who study behaviour described Grindr in this way:

“A geosocial networking [app] designed to connect MSM. Based on a user’s specific location, the app displays other Grindr users in order of their [physical distance]."

Furthermore, they added, “Although Grindr was designed as a social networking app and is not explicitly designed for finding sex partners, many MSM have used it for these purposes. For instance, a study of 195 MSM in 2012 in Long Beach, California, found that 76% of 18- to 24- year-olds reported sexual encounters with partners met on Grindr.”

The New York research team advertised for two consecutive days on Grindr and in that time recruited more than 2,000 MSM for a survey about sexual behaviour and HIV testing.

Their findings revealed that while more than two-thirds of the men surveyed had tested for HIV in the past year, about 10% had never been tested. Of these never-tested men, nearly half had engaged in unprotected anal sex in the past year and a large proportion declared that their HIV status was “negative” rather than “unknown,” stated the researchers. These perceptions about HIV status despite high-risk behaviour are interesting and reveal a need for education of young MSM about sexual safety and HIV testing.

Study details

Researchers set up a website for Grindr users who chose to click on the study ad for the 48 hours it was displayed. Overall, 5,026 men clicked on the ad and 2,175 gave informed consent and began the survey. However, only 1,351 men completed the survey and met screening requirements so that their data could be analysed.

The average profile of the men who completed the survey was as follows (percentages may not add up to 100 due to rounding):

- age: 30 years (ranging from 18 to 67 years)
- ethno-racical composition: 49% white, 21% Latino, 12% black, 10% multiracial, 6% Asian, 2% other
- 21% of men were in a relationship
• sexual orientation: 86% gay, 12% bisexual, 1.4% other, 0.4% straight
• 87.3% of participants reported their HIV status as negative and 12.7% reported it as unknown

Key findings

• More than half of the men disclosed that they had been tested for HIV in the past six months.
• More than two-thirds of the men reported that they had been tested for HIV in the past year.
• 10% of the men disclosed that they had never been tested. Moreover, according to researchers, “one-third of these men reported their HIV status as being HIV negative rather than unknown.”
• Nearly 50% of the men who had not been tested in the prior year had engaged in unprotected anal intercourse.

Putting it in perspective

The results of the survey presented by the researchers need to be treated somewhat cautiously for at least the following reasons:

• People were not randomly selected for this study. As a result, the sample of participants may not be representative of typical Grindr users in New York City at the time the survey was done.
• HIV status was entirely self-reported and not verified. However, the researchers turned this into a strength of the study by uncovering how men who had not been tested perceived their status as negative despite having unprotected anal intercourse.

These issues aside, the researchers were able to recruit a relatively large number of participants in only 48 hours.

Grindr is merely one app commonly used by MSM. Other specific apps and websites that have been developed for more targeted populations of MSM include the following mentioned by the researchers:

• Mister – for older men
• Scruff – for hairier men
• Recon – for men with fetishes

These other apps work in a broadly similar manner to Grindr.

For the future

Social networking is increasingly used by some MSM to interact and meet with others, in some cases for sex. Engaging populations via targeted apps and social networks can allow researchers to recruit potential volunteers relatively quickly. Thus, apps may come under more scrutiny by researchers seeking to understand sexual behaviour.

Future studies that make use of social networking and apps need to be bigger and longer. It will also be important to verify HIV status in studies that seek to understand sexual behaviour in MSM.

For now, the use of social networking, particularly apps, for research on sexual health is in its infancy. The New York City study uncovered a need to further understand and educate sexually active MSM who use apps about the need for sexual safety and HIV testing. Expect to see more studies conducted via apps in the future.

Future research efforts could include the offer of testing for HIV and other STIs as well as counselling targeted populations and helping to connect them with health services.

—Sean R. Hosein

REFERENCES:

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