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COVID-19

To Have or Not to Have Sex? COVID-19 and Sexual Activity Among Chinese-Speaking Gay and Bisexual Men in Hong Kong



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ABSTRACT

Background: The coronavirus disease 2019 (COVID-19) outbreak has fundamentally changed daily routine, including sexual activity. However, most research on sexual activity during the COVID-19 pandemic focused on heterosexual individuals. The only study so far on men who have sex with men was conducted in the United States.

Aim: Our study expands the understanding of sexual activity during the COVID-19 pandemic by studying gay and bisexual men in Hong Kong. Although sexual desire and sexual activity continue to be important aspects of one's life during the COVID-19 pandemic, there are COVID-19—related barriers to having sex. This study therefore examined the association between sexual desire, COVID-19—related barriers, and whether to engage in sexual activity or not during the COVID-19 pandemic.

Methods: 857 cisgender sexual minority people in Hong Kong participated in an online survey study, and for this article, only male participants were included in the analysis, yielding an analytical sample of 376 gay and bisexual men.

Outcomes: Participants were asked to assess their sexual desire (ie, sexual drive and sexual motivation), COVID-19—related barriers (ie, perceived difficulties to have sex with another person during the pandemic and perceived risk of COVID-19 infection), and sexual activity during the COVID-19 pandemic.

Results: It was found that while sexual desire remained prevalent among the gay and bisexual men, COVID-19—related barriers were also commonly observed. Sexual drive and sexual motivation were positively associated with sexual activity. Perceived difficulties to have sex with another person during the pandemic and perceived risk of COVID-19 infection were negatively predictive of engaging in sexual activity, after controlling for general sexual desire.

Clinical Implications: Understanding the ambivalence and driving and inhibiting factors for having sex during the COVID-19 pandemic can provide a new framework for understanding people's sexual activity during an unprecedented scale of the pandemic. It is likely that abstinence would not work as the respondents expressed strong sexual desire and that the pandemic is going to last for a long time. Governments, policy makers, and sexual scientists need to work together to come up with practicable, feasible, and easy-to-follow guidelines for having sex during the pandemic.

Strength & Limitations: This is one of the first studies to examine the impact of COVID-19 on sexual activity among gay and bisexual men. The results should be interpreted with caution because of the use of cross-sectional design and nonprobability sampling.

Conclusion: Sexual desire and COVID-19—related barriers serve as driving and inhibiting factors in explaining whether or not people have sex during the COVID-19 pandemic. Suen YT, Chan RCH, Wong EMY. To Have or Not to Have Sex? COVID-19 and Sexual Activity Among Chinese-Speaking Gay and Bisexual Men in Hong Kong. J Sex Med 2021;18:29—34.

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INTRODUCTION

Since the World Health Organization declared the coronavirus disease 2019 (COVID-19) outbreak a global pandemic, research has grown exponentially to study the health, political, economic, and social impact of the pandemic. The impact of an unprecedented scale 'lockdown' and social distancing fundamentally changes how states, workplaces, families, and individuals organize their daily routine. One behavior that may be impacted by self-isolation/social distancing is that of sexual activity. This leads to a small but growing literature centering on sexual health during the COVID-19 pandemic.^{1–4}

A study of 868 individuals in the United Kingdom⁵ found that during self-isolation/social distancing, 39.9% of the respondents reported engaging in sexual activity at least once per week. Variables significantly associated with sexual activity were being male, a younger age, being married or in a domestic partnership, consuming alcohol, and a higher number of days of self-isolation/social distancing.

An online survey of a convenience sample of 270 men and 189 women in China showed that 44% of the participants reported a decrease in the number of sexual partners and 37% of the participants reported a decrease in sexual frequency. Multiple regression analysis showed that age, partner relationship, and sexual desire were closely related to sexual frequency. In addition, it was found that most individuals with risky sexual experiences had a rapid reduction in risky sexual behavior.

An online survey of a convenience sample of 120 respondents from 3 Southeast Asian countries, Bangladesh, India, and Nepal, found that 45% of the participants reported that the lockdown had affected their sexual life. However, the study found no substantial difference in sexual activity before and during the lockdown.

Such research has been conducted with the concern of physical and mental health benefits associated with sexual activity^{8,9} and argues that maintaining an active sex life or reintroducing frequent sexual activity into one's life during self-isolation/social distancing may mitigate some of the potential detrimental consequences of COVID-19 self-isolation/social distancing.⁵ It has also been suggested that sex can affect the immune response to a pathogenic agent, as well as the susceptibility for some respiratory diseases, and thus, sexual activity during the COVID-19 pandemic should be a public health concern.¹⁰

However, most research on sexual activity during the COVID-19 pandemic focused on heterosexual individuals and excluded sexual minority individuals. The only exception so far has been a study conducted with 1,051 men who have sex with men (MSM) in the United States¹¹ collected from April 2 through April 13, 2020. 51.3% of the participants reported fewer sex partners, and 68% reported fewer opportunities to have sex because of COVID-19 or the plans to manage it. 48.8% reported a decreased use of dating or hook-up apps to meet other men in person; however, 64.6% reported unchanged or increased use of dating or hook-up apps to connect with other men.

Younger participants were found to be more likely to have an increased use of apps to connect with other men. More research is needed to understand factors that explain such reported changes in sexual activity among MSM.

The Present Study

Our study aims to expand the understanding of sexual activity during the COVID-19 pandemic by studying gay and bisexual men in Hong Kong.

In addition, we argue for the need to understand the complexity of sexual activity during the COVID-19 pandemic. We propose, on the one hand, that sexual desire (ie, sexual drive and sexual motivation) remains prevalent among the gay and bisexual men we studied during the COVID-19 pandemic as sexual activity continues to be an important aspect of one's life. We also propose, on the other hand, that there are COVID-19-related barriers to having sex. Emerging research has found that people reported fewer opportunities to have sex because of COVID-19.11 In addition, people may be fearful of having sex during the COVID-19 pandemic. Despite the fact that coronaviruses are not known to be sexually transmitted, it is possible to 'indirectly' transmit COVID-19 during sexual activity. 12 We therefore propose that sexual desire and COVID-19-related barriers serve as driving and inhibiting factors in explaining whether people have sex or not during the COVID-19 pandemic.

Our study aimed to (1) examine sexual desire and COVID-19—related barriers to having sex among gay and bisexual men, (2) investigate demographic differences in sexual desire and COVID-19—related barriers to having sex, and (3) estimate the effects of sexual desire and COVID-19—related barriers on sexual activity during the COVID-19 pandemic. We hypothesized that sexual desire (ie, sexual drive and sexual motivation) would be positively related to engaging in sexual activity among gay and bisexual men. In addition, it was hypothesized that COVID-19—related barriers (ie, perceived difficulties to have sex with another person and perceived risk of COVID-19 infection) would be negatively related to engaging in sexual activity above and beyond sexual desire.

MATERIALS AND METHODS

Study Design

Ethical approval was obtained from the Survey and Behavioural Research Ethics Committee of the corresponding author's institution before data collection. Participant recruitment was conducted primarily via local lesbian, gay, and bisexual community organizations, listservs, and social media in Hong Kong in May 2020. The inclusion criteria for the study were (1) being 16 years of age or older, (2) having a gender identity that is consistent with their sex assigned at birth, (3) identifying as lesbian, gay, bisexual, or otherwise nonheterosexual, (4) living in Hong Kong currently, and (5) being able to read and understand Chinese. Individuals who show initial interest in the study were invited to complete a

web-based survey hosted by Qualtrics. They were required to read the study background and provide informed consent before participating in the study. It took approximately 20-30 minutes to complete the questionnaire. Participants received a cash coupon of HK\$50 (USD6.4) as a compensation for their time and effort.

Although 857 cisgender sexual minority individuals (male: 43.9%, female: 56.1%) participated in the online study, only male participants were included in the current analysis, yielding an analytical sample of 376 gay and bisexual men. Half of them were aged 16 — 25 years (50.0%). One-third of the participants had a monthly income of less than HK\$5,000 (about USD \$645) (33.2%). The majority of them were in employment (58.2%). Slightly more than half of the participants were not in a relationship (52.7%). Table 1 describes the demographic characteristics of the analytical sample.

Measures

Engaging in Sexual Activity

Participants were asked to indicate how often they had engaged in sexual activity with their partners during the COVID-19 pandemic on a 5-point Likert scale from 1 (never) to 5 (always). The responses were recoded into a dichotomous variable indicating whether they had engaged in sexual activity with their partners during the COVID-19 pandemic. A response of 1 (never) was coded as 'not engaged in sexual activity', whereas responses of 2 through 5 were coded as 'engaged in sexual activity'.

Sexual Desire (Sexual Drive and Sexual Motivation)

For sexual drive (the biological aspect of sexual desire), participants were asked to indicate how long they would feel comfortable for not having sex. Response options included '1 day,' 'several days,' 'a week,' 'several weeks,' '1 month,' 'several months,' 'one or 2 years,' and 'forever'. For sexual motivation (the psychological aspect of sexual desire), participants were asked to indicate how often they had desire to have sex with other people on a 5-point Likert scale from 1 (never) to 5 (always). Higher scores indicated higher levels of sexual drive or sexual motivation.

COVID-19—Related Barriers

Participants were asked how difficult they thought it was to engage in sexual activity with other people during the pandemic on a 5-point Likert scale from 1 (not difficult at all) to 5 (extremely difficult). In addition, they were asked to indicate their perception on the risk of COVID-19 infection during sex on a 5-point Likert scale from 1 (no risk at all) to 5 (very high risk). Higher scores indicated higher levels of perceived difficulties to have sex with another person or perceived risk of COVID-19 infection.

Data Analysis

Before the main analysis, descriptive statistics were used to characterize the levels of sexual desire, COVID-19—related barriers, and sexual activity among gay and bisexual men. The

Table 1. Demographic differences in sexual desire and barriers during the COVID-19 pandemic (N = 376)

		Sexual desire		COVID-19—related barriers	
	Distribution	Sexual drive	Sexual motivation	Perceived difficulties to have sex with another person during the pandemic	Perceived risk of COVID-19 infection
Demographic characteristics	n (%)	M (SD)	M (SD)	M (SD)	M (SD)
Age					
16–25	188 (50.0%)	3.99 (2.00)	3.27 (1.19)	3.32 (1.28)	3.34 (1.05)
26–35	129 (34.3%)	4.33 (1.73)	3.22 (1.05)	2.94 (1.37)	3.42 (1.02)
36 or older	59 (15.7%)	4.22 (1.64)	3.05 (0.90)	2.90 (1.28)	3.64 (1.16)
Monthly income					
Less than HK\$5,000 (US\$645)	125 (33.2%)	3.96 (2.04)	3.13 (1.26)	3.29 (1.37)	3.43 (1.11)
HK\$5,001—HK\$19,999 (US\$646 —US\$2,579)	111 (29.5%)	4.24 (1.94)	3.23 (1.03)	3.18 (1.27)	3.41 (1.07)
HK\$20,000 (US\$2,580) or more	140 (37.2%)	4.23 (1.61)	3.29 (1.01)	2.93 (1.31)	3.39 (1.02)
Employment status					
Student	126 (33.5%)	4.07 (2.08)	3.27 (1.20)	3.40 (1.28)	3.39 (1.06)
In employment	219 (58.2%)	4.25 (1.71)	3.28 (1.02)	3.03 (1.33)	3.45 (1.06)
Not in employment	31 (8.2%)	3.71 (1.87)	2.58 (1.09)	2.61 (1.28)	3.26 (1.13)
Relationship status					
Not in a relationship	198 (52.7%)	3.74 (1.90)*	3.16 (1.13)	3.28 (1.30)	3.54 (1.00)
In a relationship	178 (47.3%)	4.54 (1.74)*	3.25 (1.07)	2.89 (1.33)	3.27 (1.12)

COVID-19 = coronavirus disease 2019.

Significant difference between groups are indicated by * (P < .003).

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independent samples t-test and one-way analysis of variance (ANOVA) with Bonferroni correction were conducted to explore demographic differences (ie, age, monthly income, employment status, and relationship status) in sexual desire and COVID-19-related barriers. To examine our hypothesis, we conducted hierarchical logistic regression to determine the effects of sexual desire and COVID-19-related barriers on sexual activity. The demographic variables (ie, age, monthly income, employment status, and relationship status) were included in the first block of the regression model. The variables were dummy-coded before being entered into the regression analysis. Sexual desire (ie, sexual drive and sexual motivation) was entered in the second block, adjusting for demographic variables. In the third block, we entered COVID-19-related barriers (ie, perceived difficulties to have sex with another person during the pandemic and perceived risk of COVID-19 infection) to assess whether they would significantly predict engaging in sexual activity above and beyond general sexual desire.

RESULTS

Sexual Desire, Activity, and Barriers During the COVID-19 Pandemic

Around 44.4% of the gay and bisexual men reported that they had felt uncomfortable for not having sex in 1 month or less time. More than one-third of the participants (38.9%) indicated that they had usually or always had sexual motivation during the COVID-19 pandemic. Around 65.4% reported having sexual activity during the pandemic.

Nearly two-thirds of the participants (63.3%) perceived moderate to high levels of difficulties of engaging in sexual activity during the pandemic. Slightly more than half (52.1%) believed that there had been a risk of COVID-19 infection by engaging in sexual activity.

Demographic Differences in Sexual Desire and Barriers

One-way ANOVAs were conducted to examine whether sexual desire and COVID-19—related barriers varied by demographic characteristics. The results showed that there were no significant differences in sexual desire and COVID-19—related barriers between gay and bisexual men of different ages, monthly income levels, and employment status. The independent samples t-test showed that participants in a relationship reported significantly higher levels of sexual drive than those who were not in a relationship (t = -4.12, P < .001). They did not show significant differences in COVID-19—related barriers.

Effects of Sexual Desire and COVID-19—Related Barriers on Sexual Activity

As shown in Table 2, the results of logistic regression indicated that sexual desire was positively related to sexual activity, adjusting for demographic characteristics. In particular, sexual drive

Table 2. Effects of sexual desire and COVID-19—related barriers on sexual activity among gay and bisexual men

	Sexual activity		
Predictor variables	OR	95% CI	
Block 1: demographics			
Age			
16-25 (reference)	_	_	
26-35	1.32	0.70-2.49	
36 or older	1.01	0.45-2.26	
Monthly income			
Less than HK\$5,000 (US\$645) (reference)	_	_	
HK\$5,001—HK\$19,999 (US\$646—US\$2,579)	1.59	0.76-3.35	
HK\$20,000 (US\$2,580) or more	2.70*	1.12-6.44	
Employment status			
Student (reference)	_	_	
In employment	0.65	0.28-1.48	
Not in employment	1.52	0.56-4.14	
Relationship status			
Not in a relationship (reference)	_	_	
In a relationship	4.24***	2.60-6.93	
Block 2: sexual desire			
Sexual drive	1.35***	1.16—1.58	
Sexual motivation	1.52**	1.17—1.96	
Block 3: COVID-19—related barriers			
Perceived difficulties to have sex with another person	0.55***	0.43-0.71	
Perceived risk of COVID-19 infection	0.63**	0.48-0.84	

COVID-19 = coronavirus disease 2019.

*P < .05, **P < .01, ***P < .001.

(OR = 1.35, 95% CI = 1.16 – 1.58) and sexual motivation (OR = 1.52, 95% CI = 1.17 – 1.96) were positive predictors of sexual activity. The model explained 23.3% (Cox and Snell R²) of the variance in sexual activity. Moreover, COVID-19–related barriers explained 8.9% (Cox and Snell R²) additional variance in sexual activity above and beyond general sexual desire. Perceived difficulties to have sex with another person during the pandemic (OR = 0.55, 95% CI = 0.43 – 0.71) and perceived risk of COVID-19 infection (OR = 0.63, 95% CI = 0.48 – 0.84) were negatively predictive of engaging in sexual activity, after controlling for general sexual desire.

DISCUSSION

This study expands the current understanding of sexual activity during the COVID-19 pandemic by studying gay and bisexual men in Hong Kong. This is the first study to examine gay and bisexual men's sexual activity in a non-Western context during the COVID-19 pandemic. In seeking a fuller explanation for sexual activity during the COVID-19 pandemic, we

examined the roles of sexual desire and COVID-19—related barriers in shaping sexual activity.

It was found that sexual desire remained prevalent among the gay and bisexual men. Around 44.4% of them reported that they had felt uncomfortable for not having sex in 1 month or less. More than one-third of them (38.9%) indicated that they had usually or always had sexual motivation during the COVID-19 pandemic. The results revealed that a substantial proportion of gay and bisexual men were biologically driven and psychologically motivated to seek sexual encounters, even during the pandemic. Around 65.4% reported having sexual activity during the pandemic.

On the other hand, COVID-19—related barriers were also prevalent. Nearly two-thirds of the participants (63.3%) perceived moderate to high levels of difficulties of engaging in sexual activity during the pandemic. This can be attributed to the enactment of social-distancing measures in Hong Kong, which creates an additional burden on those who did not live with their partners. Slightly more than half of them (52.1%) believed that there had been a risk of COVID-19 infection by engaging in sexual activity. This is similar to the 68% in a U.S. study among MSM who reported fewer opportunities to have sex due to COVID-19 or the plans to manage it. ¹¹

We found that sexual desire and COVID-19—related barriers serve as driving and inhibiting factors in explaining whether or not people have sex during the COVID-19 pandemic. Although sexual drive and sexual motivation were intrinsic factors that were positively associated with sexual activity, perceived difficulties to have sex with another person during the pandemic and perceived risk of COVID-19 infection were extrinsic considerations that were negatively predictive of engaging in sexual activity. These COVID-19—related inhibiting factors remained significant, even after controlling for general sexual desire.

We argue that these findings bear important implications. Understanding the ambivalence¹³ and driving and inhibiting factors for having sex during the COVID-19 pandemic can provide a new framework for understanding people's sexual activity during an unprecedented scale of pandemic: how do they engage in sexual activity when they experience sexual desire but at the same time perceive that there are COVID-19—related barriers? More research can be conducted on how they assess perceived risk of COVID-19 infection in terms of different sexual activities and partner characteristics.

The study also found that a high percentage of the participants perceived moderate to high levels of difficulties of engaging in sexual activity and the risk of COVID-19 infection by engaging in sexual activity during the pandemic. It is likely that abstinence would not work as the respondents expressed strong sexual desire and that the pandemic is going to last for a long time. With the influence of sexual drives, there might be elevated risks of ignoring social distancing, leading to a corresponding spread of COVID-19 in gay and bisexual men. Governments, policy makers, and sexual scientists need to work together to come up with practicable,

feasible, and easy-to-follow guidelines for having sex during the pandemic. The National Institute for Public Health and the Environment in the Netherlands has issued guidelines for singles about finding sex partners during the pandemic. ¹⁴ The New York City government has also issued recommendations about safer sex during the COVID-19 pandemic. ¹⁵

A few limitations should be noted when interpreting the results of the present study. First, the study has not measured if sexual activity and desire had changed for the participants before and after the pandemic. Other psychological factors such as the need for companionship and intimacy should also be accounted for in future research. Second, the study only examined sexual activity with partners. Future studies could explore the impact of COVID-19 on different types of sexual activity such as masturbation and virtual sex, which are important and relevant sexual acts in times of social distancing. This could allow better understanding of the concern and frustration of those not engaging in partnered sexual activity. Third, although it is observed that nearly two-thirds of the participants perceived moderate to high levels of difficulties of engaging in sexual activity during the pandemic, further qualitative work is needed to understand why people perceive difficulties to have sex with another person during the pandemic. Fourth, the findings were based on cross-sectional data. The associations generated from the analysis do not imply causal effects of one variable on the others. Future work should replicate the present study by examining the relationship between sexual desire, COVID-19-related barriers, and sexual activity with a longitudinal design. Fifth, this study relied on nonprobability sampling, and thus, the sample might not be representative of the sexual minority men population in Hong Kong. Although we have included a considerably large sample, the findings are not necessarily generalizable to all gay and bisexual men in Hong Kong.

In conclusion, this is one of the first studies to examine the impact of COVID-19 on sexual activity. In particular, this is the first study to study gay and bisexual men's sexual activity in a non-Western context during the COVID-19 pandemic. We found that sexual desire and COVID-19—related barriers serve as driving and inhibiting factors in explaining whether or not people have sex during the COVID-19 pandemic. There needs to be more open discussion about sexual desire and perceived barriers to having sex during the COVID-19 pandemic to achieve sustained sexual health in an era of global pandemic.

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