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Improving the health of cisgender men who identify as bisexual: What do they want from interventions?

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Abstract

Self-identified bisexual men are at increased risk for negative health outcomes, but there are no interventions tailored to their unique needs. In order to develop interventions for this population, it is first necessary to understand their preferences. As part of a larger study, 128 cisgender men who identified as bisexual reported on their preferences for different intervention components. Large proportions of participants prioritized addressing both health (e.g., mental health, HIV/STI) and psychosocial experiences (e.g., dating/relationships, discrimination/victimization). A slightly larger proportion of participants preferred an intervention for gay and bisexual men together compared to an intervention for bisexual men only. However, those who reported more discrimination and recent female sexual partners were more likely to prefer an intervention for bisexual men only. Larger proportions of participants preferred a group intervention compared to an individual intervention and an in-person intervention compared to an online intervention. These findings highlight the importance of addressing both health and psychosocial experiences in tailored interventions for self-identified bisexual men. Further, while in-person and group interventions may appeal to larger proportions of self-identified bisexual men, the appeal of an intervention for gay and bisexual men together compared to an intervention for bisexual men only may depend on individual and social/contextual factors.

Keywords

bisexual; sexual identity; sexual orientation; intervention preferences; health

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Bisexual men are at increased risk for depression, anxiety, and problematic substance use compared to both heterosexual and gay men (McCabe, Hughes, Bostwick, West, & Boyd, 2009; Ross et al., 2018), and they are also at increased risk for HIV compared to heterosexual men (Caceres et al., 2018; Friedman, Wei, et al., 2014). As such, there is a critical need to develop interventions to improve their health and wellbeing. Many interventions are labeled as being for “gay and bisexual men,” but they are typically designed for gay men and few bisexual men are included in efficacy trials (Feinstein, Dyar, & Pachankis, 2017). In recent years, HIV prevention programs have been developed for behaviorally bisexual men (i.e., men who have sex with men and women; Harawa et al., 2013), but these programs are not tailored to the unique needs of self-identified bisexual men. This parallels the general trend in research on bisexual men, most of which has focused on their sexual behavior more so than their identity (Bostwick & Dodge, 2018). However, bisexual identity is highly stigmatized, especially among men (Dodge et al., 2016; Friedman, Dodge, et al., 2014; Herek, 2002), and bisexual individuals face discrimination from both heterosexual and gay/lesbian individuals (Feinstein & Dyar, 2017). These stigma-related experiences not only contribute to negative health outcomes (Brewster, Moradi, Deblaere, & Velez, 2013; MacLeod, Bauer, Robinson, MacKay, & Ross, 2015), they also present barriers to accessing healthcare (e.g., bisexual individuals report negative experiences with providers; Dodge, Jeffries, & Sandfort, 2008; Dodge et al., 2012; Eady, Dobinson, & Ross, 2011; Page, 2004).

Developing tailored interventions for self-identified bisexual men has the potential to improve their health while affirming their identities and preparing them to cope with stigma and discrimination. In order to inform the development of interventions for self-identified bisexual men, it is important to understand their preferences for different intervention components. This is consistent with the Institute of Medicine’s (2001) recommendation for healthcare to be able to respond to individual preferences, which first requires assessing them. Previous research has found that most behaviorally bisexual men prefer individual interventions due to privacy concerns, but some prefer group interventions to meet other bisexual men (Dodge et al., 2012). To our knowledge, no previous studies have examined intervention preferences among self-identified bisexual men, and there is reason to believe that their preferences may be different than those of behaviorally bisexual men.

First, in samples of youth and adults, large proportions of self-identified bisexual men do not report bisexual behavior (e.g., Everett, 2013; Mustanski, Birkett, Greene, Rosario, Bostwick, & Everett, 2014). As such, findings from previous studies that have focused on behaviorally bisexual men may not generalize to self-identified bisexual men who have not engaged in bisexual behavior. Second, it has been suggested that sexual identity is the dimension of sexual orientation that is most relevant to experiences of disadvantage and discrimination (Vizard, 2014), and that the often public nature of sexual identity (relative to the often private nature of sexual behavior) may contribute to being targeted for victimization (Everett, 2013). In fact, accumulating evidence suggests that being more open about one’s bisexual identity is associated with increases in depression and substance use (Feinstein, Dyar, Li, Whitton, Newcomb, & Mustanski, in press), highlighting the relevance of bisexual identity to health. Finally, there is some evidence that self-identified bisexual men differ from behaviorally bisexual men who do not self-identify as bisexual in important ways.

Specifically, compared to behaviorally bisexual men who do not self-identify as bisexual, self-identified bisexual men are less likely to be married, less likely to have children, more likely to have ever had anal sex, and more likely to describe their sexual behavior as “predominately homosexual” (Lever, Kanouse, Rogers, Carson, & Hertz, 1992). These findings suggest that self-identified bisexual men may be embedded in different social communities than behaviorally bisexual men who do not self-identify as bisexual, which may affect their access to and engagement with healthcare as well as their needs and preferences for interventions. Interventions may need to address different topics and be delivered in different formats to meet the unique needs of self-identified bisexual men. For example, given the invisibility of bisexuality (Bostwick & Dodge, 2018), men who identify as bisexual may be particularly likely to prefer interventions that connect them to other bisexual men in the interest of building community.

In sum, the lack of research on intervention preferences among self-identified bisexual men represents a critical barrier to developing tailored interventions to improve their health and wellbeing. To address this gap, we examined preferences for different intervention components in a subset of cisgender men who identified as bisexual who participated in a larger longitudinal cohort study. We focused exclusively on cisgender men because the broader cohort only included individuals who were assigned male at birth and, as such, there were no transgender men in the cohort. In addition to examining intervention preferences, we also examined their associations with stigma-related experiences, outness, and recent sexual behavior.

Methods

Participants and Procedures

We used data from a subset of 128 cisgender men who identified as bisexual who participated in RADAR—a longitudinal cohort study examining influences on HIV and substance use among young men who have sex with men. In order to enroll in the broader cohort, participants were required to be 16-29 years old, assigned male at birth, English-speaking, and to report a sexual minority identity (e.g., gay, bisexual) or sex with a man in the past year. The subset of participants included in the current analyses were required to identify as bisexual and male. Given that the broader cohort only included individuals who were assigned male at birth, there were no transgender men in the cohort. Cohort members completed a psychosocial survey, a network interview, and biomedical specimen collection every six months and were compensated \$50. Data collection began in February 2015, but the intervention preference measure was added after data collection had begun; it was administered to all participants who identified as bisexual and male who completed a visit between December 2016 and June 2017. The current analyses used data from the study visit during which each participant completed the intervention preference measure. All procedures were approved by the Institutional Review Board. The analytic sample ranged in age from 18 to 32 years ($M = 22.21$, $SD = 2.87$) and was racially/ethnically diverse (36.7% Black or African American, 30.5% Hispanic or Latino, 19.5% White, 9.4% multi-racial, 3.1% Asian, 0.8% other). Most participants (84.4%) were HIV-negative, whereas 15.6% were HIV-positive.

Measures

Intervention preferences.—Participants were asked four questions: (1) “Which of the following topics are important to address to improve the health and wellbeing of bisexual men?” Response options included: mental health; drug/alcohol use; HIV/STI; coping with discrimination/victimization; dating/relationships; other (please specify). Participants could select multiple response options. (2) “What type of program would you be most comfortable with?” Response options included: a program for bisexual men only; a program for gay and bisexual men together; I don’t have a preference. (3) “Would you want the program to be one-on-one (a program facilitator meeting with just you) or in a group?” Response options included: one-on-one; group; I don’t have a preference. (4) “Would you want the program to be online or in-person?” Response options included: online; in-person; I don’t have a preference.

Anti-bisexual discrimination.—The Anti-Bisexual Experiences Scale (Brewster & Moradi, 2010) is a 17-item measure that is administered twice (separately for discrimination from heterosexual and gay/lesbian individuals). It measures three types of anti-bisexual discrimination, including sexual orientation instability assumptions (e.g., “People have acted as if bisexuality is ‘just a phase’ I am going through”), sexual irresponsibility assumptions (e.g., “People have treated me as if I am obsessed with sex because I am bisexual”), and hostility (e.g., “People have not wanted to be my friend because I identify as bisexual”). Items were rated on a scale of 1 (never) to 6 (almost all of the time) and means were calculated for discrimination from heterosexual ($\alpha = .93$) and gay/lesbian individuals ($\alpha = .92$).

Internalized binegativity.—The 5-item internalized binegativity subscale from the Bisexual Identity Inventory (Paul, Smith, Mohr, & Ross, 2014) measures a negative affective response to being bisexual (e.g., “It’s unfair that I am attracted to people of more than one gender”). Items were rated on a scale of 1 (strongly disagree) to 7 (strongly agree) and their mean was calculated ($\alpha = .73$).

Outness.—Participants were asked, “How out are you to people around you?” Response options included: 0 = not out to anyone; 1 = only out to a few select people; 2 = out to most people; and 3 = out to everyone.

Recent sexual behavior.—The HIV-Risk Assessment for Sexual Partnerships (H-RASP; Swann, Newcomb, & Mustanski, 2018) is a self-administered, computerized interview designed to assess sexual behavior and associated situational/contextual variables at the level of the sexual partnership. In the current study, participants reported on up to four sexual partnerships during the preceding six months. For analyses, a dichotomous variable was created to reflect whether or not participants reported vaginal or anal sex with any female partners in the preceding six months.

Results

First, we examined the proportion of participants who endorsed each intervention preference. Then, we used chi-square tests, independent-samples *t*-tests, and one-way

analysis of variance tests to examine the associations between intervention preferences and stigma-related experiences (discrimination and internalized binegativity), outness, and reports of recent female sexual partners.

Topics.

The largest proportions of participants endorsed mental health (84.4%) and HIV/STI (77.3%) as important to address, but the majority also endorsed dating/relationships (70.3%), drug/alcohol use (62.5%), and coping with discrimination/victimization (63.3%). Six participants (4.7%) identified additional topics (e.g., self-love and understanding, bisexual erasure). Topic endorsement was not associated with discrimination, internalized binegativity, outness, or reports of recent female sexual partners.

Target population.

Results are presented in Table 1. Approximately one-quarter of participants (27.3%) preferred an intervention for gay and bisexual men together, 18.8% preferred an intervention for bisexual men only, and 53.9% did not have a preference. Participants who preferred an intervention for bisexual men only reported more discrimination from gay/lesbian individuals (compared to those who preferred an intervention for gay and bisexual men together) and more discrimination from gay/lesbian and heterosexual individuals (compared to those who did not have a preference). Participants who preferred an intervention for bisexual men only were also more likely to report recent female sexual partners compared to those who preferred an intervention for gay and bisexual men together. Similarly, participants who did not have a preference were also more likely to report recent female sexual partners compared to those who preferred an intervention for gay and bisexual men together. Target population preference was not associated with internalized binegativity or outness.

Format.

Results are presented in Table 2. Approximately one-third of participants (36.7%) preferred a group intervention, 21.1% preferred an individual intervention, and 42.2% did not have a preference. Format preference was not associated with discrimination, internalized binegativity, outness, or reports of recent female sexual partners.

Delivery.

Results are presented in Table 3. Approximately half of participants (55.5%) preferred an in-person intervention, 10.2% preferred an online intervention, and 34.4% did not have a preference. Participants who preferred an in-person intervention and participants who preferred an online intervention both reported more discrimination from heterosexual individuals compared to those who did not have a preference. Delivery preference was not associated with discrimination from gay/lesbian individuals, internalized binegativity, outness, or reports of recent sexual partners.

Discussion

The cisgender men who identified as bisexual in our study endorsed a range of topics as important to address in programs aimed at improving their health. Although mental health was most commonly endorsed, all of the topics were endorsed by the majority of participants. These findings highlight the need for interventions for self-identified bisexual men to address multiple health issues (including, but not limited to, HIV/STI) and to attend to psychosocial issues (e.g., dating/relationships, discrimination/victimization). The importance of attending to dating/relationships is consistent with efforts to integrate HIV prevention and relationship education for young male couples (Newcomb et al., 2017). Although interventions have been developed to address the impact of discrimination on sexual minorities' health (Chaudoir, Wang, & Pachankis, 2017), none have been developed to address the unique challenges facing self-identified bisexual men.

Preferences for other intervention components varied. A slightly larger proportion of participants preferred an intervention for gay and bisexual together compared to an intervention for bisexual men only; these men may believe the health needs of gay and bisexual men are more similar than different. However, those who reported more discrimination, especially from gay/lesbian individuals, were more likely to prefer an intervention for bisexual men only. These men may recognize the unique challenges facing bisexual individuals (Feinstein & Dyar, 2017) and may not feel comfortable discussing their concerns with gay men. Participants who reported recent female sexual partners were also more likely to prefer an intervention for bisexual men only. Given that bisexual men are often blamed for transmitting HIV to women (Friedman et al., 2017; Jeffries, 2014), those who have had recent female sexual partners may be particularly aware of the unique challenges facing bisexual men and, as such, interested in discussing their concerns with other bisexual men who may have had similar experiences. In contrast to research on behaviorally bisexual men (Dodge et al., 2012), a larger proportion of participants preferred a group intervention compared to an individual intervention. Meeting other bisexual men and being part of a community that shares the same identity may be more important to self-identified bisexual men than to behaviorally bisexual men (who may not identify as bisexual). Self-identified bisexual men may also feel more comfortable participating in a group intervention with other bisexual men.

Finally, participants reported a preference for an in-person intervention compared to an online intervention, which may also reflect the importance of being part of a community that shares the same identity. Participants who preferred an in-person intervention and participants who preferred an online intervention both reported more discrimination from heterosexual individuals compared to those who did not have a preference. We did not assess whether discrimination occurred in-person or online, but it is possible that those who experienced in-person discrimination preferred an online intervention, whereas those who experienced online discrimination preferred an in-person intervention. Of note, a sizeable proportion of participants did not report intervention preferences (34.4% to 53.9%). Given the lack of interventions for self-identified bisexual men, they may simply be interested in an intervention tailored to their unique needs regardless of the format.

The current findings should be considered in light of several limitations. First, given that all of our participants were cisgender men living in Chicago, it will be important to examine intervention preferences among transgender men and in different geographic regions. Transgender people are particularly likely to use labels that reflect attractions to more than one gender/sex (e.g., bisexual, pansexual; James, Herman, Rankin, Keisling, Mottet, & Anafi, 2016), and transgender people who identify as bisexual or pansexual tend to face greater hardships than those who identify as gay, lesbian, or heterosexual (Movement Advancement Project, 2017). As such, transgender people who identify as bisexual or pansexual may have unique needs and preferences for interventions. Further, there is some evidence that the experiences of people who identify as bisexual differ from those of people who identify as pansexual, queer, or fluid. For example, Mitchell, Davis, and Galupo (2015) found that people who identified as bisexual reported experiencing more interpersonal hostility from gay/lesbian people and feeling less connected to the LGBT community than did people who identified as pansexual, queer, or fluid. For that reason, it will be important to examine intervention preferences among people who use labels other than bisexual to describe their attractions to more than one gender/sex. Of note, cisgender men are more likely to use the label bisexual to describe their attractions to more than one gender/sex than they are to use other labels (e.g., pansexual, queer; Katz-Wise, Mereish, & Woulfe, 2017), and cisgender men are less likely than cisgender women and gender minorities to identify as pansexual or queer (Morandini, Blaszczyński, & Dar-Nimrod, 2017). Therefore, it may be particularly important to consider the range of labels used to describe attractions to more than one gender/sex in samples of cisgender women and gender minorities. Additionally, preferences for different intervention components may depend on the focus of the intervention (e.g., mental health versus HIV/STI). Finally, we did not ask participants why they preferred different intervention components, which future qualitative research could address. Limitations aside, the current study is the first to examine self-identified bisexual men's intervention preferences and findings will help inform the development of tailored interventions to address their unique needs.

In sum, interventions for self-identified bisexual men would benefit from addressing a range of health and psychosocial issues. While in-person and group interventions may appeal to larger proportions of self-identified bisexual men, the appeal of an intervention for gay and bisexual men together compared to an intervention for bisexual men only may depend on individual and social/contextual factors. Our findings also highlight the importance of attending to the needs of self-identified bisexual men as their intervention preferences differed from those of behaviorally bisexual men in prior research. As noted, there are no evidence-based interventions tailored to the unique needs of self-identified bisexual men. The lack of funding available for research focused on bisexual men's health presents a major barrier to developing such interventions. From 1989 through 2011, less than 1% of all studies funded by the National Institutes of Health (NIH) focused on LGBT health and, of those, only 14.8% involved bisexual men (Coulter, Kenst, Bowen, & Scout, 2014). Additionally, while foundation funding for research on LGBT populations reached a record high in 2016, less than 1% specifically focused on bisexual individuals (Fundors for LGBTQ Issues, 2016). The recently established NIH Sexual and Gender Minority (SGM) Research Office has and will continue to play a critical role in advancing research on SGM health, but

there is still a need for increased attention to the health disparities affecting bisexual men. Policy makers can also help to reduce these disparities by enacting laws and allocating funding dedicated to this population.

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Table 1.

Identity and minority stress as a function of preferred intervention population.

	Bisexual men only (<i>n</i> = 24)	Gay and bisexual men (<i>n</i> = 35)	No preference (<i>n</i> = 69)	
	<i>M</i> (<i>SD</i>) or %	<i>M</i> (<i>SD</i>) or %	<i>M</i> (<i>SD</i>) or %	<i>F</i> or χ^2
Discrimination from gay/lesbian individuals	2.05 ^a (.98)	1.58 ^b (.63)	1.51 ^b (.64)	$F = 5.32^{**}$ (2, 125)
Discrimination from heterosexual individuals	2.26 ^a (1.27)	1.92 ^{ab} (.89)	1.66 ^b (.63)	$F = 4.65^*$ (2, 125)
Internalized binegativity	2.21 (1.08)	2.07 (1.08)	2.18 (1.14)	$F = .15$ (2, 125)
Outness	1.54 (.78)	1.86 (.91)	1.75 (.86)	$F = .97$ (2, 125)
Recent female sexual partner	50.0 ^a	17.1 ^b	36.2 ^a	$\chi^2 = 7.36^*$ (2)

* $p < .05$

** $p < .01$; different superscript letters indicate significant differences ($p < .05$) between column proportions.

Table 2.

Identity and minority stress as a function of preferred intervention format.

	One-on-one (<i>n</i> = 27)		Group (<i>n</i> = 47)		No preference(<i>n</i> = 54)		<i>F</i> or χ^2
	<i>M</i> (<i>SD</i>) or %	%	<i>M</i> (<i>SD</i>) or %	%	<i>M</i> (<i>SD</i>) or %	%	
Discrimination from gay/lesbian individuals	1.59 (.68)		1.67 (.76)		1.62 (.76)		<i>F</i> = 12(2, 125), <i>ns</i>
Discrimination from heterosexual individuals	1.73 (.72)		2.07 (.98)		1.70 (.83)		<i>F</i> = 2.60 (2, 125), <i>ns</i>
Internalized bignegativity	2.35 (1.31)		2.21 (1.02)		2.01 (1.07)		<i>F</i> = .95 (2, 125), <i>ns</i>
Outness	1.63 (.69)		1.77 (.89)		1.78 (.93)		<i>F</i> = .29 (2, 125), <i>ns</i>
Recent female sexual partner	37.0		27.7		37.0		χ^2 = 1.17 (2), <i>ns</i>

Table 3.

Identity and minority stress as a function of preferred intervention modality.

	Online (<i>n</i> = 13) <i>M</i> (<i>SD</i>)	In-person (<i>n</i> = 71) <i>M</i> (<i>SD</i>)	No preference (<i>n</i> = 44) <i>M</i> (<i>SD</i>)	<i>F</i> or Fisher's exact test
Discrimination from gay/lesbian individuals	1.90 (.97)	1.67 (.76)	1.49 (.60)	$F = .17$ (2, 125)
Discrimination from heterosexual individuals	2.16 ^a (1.10)	1.98 ^a (.93)	1.52 ^b (.61)	$F = 4.96^*$ (2, 125)
Internalized binegativity	1.98 (1.14)	2.13 (1.10)	2.24(1.12)	$F = .74$ (2, 125)
Outness	1.62 (.77)	1.85 (.84)	1.61 (.92)	$F = 1.14$ (2, 125)
Recent female sexual partner	53.8	33.8	27.3	Fisher's exact test = 3.11

* $p < .01$; different superscript letters indicate significant differences ($p < .05$) between column proportions; Fisher's exact test was used instead of a chi-square test because one cell had an expected count less than five.