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Sexual Health Information Sources, Needs, and Preferences of Young Adult Sexual Minority Cisgender Women and Non-Binary Individuals Assigned Female at Birth

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Abstract

Background: Young adult sexual minority women (SMW) have unique sexual health needs and higher rates of some poor sexual health outcomes compared to their heterosexual peers. Unequal access to relevant sexual health information may contribute to sexual orientation disparities in sexual health among women, but research on sexual health communication among SMW is sparse.

Methods: In-depth interviews conducted in 2016–2017 investigated sexual health communication in a sample of 29 racially/ethnically diverse cisgender women and non-binary individuals assigned female at birth who were between 19 and 36 years of age and identified as

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Ethical approval: This research involved human participants, all of whom provided written informed consent. The Office of Human Research Administration at Harvard Longwood Medical Area approved all research activities. Study procedures complied with the principles of the Declaration of Helsinki.

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a sexual minority. Data were analyzed using a thematic analysis approach that involved inductive and deductive coding to identify themes.

Results: Three broad themes were identified: 1) sources of sexual health information; 2) sexual health information needs; and 3) preferences for sexual health information delivery. Participants discussed and critiqued the Internet, other mass media, health care providers, school-based sex education, family, and peers/partners as sources of sexual health information. Participants expressed a need for customized, non-heteronormative information pertaining to sexually transmitted infection risk and prevention. They preferred receiving information from health care providers, the Internet, and other mass media, and some also suggested school-based sex education and peer education as methods for delivering information.

Conclusions: Participants expressed clear desires for relevant, high-quality sexual health information delivered through a variety of channels, especially the Internet, other mass media, and health care providers.

Policy Implications: Findings call for policies that improve provision of sexual health information through health care providers, online resources, and school-based sex education.

Keywords

Health communication; Communication inequalities; LGBTQ young adults; Sex education; Qualitative research

Introduction

Sexual health, including prevention of sexually transmitted infections (STIs) and cervical cancer, is an important yet understudied aspect of the health and well-being of young adult sexual minority women (SMW; e.g., lesbian and bisexual women; women with same-sex sexual partners) (McNair, 2009). Relative to their non-sexual minority counterparts (e.g., heterosexual women; women with only male sexual partners), some groups of SMW are less likely to receive sexual health services (e.g., human papillomavirus [HPV] vaccines, Pap tests, STI tests) (Agenor, Krieger, Austin, Haneuse, & Gottlieb, 2014; Agenor, Muzny, Schick, Austin, & Potter, 2017; Agenor et al., 2015; Charlton et al., 2011) or engage in safer sex behaviors (e.g., using a condom or other barrier method) (Brittain & Dinger, 2015; Ybarra, Rosario, Saewyc, & Goodenow, 2016) and may be at higher risk of poor sexual health outcomes (e.g., some STIs, teen pregnancy) (Charlton et al., 2011; Charlton et al., 2013; Everett, 2013; Goldberg, Reese, & Halpern, 2016). Prior research suggests that sexual health and health care disparities between SMW and non-SMW are due to a range of structural factors, including stigma and discrimination in the health care system in particular and society in general (Kuyper & Vanwesenbeeck, 2011; Mink, Lindley, & Weinstein, 2014) as well as financial barriers to health care (Dahlhamer, Galinsky, Joestl, & Ward, 2016; Skopec & Long, 2015). Another structural factor that may underlie sexual orientation disparities in sexual health among women is limited access to high-quality sexual health information customized to the specific and unique needs and concerns of SMW (Flanders, Pragg, Dobinson, & Logie, 2017; Meadows, 2018; Solazzo, Tabaac, Agenor, Austin, & Charlton, 2019).

The Structural Influence Model of Health Communication (Viswanath, Ramanadhan, & Kontos, 2007) provides a theoretical understanding of how differences in access to sexual health information may contribute to sexual health disparities between SMW and non-SMW. This model posits that one mechanism by which social determinants of health result in health disparities is through *communication inequalities*, defined as “the differences among social groups in their ability to generate, disseminate, and use information at the macro level and to access, process, and act on information at the individual level” (Viswanath, 2006, p. 222). Put another way, social factors structure unequal communication experiences between particular groups. Communication may include, for example, actively looking for health information (i.e., information seeking) and being exposed to health information through routine media use (i.e., information scanning) (E. K. Ruppel, 2016). Those communication experiences in turn determine between-group differences in health-related outcomes, such as knowledge about a health issue, engagement in health behaviors, and disease incidence (Viswanath et al., 2007). In the case of SMW, the underlying structural disadvantages associated with bias, discrimination, and stigma related to their multiple social identities, including sexual orientation, gender, race/ethnicity, and socioeconomic position, may limit access to communication of sexual health information and thereby impact sexual health-related outcomes (Viswanath et al., 2007).

There is emerging evidence supporting the presence of communication inequalities in the context of young SMW and sexual health. For example, adolescent and young adult SMW have difficulty obtaining information—from health care providers (Arbeit, Fisher, Macapagal, & Mustanski, 2016; Barefoot, Warren, & Smalley, 2017; Klein et al., 2018; Wingo, Ingraham, & Roberts, 2018), schools (Arbeit et al., 2016; Bodnar & Tornello, 2019; Doull et al., 2018; Estes, 2017; Gowen & Wings-Yanez, 2014), and parents (Estes, 2017; Newcomb, Feinstein, Matson, Macapagal, & Mustanski, 2018)—that is accurate, relevant to their sexual behaviors, and respectful of their sexual orientations and gender identities. Online sexual health information resources may be more accessible and pertinent to SMW (Flanders et al., 2017; Manduley, Mertens, Plante, & Sultana, 2018; Mitchell, Ybarra, Korchmaros, & Kosciw, 2014; Polonijo & Hollister, 2011; E. H. Ruppel, Karpman, Delk, & Merryman, 2017; Simon & Daneback, 2013) but of dubious quality (Faulkner & Lannutti, 2016; Lindley, Friedman, & Struble, 2012). Indeed, studies have found that SMW lack accurate information about and knowledge of female-to-female STI transmission, including sexual risk behaviors and safer sex practices (Agenor et al., 2019; Doull et al., 2018; Kaestle & Waller, 2011; Marrazzo, Coffey, & Bingham, 2005; Muzny, Harbison, Pembleton, & Austin, 2013; Power, McNair, & Carr, 2009; Santos, Williams, Rodriguez, & Ornelas, 2017).

Prior research examining access to sexual health information among SMW has made meaningful contributions but also has notable limitations. First, while studies have begun to document SMW’s sexual health knowledge gaps, they have not thoroughly examined their experiences and perspectives on acquiring sexual health information from various sources or assessed their sexual health communication preferences. In particular, knowing how SMW prefer to obtain sexual health information may be important for designing customized health promotion interventions for this group (Kreuter & Wray, 2003). Second, studies about sources of sexual health information among SMW have rarely focused on

young adults specifically. Because young adulthood is an important developmental stage for establishing health-promoting habits, transitioning from pediatric to adult medical care, and forming a sexual orientation identity (Institute of Medicine and National Research Council, 2014; Morgan, 2015), and because young adults are at relatively high risk for STIs (Institute of Medicine and National Research Council, 2014), understanding sexual health communication issues in this particular age group is critical. Third, existing research has generally relied on predominantly White samples (Arbeit et al., 2016; Kaestle & Waller, 2011; Marrazzo et al., 2005), all racial/ethnic minority samples (Muzny et al., 2013; Santos et al., 2017), or samples drawn from outside the United States (Power et al., 2009), and has therefore not drawn comparisons between racial/ethnic groups in a U.S. context. To address these gaps in the scientific literature, we conducted a qualitative study to investigate sexual health information sources, needs, and preferences in a racially/ethnically diverse sample of young adult SMW in a major U.S. city. Findings from this study will help inform future research and health promotion interventions that facilitate access to relevant and accurate sexual health information customized to the specific needs of young adult SMW, with the goal of reducing communication inequalities and improving sexual health in this understudied and underserved population.

Methods

Participant Recruitment and Sampling

We used a purposive sampling strategy to recruit study participants (N=29) according to the eligibility criteria: assigned female sex at birth (AFAB); identifies as a woman; identifies as lesbian, bisexual, or queer; resides in Boston, Massachusetts; and ages 18 to 36 years. This age range captured participants who had ever been eligible for the HPV vaccine, which was the focus of the parent study from which this study was drawn. (See Agenor et al. (2019) and Jahn, Bishop, Tan, and Agenor (2019) for study information and findings.) To recruit participants, we posted Craigslist ads and contacted email listservs, Facebook groups, and community-based, health care, and student organizations that serve local SMW. We also conducted snowball sampling through peer social network referral (Arcury & Quandt, 1999; Marshall, 1996; Patton, 2002). We used maximum-variation sampling (Marshall, 1996; Patton, 2002) to enroll participants who were diverse in terms of age and sexual orientation identity. We used quota sampling (Marshall, 1996; Patton, 2002) to achieve approximately equal numbers of participants identifying as White (n=14) and as people of color (n=15; including but not limited to Black, Latinx, Asian, and multiracial individuals), which allowed for comparisons between these racial/ethnic groups.

Data Collection

Trained interviewers conducted in-depth, semi-structured, English-language interviews with each participant from November 2016 to November 2017 in Boston, Massachusetts. Interviews took 40–80 minutes (mean: 60 minutes), were conducted face-to-face in a private room, were audio recorded with participants' written informed consent, and were completed using a semi-structured interview guide. The interview guide, which was grounded in the research literature and reviewed by experts in the sexual health of SMW (King & Horrocks, 2010), comprised open-ended questions and probes related to: sexual health care experiences

and concerns; STI beliefs and risk perceptions; sexual health information acquisition; and recommendations for communicating sexual health information to SMW. Example questions included “*Tell me about the last time you saw a healthcare provider about your own sexual or reproductive health. What type of health information and resources did you receive during this visit?*” and “*What type of health information do you think would be most helpful in terms of preventing HPV infection [probe: and in terms of safer sex practices] among lesbian, bisexual, and queer women? How would you like to receive this information?*” At the end of the interview, participants completed a short demographic survey (see Table 1 for characteristics measured). Each participant received a \$25 gift card for their time. The Office of Human Research Administration at Harvard Longwood Medical Area approved all research activities.

Data Analysis

Interviews were transcribed verbatim and entered into Dedoose (Version 8.1.8; Dedoose, 2018) for thematic analysis (Braun & Clarke, 2006). The first author began the analysis with data immersion—closely reading each transcript and recording general impressions in written memos. She then developed and refined the codebook. The initial codebook included deductive codes (based on the research question and literature) and inductive codes (based on the first three transcripts and general observations from the data) (Fereday & Muir-Cochrane, 2006). The first author organized and refined the codes through discussion with the research team and application to additional transcripts and then applied the final codebook to all transcripts. In the next step of analysis, the first author extracted coded text pertaining to sexual health information and entered it into a database arranged as a conceptually clustered matrix (Miles, Huberman, & Saldana, 2014), which she used to identify themes and examine patterns based on participants’ sexual orientation identity, race/ethnicity, and age. The major themes into which codes were classified were: 1) *sources of sexual health information*, 2) *sexual health information needs*, and 3) *preferences for sexual health information delivery*. The research team discussed and provided feedback on study findings throughout the data analysis and interpretation process.

Reflexivity and Positionality

Critical reflection on the research process and researchers’ roles in it, including researcher positionality in relation to the population being studied, is an important task of rigorous qualitative research (Bourke, 2014; Corlett & Mavin, 2018; Levy, 2013). In this study, the first author is a White, heterosexual, cisgender woman in her early thirties. Her academic training is in public health and health communication. She has completed coursework and has prior research experience in lesbian, gay, bisexual, transgender, and queer (LGBTQ) health. The research team comprised members who are sexual minorities, people of color, and experts in health communication, sexual health, social epidemiology, and research with LGBTQ young adults and LGBTQ people of color. Thus, the research team overall includes both insiders and outsiders of the multiple social identities under study (i.e., racially/ethnically diverse young adult SMW).

Results

Study Population

Participant characteristics are provided in Table 1. Participants ranged in age from 19 to 36 years, with most (n=20) being age 26 years or younger. All participants were AFAB and identified as cisgender sexual minority women upon study entry. However, 4 identified as gender non-binary at the interview, reflecting the fluid nature of gender identity depending on time and context (Diamond & Butterworth, 2008; Matsuno & Budge, 2017). We opted to include these participants and hereafter refer to our study population using the more inclusive phrasing “AFAB sexual minorities” instead of “SMW.”

Most participants (n=23) identified their sexual orientation as queer; the other most commonly reported sexual orientation identities were bisexual (n=9), gay (n=7), and lesbian (n=6). About half (n=14) identified as White and about half (n=15) as people of color, including seven Asian/Pacific Islander, five Black, one Latina/Hispanic, and two biracial participants. (Both biracial participants identified as Asian/Pacific Islander and White). All participants who shared their education level (n=24) had at least some college education. The majority (n=18) reported a private doctor’s office as their usual source of sexual health care.

Sources of Sexual Health Information

Participants described a wide range of sexual health information sources, including mass media, health care providers, school-based sex education, family, peers, and partners, with variable quality and relevance to their lives as AFAB sexual minorities. They discussed instances of actively seeking out and passively being exposed to information from these sources but also noted important ways in which these sources had not met their needs.

Mass media.—Many participants pointed to the Internet as their main source for sexual health information, stating that they conducted web searches, sought out trusted institutions (e.g., Centers for Disease Control and Prevention [CDC]), or, less commonly, followed websites and social media accounts that sometimes shared such sexual health information (e.g., Planned Parenthood). Internet resources were generally viewed positively. However, a few participants noted that the quality of online information varied. For example, this 26-year-old White bisexual/queer cisgender woman (ID 9) stated:

It’s good that there’s lots of information out there. I think it’s often hard to know how verifiable it is... I’ve definitely gotten in loops of message forums about people sharing experiences or information that may or may not be true.

Participants also mentioned television shows and ads as sources of information about HPV specifically. For example, one 32-year-old Black bisexual/queer cisgender woman (ID 31) said, “There’s been this new campaign flooding my Hulu. It was effective, let me tell you! It was a terrible commercial, but now I’m informed that men and women should get the HPV vaccine.”

Health care providers.—Participants reported varied experiences in receiving sexual health information from their health care providers. Many described provider visits in which sexual health was not discussed in detail, even when the reason for the visit was a Pap test or routine STI screening. For example, a 21-year-old White bisexual cisgender woman (ID 22) said, “I went for my annual and my gynecologist didn’t even ask me about my sex life, period. She never asked about my sexual orientation, or how many partners I had, if I was seeing anyone. Nothing. Zero questions.”

Many described sexual health conversations with providers that were not sensitive to their needs as AFAB sexual minorities. These conversations typically assumed sexual partners of a different sex/gender, emphasized pregnancy or contraception over other sexual health concerns, or implied that AFAB sexual minorities were not at risk for STIs. For example, one 24-year-old White queer cisgender woman (ID 6) recounted a provider visit in which the sexual health conversation ended when she said that she was engaging in sex with women: “She was like ‘OK, as long as you’re not having penetrative sex, then keep on doing what you’re doing.’” This participant recalled feeling “very angry” about not receiving any sexual health information from her provider after disclosing her sexual orientation.

Some participants described how negative interactions with providers hindered communication about sexual health topics. These interactions were usually portrayed as having been judgmental, rude, ignorant, or biased in response to participants’ sexual behaviors or aspects of their identity, like sexual orientation, gender, age, and/or race/ethnicity. For example, one 21-year-old White queer/pansexual cisgender woman (ID 2) said that after she disclosed her sexual orientation identity, her provider told her, “You don’t look gay.” This participant went on to explain, “While I would have liked to talk about my health and risks of being sexually active at that time, I didn’t want to have that conversation with that person after that comment.” Another participant, an Asian queer cisgender woman (age not given; ID 24) who had worked as a sexual health educator, said this about contraception discussions with her providers: “I always notice their surprise when I have questions or when I correct them or question their judgments. And it’s like kind of a nasty shock, like oh they’re not expecting that and it’s not welcome for me to question their authority.” She suspected that this was related to stereotypes about her race/ethnicity, gender, or a combination of the two.

In contrast, some participants noted that their providers spoke respectfully with them about their sexual relationships and sexual practices and offered customized, practical sexual health information. For example, one 24-year-old White queer/lesbian cisgender woman (ID 25) stated:

I told her about this change that had happened, and what I was doing sexually. And she just took it in stride completely; her face didn’t show anything. Like ‘OK now [you’re dating] women. OK so just so you know, there are these risks associated with oral sex between women.’ She just right away was able to switch gears completely. It was very cool.

School-based sex education.—Many participants, especially younger participants, brought up their middle school or high school sex education and described it as having inadequately covered the sexual health information they needed. This was typically because of an emphasis on abstinence, neglect of sexual minority sexual health concerns, or general poor quality. As one 23-year-old White gay cisgender woman (ID 21) described, “in terms of factually getting information, I felt like there was nothing here for me...there was no mention of what to do if you’re not cisgender and heterosexual.”

Several participants said that they had encountered sex education in college, through classes, campus health promotion, or extra-curricular activities. Most described this positively, noting its relevance to a range of sexual orientations and gender identities. For example, one 26-year-old White bisexual/queer cisgender woman (ID 9) remembered the health promotion materials available on her college campus:

RAs [resident assistants] would have them on their doors and it would be condoms and dental dams and lube and all kinds of different things, so I liked the inclusiveness of that, and the information that was available at student health services was inclusive of different sexualities and genders.

Family.—When asked about the sexual health information that they received from their parents or other family members, participants provided a wide range of responses. Many participants, especially those identifying as Asian and/or White, described resistance on the part of their parents and/or themselves to discuss sexual health. For example, a 21-year-old Asian pansexual/bisexual non-binary participant (ID 12) said of their family: “We don’t really talk about sexual or reproductive health. I don’t recall having ‘the talk’ with my parents.” As another example, a 21-year-old White bisexual cisgender woman (ID 22) described that when she tried to initiate a discussion about a sexual health topic, her mother was not receptive:

So when I told her I wanted to get the IUD [intrauterine device], she said ‘you’re not having sex are you?’ and I was like ‘no I’m just getting this for fun!’ I think... because I was not in a relationship at the time, she was repressing the fact that ‘oh my daughter is sleeping around’ or something. It makes it more difficult to talk to her about things like that.

On the other hand, several participants, most of whom identified as White, Black, or Latina, described instances of getting sexual health information from their family members. These family members included mothers, fathers, and sisters. Some said that their parents encouraged them to seek out Pap tests and other sexual health services, as in this example from a 24-year-old White queer/lesbian cisgender woman (ID 25) about seeing a gynecologist: “I think my mom routinely sees someone similar, and she felt like ‘OK you’re getting to this age where even if you’re not having sex, you should just be thinking about that part of your health.’” Among participants who reported receiving sexual health information from their families, only a few mentioned obtaining information specific to AFAB sexual minorities. For example, only two participants said that they had spoken with a family member about specific barrier methods to prevent female-to-female STI transmission, including dental dams, plastic wrap, and gloves.

Peers and partners.—Many participants reported speaking comfortably about sexual health with friends, describing peer discussions about contraception and about STI prevention, testing, and experiences. In contrast, a few participants observed that conversations among sexual minority friends tend to downplay STI risk and normalize not using dental dams. One 23-year-old biracial (Asian/White) queer cisgender woman (ID 30) said that she “definitely” has talked about STIs with friends, but “that is mostly a conversation with my friends who identify as straight...I don’t think I’ve ever had this kind of conversation with queer friends.”

Most participants reported discussing STIs with their sexual partners, typically before engaging in sex. Participants usually described these conversations as brief and focused on STI testing and infection status, but a few pointed to the conversations as opportunities for exchanging STI prevention information. One 22-year-old Asian lesbian cisgender woman (ID 17) described how she conversed with a new partner:

There was like a lot of education happening in that conversation about protection and things, and I asked her ‘what do you think to worry about and what do you think our options are?’ And she had no idea so I kind of walked through it. And then I was like, ‘So we’re not trying to prevent pregnancy, clearly, but like if we’re worried about STIs and things like that then we should think about protection.’

Sexual Health Information Needs

Participants identified gaps in their own sexual health knowledge and in the sexual health information to which they were exposed. They expressed needs for information about risks and prevention of STIs and, more broadly, information without heteronormative assumptions about sexual orientation, gender, and sexual behaviors.

STI risk and prevention information.—Many participants recognized that they had limited knowledge about STI risk and prevention. As one 23-year-old White gay cisgender woman (ID 21) stated, “I don’t really know what lesbian preventing STIs looks like.” There was a common belief that AFAB sexual minorities, in particular those identifying as gay or lesbian, were at lower risk for STIs, as described by this 33-year-old Black lesbian non-binary participant (ID 14): “I’m going to be honest, in terms of STIs, I just feel like... I’m a lesbian, I’m probably not going to...be as exposed, as heterosexual, or bisexual folks.” Participants explained that there was generally a lack of STI information customized to their needs as AFAB sexual minorities. They called for information about safer sex practices and specific ways in which STIs can be transmitted among AFAB sexual minorities. For example, one 22-year-old White gay non-binary participant (ID 26) requested “information about how you can contract STIs and HPV in different ways,” elaborating, “So like can you get it from using sex toys? Can you get it if someone is digitally penetrating you? If you’re digitally penetrating someone else? Can you get it from oral sex?”

Non-heteronormative sexual health information.—Participants identified the heteronormative bias of available sexual health information. For example, one 34-year-old Asian queer cisgender woman (ID 20) said:

As a woman in this society...everyone is worried that you are going to get pregnant or [get] some type of STI from a man. And we're just going to beat this into you, that you need to have a condom happening somewhere. And then I started dating women...and nobody was talking about anything like that.

Several described a need for sexual health information that addresses a diverse range of sexual activities and sexual partnerships with both AFAB and assigned-male-at-birth sexual partners, and that does not assume gender or sex of sexual partners and types of sexual behaviors. For example, one 22-year-old White gay non-binary participant (ID 26) requested "other kinds of information that doesn't just assume you're having a single kind of sex with a single kind of person and actually go into what different kinds of things could look like." They elaborated that such information "doesn't only assume you're only having sex with one person, and just uses language that is more neutral in that regard and in terms of gender and sexuality." Another participant, a 26-year-old White queer/lesbian cisgender woman (ID 3), described a need for information that is "less geared to identity or the gender of partners, and more geared to the [sexual] acts."

Preferences for Sexual Health Information Delivery

Participants shared their opinions on methods of delivery for sexual health information and strategies for reaching AFAB sexual minorities with this information. They emphasized the Internet, other mass media resources, and health care providers but also mentioned school-based sex education and peers, noting particular strategies for improving these potential sources.

Mass media.—Many participants believed that Internet-based resources would be useful for sharing sexual health information with AFAB sexual minorities. One 31-year-old White lesbian cisgender woman (ID 4) conveyed what she saw as a main benefit of this approach, saying, "It protects your privacy when you're still figuring out your sexual orientation and allows you to explore that information on your own in a good setting."

Participants expressed support for the dissemination of sexual health information through media campaigns, including shareable content posted on relevant social media sites; pamphlets, posters, and ads in places such as health clinics and public transportation; and television commercials. They called for these to use imagery and language either customized specifically to AFAB sexual minorities or inclusive of a diverse range of sexual orientation and gender identities. One 32-year-old Black bisexual/queer cisgender woman (ID 31) mused:

That would be really amazing if there were advertisements that were directed... explicitly towards queer folks in general. What would that even look like?...It's not just about people who identify as queer, it's about anyone who's having sex. And that could be sex with any kinds of partners from any kinds of backgrounds, gender and otherwise. So you would be addressing a larger population.

Health care providers.—Most participants believed that health care providers should be a key source of sexual health information. As one 22-year-old Asian lesbian cisgender

woman (ID 17) described, STI prevention should be “incorporated into any generic check-up because it’s a whole part of your body that’s very important and needs to be worried about even if you don’t want to talk about it.” Participants stressed that providers should display sensitivity toward their patients’ sexual behaviors, sexual orientations, and gender identities. Some participants, including a 27-year-old Black queer cisgender woman (ID 23), specified that they would want to receive sexual health information from providers who were specifically trained to work with AFAB sexual minority patients:

I hope that they’re trained in speaking to lesbian, bisexual, queer, trans women and just know...what sorts of things could come up in a conversation about sex, so that they’re not surprised and not confused, and the patient doesn’t feel like they’re in a position where they have to then explain to the provider what their concern is.

Along these lines, participants expressed demographic preferences for their providers. Several preferred a woman, a few participants of color preferred a woman of color, and some preferred providers who identified as a sexual or gender minority or served these groups through their work or advocacy. Participants noted that such providers might be more relatable or better understand their sexual health needs.

School-based sex education.—Some participants, especially those who identified as bisexual or queer, thought that schools could be a good place to provide sexual health information relevant to AFAB sexual minorities. One Asian queer cisgender woman (age not given; ID 24) shared:

I feel like that knowledge is not out there, they’re not teaching how to have safe sex with a strap-on 101 in sex ed. So making sex ed less heteronormative and... talking about things like gloves and dental dams in middle and high schools would probably be huge to making those things not so obsolete and not just things like weird party favors available at the health center that you’re never going to use because you don’t know anybody else who uses them.

Participants proposed ideas for supplementing existing sexual health curricula in schools, including by having non-profit organizations visit schools to teach additional material and by having sex education taught in community centers or other after-school destinations.

Peers.—A few participants stated that they would like to receive sexual health information from similarly identified peers trained in sexual health. A 21-year-old Asian pansexual/bisexual non-binary participant (ID 12) explained that sexual or gender minority young adults may place particular importance upon the social identities of sexual health educators:

[Getting information from a queer woman] just feels more natural because a lot of the time, and maybe it’s just my experience with my queer friends, but they are really angsty about people telling them what to do because they are finally out and they can finally do whatever the hell they want...And I feel like having some White, old White woman or old White man talk to them would bring out the angst in them rather than actually get some message across.

Discussion

In this study, AFAB sexual minority participants described and critiqued numerous sources of sexual health information. They reported acquiring sexual health information primarily from the Internet; receiving some information from other mass media; and having mixed experiences with health care providers, schools, family, peers, and partners as sources of sexual health information. Participants also discussed their needs and preferences for obtaining sexual health information. In terms of informational content, they expressed two main needs: STI risk and prevention information specific to sex between AFAB sexual minorities and non-heteronormative sexual health information. In terms of informational delivery, participants' preferences largely mirrored the information sources they reported already using but with areas for improvement. They wanted to continue receiving sexual health information from the Internet but also wanted health care providers to be a key source of information. They also saw opportunities to reach SMW through school-based sex education, mass media campaigns, and peer educators.

That the Internet emerged as a typical and preferred information source is consistent with previous research among young adults and SMW. Other research has documented SMW's use of the Internet to access sexual and reproductive health information, describing online resources, in part, as a supplement to the inadequate, heteronormative information offered elsewhere (Flanders et al., 2017; Polonijo & Hollister, 2011; E. H. Ruppel et al., 2017). On the other hand, the finding that participants wished to receive information from health care providers adds a new facet to research on patient-provider communication in this population. Existing research has focused on challenges in clinical interactions, such as issues disclosing one's sexual orientation or difficulty obtaining non-heteronormative, customized information (Arbeit et al., 2016; Baldwin et al., 2017; Barefoot et al., 2017; Klein et al., 2018; Rossman, Salamanca, & Macapagal, 2017; Wingo et al., 2018). Indeed, Healthy People 2020 points to the scarcity of health care providers skilled in sexual and gender minority issues as a key social determinant of health among lesbian, gay, bisexual, and transgender individuals (U.S. Department of Health and Human Services, n.d.). Participants identified these concerns but also indicated a clear desire to obtain sexual health information from health care providers, if those providers are sensitive to and knowledgeable about their specific sexual health needs.

Descriptions of middle and high school-based sex education in this study align with related research among sexual minority individuals (J. M. Currin, Hubach, & Croff, 2019; Joseph M. Currin et al., 2017; Gowen & Wings-Yanez, 2014; Hobaica & Kwon, 2017; Kosciw, Greytak, Zongrone, Clark, & Truong, 2018; Rose & Friedman, 2017) in which respondents have generally reported a heteronormative bias in their school-based sex education or a lack of sex education entirely. For example, a large national survey of middle and high school students found that only 6.7% had received LGBTQ-inclusive sex education at school, and 22.4% had received no school-based sex education (Kosciw et al., 2018). This is consistent with recent reporting from the Sexuality Information and Education Council of the United States (2020), which found that just 28 states require schools to provide sex education, 11 states require sex education to be inclusive of minority sexual orientation identities, and 9 states require sex education to avoid mentioning LGBTQ identities or

present them negatively. Our finding that college-level sex education was described more positively is encouraging but perhaps surprising given reports of continued marginalization of sexual minority students on college campuses (Evans, Nagoshi, Nagoshi, Wheeler, & Henderson, 2017; Garvey, Taylor, & Rankin, 2014; Pryor, 2017) and the failure to even measure provision of LGBTQ-focused sex education in the only recent, national survey we could identify related to sexual health promotion at U.S. colleges and universities (Habel et al., 2018). It is also important to note that while our sample was highly educated, many AFAB sexual minorities may not have access to college and the sexual health information resources it affords.

Past research on SMW's sexual health communication with families is extremely limited but generally aligns with and gives context to our findings. Through interviews with a small sample of sexual minority young men and women in the Southeast United States, Estes (2017) found that participants had experienced little discussion about sex at home, with the conversations that did occur focusing on heterosexual concerns. Participants in Estes' study described their parents as uncomfortable talking about sex and lacking knowledge about lesbian, gay, and bisexual sexual health. Similarly, Newcomb et al.'s (2018) focus group study with the parents of lesbian, gay, bisexual, and transgender adolescents found that many parents cited discomfort and poor understanding of non-heterosexual sex as barriers to discussing sexual health with their children; the latter was especially common among parents of lesbian and bisexual cisgender girls. These findings suggest that parents' lack of comfort and knowledge may have contributed to participants in our study having received scant sexual minority-specific information from their parents.

Participants' stated need for non-heteronormative sexual health information, especially about STI risk and prevention in the context of AFAB-to-AFAB sex, supports others' findings that SMW do not know enough about their risk for STIs and how to practice safer sex with women (Doull et al., 2018; Kaestle & Waller, 2011; MARRAZZO et al., 2005; Muzny et al., 2013; Power et al., 2009; Santos et al., 2017). For example, in Muzny et al.'s (2013) focus group study with adult African American SMW in the Southern United States, many participants believed there was very little risk of transmitting STIs between women, did not know how to get and/or use preventative barrier methods, and expressed a need for reliable sexual health information. Similarly, through qualitative interviews with adult lesbian and bisexual women living in Australia, Power et al. (2009) found a common perception that sex between women is safe from STI risk, especially if neither woman has ever had a male partner. Participants in that study attributed these ideas in part to the absence of sexual minority women, and the emphasis on condoms and penetrative sex, in typical sexual health information.

The present study had some limitations. First, only one person, the first author, developed the initial codes and themes, which may have introduced bias. We took multiple steps to mitigate potential bias, including organizing the data in a matrix display, which systematized the search for patterns and negative evidence (Miles et al., 2014); acknowledging points of disagreement throughout the description of themes; iteratively discussing and refining the codebook and thematic interpretations with other members of the research team, including those who had conducted the interviews, throughout the analysis; and incorporating

academically and sociodemographically diverse perspectives on the research team, including experts in the study topic and members of the study population. A second limitation is that all participants were located in a single U.S. city, all who reported education had at least some college, and most had private health insurance coverage. Thus, findings may not apply to young adult AFAB sexual minorities in other locations, such as rural areas, with different communication environments for sexual health information and different levels of support for sexual minority populations. Individuals with less education or with public or no health insurance may have different perspectives and encounter additional or specific barriers with regard to sexual health information. A third limitation is that because of sampling limitations (namely, small numbers of participants from particular social identity groups), we could make only tentative comparisons among participants in relation to race/ethnicity, sexual orientation identity, and age, and no comparisons by gender identity. More thorough examination of these dimensions may be important for understanding the sexual health information experiences, needs, and preferences of socially and economically diverse AFAB sexual minorities, including those who are multiply marginalized.

This study's findings have implications for public health research, practice, and policy. Future qualitative research should explore sexual health information issues among groups of AFAB sexual minorities not widely represented in this study, such as those with lower education levels, those without private health insurance, and those living in other geographic areas. This work should use sampling designs that allow for robust and detailed subgroup comparisons. Future qualitative research should also explore underlying reasons for the sexual health information access challenges identified in this study; for example, studies could investigate why health care providers do not always provide customized sexual health information to AFAB sexual minority patients. Findings could also be triangulated with other qualitative (e.g., sexual health information document review) and quantitative (e.g., survey) research that documents the specific types and quality of sexual health information acquired from various sources and associations with sexual health behaviors and outcomes among diverse groups of AFAB sexual minorities. Evidence from such research would help identify the best channels for sharing customized sexual health information and areas for improving sexual health communication among young adult AFAB sexual minorities.

In terms of practice and policy, our findings call for improved availability of non-heteronormative sexual health information customized to the specific needs of young adult AFAB sexual minorities, especially related to STI risk and prevention in the context of AFAB-to-AFAB sex. An important priority should be to improve health care providers' ability to share such information by bolstering their content knowledge, culturally competent communication skills, and institutional support. Existing resources at the level of undergraduate medical education (e.g., Advisory Committee on Sexual Orientation, 2014), clinical practice (e.g., Cook, Gunter, & Lopez, 2017; Daniel & Butkus, 2015; Knight & Jarrett, 2017; National LGBT Health Education Center, 2019), and institutional policy (e.g., DeMeester, Lopez, Moore, Cook, & Chin, 2016; Eckstrand, Lunn, & Yehia, 2017; Human Rights Campaign Foundation, 2019; Wilkerson, Rybicki, Barber, & Smolenski, 2011) provide guidelines for medical educators, clinicians, and administrators undertaking this work. Resources related to shared decision-making and patient-centered care may be particularly helpful for improving clinicians' skills in communicating with AFAB sexual

minorities and understanding their individual needs and preferences (Barry & Edgman-Levitan, 2012; The Joint Commission, 2011); however, guidance specific to racially/ethnically diverse sexual minority patients is sparse and needs further development (Baig et al., 2016; Peek et al., 2016; Tan et al., 2016). Policies that encourage adoption and continued development of these guidelines should be prioritized.

Other practices supported by this study's findings include offering internet-based resources, public communication campaigns, school-based sex education, and peer education, provided that these efforts are inclusive of a range of social identities and sexual behaviors. Delivering information through trustworthy online resources and social media accounts would align with how individuals already obtain information and may have large potential reach. A recent review by Wadham et al. (2019) showed the wide range of web-based and other new digital media interventions that already have been developed to promote sexual health among young people, with mixed effectiveness. Approaches included online training modules, instant messaging and text messaging, social media campaigns, interactive websites, and entertainment-education videos streamed online. The authors identified strategies that seemed to be beneficial for program success, including drawing from existing programs or theory, customizing content for specific audiences, and working with communities to develop programs. Although several online programs have been developed to promote sexual health among sexual minority young men (e.g., Lelutiu-Weinberger et al., 2015; Pedrana et al., 2013), we are aware of just one with content for sexual minority young women: Mustanski et al.'s (2015) Queer Sex Ed intervention. This comprehensive sexual health education program was customized for sexual and gender minority youth and was found to be feasible to deliver online, positively received by participants, and efficacious for a variety of outcomes such as safer sex knowledge. These examples provide a strong starting point for developing internet-based resources that cater to young adult AFAB sexual minorities. In terms of policy, one possible strategy is to expand the online communication efforts, including informational websites and social media campaigns, of well-known government health agencies (e.g., CDC, as cited by study participants) in the area of young adult AFAB sexual minorities' sexual health. Another policy priority should be to mandate comprehensive, LGBTQ-inclusive sex education across the nation's schools. Together, these interventions may help facilitate equitable access to high-quality sexual health information that meets the unique and specific needs of AFAB sexual minorities, and in turn, help promote sexual health in this understudied and underserved population.

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Table 1

Sociodemographic characteristics of young adult sexual minority cisgender women and non-binary individuals assigned female at birth aged 18–36 years (N=29)

Characteristic	n (%)
Age (years)	
18–26	20(69)
27–36	8 (28)
Missing	1(3)
Race/ethnicity	
White	14 (48)
Asian/Asian American or Pacific Islander	7 (24)
Black or African American	5(17)
Latina or Hispanic	1(3)
Bi/Multiracial	2(7)
Gender identity	
Cisgender woman	25(86)
Non-binary	4(14)
Sexual orientation identity ^a	
Queer	23 (79)
Bisexual	9(31)
Gay	7 (24)
Lesbian	6(21)
Heterosexual	1(3)
Another sexual orientation identity	3(10)
Educational attainment	
High school diploma or GED	0(0)
Some college or Associate's degree	5(17)
Bachelor's degree	6(21)
Some graduate school	5(17)
Graduate degree	8 (28)
Missing	5(17)
Employment status ^a	
Working for pay	21(72)
Student	11 (38)
Not working for pay	0(0)
Missing	5(17)
Health insurance status	
Private	23 (79)
Public	1(3)
None	0(0)
Missing	5(17)

Characteristic	n (%)
Usual source of sexual health care ^a	
Private doctor's office	18 (62)
Community health center	5 (17)
Hospital clinic	3 (10)
Planned Parenthood clinic	3 (10)
Somewhere else	4 (14)
None	3 (10)

^aSelection of multiple response options permitted.

Note: Percentages may not add to 100% due to rounding and possible selection of multiple response options.

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