

# Polysubstance Use, Decision Making, and Geosocial Networking App Use Among Men Who Have Sex With Men

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## Introduction

- Smartphones and geosocial networking applications (GSN apps) have changed the traditional paradigm for identifying sexual partners and provides new means for men who have sex with men (MSM) to locate partners outside of traditional venues. GSN apps have become a new environment through which young MSM can meet potential sex partners. However, research is limited in this area, particularly in the realm of alcohol and substance use, and risk taking behaviors. MSM exhibit the greatest risk for HIV and are disproportionately affected by HIV infection. In the United States, MSM account for 55% of people living with HIV and accounts for 66.7% of HIV infections diagnosed in 2014<sup>1</sup>. MSM who are meeting on GSN apps are at greater risk for HIV and other sexually transmitted infection<sup>3</sup>. Alcohol and/or substance use can greatly increase the risk of infections through reductions in cognitive processing ability and narrowed attention focus<sup>2,3</sup>.

## Purpose

- The purpose of this presentation is to explain how the traditional paradigm for identifying sexual partners has evolved for MSM, recognize the impact of polysubstance use on decision making, and discuss clinical and research implications when caring for MSM.

## Methods

- A literature search was conducted through Pubmed, CINHALL, EBSCO, and Google Scholar.
- Search terms included: Men who have sex with men, alcohol use, substance use, geosocial networking apps

## Polysubstance use and Decision Making

- Little is known about the associations of polysubstance use and decision-making process among MSM in the realm of GSN applications use.
- Alcohol and substance use among MSM is almost double that of heterosexual men (31.4% vs. 15.6%)<sup>4</sup>.
- Alcohol and substance use among MSM is a significant predictor of risky sexual behavior<sup>5,6</sup>. Moreover, alcohol consumption directly affects sexual-decision making and is associated with increased risk behaviors linked to HIV infection<sup>5-7</sup>.
- 52% of MSM who use GSN apps were more likely to use non-injection drugs (specifically, crystal meth, painkillers, and poppers) in the last 12 months<sup>2</sup>.
- The effects of alcohol on intentions to engage in unprotected sex were stronger when sexual arousal was heightened<sup>7</sup>.
- Additionally, alcohol consumption, particularly binge drinking, has been significantly associated with more unplanned sexual encounters and can also affect sexual communication and negotiation<sup>7,8</sup>.

## Geosocial Networking Applications

- Geosocial networking (GSN) applications (e.g., Grindr, Scruff, and Jack'd) have become a new environment through which young MSM can meet potential sex partners. GSN applications facilitate the identification of sex partners nearby. Sexual encounters between MSM are often expedited by the use of these GSN. These meetings may occur quickly, with little discussion of each partner's HIV status or sexual history.
- One study found that of 379 MSM, 63.6 % reported using GSN apps to find men in the past year. Nearly 25% of MSM had sex with a man met using a GSN application in the prior year; these men were more likely to be under 35 years old and have had sex with a man met on the Internet<sup>2</sup>.

## Clinical and Research Implications

- Clinicians should routinely screen for alcohol and substance use, HIV, and other sexually transmitted infections
- High-intensity counseling on sexual risk reduction can reduce STIs in primary care and related settings<sup>13</sup>.
- Studies aimed to understand behaviors associated polysubstance use when paired with GSN app use are needed.
- Research regarding the specific uses of apps for sex seeking and implications for app-based HIV prevention interventions are needed<sup>14</sup>.
- Future studies should be conducted to understand the relationship between GSN app use and syphilis/HIV incidence<sup>3</sup>.
- Mobile app interventions may prove to be beneficial for alcohol and substance use, as well as HIV-related delivery of app-based interventions

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