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Why Girls Choose Not to Use Barriers to Prevent Sexually Transmitted Infection During Female-to-Female Sex

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A B S T R A C T

Purpose: Using data from a national qualitative study of lesbian, bisexual, and other sexual minority adolescent girls in the U.S., this study examined their awareness of the risk of sexually transmitted infection (STI) and opportunities for barrier use.
Methods: Online asynchronous focus groups were conducted with lesbian and bisexual (LB) girls ages 14–18 years. Girls were assigned to online groups based on their self-identified sexual identity and whether they were sexually experienced or not. Two moderators posed questions and facilitated online discussions. Interpretive description analysis conducted by multiple members of the research team was used to categorize the results.
Results: Key factors in girls' decisions not to use barriers with female partners concerned pleasure, sex of sexual partner, lack of knowledge of sexual risk or of barrier use for female-to-female sexual activities, and use of STI testing as a prevention tool.
Conclusions: Addressing knowledge and access gaps is an important first step for improving sexual health. Prevention priorities should focus on helping LB girls understand their risk of STI transmission in both opposite and same-sex relationships. Tailoring messaging to move beyond heteronormative scripts is critical to engaging LB girls and equipping them with the skills and knowledge to have safer sex regardless of the sex of their partner.

IMPLICATIONS AND CONTRIBUTION

Although lesbian and bisexual teenage girls are at higher risk of sexually transmitted infections than their heterosexual counterparts, little is known about how they understand STI risk or why they may choose not to use barriers when engaging in female-to-female sex.

Although evidence indicates that lesbian and bisexual (LB) adolescent girls are at increased risk of sexually transmitted infections (STIs) and adolescent pregnancy compared with heterosexual girls [1–4], few targeted sexual health intervention programs are available for LB girls. Standard sexual health interventions for adolescents typically rely on beliefs and understandings of risk that are centered on heterosexual sexual behaviors; even the growing body of research about LB adolescent sexual health disparities tends to focus on their unprotected sexual experiences with males as a key explanation for that higher risk [5–7].

For LB girls, the exchange of vaginal fluid during female-to-female sex by mouth, fingers, or sex toys serves as routes for the transmission of STIs. For example, the transmission of human papillomavirus (HPV) requires only skin-to-skin contact, and genital HPV types have been identified on fingers [8]. HPV has also been found on sterilized forceps and surgical gloves, making

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transmission via sex toys, even those that are "cleaned," plausible [9]. Research has documented transmission of bacterial vaginosis, HIV, chlamydia, HPV, herpes simplex 1 and 2, and trichomoniasis between women having exclusive sexual contacts with other women [10–13].

Health practitioners should not presume that women are at low risk of STIs because they have sex with women, especially as current clinical guidance advises practitioners to screen women for STIs regardless of patients' sexual orientation [14,15]. A U.S. representative sample found bisexually identified young adult women had significantly higher odds of receiving an STI diagnosis compared with heterosexual women, and lesbian young women were more likely to believe that they were at lower risk of STI transmission compared with heterosexual peers [16]. One study of LB women demonstrates those reporting sex with a male partner were significantly more likely to report being screened, but a majority had not received STI screening in the past year [17].

Very little research has explored the STI knowledge of LB girls [18,19]. The available research on LB women finds they are aware of STI, but have limited knowledge of female-specific barriers (e.g., dental dams) and misconceptions about the risks of STI transmission during same-sex sexual activities [20–25].

Using data from a national qualitative study of LB adolescent girls in the U.S., this study examines participants' choices to use barriers in their sexual relationships with other girls as a means of identifying what kinds of prevention messaging or programming might be needed to better inform LB girls. Given that many young women first have sex in their teen years [19], our research identifies perceptions and knowledge gaps that inform decisions to use barriers with female partners.

Methods

LB girls, ages 14–18 years (see Table 1 for more descriptive information), were recruited primarily through Facebook using standardized protocols [26–28]. The 160 girls participated in asynchronous, online focus groups as part of a larger project. Online focus groups were chosen as a convenient way to interact with LB girls from all over the U.S. while protecting their identities [29]. The University of British Columbia's Behavioral Research Ethics Board and the Chesapeake Institutional Review Board approved all procedures. Parental permission was waived by both institutional review boards for legal minors. Youth assent or consent was secured, as was their capacity to assent/consent, during phone screening.

Eight online focus groups were conducted from September 2015 through January 2016 with cisgender LB girls who had a cell phone with an unlimited text messaging plan. Girls were grouped into focus groups based on their sexual experience (i.e., no sexual experience with either sex, or at least one sexual experience involving a finger or sex toy, vaginal sex, or anal sex) and their sexual identities based on a telephone screen. Youth who identified as lesbian, gay, asexual, demisexual, or queer and who were mostly or only attracted to girls were grouped together as "lesbian." Those who identified as bisexual, pansexual, polysexual, omnisexual, unsure/questioning, or queer and who were attracted to boys and girls or mostly boys were grouped as "bisexual." Two focus groups were conducted with each of four identity (lesbian and bisexual) by sexual experience (inexperienced and experienced) groups.

Participants chose their own anonymous screen name and were given a password to sign into the asynchronous online focus groups. Moderators posted a series of questions twice a day for 3 days as prompts. Questions centered around youths' sexual experiences, their thoughts about the use of birth control and latex barriers (e.g., condoms, dental dams), and STIs and pregnancy among LB girls. Moderators also posted follow-up questions and participants interacted with these and each other's comments. Peak posting times revolved around the school day, with most participants online after school and later in the evenings.

Analyses focused on participant opinions regarding the use of latex barriers during sex (dental dams and condoms) in the context of sex with other girls. Interpretive description [30,31] was used to inductively derive themes from the data. Two of the co-authors completed initial coding. Another co-author served to verify the coding and help resolve any discrepancies. A second round of analysis was conducted to further develop themes related to opinions about and use of barriers. Finally, answers from each identity/experience group were compared to identify potential variations in responses and confirm the themes. Meetings among co-authors confirmed consensus of the dominant themes and their nuances as a validation measure.

Results

Four main themes emerged as part of participant's reasons for why they would not use barriers. The themes, as discussed in greater detail below, concerned pleasure, risk linked to sex of partner, lack of knowledge of barriers, and STI testing as a prevention measure. Results also noted that once the topic of barriers was introduced in the focus groups, some participants did share reasons and scenarios in which they might use barriers, particularly among inexperienced girls.

Pleasure

Across all our focus groups, concerns about pleasure in relation to barrier use were voiced, with decrease in sexual pleasure a reason for not using barriers. An 18-year-old girl in the experienced lesbian group wrote, "I never really used a barrier because I felt it would be weird. Like laying down a sheet of plastic over her vagina just doesn't seem very sexy." An 18-year-old girl in the experienced bisexual groups commented, "I think using protection with a girl would make sex not feel as good. I would probably do it for safety, but I think if it didn't feel good, I would be less interested in having sex and I would probably even just stop having sex all together."

Inexperienced girls also noted barriers could be awkward. A girl in the inexperienced lesbian groups, aged 14, volunteered, "I feel like it would be uncomfortable and ruin the mood." A 17-year-old in the inexperienced bisexual groups admitted, "I'd much rather go without any barriers. I really just feel like I'd rather be able to taste someone or feel them exactly as they are."

Inexperienced girls in our focus groups could imagine pleasurable benefits of barriers not mentioned by experienced girls. For example, an 18-year-old girl in the inexperienced lesbian groups said, "There are barriers such as condoms that have been designed to add to the pleasure of sex. I know that I've seen boxes claiming that they have ridge or bumps that will 'make her feel better than ever' and stuff like that." When prompted that using condoms on sex toys can be a safe-sex practice, individuals among

Table 1
Focus group participant demographic characteristics

	Dual sex attracted (N = 67) % (n)	Same sex attracted (N = 93) % (n)	Total (N = 160) % (n)
Age (y)			
14	15 (10)	13 (12)	14 (22)
15	27 (18)	19 (18)	23 (36)
16	19 (13)	23 (21)	21 (34)
17	16 (11)	26 (24)	22 (35)
18	22 (15)	19 (18)	21 (33)
Race			
White	52 (35)	63 (59)	59 (94)
Black	16 (11)	9 (8)	12 (19)
Mixed racial background	15 (10)	11 (10)	13 (20)
Native American or Alaskan Native	0 (0)	2 (2)	1 (2)
Native Hawaiian or Other Pacific Islander	0 (0)	1 (1)	1 (1)
Asian	4 (3)	4 (4)	4 (7)
Other	12 (8)	10 (9)	11 (17)
Hispanic	22 (15)	22 (20)	22 (35)
Urbanicity			
Urban/city area	31 (21)	25 (23)	28 (44)
Suburban area	45 (30)	38 (35)	41 (65)
Small town/rural area	24 (16)	33 (31)	29 (47)
Do not wish to answer	0 (0)	4 (4)	3 (4)
Region			
Midwest	27 (18)	23 (21)	24 (39)
Northeast	21 (14)	17 (16)	19 (30)
South	22 (15)	35 (33)	30 (48)
West	30 (20)	25 (23)	27 (43)
Attraction[a]			
Only girls	0 (0)	78 (73)	46 (73)
Mostly girls	33 (22)	13 (12)	21 (34)
Both girls and boys	37 (25)	1 (1)	16 (26)
Mostly boys	9 (6)	0 (0)	5 (6)
Sexual experiences oral sex (ever)			
Never	46 (31)	55 (51)	51 (82)
With a girl	10 (7)	31 (29)	23 (36)
With a guy	15 (10)	3 (3)	8 (13)
With a girl and guy	28 (19)	11 (10)	18 (29)
Sex with sex toy/finger (ever)			
Never	51 (34)	53 (49)	52 (83)
With a girl	19 (13)	40 (37)	31 (50)
With a guy	12 (8)	2 (2)	6 (10)
With a girl and guy	18 (12)	5 (5)	11 (17)
Ever had sex[b]			
Never	25 (17)	26 (24)	26 (41)
With a girl	6 (4)	5 (5)	6 (9)
With a guy	13 (9)	1 (1)	6 (10)
With a girl and guy	12 (8)	3 (3)	7 (11)
Vaginal sex (ever)	40 (27)	16 (15)	26 (42)
Anal sex (ever)	10 (7)	2 (2)	6 (9)
Thinks will have sex with a girl in the next year[a]			
Definitely no	9 (6)	3 (3)	6 (9)
Probably no	30 (20)	27 (25)	28 (45)
Probably yes	37 (25)	35 (33)	36 (58)
Definitely yes	3 (2)	27 (25)	17 (27)
Thinks will have sex with a guy in the next year[a]			
Definitely no	21 (14)	86 (80)	59 (94)
Probably no	31 (21)	5 (5)	16 (26)
Probably yes	16 (11)	1 (1)	8 (12)
Definitely yes	10 (7)	0 (0)	4 (7)

Percentages may not add up to 100 due to rounding.
[a] Item was added beginning at the second focus group, as such was not asked of the first group.
[b] Item was added beginning at the sixth focus group, as such as not asked of groups 1–5.

both the inexperienced bisexual and lesbian groups responded that they would consider using dental dams or a condom.

Risk perception based on sex of partner

Risk perception was related to the sex of partner and awareness of STI risks. One 17-year-old girl in the experienced lesbian groups shared, "they [other girls] probably don't think [about barriers] since condoms are seen as a way to prevent pregnancy, and when two girls have sex they can't get pregnant so we forget that there's still a chance of STDs." Another girl in the sexually experienced bisexual groups, aged 15, posted, "I probably wouldn't use a barrier if I was having sex with a girl just because obviously, I can't get pregnant which I want to avoid but also I have

enough trust in the girls I sleep with to believe them about not having any STDs."

Trust among partners was important regardless of sex, but participants noted they trusted female partners more than male partners. An 18-year-old girl in the bisexually inexperienced groups shared:

> In general, I'm more just trusting of other women so to ask if she has STD would not even be on my radar I think. I think safety is important. I just don't know enough about it. Ok yikes, I would like all the protection I can with a guy, just because I don't trust them as much and also a man can get you pregnant and that's like not something I want.

She was not alone in commenting that female partners were more trustworthy than male partners.

Participants did note that trust and knowledge of their partners affected their ideas about risk. A 16-year-old girl in the inexperienced lesbian groups shared:

> I think that, if it is a one-time thing, then you should definitely use dental damns or condoms. This is mainly because, for one time flings, you won't want to ask about STDs or sexual history, especially if you're in the moment.

Inexperienced girls shared that trust and partner's sex affected their opinions. "I believe barriers during intercourse with a girl is a must unless your partner is faithful and both of you are STD free. When having sex with a guy, condoms or birth control is a must unless they are ready for pregnancy and want it," a 15-year-old girl in the inexperienced lesbian groups shared.

Lack of knowledge of risks and safe-sex practices related to sex between girls

The girls shared lack of knowledge of STI risk and the potential benefits of using barriers in same-sex activity. For example, a 16-year-old girl in the experienced bisexual groups noted, "I don't think most girls know about the risks of using sex toys without condoms, or about female condoms." In the experienced lesbian groups, a 15-year-old girl explained, "I've never thought of the transfer of STDs between girls. I've never been taught about STDs between females on females." Similarly, an 18-year-old girl in the experienced lesbian groups wrote, "No one has ever talked to me about using protection while having sex because no one I know has any idea about how to have safe lesbian sex. I looked to the internet when I first started having sex and I didn't see anything about using protection if you're a lesbian."

Even those familiar with the concept of barriers for sex with male partners shared that they were unaware of dental dams or of where to find them. A 15-year-old girl in the sexually experienced lesbian groups posted, "Barriers aren't really available for lesbians. Like where the heck do you buy dental dams?" In the sexually inexperienced lesbian groups, a 15-year-old participant stated, "I didn't even know dental dams were even a thing," and an 18-year-old girl in the sexually experienced bisexual groups shared, "I've never used barriers, I honestly did not know that was an option during girl-on-girl sex until maybe a year ago."

Girls opined that a lack of same-sex sexual education in schools caused their lack of awareness. For example, an 18-year-old girl in the sexually experienced lesbian groups explained:

> My school taught abstinence only so they never really told us about using condoms or how to put them on properly, and when my girlfriend asked her sex-ed teacher how lesbians should have safe sex the teacher looked at her and just moved on. No one teaches lesbian teens about stuff like that.

Similarly, an 18-year-old in the sexually experienced bisexual groups posted, "No one ever talked about gay sex. Not in school or on the news, and I definitely couldn't ask my parents." Other girls used similar statements to explain their lack of consideration about risk factors for sex with female partners and their lack of awareness about barriers.

STI testing instead of barriers to manage risk

Discussions in all groups included the idea of using STI testing as a safe-sex strategy. Girls, especially inexperienced ones, explained that STI testing, as a couple, could effectively manage their risk. For example, in the bisexual inexperienced groups, a 17-year-old girl stated, "I know I should use barriers even with girls, but I'd also prefer if I could be tested and my partner could be tested. If we're clean, I'd much rather go without any barriers." Similarly, a 14-year-old girl in the sexually inexperienced lesbian groups posted, "I would much rather just have both of us be tested for STDs than use a dental dam. I feel like it would be uncomfortable and ruin the mood."

Sexually experienced girls were aware of the availability of STI testing and some shared that they had been tested. One participant in the sexually experienced lesbian groups, aged 16, shared: "Well my girlfriend and I have both gotten tested and we're completely clean, so I suppose that's why neither of us use protection. It's not really necessary for us." Another girl of the same age and group shared, "We don't use them [barriers] because we have both been tested." Participants acknowledged the importance of STI testing and identified it as a strategy they had or were planning to use as a method to avoid use of barriers.

Using barriers

Participants, especially those who identifying as inexperienced, seemed open to using barriers in the future. A 14-year-old girl in the sexually inexperienced bisexual groups wrote, "I've literally never heard of dental dams but like I said before, I'm so paranoid about STDs that I'm fine with whatever prevention is possible." A 17-year-old girl in the inexperienced bisexual groups noted, "I think for the most part, it's a good idea to always use barriers because even if someone thinks they're clean, they might have an STD."

Although participants acknowledged that barriers were a good idea and should be used, their statements were mitigated by ideas about partners being "clean" or "STD free," suggesting that the use of barriers might be contingent on a partner's status. For example, an 18-year-old girl in the experienced bisexual groups volunteered that she did not believe that STIs were a big risk, but she "would probably be more likely to use a barrier if a partner told me they had tested positive for an STI." And a participant in the sexually inexperienced groups, aged 16, shared, "Barriers and condoms are good ideas for protection, but if we are both STD free then those things might not be necessary, but either way just to be safe."

Discussion

Despite the increased risk of STIs and adolescent pregnancy among LB girls [1–3], participants in this study had limited knowledge of their STI risk or interest in using barriers for protection. Some girls highlighted lack of access as key reasons why they did not use them. Consistent with other literature [32,33], participants also had limited knowledge of the risk for STI transmission during female-to-female sex and limited knowledge of female specific barriers. Prevention programs need to address these glaring knowledge gaps. As highlighted by Powers et al., LB girls feel excluded from the dominant heterosexually focused prevention messages in general sexual health education. This messaging needs to be re-considered to include education about STI transmission risk during female-to-female sex and strategies for using barriers effectively.

Similar to findings from research on heterosexual young people, ideas about STI prevention were entwined with pleasure and in some ways, relationship status [34]. The participants here endorsed a dominant script that barrier methods in particular impacted pleasure. The dynamic between pleasure and STI prevention is one that sexual health promotion interventions have struggled to effectively address [35]. LB specific messaging around barriers and pleasure is needed. For example, the outer rim of the female condom can stimulate the clitoris during sex or lubrication used on the underside of a dental dam can increase pleasure for the woman receiving oral sex. These and other "tips" will go a long way in encouraging girls to try barriers in their sexual relationships while encouraging conversation about healthy and pleasurable sex for young women [36].

The sex of their partner seemed to influence perceptions of risk and trust. Because there was no risk of pregnancy with female partners, these sexual relationships were generally conceptualized as less risky than sex with boys. Heterosexually dominant messaging, which positions young boys as risky and dangerous [37], likely reinforces these perceptions among girls. Additionally, our participants aligned with research on adult women in that they relied on assessments of their partners as trustworthy or "clean" to mitigate sexual health risks [38,39]. These assessments are informed by the sex of their partner which may point to the traditional focus on sexual health research and education on penile-vaginal sex to the exclusion of female-to-female sexual activities [36,40]. Dominant educational narratives of risk with female-to-male sex not only provides a lack of education about female-to-female safe-sex practices, but excludes risk with female partners from equal consideration in the emotional narrative our participants attached to the sex of their partners.

Unlike male-to-male STI transmission, which is well monitored, surveillance systems consider female-to-female transmission only when male-to-female transmission has been ruled out [10]. Consequently, surveillance systems may underestimate the prevalence of female-to-female transmission and, in turn, ensure that prevention efforts, which are guided by the reported surveillance data, may not adequately address female-to-female transmission.

Research with adults found that LB women perceive themselves at less risk of STI if they had sex with other women [25,41]. Similar to adults in Muzny et al.'s study, our participants reported a lack of attention toward female-to-female risk. They highlighted sexual education curriculum in high schools and preventative interventions outside of high schools, including those between patient and health care providers, as the source of this lack of awareness.

Changing narratives by including female-to-female practices and informing youth about accessing barriers will be critical to increase uptake of use of dental dams in female-to-female sex. Research with adult LB populations shows an aversion to using latex during sex with women [24]. Educating LB girls in school and at health clinics about dental dams before opinions are fully formed may offer an opportunity to increase barrier use. Latex barrier use, in general, should be promoted for those who use fingers, sexual toys, or other penetrating objects during vaginal or anal sex with female partners. The encouragement to adapt condoms for female-to-female sexual activity may offer additional benefits. For example, if LB girls were to find themselves in an unexpected sexual encounter with a male partner, they would be prepared by having condoms handy for sex with female and male partners.

Limitations

Our results confirm the findings of similar studies with adult bisexual and lesbian women and offers further insight about an overall lack of knowledge and awareness among younger populations, but limitations exist. Although the online medium allowed us to interact with a large number of girls across the U.S., the asynchronous format made asking follow-up questions a challenge. The medium did not always encourage cross talk and conversation that may have helped the girls elaborate on their thoughts. As with face-to-face focus groups, the digital format also meant conversations were sometimes shaped by those who were first to post. Others may have been influenced by the first posts or not have felt comfortable stating their thoughts. Unlike face-to-face focus groups, however, the written response format did encourage all participants to provide answers. Although the written interactions may have been shaped by those who posted first, the domination by those who initiate the conversation in face-to-face groups was not observed. Future research in this area should encourage synchronous participation in focus groups or use one-on-one phone interviews to continue to access the opinions of geographically variant participants.

In conclusion, addressing knowledge and access gaps is an important first step for improving sexual health. In addition, our findings support other research that describes limited personalization of risk of STIs among LB women [16,40]. Prevention priorities should focus on helping LB girls understand their risk of STI transmission in such relationships. Research has shown that condom use at sexual debut is a predictor of future condom use [39,42]. Thus, promoting the use of barrier methods seems important for the future sexual health of girls and women who have female-to-female sex. Tailoring messaging to the experiences of LB girls is critical for engaging and keeping their attention. Ensuring those messages are not lost or overwhelmed by heteronormative scripts that emphasize pregnancy prevention or penile-vaginal sex for STI transmission may be key to reducing sexual health disparities for those engaging in female-female sex, regardless how they may identify and whether they may have sex with men.

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References

[1] Charlton BM, Corliss HL, Missmer SA, et al. Reproductive health screening disparities and sexual orientation in a cohort study of U.S. adolescent and young adult females. J Adolesc Health 2011;49:505–10.

[2] Charlton BM, Corliss HL, Missmer SA, et al. Sexual orientation differences in teen pregnancy and hormonal contraceptive use: An examination across 2 generations. Am J Obstet Gynecol 2013;209:e1–8.

[3] Saewyc EM, Bearinger LH, Blum RW, Resnick MD. Sexual intercourse, abuse, and pregnancy among adolescent women: Does sexual orientation make a difference? Fam Plann Perspect 1999;31:127–31.

[4] Ybarra ML, Rosario M, Saewyc E, Goodenow C. Sexual behaviors and partner characteristics by sexual identity among adolescent girls. J Adolesc Health 2016;58:310–6.

[5] Goodenow C, Szalacha LA, Robin LE, Westheimer K. Dimensions of sexual orientation and HIV-related risk among adolescent females: Evidence from a statewide survey. Am J Public Health 2008;98:1051–8.

[6] Thoma BC, Huebner DM, Rullo JE. Unseen risks: HIV-related risk behaviors among ethnically diverse sexual minority adolescent females. AIDS Educ Prev 2013;25:535–41.

[7] Saewyc E. Adolescent pregnancy among lesbian, gay and bisexual teens. In: Cherry A, Dillon ME, editors. International handbook on adolescent pregnancy. New York: Springer Science+Business Media; 2014. p. 159–69.

[8] Marrazzo JM, Stine K, Koutsky LA. Genital human papillomavirus infection in women who have sex with women: A review. Am J Obstet Gynecol 2000;183:770–4.

[9] Ferenczy A, Bergeron C, Richart RM. Human papillomavirus DNA in fomites on objects used for the management of patients with genital human papillomavirus infections. Obstet Gynecol 1989;74:950–4.

[10] Marrazzo JM, Gorgos LM. Emerging sexual health issues among women who have sex with women. Curr Infect Dis Rep 2012;14:204–11.

[11] Bailey JV, Farquhar C, Owen C, et al. Sexually transmitted infections in women who have sex with women. Sex Transm Infect 2004;80:244–6.

[12] Kwakwa HA, Ghobrial MW. Female-to-female transmission of human immunodeficiency virus. Clin Infect Dis 2003;36:e40–1. doi:10.1086/345462.

[13] Chan SK, Thornton LR, Chronister KJ, et al. Likely female-to-female sexual transmission of HIV, Texas, 2012. MMWR 2014;63:209–12.

[14] Gorgos LM, Marrazzo JM. Sexually transmitted infections among women who have sex with women. Clin Infect Dis 2011;53(Suppl 3):S84–91. doi:10.1093/cid/cir697.

[15] Marrazzo JM. Barriers to infectious disease care among lesbians. Emerg Infect Dis 2004;10:1974–8. http://doi.org/10.3201/eid1011.040467.

[16] Kaestle CE, Waller MW. Bacterial STDs and perceived risk among sexual minority young adults. Perspect Sex Reprod Health 2011;43:158–63.

[17] Mullinax M, Schick V, Rosenberg J, et al. Screening for sexually transmitted infections (STIs) among a heterogeneous group of WSW(M). Int J Sexual health 2016;1:9–15.

[18] Hodson K, Meads C, Bewley S. Lesbian and bisexual women's likelihood of becoming pregnant: A systematic review and meta-analysis. BJOG 2017;124:393–402.

[19] Finer LB, Philbin JM. Trends in ages at key reproductive transitions in the United States, 1951–2010. Women's Health Issues 2014;24:e271–9.

[20] Muzny CA, Harbsion HS, Pembleton ES, et al. Misperceptions regarding protective barrier use for safer sex among African-American women who have sex with women. Sex Health 2013;10:138–41.

[21] Marrazzo JM, Coffey P, Bingham A. Sexual practices, risk perception and knowledge of sexually transmitted disease risk among lesbian and bisexual women. Perspect Sex Reprod Health 2005;37:6–12.

[22] Richters J, Clayton S. The practical and symbolic purpose of dental dams in lesbian safer sex promotion. Sex Health 2010;7:103–6.

[23] Richters J, Pretage G, Schneider K, Clayton S. Do women use dental dams? Safer sex practices of lesbians and other women who have sex with women. Sex Health 2010;7:165–9.

[24] Cox P, McNair R. Risk reduction as an accepted framework for safer sex promotion among women who have sex with women. Sex Health 2009;6:15–8. doi:10.1071/SH08022.

[25] Muzny C, Hanne S, Pembleton E, Austin E. Sexual behaviours, perceptions of sexually transmitted infection risk, and practice of safe sex among southern African American women who have sex with women. Sex Transm Dis 2013;40:395–400. doi:10.1097/OLQ.0b013e31828caf34.

[26] Prescott TL, Phillips G, DuBois LZ, et al. Reaching adolescent gay, bisexual, and queer men online: Development and refinement of a national recruitment strategy. J Med Internet Res 2016;18:e200. doi:10.2196/jmir.5602.

[27] Ybarra ML, Prescott TL, Espelage DL. Stepwise development a text messaging-based bullying prevention program for middle school students (BullyDown). JMIR mHealth uHealth 2016;4:e60. doi:10.2196/mhealth.4936.

[28] Ybarra ML, Prescott TL, Holtrop JS. Steps in tailoring a text messaging-based smoking cessation program for young adults. J Health Commun 2014;19:1393–407. doi:10.1080/10810730.2014.901441. PMID: 24766267.

[29] Zwaanswijk M, van Dulmen S. Advantages of asynchronous online focus groups and face-to-face focus groups as perceived by child, adolescent and adult participants: A survey study. BMC Res Notes 2014;7:756.

[30] Thorne S. Interpretive description: Qualitative research for applied practice. New York: Routledge; 2016.

[31] Thorne S, Reimer Kirkham S, O'Flynn-Magee K. The analytic challenge in interpretive description. Int J Qual Meth 2004;3:1–11.

[32] Power J, McNair R, Carr S. Absent sexual scripts: Lesbian and bisexual women's knowledge, attitudes, and action regarding safer sex and sexual health information. Cult Health Sex 2009;11:67–81.

[33] McCune K, Imborek K, Stockdale C. Sexual preventative health in U.S. sexual minority women: A review. Proc Obstet Gynecol 2017;7:1–16. Available at: http://ir.uiowa.edu/pog/vol7/iss1/1. Accessed December 15, 2017.

[34] Milhausen R, McKay A, Graham C, et al. Do associations between pleasure ratings and condom use during penile–vaginal intercourse vary by relationship type? A study of Canadian University Students. J Sex Res 2017;doi:10.1080/00224499.2017.1298713.

[35] Fine M, McClelland S. Sexuality education and desire: Still missing after all these years. Harv Educ Rev 2006;76:297–338.

[36] Fine F. Sexuality, schooling, and adolescent females: The missing discourse of desire. Harv Educ Rev 1988;58:29–54.

[37] Estes ML. If there's one benefit, you're not going to get pregnant": The sexual miseducation of gay, lesbian, and bisexual individuals. Sex Roles 2017. https://doi.org/10.1007/s11199-017-0749-8.

[38] Stevens PE, Hall JM. Sexuality and safer sex: The issues for lesbians and bisexual women. J Obstet Gynecol Neonatal Nurs 2001;30:439–47.

[39] Dolan KA, Davis PW. Nuances and shifts in lesbian women's constructions of STI and HIV vulnerability. Soc Sci Med 2003;57:25–38.

[40] Power J, McNair R, Carr S. Absent sexual scripts: Lesbian and bisexual women's knowledge, attitudes and action regarding safer sex and sexual health information. Cult Health Sex 2009;11:67–81.

[41] Kaestle CE, Waller M. Bacterial STDs and perceived risk among sexual minority young adults. Perspect Sex Reprod Health 2011;43:158–63. doi:10.1363/4315811.

[42] Shafii T, Stovel K, Holmes K. Association between condom use at sexual debut and subsequent sexual trajectories: A longitudinal study using biomarkers. Am J Public Health 2007;97:1090–5. doi:10.2105/AJPH.2005.068437.