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Creating comprehensive, youth centered, culturally appropriate sex education: What do young gay, bisexual and questioning men want?

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Abstract

We examined young gay, bisexual and questioning men's (YGBQM) experiences with school-based sex education as they sought to learn about sex and sexual health, and their suggestions for improving same-sex education resources. Thematic analysis of 30 in-depth interviews with YGBQM (ages 18-24) underscored the discrepancies between the existing school-based sex education curricula and YGBQM's perceived sex education needs. Our results show that many youths' sexuality and same-sex sexual behaviors are excluded in sex education lessons; however, YGBQM noted that they sought out other resources (e.g., websites) to answer their questions. We discuss YGBQM's ideas for the creation of a sex and sexual health website that would be tailored for youth like themselves, including topics and features that an ideal website would contain. In addition, we present recommended changes to existing school-based sexual education curricula.

Keywords

sexual health; Internet; emerging adult; LGBT

Stigma and social discrimination create barriers to providing young men who have sex with men (YMSM) with comprehensive sex and sexuality information (Lindberg, Sonfield, & Gemmill, 2008). Specifically, policies limiting access to same-sex sex education and comprehensive sexual health programs disregard the concept of healthy sexuality and positive gender roles, and may exacerbate many of the sexual risk factors (e.g., limited knowledge regarding safer sex strategies with same-sex partners) that place YMSM at greater risk for HIV and sexually transmitted infections (STIs) (Lindberg, Sonfield & Gemmill, 2008). According to the Guttmacher Institute (2013), eight states require that any discussion of sexual orientation in the context of sex education must be "inclusive." Bittner (2012) found that discussing sexual orientation in school curricula was required in only 12 states, while 3 of those states required educators to emphasize negative associations with non-heterosexual orientations. The relative dearth of LGBT inclusiveness coupled with heteronormative sex education programs in schools, frame sexual education in a way that often excludes or further marginalizes the LGBTQ community.

Based on the CDC (2011) Youth Risk Behavior Surveillance System (YRBSS), sexual minority students were less likely than heterosexual students to report using safer sex practices like condoms during their last sexual encounter. Around 60% of YMSM in the

YRBSS reported not using protection during oral sex, and around 30% reported not using a condom during anal sex (Outlaw et al., 2011). Students who identify as gay and/or lesbian are already more likely to report risky sexual behavior than heterosexual students (CDC, 2012). A lack of adequate information among YMSM on how to protect themselves against STIs (Mimiaga, Goldhammer, Belanoff, Tetu & Mayer, 2007), coupled with sexual risk behavior, may in part explain why YMSM ages 13-19 account for nearly two-thirds of all diagnosed HIV infections among men who have sex with men in the U.S. (CDC, 2012a). Stronger and culturally appropriate sex education is a necessary step in order to diminish many of the health disparities faced by sexual minority youth. To that end, we sought to examine experiences with school-based sex education curricula in a sample of young gay, bisexual and/or questioning men (YGBQM), as well as assess their recommendations for developing sex education materials that align with their sexuality and social realities.

In 2001, the U.S. Surgeon General produced a report documenting how increasing awareness, implementing and strengthening interventions, and expanding the research base could successfully promote sexual health and responsible sexual behavior (Satcher, 2001). Although the effects of abstinence-based education policies on heterosexual youth's sexual well-being continue to be heavily debated (Santelli et al., 2006; Kantor, Santelli, Teitler & Balmer, 2008), little is known about the influence of abstinence-only sex education on sexual minority youth. Fisher (2009) noted that abstinence-based sex education promotes heteronormativity through active silence. By refusing to acknowledge the variations of sexualities and sexual identities, sex education may be limited and incompatible with the needs of YGBQM. Kubicek and colleagues (2008), for example, interviewed 24 YMSM who reported a lack of information on anal sex during their school-based sex education and discovered that their participants felt "ill equipped to understand the mechanics of sex; uninformed about risk for HIV and STIs; and unable to advocate for what they might find pleasurable, let alone for safer sex during their sexual debut" (p. 235). Our study builds off of this research by exploring YGBQM's experiences with school-based sex education and their perceptions of how effective this system was in providing them with accurate, in-depth information.

Policy makers and activists are making strides toward sex education programs that are more inclusive (e.g., Real Education for Healthy Youth Act, S. 1782, H.R. 3324); many political barriers to passing such laws and implementing them at the local, state, and federal level persist (Boryczka, 2009). In order to bypass some of these ever-present barriers to implementing comprehensive sex education in schools, YMSM may supplement sex education with content from websites (Kubicek, Carpineto, McDavitt, Weiss, & Kipke, 2011; Mustanski, Lyons, & Garcia, 2011; Pingel et al., 2013). Until sex education becomes officially acceptable to and inclusive of all its recipients, alternatives to learning about risks and protective practices are essential. As such, researchers and practitioners alike increasingly note the effectiveness of using the Internet as both a viable source of information for youth and a medium for sexual health interventions (Bowen, Horvath & Williams, 2007; Kalichman, et al., 2006; Kok, Harterink, Vriens, de Zwart & Hospers 2006; Mustanski, Garofalo, Monahan, Gratzner & Andrews, 2013).

By investigating alternative mediums through which YMSM learn about sex and sexual health, and the content of those sources, we can identify how to change school-based sex education and websites in order to reduce these young men's vulnerability to sexually transmitted infections (STIs), HIV and/or emotional distress. Given the scarce data on these issues for YGQM, we sought to examine how YGBQM living in Michigan learned about sex and sexual health in order to provide some insight into what YGBQM desire out of sex and sexual health programs, whether online or in person. In our analysis, we explore what YGBQM learned in school-based sex education, what they would change about their sex

education experiences, and how they supplemented these experiences when they found information lacking.

Methods

Sample

Thirty YGBQM who reported using online dating websites in the past 3 months participated in semi-structured qualitative interviews about their sex education experiences, as well as their dating and sexual behaviors. Through these interviews, we sought to better understand the sexual lives of YGBQM and how their experiences might inform HIV prevention efforts. To be eligible for participation, recruits had to be between the ages of 18 and 24 at the time of the interview, reside in Michigan, report being White/Caucasian, Black/African American or Hispanic/Latino, report having used a dating website in the past 3 months and be currently single. We focused on single YMSM as they may be more prone to pursue a greater number of casual and/or romantic partners than YMSM already in relationships, and may be at greater risk for HIV/STI exposure. Furthermore, given increasing disparities in HIV/STI infections among YMSM (CDC, 2012a) and the need to unpack YMSM's cultural contexts, we also wanted to ensure a racially and ethnically diverse sample from the three racial/ethnic groups in our state. Participants were recruited through advertisements on two social networking sites, participant referrals, and flyers posted at local venues. Promotional materials displayed a series of questions related to *some* of the eligibility criteria, mentioned the \$30 Visa e-gift card incentive, and provided a number to call if interested. Social network advertisements were visible only to men who listed themselves as interested in other men and who fit the age range.

The sample's median age was 22 years old ($M = 21.96$; $SD = 1.75$). The racial composition of our sample was as follows: 18 self-identified as White and 12 as African American. As for ethnicity, 2 White participants identified as White/Latino, and 1 African American participant identified as African American/Latino. Twenty-one participants identified as gay, 2 as gay/bisexual, 4 as bisexual, 1 as questioning/gay, 1 as gay/trans and 1 identified as trans. In the eligibility screener, participants were able to check all sexual/gender identity categories that they felt applied, resulting in several mixed categories (e.g., questioning/gay). Over 90% of the sample (28 cases) reported having had sex with someone met on a dating website in the past 3 months. Five participants reported being HIV positive at the time of the study. Given our prior research with this population, and our desire to sample two "equivalent" racial groups (i.e., African Americans and Whites) we felt confident that we would reach saturation with 12 interviews per group and nevertheless have six interviews for those identifying as other than African American or White. We revisited this issue once we had completed 25 interviews and, noting thematic saturation, decided to complete data collection once we had completed 30 interviews.

Procedure

Six research assistants trained in qualitative interviewing techniques conducted the interviews over the phone or in person; participants chose the mode of interview by whichever they deemed most convenient. In order to set up an interview, YMSM first had to complete an eligibility screener over the phone with one of the research assistant. At the time of the interview, YMSM were asked to consent both to the interview process and to the use of an audio recorder. Using a semi-structured interview guide, research assistants then conducted an in-depth interview covering a variety of topic areas such as YMSM's past experiences with sex education, use of the Internet to find information regarding sexuality and sexual health, ideas for future sex education programming for YMSM, coming out experiences, current and past online dating experiences, sexual behavior, and the use of HIV

prevention measures. Examples of questions related to these topics include: “Have you ever had formal sex education? What did it cover? What, if anything, would you have changed? What difficulties, if any, have you had finding information about sex and sexual health?” Interviews typically lasted sixty to ninety minutes. Study data were protected by a Certificate of Confidentiality. All study procedures were approved by the Institutional Review Board of the University of Michigan, Ann Arbor.

Analytic Strategy

Several research assistants, all of whom have training in qualitative methods and more specifically conducting research with YMSM, transcribed the audio recordings of the interviews. Upon completion of transcription, we assembled a subgroup of the study team to tackle the analyses. This subgroup was comprised of the principal investigator, the six research assistants who conducted the interviews, and one research associate that specializes in qualitative methods. The study team used the interview guide as a basic structure from which to create the first draft of a codebook. We used this first draft codebook to code a single specified transcript together. We then added, subtracted and modified the codes, placing them in a referential hierarchy based on level of specificity (i.e., overarching metacodes precede subcodes) to address additional themes present in the narrative and clarify coding questions and concerns. With this second draft codebook in hand, each subsequent transcript was coded independently by two members of the team, who then met to resolve any discrepancies between their coding. The codebook was iteratively revisited as needed to incorporate new themes as they emerged, and to modify existing code structures to reflect these themes. This triangulation process ensured the reliability of the codebook as an instrument to be consistently utilized in future coding. Coded transcripts were entered into NVivo 8 (QSR International, 2008), a software program designed to facilitate qualitative data analysis.

In the course of developing the codebook and coding the interviews, the study team noted a set of emergent themes regarding YMSM's past experiences with sex education, both within and outside of school. For this paper, we therefore chose to pursue a focused analysis to understand how YGBQM learned about sex and sexual health. Our overarching research question became:

How did YMSM learn about sex and sexual health and what would they have changed, if anything, about their learning process?

To further guide our analyses, we used the following sub-questions:

1. What did YGBQM learn in school-based sex education?
2. What would YGBQM change about their sex education experience?
3. How did YGBQM supplement school-based sex education?

We identified the meta-level codes whose contents were relevant to our research questions and proceeded to conduct a focused thematic analysis on a subset of the data corpus. This process consisted of pinpointing patterns that spoke to our research questions and fleshing out the variations in each theme. We chose thematic analysis for its flexibility as an analytic tool, given that our research questions were more concerned with describing experiences shaped by policy than a particular theoretical or epistemological framework (Braun & Clarke, 2006). The meta-level codes were: (a) difficulty obtaining sexual health information; (b) sex education experiences; (c) sexual health online resources; (d) improvement of HIV prevention services; (e) creation of sexual health online resources topics and features; and, (f) improvement of sexual health online resources. Within each code, we sought out responses to our research questions, while sifting through common experiences and noting

exceptions. We then used our research questions to structure our results, with the aim of presenting clear, digestible information that is easily accessible to policymakers. Finally, we assigned pseudonyms to the participants and removed any characteristics that might otherwise identify them.

Results

Young men reported receiving inadequate sexual health information through their schools' sex education programs, and felt that their needs were left out of the curriculum. As a result, many YGBQM felt unprepared to protect themselves in their sexual experiences from HIV/STIs, and to advocate for their sexual needs and desires, especially during their sexual debut. Seeking to fill their knowledge gap, YGBQM narrated how they sought out information regarding their sexuality and same-sex desires. We expand on their experiences below, highlighting the recommendations that they provide upon reflecting on these topics.

What did YMSM learn in school-based sex education?

Abstinence and negative consequences

YGBQM narrated that most of their sex education addressed abstinence and the negative consequences of engaging in sexual intercourse. Participants described a fair amount of variation in what was presented in their sex education classes, as well as what was missing. Boris (White, 22 years old, Gay, HIV-) discussed how abstaining from sex before marriage was emphasized in his sex education in school:

I feel like, since it was all abstinence, it was just dismissed very quickly. I mean we had to make a comic book called Abstinence Man, I remember doing it in 8th grade. And like that was taught as, that was what we were taught in school for a couple days, was just abstinence and that babies will ruin your lives.

Other participants echoed the theme of negative consequences being taught in school-based sex education, stating that they were told that sex before marriage would lead to infection, death, or the responsibility of raising a child.

Limited information

Beyond fear-based approaches, participants also felt that their sex education was limited to heterosexual sex and narrow in scope. Roger (Black, 19 years old, Gay, HIV-), for example, shared how limited his sex education experience was:

Puberty, heterosexual monogamous sex, actually let me clarify: heterosexual monogamous, penile vaginal sex, yeah they cover, they barely covered oral sex, barely covered STI/STD infection, if it did it was brushed over. "Don't have sex because you will get these infections", not how you get these infections, how they differ from one another.

Roger's story exemplifies many of the deficits that YGBQM participants discussed, specifically that their sex education experiences in school excluded sexual minorities from the discussion. When recalling these experiences, YGBQM offered suggestions for improving their sex education experiences and that of others in the future.

What would YGBQM change about their sex education experience?

When speaking about how they would have changed their schools-based sex education experiences, YGBQM voiced a strong desire to make their schools' sex education programs more comprehensive in terms of their scope and inclusiveness. This desire took the form of

two intertwined approaches: 1) being more inclusive of LGBT people and their sexuality and 2) modifying heteronormative curricula and language.

People who look like me

According to YGBQM, LGBT inclusiveness would mean providing content that explained different desires people may experience, different sexual orientations and gender identities, and an honest presentation of sexual behaviors beyond vaginal-penile sex. Boris (White, 22 years old, Gay, HIV-) spoke of how he wished his sex education experience had included an acknowledgement that gay people are more than simply sexual beings:

I would have loved to of have had a, a non-sexual review of gay people when I was young. [...] It just seemed like it was very much about sex and it was this sex obsessed, ya know, culture that I was beginning to align myself with and I didn't have any alternative to talk to [my parents] about even though I knew, I knew that wasn't me. I knew I wasn't just a sex obsessed person, that I have other goals and things I wanted to do. But I didn't have, I didn't have much to explain to them.

When describing his prior exposure to gay men, Boris mentioned that it “*didn't load me with the proper ammunition to defend myself to my parents.*” Boris believed that contextualizing sex education with non-sexual LGBT history would have been beneficial in showing his parents that a gay identity involves more than sexual activity. In his recommendations for improving school-based sex education, Brent (White, 19 years old, Gay, HIV-) suggested sections for youth who may be questioning their sexuality:

I think it would need to be, ya know, how to prepare yourself. A section for coming out, like, “How could this be easier? What could help you ease into this situation? How do I know?” Like things like that.

Participants emphasized the importance of incorporating information about coming out and questioning one's own sexuality into school-based sex education curricula.

YGBQM suggested that efforts ought to be made to devise curricula with less of a heteronormative lens. As Harold (Black, 23 years old, Gay, HIV+) mentioned, “they just think everybody just heterosexual...in high school they say, “ok well girl meets boy, boy meets girl, they have a baby.” When asked what he would have changed about his sex education experience, Jonah (White, 22 years old, Bisexual, HIV-) replied, “Being able to...teach about men with men and women with women, instead of just one topic.”

While wishing for validation of their sexual desires through recognition in the sex education curriculum, some participants went a step further and advocated for sex education to be delivered by people who more closely resemble the students being taught. As Abe (White, 20 years old, Gay, HIV+) stated, “It's all the doctors who you [get the information from], and no offense, but people that don't have any of them [STIs]. And they-they don't understand. You know?” Jerome (Black, 18 years old, Bisexual, HIV-) felt that by having “someone up there who looks nothing like them” presenting information to students, that an opportunity for connection was missed.

It would have been wiser for them to have had slides that pertain to not only students, but young people. Because when you have someone of middle age of a European background in an African American school, it just doesn't make that connection that it can happen to a 15-year old student.

A “How-To” guide

In addition to being presented with information that held little relevance for them as gay or bi-identified youth, not a single participant mentioned an experience in which they were

given useful information about sexual behavior in which they engaged. Jason (Black, 20 years old, Questioning/Gay)) pointed out that most sex education does not include a “how-to” section for sex beyond penile-vaginal intercourse. This theme appeared in many interviews, particularly as participants narrated how they felt unprepared when first having sex with another man. As Scott (White, 21 years old, Gay, HIV-) lamented,

Like I know the only information I've had about it [sex] is through experience, and I think that's a huge shortcoming with sex education. It's really hetero-specific and ya know, it, my first times were like, like my first attempt was a horribly painful experience. Like I had no idea what I was doing, ya know, and I honestly think that like, that was in part a result of like poor education about it, ya know?

Many participants wanted to have a part of their sex education focused on same-sex behaviors and risks:

Honestly, I wish that they like had like gay specific like section, at least, ya know. Obviously that would be like, be much harder in practice than like in theory but like I don't think that that's something that should be compromised. Due to intolerance or like discretion or how uncomfortable the subject is (Scott, White, 21 years old, Gay, HIV-).

Scott was not the only participant to recognize the difficulties inherent in trying to incorporate information about same-sex desires and behaviors into an institutional setting such as the public education system. Several participants noted that such an expansion of the curriculum would be a “long shot,” but that it was certainly something worth hoping for and working towards. It was in part this realistic attitude about the constraints of current sex education curricula that led some YGBQM to seek other sources of information about sex and sexual health.

How do YGBQM supplement school-based sex education?

As shown in the narratives above, school-based sex education in the United States is not on par with what YGBQM needed in order to prepare them for their sexual experiences and identities. Consequently, many YGBQM instead utilized the Internet when they had questions about sex and sexual health that were not explicitly answered by their schools' sex education curricula.

The Internet as a resource

YGBQM used a range of sites found through search engines such as Google or Yahoo, along with more academic sites such as National Institutes of Health or Mayo Clinic. Fred (White, 24 years old, Gay, HIV-) preferred Web-MD, The Advocate, and CNN because “*it doesn't appear that they have an agenda [...] they're just presenting information, and they're presenting actual facts about, you know, what's going on.*” Fred recognized that not all sites present unbiased information and thorough searches may be required to find a reliable source that provides open and honest discussion.

Jamie (White, 24 years old, Gay, HIV-) frequently went to the National Institutes of Health or the Mayo clinic for his sexual health questions:

Sometimes they can be a bit dry, but other times, I mean I know that the source is authoritative. I know that the source is like, often times doesn't have a political interest in pushing a particular viewpoint. And that they're being open and honest and that they're giving me all the facts that they know about this issue.

Jamie preferred, similarly to Fred, sites that did not have an agenda and that he believed presented reliable, up-to-date information.

Roger (Black, 19 years old, Gay, HIV-) found Google and the LGBTQ resource center at his university website useful because: *“They often will connect you to other links that you may not have heard about or know about. The information is presented in a way that's accessible and easy to digest, and it's always very recent, and updated.”* YGBQM found that sites that were linked from websites they used for other purposes, such as social networking or online dating, were favorable because these sites introduced them to previously unknown sources of information. Multiple participants, including Harold (Black, 23 years old, Gay, HIV+), brought up WebMD as a preferred site for sexual health questions because of the symptom checker that the website provided: *“If I'm like having a symptom or something I can go on there and do a symptom checker and they'll bring you a whole lot of stuff and you're like, oh I didn't know about this or I didn't know about that.”* The symptom checker provided answers to questions that the youth had about signs and symptoms they may be experiencing as well as treatments to those symptoms. As evidenced by the wide array of sites utilized by the youth, it was clear that they sought out sites that were in agreement with Roger's preference for accessibility, ease of digestion and regular updates.

YGBQM suggestions for online sex education content

Given that YGBQM acknowledged the struggles involved in expanding the sex education curriculum in the United States and their habits of seeking out information online, we asked them what should be included in sexual health websites geared towards YGBQM. We found that their responses to this question might also be applied when formulating the “ideal” school-based sex education curriculum. As a start, participants suggested integrating information about sexual technique and the risks involved in certain sexual activities into sex education. Scott (White, 21 years old, Gay, HIV-) reiterated Jason's recommendation of a how-to guide:

I think a how-to guide [for anal sex] would be just so great. Like seriously [...] Yes! Oh my god, I still haven't read one. I think I've searched for one too[...] Like, ah I've had some terrible experiences, like, with people, from trying new things that you have no idea, like. There's like a physics to gay sex, that is like different from the angle that you go at it.

Based on their sexual debut experiences, many participants advised that tips around how to have sex or best practices would improve sex education. Carlos (White/Latino, 23 years old, Bisexual/Gay, HIV-) brought up the idea of exploring how to reduce risk among YGBQM by providing detailed strategies on how to integrate safer sex into their sexual practices: *“you can put things into steps and procedures and, you know, with condoms and safe sex and perhaps lubricant ...”* Expanding on sexual behaviors and talking about *“what are the risks with each activity”* was also brought up by Cameron (White, 23 years old, Bisexual, HIV-). Carlos and Cameron thought that breaking down sexual behaviors that may be putting YGBQM at risk may be useful for those experimenting with their sexuality or about to start having same-sex sex.

Along with sex education, some participants advocated for more information regarding mental health. Mitchell (White, 21 years old, Gay, HIV-) discussed how he would like to see mental health discussed:

I think the most important and overlooked thing is mental health, especially in the homosexual community because I think that it's more prevalent in this community than it is within the heterosexual community, and mental health kind of hits close to home for me and so it's something that I kind of feel strongly about.

Harold (Black, 21 years old, Gay, HIV+) also spoke about mental health: “So definitely like uh, psychological health where they can find psychological resources, um, be with just for ones who are single and going through self-esteem issues and stuff. That would be helpful.”

Taken together, these responses offer some perspective from YGBQM as to elements of a comprehensive, reliable, and attractive sex education program, free of political constraints. Such a program would ideally reach YGBQM who are exploring their sexuality and whose experiences and desires are currently excluded from school-based curricula.

Discussion

YMSM continue to be at higher risk of contracting HIV/STIs, yet policymakers have yet to install sex education programs that include sexual minorities' experiences (CDC, 2012b). The aim of our study was to explore the school-based sex education experiences of YMSM, assess their satisfaction and suggestions for improving these programs, and better understand how, if at all, they supplemented their sex education experiences with alternative sources of information. While abstinence-only policies often constrained the information available to our participants through school-based sex education, many young men did access alternative sources of information online. Nevertheless, YGBQM would like to see a school-based sex education program with fewer limitations on its curriculum. Participants did not find it helpful when sex educators attempted to scare them out of sex. When prompted to make suggestions about how to improve school-based sex education, many participants expressed the desire to see sex education that was comprehensive and inclusive of topics relevant to sexual minorities. Participants expressed hope that such an inclusive model would not only promote acceptance of sexual minorities among youth, but also help sexual minority youth themselves feel more knowledgeable and in control of their own sex and sexuality.

Overall, participants noted that they were disappointed by their school-based sex education experiences, stating that sex education marginalized them because of the strong emphasis on abstinence-only-until-marriage and penile-vaginal intercourse. If our participants could change their sex education experiences, they stated unequivocally that they would like to see school-based sex education include discussion of same-sex sexuality and sexual behaviors. We discuss the implications of these findings, focusing on the role that policy plays in school-based sex education as well as how to ensure that YMSM have a constant, reliable source for their sexual health questions.

Implications of heteronormative sex education in schools

YMSM stated that abstinence-based sex education in schools put them at a greater disadvantage during their sexual debut. Young men recalled lacking knowledge about how to engage in same-sex sexual activity or how to protect themselves from HIV/STIs. These findings may help to explain recent CDC (2012b) reports that young gay and bisexual males are at a higher risk of contracting HIV, syphilis, and other STIs than their heterosexual counterparts. Many curricula emphasized the negative consequences of engaging in sex before marriage (i.e., contraction of an STI, death or unwanted pregnancy). Although it is important to inform youth of the negative consequences of unprotected sexual encounters, it is not appropriate to do so with language or information that is only applicable to heterosexual youth. One policy recommendation suggested by our findings would be to provide relevant in-depth descriptive information to youth of all sexualities. Such a guideline may also help to prevent youth from having to sift through supplemental information sources to determine what may or may not be factual.

YMSM also noted a pervasive silence regarding conversations on same-sex attraction, which reinforces stigma and sends a message that these same-sex desires may be wrong and should be curtailed. One way to address this silence may be to train school staff around sexual and gender sensitivity. Telljohann, Price, Poureslami and Easton (2009) found that teachers who were unaware of sexual minorities' increased risk to substance use, feelings of isolation or rejection, and lack of sexual health information were less likely to include these topics in class discussions. Furthermore, research has shown a decrease in sexual risk when youth are presented with sexual health information that is relevant to their sexual behaviors or sexual identity (Blake, Ledsy, Lehman, Goodenow, Sawyer & Hack, 2001; Remafedi, 1994). Consequently, beyond topics regarding sexual risk, it is vital that instructors include open and inclusive conversations regarding same-sex attractions, the coming out experience, and same-sex relationships. The education of youth purports to have positive youth development as one of its objectives. Given that our participants spoke of feeling "undereducated" in areas of knowledge pertinent to their healthy development (e.g., about their feelings, desires, and sexuality), addressing such topics in the classroom emerges as one obvious strategy to promoting positive youth development. Additionally, the literature on resilience would suggest that positive youth development may serve as a buffer against future negative outcomes, including sexual risk behavior (Fergus & Zimmerman, 2005).

Alternative sources of sexual health information for YGBQM

As youth became sexually-active, many reported being unsure about the mechanics of male-to-male sex, let alone the risks associated with those behaviors. In proposing strategies to mitigate existing school-based sex education barriers, many requested that public health practitioners create a how-to guide for YMSM as they explore their sexuality. Similarly, YMSM noted a desire to have a comprehensive sexual health website for youth that could serve as a reliable resource. Buhi and colleagues (2010) found that of the 177 sexual health websites that they analyzed, there was no correlation between the accuracy of information and the quality of the site defined by criteria such as credibility of authors and date of last update. This presents an issue if many sexual minority youth are turning to the internet to supplement their sexual health questions, yet the resources that they are accessing are not providing accurate information.

Our findings are consistent with recent recommendations regarding the need to emphasize developmentally and culturally appropriate sex education materials for YMSM (Allison et al., 2012; Grossman et al., 2011; Harper, 2007; Harper & Riplinger, in press). Future studies should explore how YMSM are accessing certain sexual health sites over others, and how they are evaluating those sites for accurate information. Furthermore, research that informs how to increase YMSM's access to reliable sites, and/or to create opportunities for teachers to refer YMSM to these sites is needed.

Limitations

Several limitations of this study must be acknowledged. All of the interviews were conducted with young men in Michigan, a state with its own particular political context that may not be generalizable to other states. However, our findings may resonate with youth living in states that have adopted abstinence-only or abstinence-focused programs, as these policies have been documented to restrict open and affirming discussions of sexuality in their sex education curricula (Fisher, 2009; Kantor et al., 2008). Second, it may have been more difficult to recall their formal sex education experiences for our older participants. Participants closer in time to the experience may be able to recall its benefits and shortcomings more accurately. Future research ought to examine youths' experiences as they are engaging in formal sex education. Finally, to be eligible for participation, all of our participants had to be single and report seeking partners online recently. It is possible that

YGBQM in relationships may have qualitatively different experiences regarding how sex education has influenced their lives. Some researchers have argued that MSM are most often at risk of contracting HIV from their primary partner, which would indicate that including men in relationships in future studies would be of value (Sullivan, Salazar, Buchbinder, & Sanchez, 2009).

Conclusions

LGBTQ-inclusive sex education programs would benefit all youth, regardless of sexual identity or behavior. We need to ensure that the sexual health information reaching YMSM is accurate and relevant to the youth who access it—no matter how they are accessing it. While some school-based sex education curricula are more inclusive than others, it is vital that all YMSM are provided a strong educational foundation that offers inclusive information. Furthermore, all youth, no matter their sexual behaviors or sexual identity, deserve medically accurate, relevant sexual health information or referral. As same-sex inclusive, comprehensive sex education policy changes are sought across the country, it is vital that we provide sexual minority youth and their allies access to comprehensive sexual health websites that include other sexuality-specific topics (e.g., coming out) beyond STI/HIV infection. As researchers and sexual health advocates, we need to make an effort to investigate whether these sites are reliable and inclusive to sexual minorities. In order for this to become reality, it will take dedicated collaboration among policy makers, sex educators, website owners, public health leaders, and youth.

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