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Revisiting Obesity and Condom Use in Men Who Have Sex with Men

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Abstract

The incidence of both eating disorders and sexually transmitted diseases (STD) is relatively high among men who have sex with men (MSM). Yet, only one study has explored the influence of body mass index (BMI) on sexual risk-taking behaviors in this population. The objective of this study was to reexamine the practice of anal intercourse among overweight and obese MSM, and to assess the consistency with which condoms were used. MSM who had placed same-sex sexual advertisements were asked to take a brief online survey. A total of 576 MSM completed the survey, which assessed: age, HIV-status, height, weight, rejection of sexual partners, number of anal intercourse partners, and condom use during anal intercourse. Increased BMI was associated with a lowered likelihood of rejecting sexual partners and decreased number of actual anal intercourse partners. Increased BMI was also associated with decreased condom use. In addition to cardiovascular disease, obese MSM may be at a higher risk for STDs relative to normal weight MSM. There was some evidence to suggest that inconsistent condom use in such men may be an expression of the overexcitement concomitant with the comparatively rare event of acquiring an anal intercourse partner.

Keywords

Obesity; Condom Use; MSM; Sexual Rejection

INTRODUCTION

Obesity has been under researched as a predictor of sexual risk-taking behavior in men who have sex with men (MSM). As part of a larger study into the sexual health behaviors of MSM who acquire anal intercourse partners through the Internet, we sought to confirm an earlier sexual health study on body mass index (BMI) and MSM (Kraft, Robinson, Nordstrom, Bockting, & Rosser, 2006). In this previous study, normal (BMI: 18.5–24.9) or overweight (BMI: 25.0–29.9) MSM were more likely than obese (BMI: 30.0) MSM to

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engage in unprotected anal intercourse; no group differences (between normal, overweight, and obese MSM) were reported regarding the likelihood of engaging in any anal intercourse (Kraft et al., 2006). Yet, other research into self-reported body image has suggested that MSM with a more obese body image were *less* likely to engage in unprotected intercourse compared to those with an average body image, but were more likely to engage in unprotected anal intercourse relative to those with an underweight body image (Allensworth-Davies, Welles, Hellerstedt, & Ross, 2008). Thus, there is no strong consensus in the literature on the precise relationship between MSM weight and safer sex.

Given the disproportionately high prevalence of sexually transmitted diseases (STDs) and the human immunodeficiency virus (HIV) among MSM (Aral, Fenton, & Holmes, 2007), we believe further confirmatory research is warranted on the role of body size and its influence on sexual risk-taking behavior. Specifically, we report on the relationship between BMI and condom use among MSM. Additionally, we explore the relationship between BMI, number of actual sex partners, and the rejection of potential sex partners to elucidate the sex lives of MSM with a higher BMI. Although these analyses were intended to confirm the previous research, the data were collected from a different population of MSM and the research design used different methodological and analytic procedures from the Kraft and colleagues (2006) study.

Obesity in MSM

In both men and women, body dissatisfaction and obesity have been associated with increased depression, anxiety, and paranoia, and lowered self-esteem and self-worth (Barry, Grilo, & Masheb, 2002; Bohne, Keuthen, Wilhelm, Deckersback, & Jenike, 2002; Mamplekou, Komesidou, Bissias, Papakonstantinou, & Melissas, 2005). Such associations among body dissatisfaction, obesity, and negative psychological traits have been shown within the MSM community (Beren, Hayden, Wilfley, & Grilo, 1996) and may even be more intensely exhibited relative to heterosexual populations (Morrison, Morrison, & Sager, 2004; Yelland & Tiggemann, 2003). This may be due to the increased cultural emphasis placed on physiological indicators of masculinity, such as fitness, thinness, and muscularity within the MSM community (Drummond, 2005; Duncan, 2007). MSM admit to wanting partners who have achieved a more perfected physique and one study found that MSM were less likely to use condoms with such partners (Lewis & Ross, 1995). Thus, given the MSM cultural values regarding body size and body image, MSM with a higher BMI more likely might be considered the least desirable sex partner choice (Duncan, 2007).

In support of this likelihood, Peplau and colleagues (2008) reported negative effects of body image on the quality of sex lives in 42% of gay men. Specifically, 58% of obese gay men reported feeling “unattractive” and 50% reported hiding body parts during sex. Certainly, such negative associations between the men’s bodies, attractiveness, and quality of sex lives stemmed from previous negative experiences. The men might have been overlooked by fitter men or even actively rejected by potential sexual partners. Thus, Peplau and colleagues’ (2008) statistics beg the questions—how many sexual partners are MSM with a higher BMI actually accruing, and are such men who tend to report being “unattractive” very selective themselves? Though Kraft and colleagues (2006) reported no differences between BMI

categories and likelihood of anal intercourse, the selectivity of men with a higher BMI was never explored. Simply, the men may be having sex with whomever they can get.

From this previous research (Duncan, 2007; Lewis & Ross, 1995; Peplau et al., 2008), we hypothesized that MSM with a higher BMI would be less likely than MSM with a lower BMI to reject potential sex partners, but would report having fewer actual sex partners. Furthermore, with actual sex partners, MSM with a higher BMI would report using condoms less than MSM with a lower BMI.

METHOD

Participants and Procedure

MSM who had placed sexual advertisements in the “men seeking men” personals section of Craigslist.com were asked to complete a brief online survey. This was an international sample recruited from all of the Craigslist.com mirror sites for which English was the predominate language (i.e., all cities in Australia, New Zealand, the United Kingdom, and the United States). Specifically, a block message was sent to each man’s publicly listed advertisement informing him of a research study on the sexual health behaviors of men engaging in same-sex sexual behavior.

A total of 576 MSM took the survey. The sample was largely White (85.6%), and showed normal distributions on both income and education. Many of the men came from small- to medium-sized towns (44.4% from areas populated by fewer than 100,000 people). Many of the men (38%) also reported a sexual orientation other than homosexual.

Measures

Age, HIV-status (i.e., HIV-positive, HIV-negative, HIV-unknown), number of anal intercourse partners in the past year, and consistency of condom use during anal intercourse (1 = never, 7 = always) were assessed. Individuals who reported never having anal intercourse were omitted from the analyses that concerned condom use. Participants also reported if they had rejected sexual partners in the past year. They could answer yes or no to, “I have never rejected individuals no matter what they looked like or seemed.” Finally, participants indicated their height (in inches) and weight (in pounds), from which a BMI score was created: $(703 \times \text{weight in pounds})/(\text{height in inches}^2)$.

Statistical Analyses

Multiple regression was used to assess the relationship between BMI and the predictors of condom use. Age was controlled for across all tests, as it was associated with increased BMI. When assessing condom use, HIV-status and number of anal intercourse partners were also added as predictors, for some studies cite these variables as associated with inconsistent condom use (e.g., Ekstrand, Stall, Paul, Osmond, & Coates, 1999; Kim, Kent, & Klausner 2002).

RESULTS

As Table 1 indicates, participants had an average of about seven anal intercourse partners in the past year. The men in the study “usually” used condoms during anal intercourse. The sample tended towards being overweight (25.0 BMI 29.9), and 164 (28.47%) of the MSM were clinically obese (BMI 30).

Multiple regression confirmed the initial hypothesis: BMI was negatively associated with rejecting sexual partners, $t(571) = -2.63, p < .01, \beta = -.11$, and with the number of actual anal intercourse partners, $t(571) = -2.36, p = .02, \beta = -.10$. Moreover, BMI was found to be negatively associated with condom use during anal intercourse, $t(397) = -2.40, p = .02, \beta = -.12$. Age, $t(397) = -2.94, p < .01, \beta = -.14$, HIV-positive serostatus, $t(397) = -3.20, p < .01, \beta = -.16$, number of anal intercourse partners, $t(397) = -2.94, p < .01, \beta = -.14$, and never rejecting sexual partners $t(397) = -2.80, p < .01, \beta = -.13$, also were statistically significant predictors of decreased condom use.

DISCUSSION

Our study revealed a negative association between obesity and number of partners, rejection of partners, and condom use: We found that a higher BMI was associated with a lower likelihood of rejecting sex partners, a decrease in the number of actual partners, and less consistent condom use. These results were contrary to published findings (Kraft et al., 2006), which reported that obese MSM were *less* likely than other MSM to engage in sexual risk-taking behaviors, and that no differences existed between normal, overweight, and obese MSM and number of anal intercourse partners.

The implication of these current findings are important for MSM and elucidate the sexual experiences that overweight men in this community may encounter, particularly among those who solicit sex using the Internet. Body dissatisfaction and excess weight are all sensitive issues to MSM. As research shows, this is largely a result of the overt emphasis on fitness and muscularity in the MSM culture. As a potential corollary, and supported by this current sample, MSM with a higher BMI had fewer anal intercourse partners. Whether this was of volitional control was ultimately uncertain. However, the data indicated that such MSM were less likely than MSM with a lower BMI to reject sexual partners. Decreased condom use during such experiences could be an expression of desperateness and/or overexcitement that led to increased sexual risk by overweight or obese MSM. Alternatively, the combination of fewer partners and decreased condom use might suggest a verbal or nonverbal ceding of sexual risk decision-making to the partner. This might be a ploy to prevent rejection during the sexual experience. Finally, this relationship may be explained by the anatomical incompatibility between obesity and condom use. Adult obese men are prone to a condition known as buried penis (Maizels, Zaontz, Donovan, Bushnick, & Firlit, 1986), in which the penis becomes partially or fully concealed by excessive suprapubic fat. Pushing down on the pubic pad may reveal the penis; yet, in some instances, condom use may become overly uncomfortable or logistically impossible (Donatucci & Ritter, 1998). Some of the obese men in the sample might have had such a condition.

In addition to these more direct reasons for decreased condom use, there may be any number of indirect or mediating relationships linking BMI with the variables. For example, depression has been shown to disproportionately affect obese individuals, with homosexuality amplifying this effect (Morrison et al, 2004; Peplau et al., 2008). Research also has shown depression linked to unprotected anal intercourse in MSM (Perkins, Leserman, Murphy, & Evans, 1993). It could be that this trait mediated the relationship between BMI and inconsistent condom use in our study. Obesity might be driving depression, which might lead to apathy towards one's sexual health. An alternative explanation, BMI and inconsistent condom use may be related to the poor self-control associated with both obesity and unprotected intercourse. Obese individuals maintain a higher BMI because, to some degree, they lack the restraint from eating (Williams, Grow, Freedman, Ryan, & Deci, 1996). Weight-loss is effortful and it requires sacrifice. It also might be that such individuals engage in unprotected anal intercourse because they lack the restraint from unprotected intercourse. Condom use may be effortful for them (i.e., buried penis) and it requires the sacrifice of sensation. More research is needed to test this and the other potential direct and indirect influences of BMI on condom use.

This was a confirmatory study that concluded with discordant findings. Differences in the treatment of data and the measurement of unprotected sex may have contributed to differences in observed results. For our study, we measured and tested BMI as a continuous variable. For the previous study, the researchers treated BMI as a dichotomous variable, where those with a BMI of 30 and above were obese and all others were "non-obese." Due to concerns about a loss of statistical power attributable to dichotomizing or categorizing continuous variables (Aiken & West, 1991), we chose to analyze BMI scores as a continuous variable. Thus, differences in statistical power stemming from combining normal and overweight men together in the Kraft and colleagues (2006) study might have played a role in the differentiation in results. As for the construction of condom use, the previous research measured it by asking participants to recall unprotected insertive or receptive anal intercourse experiences in the previous three months. We asked for the consistency with which condoms were used as assessed by a seven-point scale (from never to always). These two different ways of operationalizing unprotected anal intercourse could have also contributed to the differing findings.

Our study was subject to several limitations. First, the sample was comprised of MSM who were actively advertising for sex online. It is uncertain whether such men were similar to men in monogamous relationships, men not looking for sex, or men looking for sex in other venues besides the Internet. Though research strongly suggests that a majority of MSM use the Internet for acquiring sexual partners (Garofalo, Herrick, Mustanski, & Donenberg, 2007), the use of such a sample still threatens the generalizability of the study. Also, we did not discriminate between types of anal intercourse. Decreased condom use in increasingly heavier men may also vary by penetrative role. Future studies might more specifically define condom use as it applies to insertive and receptive anal intercourse. Finally, the men's self-reported BMI may have inaccurately reflected their actual BMI, if a researcher or physician were to measure it objectively. Plankey, Stevens, Flegal and Rust (1997) have shown that systematic error in self-reported BMI occurs with greater frequency and intensity as actual BMI increases. As a result, the overweight men in the sample may have actually been obese.

The exact implications of deflated self-reports of weight and inflated height measurements on condom use or partner accrual are relatively unknown.

The findings reported in this study contrast those previously published. Considering these inconsistencies, further research is necessary to confirm these current results. Additionally, future studies might assess the other preventive sexual health behaviors of overweight and obese MSM, such as HIV and STD testing and disclosure. Researchers also might explore the degree to which depression, self-worth, and self-esteem mediate the sexual risk-taking behaviors of such MSM. This is a population that might be targeted for a health campaign that addresses the men's inconsistent condom use and their obesity itself. An empowerment campaign that motivates the men towards weight loss and better cardiovascular health might also motivate them to take better care of their sexual health. In the final analysis, obesity may not be as prevalent as other eating disorders in the MSM community (Yelland & Tiggemann, 2003). However, given the high rate of HIV and STDs in this community and the relaxed safer sex practices of men with a higher BMI, physicians and health clinicians more carefully might consider the sexual health of their overweight and obese patients.

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Table I

Sample Characteristics

	N	%	<i>M</i>	<i>SD</i>
HIV Status				
HIV-negative	504	87.5		
HIV-positive	39	6.8		
HIV-unknown	33	5.7		
Rejection of partners (past year)				
Have rejected	453	78.6		
Never rejected	123	21.4		
Age ^a			40.70	12.30
Anal Intercourse Partners ^b			6.74	15.16
Condom Use ^c			5.28	2.01
BMI ^d			28.11	5.79
Height (inches) ^e			70.84	2.87
Weight (pounds) ^f			200.82	45.03

Note. Absolute ranges for the continuous variables:

^a 18–79,

^b 0–100,

^c 1–7,

^d 16.72–58.58,

^e 59–79,

^f 108–400.