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Condomless Anal Sex Between Male Sex Workers and Clients in the Age of Hookup Apps

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Abstract

Among men who have sex with men (MSM), those who also engage in the exchange of sex for money, drugs, shelter or other material goods (i.e., male sex workers-MSWs) have been found to have higher rates of condomless anal sex (CAS), HIV, and STIs than MSM who do not engage in exchange sex. To gain a better understanding of the factors that influence MSWs' engagement in CAS with male clients, we analyzed qualitative interview data from a diverse sample of 141 MSWs from 8 U.S. cities who met clients primarily through hookup or dating apps/websites and who reported having condomless anal sex with at least one of their exchange sex partners in the prior three months. While high client demand and financial incentives were the most frequently mentioned reasons for engaging in CAS with clients, other factors including drug and alcohol use, attraction to the client, the heat of the moment, concerns about sexual performance, and reliance on pre-exposure prophylaxis (PrEP) were also important. Participants who engaged in CAS generally felt that due to client characteristics or mitigating steps they had taken themselves, their chance of acquiring HIV/STIs was acceptably low. Hookup or dating apps/websites have provided an additional and increasingly popular venue for exchange sex to be arranged. These platforms also offer an opportunity for HIV/STI prevention through interventions and tailored messages delivered through these venues that address the motivations, misconceptions and/or situational factors that may lead to CAS.

Resumen

Entre los hombres que tienen relaciones sexuales con hombres (HSH), se ha encontrado que aquellos que también participan en el intercambio de sexo por dinero, drogas, vivienda u otros

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bienes materiales (es decir, hombres trabajadores sexuales-HTS) tienen tasas más altas de sexo anal sin condón (SASC), VIH y ETS que los HSH que no participan en relaciones sexuales de intercambio. Para obtener una mejor comprensión de los factores que influyen en la participación de los HTS en SASC con clientes masculinos, analizamos los datos de entrevistas cualitativas de una muestra diversa de 141 HTS de 8 ciudades de EE. UU. que conocieron a los clientes principalmente a través de aplicaciones/sitios web de conexión o citas y que informaron haber tenido sexo anal sin condón con al menos una de sus parejas sexuales de intercambio en los tres meses anteriores. Mientras la alta demanda de los clientes y los incentivos financieros fueron las razones mencionadas con mayor frecuencia para participar en SASC con los clientes, otros factores como el uso de drogas y alcohol, la atracción hacia el cliente, la seducción del momento, las preocupaciones sobre el desempeño sexual y la dependencia de la profilaxis preexposición (PrEP) también fueron importantes. Los participantes que tomaron parte en SASC generalmente sintieron que debido a las características del cliente o a los pasos de mitigación que habían tomado ellos mismos, su probabilidad de contraer VIH / ETS era aceptablemente baja. Las aplicaciones/sitios web de conexión o citas han proporcionado un lugar adicional y cada vez más popular para organizar el intercambio de sexo. Estas plataformas también ofrecen una oportunidad para la prevención del VIH/ETS a través de intervenciones y mensajes personalizados que se transmiten a través de estos lugares y que abordan las motivaciones, los conceptos erróneos y/o los factores situacionales que pueden conducir a SASC.

Keywords

MSM; Male sex workers; Condomless anal sex; Condom

Introduction

Understanding the sexual behavior of men who have sex with men (MSM) is critical in preventing the spread of HIV infection, as they accounted for 68% of new HIV diagnoses in 2020 [1]. In 2017, MSM who had engaged in exchange sex in the past year (male sex workers or MSWs)—i.e., provided sex in exchange for money, drugs, shelter, or goods—accounted for an estimated 15% of MSM living with HIV and 8% of MSM without HIV [2]. These men represent an especially important subpopulation of MSM when addressing the transmission of HIV and sexually transmitted infections (STIs); that is, research indicates that when compared to MSM not engaged in exchange sex, MSWs are significantly more likely to have engaged in condomless anal sex (CAS) in the past twelve months, be living with HIV, be unaware of their HIV status [3], report more condomless anal sex partners in the prior three months [4] and/or have had an STI in the prior two years [5].

The use or non-use of condoms during exchange sex encounters is an important sexual health practice to study as they have long proven to be highly effective in preventing the transmission of HIV and some other STIs when used correctly and consistently. With the approval of pre-exposure prophylaxis (PrEP) in 2012, an additional very effective HIV prevention strategy became available [6, 7] to MSM. However, because PrEP does not protect against STIs, reliance on it alone leaves MSM vulnerable to acquiring an STI [7–9]. Accompanying the rise in PrEP use, some have raised concern about the potential for risk

compensation—i.e., the possibility of an increase in sexual behaviors that place one at risk for HIV (or other STIs) in response to a perceived decrease in vulnerability to HIV–due to an awareness that PrEP is highly protective against its acquisition [7]. However, according to meta-analyses and reviews of risk compensation studies, the evidence for this phenomenon has been inconsistent [7, 9–11].

Recent surveillance studies have noted a trend of increasing CAS among MSM in the United States [12, 13] as well as increasing estimated rates of gonorrhea and reported cases of primary and secondary (P&S) syphilis [14]. Among six jurisdictions participating in the STD Surveillance Network continuously from 2010 to 2018, the estimated gonorrhea case rate among MSM increased 375.5% or from 1368.6 cases per 100,000 MSM in 2010 to 6,508.0 cases per 100,000 MSM in 2018. Among 36 states that were able to classify at least 70% of reported P&S syphilis cases as either among women, men who have sex with women, or men who have sex with men each year during 2014–2018, cases among MSM increased 51.5% from 2014 to 2018 [14]. Higher rates of STIs in recent years may be related to the increased frequency of STI screening and detection accompanying PrEP use as well as to decreased condom use [15].

According to a recent systematic review and meta-synthesis of qualitative studies of barriers to condom use among MSM [16], factors associated with CAS included: physical discomfort (including reduced sexual pleasure); lack of HIV/STI-related knowledge; substance use; treatment optimism; condom stigma (including condoms as a symbol of distrust, a reminder of HIV/STIs, a violation of the traditional cognition of intercourse, or an embarrassing topic that could be avoided by using other techniques to assess HIV risk); unaffordability; power imbalance; and unavailability of condoms in a given situation. Psychological factors also played a role. These included: “fluke thinking” (thinking that HIV can’t happen to them); negative emotions (largely stemming from low self-esteem associated with identifying as a sexual minority); and a vengeful perspective (wanting to spread HIV to others because they had been infected by someone who had not informed them of their status). Other factors that have been reported as correlates of CAS among MSM include sexual sensation seeking; greater certainty of partner’s HIV status; familiarity with partner; and use of erectile dysfunction drugs [17]. Safe-sex messaging fatigue has also been found to be associated with increased likelihood of MSM engaging in CAS [18, 19]. However, these findings were focused on MSM in general, whereas far less research has addressed condom use barriers among MSWs.

Rates of Condom Use Among MSWs

Studies involving MSWs in high income countries, including the U.S., have found a range of condom use rates during exchange sex encounters and overall higher rates of condom use with clients than with personal (i.e., non-commercial) partners [20–30]. Consistent with trends among MSM in general [12, 13], research with 180 MSWs who worked in agencies in Spain (100 enrolled in 2010, 80 enrolled in 2015) found that rates of condom use with clients decreased significantly from 99.6% in 2010 to 92.3% in 2015 for insertive anal sex encounters, and 99.7% in 2010 to 93.0% in 2015 for receptive anal sex encounters; while the prevalence of HIV and incidence rates of STIs among these MSWs increased significantly

[20]. In a 2016 study of 58 male sex workers in Australia, of the 46 who had anal sex with clients, 71.7% reported that in an average week, condoms were used consistently by the insertive partner, 17.4% reported condoms were used most of the time, 8.7% some of the time and 2.2% not at all [27]. Additionally, a retrospective study analyzing medical records from 2010 to 2018 of 190 self-identified current MSWs in Australia found high rates of unprotected sex [30]. Investigators found that 30.4% of the 171 MSWs in their sample who answered relevant questions about sexual behaviors reported CAS with clients since their last STI screening. In another study conducted between 2014 and 2016, investigators examined the commercial sexual behavior of 95 MSWs from two northeastern U.S. cities [31]. Together, participants reported a total of 503 clients in the past month, met on the street and/or through the Internet. Anal sex was engaged in with 74.1% of these clients, with inconsistent condom use occurring with 53% of them. Condoms were used less consistently with clients assumed to be the same HIV status as them and more consistently when clients were older than them. Overall, the MSWs had CAS with male clients 2.2 times per month on average with no significant difference between MSWs who were street-based versus those who were either Internet based or used a mix of venues to meet clients.

Factors Influencing Condom Use Among MSWs

While the data cited above regarding rates of condom use among MSWs are from recent studies, most research providing insights into factors related to MSWs' willingness to engage in CAS (described below) were conducted prior to the approval of PrEP (approved in 2012 in the USA and 2016 in Australia and much of Europe) when there was not a highly effective alternative to condom use for the prevention of HIV. Additionally, there was not yet evidence supporting that those living with HIV who had achieved and maintained undetectable viral loads on medication could not transmit the virus. Therefore, the risks of CAS were very different than they are in the present era of PrEP and "Undetectable = Untransmittable".

Data from qualitative studies suggest that among both MSWs living with HIV and those without HIV the most common motivation for wanting to use condoms during exchange anal sex is to protect their health [21, 26, 29]. Yet in Bimbi and Parsons' study (2005), some MSWs were more willing to engage in CAS with clients if they believed there was a low risk of acquiring HIV/STIs from them, such as when they assumed the insertive position in anal sex [21]. Other MSWs assumed clients with high social and economic status or visibly healthy-looking genitalia were unlikely to have an STI and therefore were willing to have CAS with them. Client attractiveness was also offered by MSWs as a reason for engaging in CAS in their study.

Client Demand and Financial Incentives for Condomless Anal Sex

Achieving consistent condom use among MSWs can be complicated by a high client demand for CAS. For instance, in Bimbi and Parsons' (2005) sample of 50 male internet escorts in NYC, 80% reported that on at least one occasion, a client had requested bareback sex. Although most of their participants declined these offers, 19.6% reported that they had CAS with clients [21]. While most MSWs who were willing to engage in CAS were concerned about the risk of doing so, a few stated that they preferred CAS with clients.

Research also indicates that clients are sometimes willing to monetarily incentivize MSWs to acquiesce to their requests for CAS [21, 23, 32]. This can be an effective inducement to forego condoms as many MSWs report financial need as their reason for beginning or remaining in sex work [23, 33–37]. However, a number of qualitative studies have found that MSWs who work through agencies or through the internet often refuse offers of additional compensation for CAS noting that they feel it is not worth the risk of contracting an STI or HIV [21, 23, 26, 29]. Mimiaga et al.'s (2009) study with internet based (n = 13) and street based (n = 19) MSWs in Massachusetts found that most of their participants reported that clients had offered them more money if they would agree to engage in CAS [23]. While the internet escorts frequently reported refusing these offers, street based MSWs in their sample were more likely to accept them when in desperate need of money or resources. Joffe and Dockrell (1995) also found that a few respondents from their sample of predominantly (65%) street-based sex workers reported "that they would do anything if they were paid for it" [38]. The willingness of MSWs who are in significant financial need to agree to CAS when offered more money aligns with Minichiello et al.'s (2001) findings that "economic need status" was an independent predictor of condom use, with those experiencing more financial strain being less likely to use condoms [25].

Despite client demand, studies indicate that few MSWs advertise that they offer CAS. A review of all 1,262 escorts' advertisements on a large, nationwide, U.S. based male internet escort site found that only 6 men advertised their willingness to participate in CAS with clients by including the terms "barebacking" or its abbreviation, "bb" [39]. More recently, in an analysis of all online ads posted by 322 San Francisco area MSM sex workers on a popular, publicly viewable website, investigators found that 9% explicitly indicated in their ads their willingness to engage in CAS while 7% explicitly indicated that they would not offer CAS [40].

Methods

Participants

The data for this paper come from a subsample of a cross-sectional study of 180 MSM who had engaged in exchange sex in the prior three months. Exchange sex was defined as the exchange of sex for money, drugs, shelter or other goods. Eligibility criteria included: (a) having been assigned male sex at birth and current identification as men, genderqueer, or non-binary; (b) were 18–45 years old; (c) self-reported never having tested positive for HIV; (d) self-identified as Black/African-American, White/Caucasian, or Hispanic/Latino of any race; (e) were fluent in English; (f) resided in the areas of Atlanta, GA, Baltimore, MD, Boston, MA, Chicago, IL, Detroit, MI, New York City, NY, Philadelphia, PA, or Washington, D.C.; (g) reported having received money, drugs, shelter, or other goods in exchange for any kind of sex with at least two different male partners (exchange partners) in the prior three months; (h) reported anal sex with at least one of their exchange partners from the prior three months; and (i) reported having initially met at least one of their exchange partners on a hookup or dating app/website. We used quota sampling to obtain similar numbers of Black non-Hispanic, White non-Hispanic, and Hispanic/Latino participants, and younger (18–29-year-old) and older (30–45-year-old) participants, as well

as different levels of sex work-related behaviors (i.e., whether or not they consistently used PrEP and/or condoms with clients in the past three months).

Procedures

Recruitment occurred between October 2018 and February 2020 and study data collection concluded in April 2020. Advertisements about a study investigating men's experiences of meeting sexual partners online were placed on hookup or dating apps/websites (e.g., Grindr, Scruff, Jack'd, GrowLr) that targeted MSM as well as on popular social media sites (e.g., Facebook, Twitter, Instagram). Although not explicitly stated, graphics suggested that exchange sex was a topic of interest. The advertisements informed viewers that eligible participants would receive a $100 electronic gift card for completing the study. A link brought potential participants to a 3–5-min online screening survey to determine eligibility. The survey included questions covering demographics and recent sexual activity including exchange sex. Eligible respondents were asked to provide contact information to enable a study team member to follow up with them to provide additional details, review the study procedures and schedule the interview components.

Informed consent was completed over the phone, followed by a 20–30-min interviewer administered questionnaire confirming study eligibility and gathering information about sexual health and sexual behaviors. Once eligibility was confirmed, participants were sent a link to complete an online self-administered questionnaire lasting 20–30 min. This questionnaire covered recent sexual behaviors as well as standardized questions about mental health and substance use. Lastly, participants completed an in-depth semi-structured qualitative telephone interview lasting an average of 88 min which focused on their experiences with sex work. The interviewers were two study team members who were trained by one of the authors (KS) who, for quality control, also reviewed randomly selected interviews conducted by each of the interviewers. Feedback was provided to the interviewers when problems were identified.

Analysis

Interviews were transcribed verbatim and subsequently coded using ATLAS.ti. Members of the research team developed a topical coding scheme that reflected the study's primary areas of inquiry. The data for this report come from all excerpts assigned one or more of the following codes: "specific encounter: with condom" (131 excerpts), "specific encounter: condomless" (246 excerpts) or "HIV/STI prevention habits" (481 excerpts). Most of the material assigned these codes came from responses to several interview guide questions. These included: "Before the meeting [with this client], was there a conversation about condom use or HIV or STI status?"; "Did you have any conversations about what he [the client] wanted to do?"; "Did you talk about safer sex?"; "Did he [the client] want to use condoms?"; "Did you use condoms?". The extracted data were then further coded for this report using an inductive thematic analysis approach [41, 42]. This approach was chosen for its flexibility and capacity to yield rich description on the phenomenon under investigation. Two of the authors (KS and CB), both experienced qualitative researchers, independently coded a subsample of interviews with the goal of developing codes that were derived inductively and built up from the data that referenced the specific circumstances,

considerations and factors associated with participants' engagement in CAS with a client. The subset of interviews was chosen to represent the study sample's diversity. Next, they met to discuss and merge their codes, removing any overlap or redundancy. The resulting list of codes was clearly defined in a codebook. Subsequently, they each independently applied the consolidated list of codes to the extracted material from a different subset of interviews. Once again, they met to resolve any differences in their application of the codes, add new codes, and to refine code definitions, as needed. Finally, given the very strong agreement in their application of the codes, they were then applied to all the extracted interview material. The codes became the basis of the thematic analysis as they were grouped into overarching themes.

Results

Of the 180 study participants, 141 (78.3%) reported CAS sex with at least one client in the past three months. This subsample of participants is the focus of this paper. Participants ranged in age from 18 to 45 with a median age of 28. With regard to race and ethnicity, 36.2% identified as Hispanic/Latino (any race), 36.9% as White (non-Hispanic) and 26.9% as Black (non-Hispanic). The large majority (85.8%) were born in the United States. In terms of education, 20.5% had a high school degree or less, 61.1% had some college or a bachelor's degree, while 18.4% had obtained a graduate or professional degree. Most reported limited annual incomes with 41.7% earning less than $20,000, 25.9% earning $20,000 to $39,999, 13.7% earning $40,000 to $59,999 and 18.7% earning $60,000 or more. The demographics of the study participants included in this report are shown in Table 1.

The most frequently used substance was alcohol, with 87.9% of participants reporting using it in the prior month. While the two most commonly used drugs in the past month were cannabis and poppers; cannabis use was reported by 59.6% of men and popper use by 51.1%. Most had recently been tested for HIV (65.7% within the last three months and 21.4% in more than three but less than six months ago). During those same time periods 62.5% and 18.4% respectively reported having had STI testing. In terms of PrEP use, 37.4% reported never having used it; 53.2% reported using it currently (in the past three months) and 9.3% reported having used it in the past. Participants reported between 2 and 56 clients in the past three months (mean number = 6.97). Nearly all participants (90.1%) reported meeting clients through smartphone hookup or dating applications in the prior three months, while the second most used venue for meeting clients was hookup or dating websites (28.4%), followed by social media platforms (17.0%) and escorting websites (12.1%). Among the 141 participants who had condomless anal sex with a client in the past three months, 67.4% had CAS as a top and 60.3% as a bottom. Participants reported CAS as a top with a mean of 3.40 clients in the past three months (median = 2; range = 0–23); and as a bottom, participants reported CAS with a mean of 2.50 clients (median = 2; range = 0–18). The substance use and sexual health characteristics of the study participants included in this report are shown in Table 2. Described below are the reasons, factors, or circumstances that led to participants' engagement in CAS. While they are presented separately, often a combination of factors was at play when CAS occurred.

Expanding the Pool of Potential Clients

In certain instances, participants would engage in CAS to expand their pool of potential clients and to minimize the possibility of losing clients and consequently income. For these men, acceding to a client's wishes to have CAS was a business decision based upon the notion that most clients preferred CAS and would not pay for sex with condoms. For instance, a 24-year-old Latino participant from NYC who was on PrEP reported that he discussed HIV/STI status, PrEP use, and condom use prior to meeting clients. However, he typically did not use condoms, as condomless sex was requested by clients "99% of the time". Similarly, a participant who was on PrEP reported that he usually tried to get first time clients to use condoms, but that most clients did not want to pay for sex with condoms.

> Some guys, particularly if they're paying for sex, most I have found typically don't want to use condoms. … Most clients are very clear, they're not looking for safe sex. "I'm not interested in using a condom." And then some guys are like, "Condoms are an absolute must…" But I found that those, at least in my encounters, are more the minority. Most of the guys are much more interested in having condomless sex.
>
> (35 years old, Black, D.C.)

Other men reported they avoided discussing condoms altogether because it could result in the loss of potential clients. For example, a participant who never used PrEP, stated that he asked participants if they were "clean and negative", but did not discuss using condoms with clients.

> I learned very quickly that that's just not something guys are into. Guys would prefer, if they're going to pay, they really wouldn't prefer using a condom. And I totally get why. Condoms suck.
>
> (22 years old, White, Chicago)

A participant who had discontinued PrEP realized he was at risk of acquiring HIV due to his sexual practices, including having CAS with a regular client who was living with HIV and experiencing disease related complications. Like the participant above, he described being willing to engage in CAS as necessary in order to acquire and retain clients. Even discussion about condoms, he said, drove away clients and was bad for business.

> Most people aren't interested if you say that [you want to use condoms]. They're most interested in bareback. If you start talking about condoms, a lot of people won't even want to meet up, especially the older guys. … They're not really interested in having sex with condoms at all.
>
> (31 years old, White, Boston)

To attract more customers, several participants advertised their willingness for CAS in their profile. For instance, a participant on PrEP, who reported that he didn't "really ever have sex with a condom" and avoided asking clients about their HIV or STI status, used humor to convey what he offered.

> Well actually, what's funny is there's this line on my Grindr profile that says, "I like my sex the way I like my cookie dough." Which like, I like my cookie dough

> raw. … That, I think is a big way to draw attention, that kind of like witty humor. That has drawn I think a lot of interest, because I think also from my experience, no generous guy is going to pay you or give you any kind of value if he has to have sex with you with a condom on. I don't know. That just also seems kind of taboo.
>
> (23 years old, White, Chicago)

An Opportunity to Charge a Higher Fee

Several participants, who generally didn't care whether condoms were used or not but recognized that many clients preferred "bareback" sex, would initially take a "condom required" position when giving their fees. When the client subsequently requested CAS, as these participants expected they might do, they would use the opportunity to insist on more money for that service. For example, a participant stated that to appear more desirable as someone who takes care of his sexual health, he had initially included his preference for condoms in his app profiles for clients. Once he started PrEP, however, he didn't feel the need to always use a condom. Still, he decided not to change his profile as he believed it enabled him to obtain a higher fee from some clients.

> I guess I'm coy about it. I'm just like, "Hmm, let me think about it." Then I wait a few minutes and then I just tell them that I don't feel super comfortable, but that if they're willing to pay more, then sure.
>
> (28 years old, Latino, NYC)

Similarly, a participant who initiated PrEP in the past three months reported preferring condoms and discussing condom use with clients before meeting. Even prior to beginning PrEP he sometimes had CAS, after determining that a client was HIV negative and preferably on PrEP or, on an occasion, when one was HIV positive and undetectable. He described his method for making more money off an exchange when condoms were not used.

> Yeah, people have offered more for it [CAS]. And I think if they feel me shying away from it because they want it to be condomless, they would offer more. I guess it's maybe a tactic I have. But yeah, they usually use an incentive to have bareback sex. I think people are willing to do more for it because they're into it more, I guess.
>
> (23 years old, White, Philadelphia)

Others just simply felt comfortable asking directly for more money to have CAS. For example, a participant on PrEP who reported having CAS with clients also said he was only willing to take that risk if the client would pay more.

> I'm willing not to use a condom as long as I get paid more. I would prefer, obviously, to use one, but I won't do it without one getting paid more for it. … I'll let them say what they want. Yes. I ask about what they're into, the kind of term I use. And then from there they'll tell me what they're into, and then sometimes they'll just say, "I prefer raw." And then I'll say, "Okay, well if you want that, then that's going to actually be a risk I'm taking, so that's going to come with certain expectations as far as money."

(28 years old, Black, NYC)

A participant who used PrEP intermittently reported that clients requested CAS about 40% of the time and he told them that, at a minimum, that would require more money. He also asked them about their HIV status, when they were last tested and evaluated how confident they seemed in their answers to determine if he felt comfortable enough to engage in CAS for more money. He described one such situation with a client with whom he was meeting for the second time; they had used a condom during their first encounter.

> He asked me if we could go raw. I told him yeah, but it would be more money [than the first time] and he agreed, and he paid it, so I did it. I had taken PrEP and stuff.

(26 years old, Latino, Philadelphia)

Effects of Drugs and Alcohol

In the case of some participants, drug and alcohol use interfered with their discussions about or implementation of condom use with clients. For instance, a participant who had never used PrEP described how his drug use interfered with negotiating condom use with clients.

> It [condom use] would occasionally come up if the guy brought it up. I, when I was high, did never care to discuss it, to make a plan, to be safe. It's just like I put all sorta caution out the window because I was altered [by drug use], and only focused, once I was altered, on the continuing to smoke meth.

(41 years old, White, Philadelphia)

Similarly, a participant explained that while he generally preferred using condoms with exchange partners, he would sometimes end up having unprotected sex due to his use of meth, as in the encounters below which occurred while he was on PrEP as was still the case.

> Again, I don't fuck terribly much with any exchange partners, except at the bathhouse. I did fuck all of them, or at least two of them, I think I said in the [study] questionnaire. They were, of course, no condom. That was mostly because of meth. I don't know if you know much about meth, but it reduces 100% of your inhibitions, your criticism factor goes down by 100%. It's just, everything is a go.

(36 years old, White, Philadelphia)

Even among participants who routinely used condoms, some reported that being under the influence of drugs or alcohol sometimes led to CAS. A participant who had never used PrEP said he turned down requests for bareback sex and regularly inquired about HIV/STI status prior to meetings. He described, however, an occasion when being drunk led to his agreeing to unprotected sex with a client.

> I always say no. With the guy that paid me $20, I did bareback with him unfortunately because, I don't know. When I got there, he told me he didn't have a condom … I did have this conversation with him. I asked him if he had condoms, but I guess he lied to me now that I'm thinking about it. He didn't have condoms and I was drunk enough to the point where I was like, "Okay, whatever, you're clean, I'm clean," so I believed him which was a mistake.

(20 years old, Latino, NYC)

Attractive Clients

For some participants, a client's attractiveness influenced their decisions to have CAS. For instance, a participant who had discontinued PrEP and regularly used condoms with clients explained why he did not discuss using condoms with a particular client and had CAS with him. After reporting that he had been attracted to the client whom he described as "huge" and "really masculine", he described how he equated his good looks with being healthy.

> I'll be honest, he was really, really good looking. He was really good looking, so I don't know. I was just like I just assumed. I don't know. You shouldn't do that, I know, but he's just really good looking and I just didn't ask, didn't think to ask.
>
> (27 years old, Black, Baltimore)

Another participant on PrEP, said he evaluated condom use on a case-by-case basis. However, he admitted that having an attractive client was one of the circumstances in which he was agreeable to not using them.

> To be honest with you, as horrible as it sounds, I would be willing to not wear one if they were attractive. Even though that doesn't logically make any sense, I'm well aware. But at the same time, I don't have any STIs right now, and I haven't since 2016.
>
> (26 years old, White, D.C.)

Heat of the Moment

In some instances, becoming very aroused interfered with condom use. Occasionally, this occurred even when safe sex practices had been agreed to ahead of the encounter. For example, a participant who never used PrEP said he posted his preference for condoms in his profile and prior to meeting, discussed that he likes to have safe sex, particularly with new clients, and also requested that clients withdraw before ejaculation during unprotected sex. Nevertheless, he acknowledged that despite his intention to be safe, there had been times when condoms were not used in the heat of the moment.

> If it happens, it's because it happened in the moment. Like if things got heated up, and the moment just happened really quickly. Then I just was like, "Whatever." It's happened. It definitely has happened. But my head is always wanting to do that, going into a situation. Just sometimes, in that situation, it might not happen if that person has made me feel extremely comfortable, or I don't know, something just really turned me on, or something like that.
>
> (27 years old, Black, Atlanta)

Similarly, a participant who had never used PrEP, but did typically ask clients about their HIV/STI status and their own PrEP use, and who believed his profile stated, "Safe Sex Only", described an incident when he and his client were caught up in the moment and continued anal sex after the condom broke.

> I think we both got carried away and the condom popped and then it was kind of like I don't know. I just think we got carried away in the moment.
>
> (24 years old, Black, NYC)

When discussing his history with one particular client with whom he routinely used condoms, another participant who had never used PrEP described an occasion when the moment got away from them, and they engaged in CAS.

> Because we were just getting into it, and in the moment we just didn't want to do it [use a condom]. And that was … yeah. So, we just decided not to.
>
> (19 years old, Latino, Chicago)

Ensuring Sexual Performance

Several participants described how condoms interfered with their sexual performance with clients, leading them to engage in CAS. They reported discomfort as well as difficulty obtaining and maintaining an erection while wearing condoms. A participant who never used PrEP stated that as a bottom he required clients to wear a condom. However, as a top he didn't use them due to the multiple problems he felt they caused including difficulty remaining hard.

> If I use a condom to top, I may not enjoy. I may go soft. I don't like putting them on. They hurt for me.
>
> (22 years old, Black, Detroit)

Similarly, a participant who discontinued PrEP use and as a top felt he was at lower risk, said he did not use a condom with exchange partners because it made it hard for him to maintain an erection and compromised his pleasure.

> Mainly when it's exchange for money and stuff like that, they'll be willing to go without a condom. The way I feel is like if they want to go without something. … Me, personally, I don't use them, because I don't get a sexual pleasure and can't really hold an erection.
>
> (31 years old, Black, NYC)

While a participant on PrEP described his preference for CAS, reporting that condoms interfered with his erection and affected his performance and ability to have repeat clients.

> I preferred it [using condoms] before, but I never liked them because they mess with my erection. So, that's why I like being on the PrEP and then I can perform better, as far as being hard. … I would say it makes me perform better. I would get them more as a repeat person.
>
> (41 years old, White, Chicago)

Influence of PrEP

The availability of PrEP influenced both clients' requests for CAS as well as participants' attitudes regarding condom use. Some participants on PrEP reported that because its use virtually eliminated their risk of acquiring HIV—which they regarded as the biggest threat posed by CAS—they felt that the benefits of CAS with clients outweighed the risks and inconveniences of acquiring a treatable STI. For instance, a participant, who believed that because his clients were largely white and affluent they were likely to know their status

and if living with HIV to be on treatment and undetectable, shared how being on PrEP influenced his choice to have CAS regularly.

> Yeah, so I feel like though my risk of contracting HIV is the thing that I'm most concerned about. A lot of the other common STDs that I could contract from a potential client, a lot of them are easily curable and not big deals to have. So yeah, since PrEP came along I feel like my acceptable risk is such that I can have condomless sex with basically anybody and I'm willing to accept that chance that I still do contract HIV despite being on PrEP.
>
> (42 years old, White, D.C.)

Other participants noted the growing number of clients they encountered who used PrEP as an additional factor influencing their decision to have CAS. A 32-year-old Latino participant from Atlanta who had been off PrEP for the past five months due to insurance issues but planned to restart soon, said he had some medication still that he could use right after possible exposure to HIV if needed. He related that he had not used condoms at all with personal or paying partners after he started PrEP in 2014, despite having previously used them "100% of the time". While on PrEP, he did not feel that he needed to discuss HIV/STI status or condom use with potential clients because he believed that the majority of MSMs in his area were "either on medicine or they're on a preventative." Additionally, a participant never on PrEP said he based his condom use upon a client's preference as well as a client's proof of HIV negative status and of current PrEP use.

> Depending on the status. Especially, well if they say they're negative, and if I see the receipt, I'll most likely not use a condom. If they're on PrEP, then I probably won't use it. … I do ask like, "Oh, if you're on PrEP like I would want to see like a prescription bottle with your name on it, at least some indication that you're on it."…They do [show the evidence of PrEP use]. Some are like very hard-headed about it, but they eventually show me."
>
> (19 years old, Latino, NYC)

Similarly, a participant said up until a few years earlier, he used condoms all the time with clients who usually wanted them to be used. In 2015, when PrEP was becoming more widely available, he began to use it too. With an increase in PrEP uptake, he noticed that fewer clients wanted to use condoms and he started to accommodate this shift in client preferences.

> I think that society in general has changed in regard to condom use pretty dramatically over the past few years. Because I would say like maybe when I first started 10 years ago, most clients wanted to use condoms, and so it was never really an issue. I just said, "I always use condoms." Back then you could also write things like that in your profile. I would just say, "I'm only doing safe sex," so it was never really an issue. It was just like I put it out there. That's what the clients wanted. Everybody was happy. It started to change maybe three to four years ago. Now I feel like the overwhelming majority of clients want to not use condoms. It's just like something you either have to do or tolerate a loss in clients that are willing to see you … About the time that PrEP was starting to become very common,

> my doctor had started recommending it pretty much as soon as it, I think, was in common use. I just started taking PrEP as a precaution. Then over time, more and more clients didn't want to use condoms. It kind of happened in the reverse order. I started taking PrEP, and then clients progressively started to want to use condoms less and less frequently.
>
> (31 years old, White, NYC)

Risk was Judged to be Acceptably Low

In many instances, participants had CAS with a client when they judged that the risk of acquiring HIV associated with doing so had been mitigated to what was for them an acceptable level. Sometimes, the risks were considered acceptable because they had believed, based on what they knew about a client, that the risk he posed was very low. Other times, they deemed actions that they themselves had taken, such as using PrEP or being in the insertive position for anal sex, sufficiently mitigated their risk. Often, it was a combination of reasons, involving both themselves and their clients, that led them to judge the risks of CAS to be acceptably low.

Most participants who engaged in CAS had first evaluated the chances that a client had HIV or another STI and had determined that a client's potential risk was acceptably low. In making such an assessment, they usually considered things like whether someone claimed to be "drug and disease free" or on PrEP. Some required proof of HIV/STI test results in certain cases. For instance, a participant on PrEP reported asking for proof of a client's negative test results or being on PrEP before agreeing to CAS.

> Yeah, so most of the time people have paperwork for all that good stuff, especially when you're tested, because if you're on PrEP, you're three times a month [tested every 3 months], which I am on, so I'll say that. Or I ask, if I get that, I'll be like, "Where's your prescription," or whatever it may be. Or like, "Where's your bottle," and all that. Sometimes I'll make them take it in front of me, which I know sounds silly, but yeah, no sometimes I'll actually ask for physical proof like that.
>
> (26 years old, White, Philadelphia)

In determining whether or not they felt comfortable having CAS, several participants focused primarily on what a potential client mentioned about his recent sexual behavior and the HIV/STI risk that information suggested he might pose. For example, a participant who said he felt protected on PrEP and did not discuss condom use with clients, nor ask about their HIV status, described the kind of things he might hear from a prospective client, such as talking about prior sex partners in a "very, very liberal or open way" that would convince him he needed to bring condoms to an encounter to avoid an STI.

> The level of kind of sketchiness and the read I'm getting for the situation. Like they'll talk about, "Oh, just last night or last week, or just last weekend I spent three days smoking Tina," which is crystal meth, "and getting fucked by different guys," which is 10 or more guys over the course of a weekend. You can just tell by the way they're talking about it that there was no condoms or protection used. In that type of situation, I may bring condoms with me and choose to use a condom,

> just because that's a lot of risk. My concern isn't even HIV in that situation. My concern is going to be other types of STIs, like syphilis, which is a bitch to get rid of if you get that, and then like genital warts and shit like that and herpes that you can't get rid of. Stuff that are caused by viruses that you can't treat, and that you have forever. That's what I'm more worried about than HIV or anything else.
>
> (30 years old, Black, D.C.)

Others relied on a client's appearance when deciding whether he would feel the need to use condoms at their encounter. For instance, a participant who never used PrEP and preferred using condoms, said he evaluated how healthy the client looked to determine whether he would be comfortable having unprotected sex with him.

> You don't see no signs of them having AIDS or HIV. You don't see no yellow eyes, no skin disorder. You don't see nothing wrong with their penis. So, you think they're clean. You think they don't have any diseases. And you just don't give them a condom. So that's how I made that decision. I've seen guys and they look just … they don't look healthy. They look bad. Then you'll be like, "These guys are lying. This guy has to have a disease because he just doesn't look well."
>
> (20 years old, White, D.C.)

Several participants believed that they could rely on their intuition to assess a client's risk, in some cases even while recognizing that this approach was ill-informed. A participant who had never taken PrEP reported that he didn't usually initiate discussions on condom use or HIV/STI status.

> I just … as ignorant as it sounds, I think I know the person who I'm getting into it with. But if I have a suspicion, or if I feel it in my bones or something, then I'll bring it up. But I don't think I've ever had to. I just know who I'm getting with … And if I see if something's up right at the moment, then I won't do it. And I've never had to do that.
>
> (19 years old, Latino, Chicago)

Some participants were willing to forego condom use with clients they were familiar with or had known for a while, believing that these clients would be honest with them about their sexual behavior with others and could be trusted to not pose a risk for HIV/STIs. For instance, a participant who regularly bottomed and had never used PrEP said he made it clear to new clients that he wanted to use condoms. He reported, however, that condom use "becomes less important over the relationship" as he grows more comfortable with the person as described in the following example when he talked about a recent client.

> I think I am [comfortable with no longer using condoms with him], just because I feel like I trust his judgment, now that I know him as a person. I know that he doesn't really, he's not out there like that. He's a real, I don't know, a protect-his-image kind of person. He has a lot to lose, I should say. So, he's much more serious about it, more even than me. So, I feel like he probably feels like it's more to his benefit to use a condom than I do.
>
> (27 years old, Black, Atlanta)

Another participant who never used PrEP and asserted he would never not use condoms during anal sex with a stranger reported CAS with two friends he had known for some time who also paid him as clients.

> Like I said, the only two examples of that, having full anal penetration, are the people who I consider friends of mine and I do think that is kind of a function of I would not want to have unprotected sex with a stranger, someone I don't know who even if they told me something about their status, I would still have to maybe have a healthy dose of doubt. Yeah, from those people, those people being people that I trust, I don't ask for a screenshot of a clean bill of health from a testing center. I don't ask for a specific date, just a general … I was tested with this given timeframe [and] I have not engaged in risky behavior since then.
>
> (25 years old, White, Atlanta)

Some participants' assessments of the risk involved in having CAS with a client were based upon their positioning in the sexual encounter, believing that being the insertive position in CAS carried an acceptably low level of risk for acquiring HIV. For instance, a participant who never used PrEP reported using condoms as a bottom but was not concerned about using them as a top.

> When I top, I really don't talk about condoms. It's usually when I bottom is the only time I bring it up … I know I might be wrong, but I don't feel like you can get AIDS from topping, so I really don't … I know you can get other stuff, but I really don't worry about condoms when I top.
>
> (19 years old, Latino, Detroit)

Similarly, a participant who had never been on PrEP and described himself as "very pro-condom," said even as a top he would prefer to use condoms. However, he acknowledged that he would sometime engage in CAS as a top for the business, although he didn't advertise this, because he felt it posed a much lower risk than being a bottom. He described what he put in his profiles.

> HIV status is always negative. Always put that up there; and condoms I never put an answer to the condom, because normally most of the time it's just oral. And if I'm going to top anybody, I like to try to go with condoms most of the time, but I feel like as a top I'm less at risk though I've been told that's not as true. But no, I don't put any kind of [condom] preference on my profile … a lot of times I do want to use condoms, but as a top I don't because I feel like I'm not as much as it-- as risky, but I know that that's not true about what I've been told. And sometimes if they want to do without a condom then it's like, you know you do it, or you don't make the money.
>
> (31 years old, Latino, NYC)

Discussion

This study extends our understanding of CAS among male sex workers by providing more recent insights into factors that influence engagement in this practice in the era of PrEP, a

highly effective method for preventing HIV acquisition. It also provides a useful update to the existing literature regarding CAS among MSWs which had largely focused on street-based sex work or work conducted via online escort sites. In contrast, this report focuses on MSWs who primarily arranged exchange sex through an increasingly popular venue—hookup or dating apps/websites. Researchers have noted that although not intended for sex work, these websites and apps are increasingly being used as a platform for arranging exchange sex including among those who only occasionally and informally engage in exchange sex [43–47]. These websites and apps provide an easy, convenient, discreet and generally more financially rewarding approach to sex work when compared with other methods of marketing sex work (e.g., the street, agencies or print advertising) [44]. While meeting clients this way affords better opportunities than say street work to discuss condom use before meetings, some MSWs may choose not to take advantage of this opportunity or prefer to engage in CAS or be influenced by various factors to forego condom use once they meet the client.

More than three-fourths of our full study sample reported engaging in CAS with at least one client in the prior three months. While some participants had a preference for CAS, for most the use of condoms was decided on a case-by-case basis, weighing the potential risks of acquiring HIV or other STIs against the perceived benefits of offering this service (e.g., a larger potential client pool, higher fees, greater pleasure and improved sexual performance). Most participants inquired about a potential client's HIV/STI status and testing dates, PrEP use and/or recent sexual behaviors, when determining whether the risk was low enough to engage in CAS.

Excluding those MSW who preferred to never use a condom, a financial incentive was the primary reason for engaging in CAS with clients. Not only did a willingness to participate in CAS enable them to serve more clients, but in many cases, it also secured a higher fee than sex with condoms. While prior studies have generally found that most MSWs working through agencies or through the internet often reported refusing offers of additional money for CAS [21, 23, 26, 48] and that it was more of an incentive for street-based MSWs [23, 25, 38], some of our participants who did not want to lose clients or the chance for more income, were willing to engage in CAS. Several even strategically used negotiations over CAS as a way to obtain more money, a tactic also reported by some participants in previous studies [21, 39, 40]. Addressing the financial incentives that exist for CAS will be particularly challenging as it involves either decreasing client demand for CAS or improving the financial stability of those receiving payment for sexual services. Approximately 68% of our participants earned less than $40,000 annually, and 42% had incomes under $20,000. Furthermore, approximately one-fourth of our participants were currently in school, a time when expenses may be high while employment opportunities and income are very limited. Students may be particularly tempted by offers of money or meals in exchange for a sexual encounter or even CAS. Future research examining the societal or structural factors that influence the financial incentives of CAS among MSWs on hookup apps would be valuable, followed by programming and outreach efforts to address modifiable needs. For participants who engaged in sex work (including finding clients) while under the influence of drugs or alcohol and for those for whom drug use was a part of the encounter, being under the influence sometimes clouded their judgment and interfered with assessments of a client's

HIV/STI status and discussions of or implementation of condom use. For these participants, addressing drug use is an essential precursor to implementing safer sex practices.

While client demand and financial or material incentives are factors that specifically drive MSWs to have CAS, study participants were also influenced by factors that affect MSM more generally. For instance, some participants avoided condoms because they claimed they interfered with their sexual performance. If an MSW is unable to sexually perform with a client and provide the desired services, it is reasonable to assume that the client likely will choose to not hire that MSW again in the future, leading to financial repercussions. Other factors that led to CAS between our participants and their clients are similar to those that any MSM may experience during a casual hookup. These include getting caught up in the heat of the moment or being "turned on" by a really attractive man, or when using drugs or alcohol impaired judgment or lowered inhibitions and plans for condom use did not materialize.

When deciding whether to engage in CAS, participants often relied upon their perceptions of the level of risk to their health posed by a particular client and whether the risk seemed acceptably low. These perceptions were shaped by a combination of factors, but particularly by his own or the client's use of PrEP, which lowered the risk of HIV acquisition. This is consistent with research by Kippax and Holt (2016) on sexual health practices of MSM in general, which has shown a decreased reliance on the consistent use of a single risk reduction strategy such as condoms, possibly due to "a growing belief in the health and preventive benefits of ART" (p.2898) [49]. In determining whether the level of risk for CAS was acceptable to them, some asked scientifically grounded questions, such as whether the client used PrEP and was adherent to the regimen, or the date and results of their most recent HIV and STI tests (sometimes asking for proof of their answers). Others evaluated potential clients' remarks or postings about recent sexual behaviors (e.g., multiple partners, attendance at sex parties, clubbing, excessive drug use), and several inquired about sexual activity since a client's last testing for HIV/STIs. Some, before engaging in sex, conducted visual inspections of a client's genitalia which they felt would provide evidence of sexual health or disease. Additional criteria some participants used to assess a client's risk were particularly unreliable, such as the client's socioeconomic or marital status, how healthy the client looked or using intuition to decide whether someone was safe or not. Reliance on such client characteristics for health decisions is fraught with problems. As they got to know a repeat client better, some participants felt more trustful that the client was honest with them about their sexual activity practices with others and they were more likely to engage in CAS without, for example, requiring proof of recent testing of HIV negative serostatus. Some participants also assessed the risk of their position in a sexual encounter, feeling that being the insertive partner conferred enough of a reduction in risk for acquiring HIV that it was worth the benefit of earning money by not using a condom.

Our participants' decision-making approaches were in some ways consistent with a conceptual model outlined by Dennermalm et al. [50], "Ontological Perception of Pleasure and Risk" among highly sexually active MSM. They found that MSM's "decision making processes varied greatly and were influenced by perceptions of pleasure and risk" [50] (p.10). They reported that their participants exhibited wide variation in the number of risk management methods they chose to apply and when to apply them. They outlined

three approaches their MSM utilized when making risk management decisions about sex behaviors: a “fixed approach” in which their chosen method of risk reduction “applied to all persons and contexts, with no exceptions”; a “categorical approach” in which the chosen method was “used or not used depending on pre-set categories”; and a “dynamic approach” in which the chosen method “will be used or not used depending on how a person or context fit into a scale”. While some of our participants utilized a “fixed approach” of always relying on condoms with clients, others used a “categorical approach” determining whether their chosen method of protection against HIV/STIs (e.g., condoms, PrEP) would be used based upon answers to pre-set categories (e.g., a client’s HIV or STI status) that indicated whether the risk for CAS in their judgement was low enough to be acceptable. While others engaged in a “dynamic approach,” choosing to rely or not on their chosen method based upon where the client fell along a “scale” such as level of familiarity, apparent health or degree of promiscuity. While Dennermalm et al. [50] found their MSM participants engaged in a balancing of pleasure and safety, our participants tried to balance not only pleasure and safety but more notably financial benefits and safety.

As discussed above, participants engaging in CAS often asked potential clients about their use of PrEP and also themselves sometimes relied upon PrEP use, a highly effective method for reducing the risk of acquiring HIV, but not protective against STIs. However, some participants, whether on PrEP or not, were undeterred from engaging in CAS by the risk of acquiring an STI (other than HIV) which they saw as a temporary nuisance, but treatable. That is, they saw an occasional STI as probably an unavoidable “cost of doing business” if they were going to offer CAS, regardless of whether they were using PrEP or not. They were willing to accept this cost when CAS was what the consumer (i.e., client) wanted. Many felt that if they wanted to be in business and have a steady flow of clients, they had to be willing to provide this service, and hopefully succeed in getting a higher fee for doing so while trying in other ways to manage their risk for acquiring HIV or another STI. This finding is concerning given the disproportionately higher and rising rates of STIs such as gonorrhea and syphilis among MSM, the growing concern over antibiotic resistant strains of bacterial STIs, and the possibility that an STI may increase the risk of transmitting or acquiring HIV [14, 15]. However, Grey (2019) has noted that “an incident STI is unlikely to negate fully the prophylactic benefit of HIV PrEP” [15] (p.760). Given that research indicates that MSWs are less likely to use condoms with non-paying partners than with clients [20, 27, 28, 30], MSWs who contract an STI through CAS with a client can potentially spread that infection to their non-paying partners. A new STI prevention regimen currently under investigation may present one potential path for reducing this risk. While not yet approved for routine clinical use, initial trials of prophylactic doxycycline for bacterial STIs (doxy PrEP and doxy PEP) have found that it is effective and tolerable with additional investigations needed to determine the appropriate dosing regimen and target populations, cost-effectiveness, individual and population level risks and benefits, possible behavioral risk compensation and potential antimicrobial resistance [51, 52]. In fact, there may already be some awareness of and use of prophylactic doxycycline among high-risk MSM [53, 54]. Two participants in our study, both of whom reported regularly engaging in CAS with clients as well as with other (non-commercial) partners and in group sex/sex parties, brought up their use of doxy PrEP to reduce their risks of getting STIs. It did not appear to lead them

to engage in CAS, but rather was something they used because of their frequent participation in this practice. With the development of and adherence to clinical guidelines to minimize antimicrobial resistance, the availability of an effective prophylactic regimen could help reduce the risk of bacterial STIs among high-risk groups including MSWs just as PrEP and TasP have done for HIV.

While hookup or dating apps/websites have provided MSM with a new pathway into exchange sex [55], they may also provide a cost-effective opportunity for HIV/STI prevention through educational messaging, counseling and testing referrals [56–60]. Dating and hookup app-based interventions and messaging to increase the use of condoms among MSWs should be tailored to address the different issues that affect condom use in this population, recognizing the motivations, misconceptions and/or situational factors that may lead to CAS on a regular basis or in a given client encounter. For instance, those MSWs who are less concerned about STIs and have very substantially reduced their risk of acquiring HIV through the use of PrEP, may benefit from educational messages about the potential health consequences of STIs and the increasing spread of bacterial STIs that may be resistant to treatment with current antibiotics. Alternatively, those who routinely use condoms but lapse under the influence of drugs and alcohol, a scenario reported by some of our participants, might benefit from different types of support or interventions. While Smith and Seal [29] found that increased sexual risk behavior was not related to mental health status or drug use history among the agency-based MSWs in their study [29], Mimiaga et al. [23] reported that internet escorts often used drugs to enable them to get through sex work encounters by helping them lose inhibitions or to perform sexually [23]. MSWs with potential addiction issues could obviously benefit from referrals to treatment centers while others might benefit from skill building in staying sober and aware during sex work encounters. Additionally, given that financial incentives are typically the principal driving factor for engaging in CAS, social marketing programs on hookup apps that reach all users, both clients and MSWs, would be useful for addressing the demand for and acquiescence to CAS.

Some limitations of this study should be noted. First, the transferability of our findings to other settings or contexts may be limited. For example, our participants were recruited from a limited number of urban areas and therefore they and their clients may differ in their perceived vulnerability to HIV/STI and their use of different prevention measures (e.g., condoms or PrEP) from their counterparts in other settings such as cities in other parts of the U.S. or in rural, small town or suburban regions. In addition, as with other qualitative investigations, our data were self-reported and are therefore subject to recall error, especially for any exchange sex encounters that happened further in the past. Men may also under-report engagement in sexual practices like CAS due to social desirability bias.

Conclusion

This study provides the accounts of MSWs regarding the multiple factors influencing them to engage in condomless anal sex with their clients. The sample included a sizable diverse group of MSM without HIV from multiple U.S. cities, different racial and ethnic groups, a wide range of ages, and varying levels of involvement in sex work. Importantly, it sheds

light on CAS among MSWs in an era when hookup or dating apps and websites are increasingly being utilized by both those who regularly or only intermittently or casually engage in exchange sex. Further, it provides an updated examination of CAS in an era when PrEP and TasP offer highly effective methods for preventing the transmission and acquisition of HIV. While financial factors played a primary role in choosing to engage in CAS, other reasons including drug and alcohol use, the heat of the moment, sexual performance and protection offered by PrEP influenced participants' engagement in CAS with clients. Most participants who had CAS assessed various factors to determine whether they felt the level of risk for HIV and/or STIs was acceptable. Hookup or dating apps and websites could serve as important tools for social marketing campaigns to promote condom use among those engaging in exchange sex.

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Table 1

Participant Characteristics ($N = 141$)

	n	%
Demographics		
Age group (in years)		
18 to 24	45	(31.9)
25 to 29	35	(24.8)
30 to 35	36	(25.5)
36 to 45	25	(17.7)
Race/ethnicity		
White, not Hispanic	52	(36.9)
Latino, any race	51	(36.2)
Black, not Hispanic	38	(26.9)
Born in the US	121	(85.8)
Gender identity		
Cisgender man	135	(95.7)
Gender nonconforming	6	(4.3)
Sexual identity		
Gay/Queer	123	(87.2)
Bisexual/Pansexual/Heterosexual/Other	18	(12.7)
Residence		
NYC	65	(46.1)
D.C	19	(13.5)
Philadelphia	17	(12.1)
Chicago	16	(11.3)
Baltimore	5	(3.5)
Atlanta	9	(6.4)
Boston	4	(2.8)
Detroit	6	(4.3)
Socioeconomics		
Education		
High School or less	29	(20.5)
Some college or associates	46	(32.7)
Bachelor's	40	(28.4)
Graduate	26	(18.4)
Student Status		
Not currently in school	102	(72.3)
Currently in school	39	(27.7)
Income (N = 139)		
Under $20,000	58	(41.7)
$20,000 to $39,999	36	(25.9)
$40,000 to $59,999	19	(13.7)

	n	%
$60,000 or more	26	(18.7)

Table 2

Substance Use and Sexual Health (N = 141)

	n	%
Substance use		
Alcohol within the last month	124	(87.9)
Cannabis		
Within the last month	84	(59.6)
Within the last year (> 1 month)	21	(14.9)
> 1 year ago	12	(8.5)
Poppers		
Within the last month	72	(51.1)
Within the last year (> 1 month)	20	(14.2)
> 1 year ago	9	(6.4)
Sexual health		
Recency of HIV testing (N = 140)		
Within the last 3 months	92	(65.7)
> 3 and < 6 months ago	30	(21.4)
6 months to < 1 year ago	11	(7.9)
1 to 2 years ago	4	(2.9)
More than 2 years ago	3	(2.1)
Recency of STI testing (N = 136)		
Within the last 3 months	85	(62.5)
> 3 and < 6 months ago	25	(18.4)
6 months to < 1 year ago	14	(10.3)
1 to 2 years ago	4	(2.9)
More than 2 years ago	8	(5.9)
PrEP Use (N = 139)		
Current: Used PrEP in past 3 months	74	(53.2)
Never: Never used PrEP	52	(37.4)
Discontinued: Previously used PrEP	13	(9.3)
Sexual Behaviors		
Number of clients in the past 3 months		
Mean	6.97	
Median	4	
Interquartile range	3–7.5	
CAS with 1 or more clients in the past 3 months	141	(100.0)
As a top[a]	95	(67.4)
As a bottom[a]	85	(60.3)
Number of clients, CAS as a top		
Mean	3.40	
Median	2	
Range	0–23	

	n	%
Number of clients, CAS as a bottom		
Mean	2.50	
Median	2	
Range	0–18	
Venues used for exchange sex in past 3 months		
Hookup or dating apps	127	(90.1)
Hookup or dating websites	40	(28.4)
Social media platforms	24	(17.0)
Escorting websites	17	(12.1)

[a]Proportion of the 141 participants who had CAS in the past three months who had it in this position with at least one client. Percentages exclude missing data