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Mental Health Needs of Sexual Minorities in Jamaica

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Abstract

This study examined the prevalence of Axis I disorders and associated risk factors in a sample of sexual minority men and women in Jamaica, a country that is widely known for its high societal rejection of homosexuality. Poor relationships with family, negative or abusive experiences related to one's sexual orientation, and greater openness about one's sexual orientation were independent risk factors for Axis I disorders. Prevention of mental disorders in sexual minorities in Jamaica should focus on rebuilding family support and promoting social acceptance of sexual minorities.

Keywords

LGBT; depression; suicide; mental health; minority stress; Jamaica

minorities (David & Knight, 2008).

Minority stress, the unique or increased life demands on one's coping resources due to disadvantaged social status, has been strongly implicated in the poor psychological and overall well-being observed among various minority groups. Sexual orientation is one of the factors that could give people such a disadvantaged position, and several studies have examined how sexual orientation impacts well-being (Meyer, Schwartz & Frost, 2008). Studies that have examined the impact of sexual orientation in relation to ethnicity on mental health have yielded somewhat conflicting results. Among ethnic minorities, sexual minority orientation may increase mental health risk (Cochran, Mays, Alegria, Ortega, & Takeuchi, 2007), but being ethnic minority has not been consistently shown to increase mental health risk among sexual

Several studies, primarily conducted in high income countries, have reported an increased risk for mental health problems among sexual minorities (e.g., Bagley & D'Augelli, 2000; de Graaf,

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Sandfort, & Have, 2006; Remafedi, French, Story, Resnick, & Blum, 1998; Sandfort, de Graaf, Bijl, & Schnabel, 2001). For instance, among American twins from the population-based Vietnam Era Twin Registry, men reporting same-gender sexual orientation were at more than six times greater risk of suicidal attempts compared to their heterosexual biological twin counterparts (Herrel et al., 1999). Younger sexual minorities appear to be at increased risk for mental health problems including major depression, generalized anxiety disorder, conduct disorder, and nicotine dependence (Fergusson, Horwood, & Beautrais, 1999), as well as schoolrelated problems (Savin-Williams, 1994). This increased morbidity observed among gay and bisexual men and women is understood as a consequence of anti-gay verbal harassment, discrimination and physical violence (Mays & Cochran, 2001; Meyer, 2003). The resulting lower self-esteem and increased suicidal ideation may affect sexual minorities who are more open about their sexuality, although existing study findings have been mixed (Huebner, Rebchook, & Kegeles, 2004). Childhood harassment associated with gender-role nonconformity may also contribute to the increased suicidality seen among adult sexual minorities (Plöderl & Fartacek, 2007). Negative social attitudes towards homosexuality also appear to deter sexual minorities from accessing medical or mental health care (Collings & Welch, 2000; Welch, Collings, & Howden-Chapman, 2000; Human Rights Watch, 2004).

This is the first study to examine the prevalence of Axis I disorders and associated risk factors in a sample of Jamaican sexual minority men and women. Although nearly ten percent of adolescents in the Caribbean report a history of same-sex sexual experience and attraction (Halcón et al., 2003), issues of sexuality generally and same-sex relationships especially are rarely discussed in the Caribbean (Chevannes, 1992).

Verbal harassment and homophobic violence are frequent in Jamaica (Human Rights Watch, 2004). These negative responses are supported by legislation that considers same-sex intimacy a crime, punishable under Articles 76, 77, and 79 of Jamaica's Offences Against the Person Act by up to 10 years with hard labor for buggery, attempted buggery or gross indecency (Offences Against the Person Act, 1864; Human Rights Watch, 2004). The Jamaican law does not give a detailed definition of the term buggery, but describes it as an "abominable crime" under Article 76 titled 'Unnatural offences'. Neither has the term been clearly defined since its introduction through the Buggery Act 1533 in English Law, the vestiges of which remain law in Jamaica, a former British colony.

Amidst these challenges, some sexual minorities in Jamaica access social and sexual educational services offered by several human rights and sexual minority support groups, and HIV/AIDS organizations. These groups offer social support, helpline information services, counseling, legal advocacy and representation, and educational programs (Jamaica Forum for Lesbians, All-Sexuals and Gays, 2005). However, these counseling programs lack organization, and the shortage of volunteer mental health counselors limits the effectiveness of some interventions.

This is a descriptive study, in which we set out to determine the prevalence of Axis I disorders among sexual minorities in Jamaica, and to assess the role and significance of abusive, discriminatory or other negative experiences related to one's sexual orientation. In this study, we anticipated a high prevalence of mental health problems and further expected that these problems were largely attributable to homophobic violence and discrimination, and other homosexuality-related stressors. No empirical data exist in Jamaica regarding the mental health of sexual minorities, while such knowledge is needed to inform appropriate interventions and policies.

Method

Participants

Sixty-two participants were recruited between June and September 2007 through local human rights, sexual minority support, and HIV/AIDS care groups in the three counties of Jamaica. Participants had to be 16 years of age or older and resident in Jamaica for at least 3 years. All participants were interviewed after having given written informed consent.

In an effort to mitigate disproportionate recruitment of individuals accessing LGBT and human rights support services, primary referents were asked to direct to the study, acquaintances not normally accessing such services. Nearly forty percent of participants were not accessing such services. Among thirty-eight participants who did access these services, 37% were contacted through human rights and LGBT advocacy groups and 63% through HIV/AIDS care/prevention programs. There was no statistically significant difference by independent student t test analysis between participants accessing LGBT support services with those who did not with regards to age, personal comfort level with sexual orientation, age of realization of sexual orientation, or age of disclosure of sexual orientation to family or non-family. Thirty-nine percent of all interviewees were from the Kingston Metropolitan and surrounding areas in the South-Eastern part of the island, and 31% from Western parishes; the remaining participants were from the central parts of the island.

The mean age of participants at the time of interview was 29 (SD = 7.67) years. Among 50 men (81%) and 11 women, fifty percent identified as gay, 32% as bisexual, and 15% as lesbian. One individual reported being inter-sexed. We included this study participant in the sample, although the person was not included in the gender analyses.

Nearly one-third of the participants did not complete a high school education and 39% were unemployed. Almost all participants (90%) had never been married; a few of them had children (15% -6 out of 50 men, and 3 out of 8 women; Chi-square analysis showed no association between gender and having children). Fifty-three percent of all participants reported either presently living together with a partner (n = 13) or being in a visiting relationship (in an intimate relationship but not living together with partner, n = 20). There were no significant gender differences for having children, marital status, employment status, educational level, or access to LGBT services. Eighteen percent of the participants reported to have tested positive for HIV, whilst 15% said that they had never been tested; all participants with HIV were men.

Procedures

This study was designed in consultation with human rights, HIV/AIDS care/prevention, and LGBT support organizations; each of which gave written agreements to collaborate. These organizations assisted in the recruitment of participants and provided private space for conducting interviews. Ethical approval for this study was obtained from the University of the West Indies Ethics Committee, Mona, Kingston, Jamaica.

Interviews were conducted in person by a Master of Science in Psychology graduate student and three senior medical students. Interviewers were recruited through poster advertising on the university hospital compound and through lecturers in the Department of Community Health and Psychiatry and the Department of Sociology, Psychology and Social Work at the University of the West Indies (UWI), Mona. All interviewers were trained and supervised by a lecturer in Psychiatry at the UWI and Consultant Psychiatrist at the University Hospital of the West Indies (UHWI). Interviewers also completed the Collaborative Institutional Training Initiative (CITI) Research Ethics online course delivered by the University of Miami, USA in collaboration with UWI, Mona.

Training for the conducting of interviews was done in 2- to 3-hour sessions twice weekly over a 4-month period between February and May, 2007 and totaled approximately thirty training sessions. SCID-I/NP training included lectures, video sessions of interviews conducted by the designers of the SCID-I/NP (First, Spitzer, Gibbon, & Williams, 2002), role plays, home assignments, and interviewing and observing clinical management of actual patients at the University Hospital psychiatry ward. Training was also provided in assessment of suicide risk and making emergency or other appropriate referrals.

Measures

To assess gender and sexual identity we asked each participant to choose the single term that he/she felt best describes him/herself from the following list of options: gay male, lesbian, bisexual, transgender (that is, although you were born with one sex you live as the opposite sex), transsexual (that is, you were born with one sex but had surgery to change to the other sex), heterosexual, hermaphrodite/inter-sex (that is, you were born with both male and female sex organs), or other (participants were asked to specify). Gender role preference was assessed by asking: "What role do you prefer in a relationship?" with the possible responses being female gender role, male gender role, equal, unsure or other. We furthermore collected data on intimate relationship status and prior sexual intercourse with persons of the other sex.

For all participants, family relations were considered positive if participants reported *getting along OK* or *very well* with family or negative if *not getting along*. Participants were asked about *openness* in relation to the proportion of family or acquaintances to whom they had disclosed their sexual orientation, through the question: "Using the scale below please rate how open you are to people about your sexual orientation: not out, out to less than half the people I know, out to half the people I know, out to more than half the people I know, or out to almost everyone". Openness was considered *low* if there was disclosure of sexual orientation to less than fifty percent of acquaintances or family, and *high* if fifty percent or greater. There were no questions regarding whether this openness was voluntarily declared to others or not. Personal comfort with sexual orientation was coded on a scale of 1 (*least comfortable*) to 5 (*most comfortable*); 1 to 3 were considered *low* and 4 to 5 as *high*.

Descriptive data were also obtained regarding negative or abusive experiences related to one's sexual orientation, including nature of the event (e.g., name calling, physical violence, being forced out of a community), frequency, most recent occurrence, whether complaints were made to appropriate authorities or agencies, or counseling/psychological intervention sought. If no complaint was made or counseling sought, we asked participants about possible reasons (e.g., did not have time to make a complaint, did not know where to go). In assessing social support systems, respondents answered questions about support services accessed, such as whether they found these services helpful and how so (e.g., feel better about self, feel less lonely). A composite socioeconomic score was derived from data on household characteristics, access to potable water, and income.

The main research instrument used in this study consisted of the English version of the SCID Non-patient Edition November 2002, SCID-I/NP (First, Spitzer, Gibbon, & Williams, 2002); an additional questionnaire was designed by the study authors and included several items adapted from the Minnesota Adolescent Health Survey (Remafedi et al., 1998; with the authors' permission). One modification was made to the SCID interview: the phrase "getting an injection" was substituted for "getting a shot" in question 7 on page 1 of the screening module: "Are there any other things that you have been especially afraid of, like...getting a shot"; the reason for doing so is that in Jamaican parlance the term *shot* is invariably interpreted to mean *gunshot*. In one case the SCID was administered using a sign language interpreter. Total time for obtaining informed consent and conducting interviews generally lasted for about ninety minutes to two hours.

The kappa value, which assesses the reliability of the SCID in diagnosing specific DSM-IV Axis I disorders, ranges from 0.57 for obsessive compulsive disorder (OCD) to 0.80 for major depressive disorder, and above 0.75 for substance use disorders (Zanarini et al., 2000). A kappa score greater than 0.70 indicates good reliability, and 0.5 to 0.7 is considered fair. Based on the SCID-I/NP interview, participants with a positive finding were referred to a volunteer psychiatrist, psychologist or counselor for follow up care outside of the research study. We assessed the individual's level of psychological, social and occupational functioning using the Global assessment of functioning (GAF) score, a semi-quantitative rating excluding physical and environmental limitations (Vaillant, 2003). Inter-rater reliability of the GAF and its agreement with the Health-Sickness Rating Scale are between 0.85 and 0.95 (Vaillant, 2003).

We calculated descriptive frequencies for the main outcome variables including Axis I disorders, Global assessment of functioning, and psychosocial and environmental problems. We performed Pearson's chi-square analyses (Fisher's exact tests where appropriate) involving the presence or absence of an Axis I disorder and each type of negative experience (e.g. physical violence) to identify factors associated with poor mental health outcomes. Chi-square analyses were also used to examine associations between having an Axis I disorder and whether participants reported abuse to authorities or received psychological counseling after negative experiences. Associations between numeric variables, such as personal comfort with sexual orientation and level of openness or disclosure, were calculated using Pearson or Spearman's correlation. In an effort to reduce Type II errors because of multiple comparisons, we used a more conservative p value of 0.01 for statistical significance. Logistic regression models were subsequently tested to determine which factors were independent predictors of Axis I disorders. We adjusted for gender, sexual orientation and quality of relationship with family in regression models, and statistical significance was determined by likelihood ratio tests. Statistical analyses were performed using the Statistical Program for the Social Sciences (SPSS) version 16, STATA version 9.0 and Microsoft Excel. Statistical tests were two-tailed.

Results

Prevalence of Axis I Disorders among Jamaican Sexual Minorities

Twenty-seven percent of participants met DSM-IV-TR criteria for a major Axis I disorder in the past month (Table 1). The most common diagnosis was major depressive disorder, present in 13% of those interviewed. Of the 62 participants interviewed, 8% met criteria for substance use disorder with cannabis for the month leading up to the interview, and 3% for substance use disorder with alcohol. The GAF score was lower among persons with an Axis I disorder (M = 54, SD = 11 versus M = 77, SD = 13 in persons without an Axis I disorder; t(54) = 6.14, p < .01). Lifetime prevalence of Axis I disorders was higher, with most participants (69%) meeting criteria on the SCID-I/NP for ever having had one or more Axis I disorder(s) in their lifetime (Table 1). Again, major depressive disorder was the most common diagnosis (45%), followed by substance use disorder, which was more common for alcohol than for cannabis.

Negative and Abusive Experiences

Fifty-three participants reported having had some form of negative or abusive experience related to their sexual orientation, most of them (42%) within the past month leading up to the interview, and a cumulative percentage of 76% within the past 12 months. The frequency of these abusive incidents was greater than three times per month for more than half of the participants. The most common negative experiences reported were name calling (85%), discrimination (62%), threats of physical violence (49%), and being harassed (42%); physical violence was reported among 19%. Some participants had multiple negative or abusive experiences. Among participants who had such experiences, a minority had ever complained to the relevant authorities (26%), or received counseling (11%) after these events (Table 2). A

psychologist was the therapist in three of the six instances where counseling was received. Forty-one percent of these individuals who had negative experiences but who did not access counseling, felt that there was no need; and a substantial proportion (20%) considered the matter as not being "serious enough" or "important enough" to make a complaint.

Negative experiences were more likely among persons who were more open about their sexual orientation (half or more of the people they knew were aware of their sexual minority status), $\chi^2(1, N=62)=5.79, p=.02$. Bisexual men tended to be less open with their sexual orientation compared to men engaging exclusively in same-sex relations, $\chi^2(1, n=49)=5.98, p=.014$. HIV status, having an Axis I disorder, access to LGBT services, socioeconomic status, and personal comfort level with sexual orientation did not appear to increase the risk for negative/abusive experiences. There was no correlation between comfort level score and openness with sexual orientation. None of the factors gender, age, accessing LGBT support services, HIV status, or receiving counseling after having a negative/abusive experience was associated with having an Axis I disorder.

Quality of Coping Resources and Implications for Occurrence of Axis I Disorders

Bivariate analyses revealed that participants meeting criteria for a major Axis I disorder in the past month were more likely to report having poor relationships with their families, $\chi^2(1, N = 62) = 7.15$, p = .008, and problems with their primary support systems, $\chi^2(2, N = 62) = 13.7$, p = .001. Quality of relationships with family did not appear to be influenced by a participant's openness with sexual orientation, HIV status, or whether participants were experiencing other socioeconomic difficulties like unemployment or inability to attend school. A history of prior mental disorder (based on prior psychiatric hospitalization), prior treatment for drugs or alcohol, or having ever been suggested to seek emotional or psychiatric help was also not associated with having a poor relationship with family. There was no association between the primary outcome of psychiatric morbidity and overall occurrence of all negative experiences; however, psychiatric morbidity seemed to be associated with the specific type of abuse (Table 2).

For multiple regression analyses (Table 3), gender, sexual orientation and quality of relationship with family were included as covariates. Persons who reported experiencing withdrawal of family support were more likely to have an Axis I disorder (Adjusted Odds Ratio (AOR) = 8.21, 95% Confidence Interval (CI), 1.13 to 59.3, p = .032). Participants with a positive relationship with family were significantly less likely to have a mental disorder (AOR = 0.12, 95% CI, 0.023 to 0.47, p = .003). Negative experiences related to one's sexual orientation, such as eviction (AOR = 11.4, 95% CI, 1.53 to 85.3, p = .012) and receiving threats of violence (AOR = 4.63, 95% CI, 1.00 to 21.4, p = .036) also increased the risk for mental health problems. Similarly, multiple regression demonstrated that increased openness with one's sexual orientation was a risk factor for Axis I disorders (AOR = 5.91, 95% CI, 1.10 to 31.9, p = .027).

Discussion

This is the first study to explore the psychological health needs of marginalized sexual minorities in Jamaica and describe risk factors for poor mental health outcomes. As expected, this study suggests that abusive homophobic experiences are common among Jamaican sexual minorities. The existence of a weak or negative relationship with their families seems the most important predisposing risk factor for mental health problems in sexual minorities. Although this is a descriptive study, we assessed Axis I disorders by thorough clinical interviews using an established diagnostic tool, and not merely brief screening instruments commonly utilized by other researchers.

Prevalence of Axis I disorders among Jamaican sexual minorities

Axis I mental health disorders in the past month, particularly major depression and substance use disorders with cannabis and alcohol, were prevalent among the sexual minority participants in this study. Axis I disorders seemed to be less prevalent than would be anticipated from such high levels of abuse experienced by this marginalized group. It could be that the relatively low prevalence of mood and anxiety disorders in the past month is due to response differences to diagnostic tools utilized in this study, in line with what Turner and Lloyd (2004) postulated regarding the lower prevalence of mood and anxiety disorders observed among African Americans compared to other ethnic groups. The true prevalence of Axis I disorders in the past month may also be underestimated in this cross-sectional study; indeed, two-thirds of participants met diagnostic criteria when asked about longer lifetime experiences, albeit retrospectively. Lifetime prevalence of Axis I disorders seems more consistent with levels reported among sexual minorities in other studies (Huebner, et al., 2004; Sandfort, et al., 2001).

Risk factors for mental health problems

Factors primarily associated with psychiatric morbidity included poor relationships with family, negative experiences related to sexual orientation (in particular being evicted or physically abused), and greater openness with one's sexual orientation. Global assessment of functioning correlated well with the presence of an Axis I disorder.

For the first time, we now have a clear indication that among sexual minorities in Jamaica a negative relationship with family is an important risk factor for mental health problems. Fear and rejection by families frequently characterize the initial and sometimes sustained response on learning of the sexual minority status of relatives (Kreiss & Patterson, 1997). It is believed that ineffective communication that impedes disclosure or disruption of existing communication channels, as part of parents' initial reaction, presages the ensuing disruption of family dynamics.

Disclosure to family typically takes place at a later age than disclosure to a carefully selected friend or non-family, as was observed for this and several prior studies (Kreiss & Patterson, 1997; Mattison & McWhirter, 1995). In this Jamaican study, the mean age of disclosure to family was just over twenty-two years old, nearly ten years older than the mean age of initial disclosure to carefully selected acquaintances. This stage in early adulthood perhaps coincides with a point where greater independence may be assumed by some; but may be a critical point in the lives of others, where withdrawal of financial, emotional or other support may be more detrimental. The psychological well-being of sexual minorities may be substantially impacted by quality of family relationships, and early interventions could reduce the risk of poor health outcomes. Ryan, Huebner, Diaz, and Sanchez (2009) have identified specific rejecting versus wellness-promoting family responses experienced during adolescence that impact the well-being of LGBT in adulthood. Through the Family Acceptance Project, they are implementing interventions directed at improving families' understanding and acceptance of LGBT youth. A similar *Family Integration Initiative* would be timely and meaningful for Jamaican sexual minorities.

Impact of negative/abusive experiences

The prevalence and frequency of negative experiences reported by sexual minorities in this study were high. The association between experiences of discrimination and psychiatric morbidity has been well documented (Mays & Cochran, 2001). Though there is little published information on sexuality and sexual attitudes in Jamaica, especially same-sex attraction, early attempts at exploring Jamaican sexual attitudes and beliefs characterize a widely held perception of homosexuality as unnatural and resulting from inappropriate socialization

(Whitehead, 1976). In Jamaica, more than eleven percent of Emergency Room admissions are due to interpersonal violence-related injuries (Ministry of Health Jamaica, 2008), so it is not surprising that same-sex intimacy, which has the extra stigma of being criminalized, is often dealt with interpersonally in a violent way, as well.

Existing studies have tended to focus on the apparent link between marginalization and mental disorders, looking less at how social status itself may influence the types and level of stress exposure (Meyer et al., 2008). Our study demonstrated a particularly high stress exposure level among sexual minorities in Jamaica. However, because poor psychological well-being appeared to be less than expected based on the high level of negative experiences observed, sexual minorities in this study seem to be honing effective coping strategies or survivor skills despite constantly facing intense homophobia. This seems consistent with larger studies among adult LGBTs that consistently show that most subjects do not meet criteria for psychiatric disorders, even though prevalence of negative or discriminatory experiences may affect many or most (Sandfort et al., 2001; Mays & Cochran, 2001).

Greater level of openness with one's sexual orientation was associated with having negative experiences and appeared to consequently increase risk for psychiatric morbidity. That there was no correlation between openness and degree of personal comfort with one's sexual orientation would seem to suggest that, at least among participants in this study, disclosure might have been more likely attributable to stereotypical perception and involuntary outing rather than to voluntary self-initiated disclosure. For example, men who were exclusively engaged in same-sex relations were more open than bisexual men, but were not necessarily more comfortable with their sexual orientation. This seems hardly surprising as exclusively gay men may be more vulnerable to stereotyping (Sandfort, Melendez, & Diaz, 2007), whilst some bisexual men may seek to engage in heterosexual relationships in order to conceal their same-sex relations. Logistic regression analyses showed that negative experiences and greater openness, but not personal comfort level with one's sexual orientation, increased the risk for mental health problems. Because we did not distinguish between voluntary or involuntary disclosure, we are unable to make any solid conclusions about the relative importance of gender nonconformity or self-assertive disclosure to the occurrence of negative or abusive experiences in this study. What seems to be clear, however, is that openness, perhaps due to gay/lesbian stereotyping and consequent homophobic abuse, increases the risk for Axis I disorders in this study group.

Next steps

We find it interesting that factors that would generally be expected to put a strain on family relationships (such as unemployment, history of psychiatric problems, or treatment for illicit drug use or alcohol abuse) were not associated with negative relationships between sexual minorities and their families. Rather, withdrawal of family support, having experienced eviction from home or rented premises, and threats of violence may indicate the lack of a reliable social support system for sexual minorities in times of difficulty. In fact, the presence of an Axis I disorder was associated with sexual minorities having problems with their primary support systems. Strategies aimed at addressing the psychological health needs of sexual minorities in Jamaica should be multi-faceted, involving rebuilding family support and addressing personal support systems. Furthermore, coping mechanisms that seemingly mitigate high levels of psychiatric morbidity in a very hostile homophobic environment need further study with the aim of identifying and sharing positive behaviors with the rest of the Jamaican LGBT community. Beyond these descriptive study approaches, intervention studies seeking to identify effective family-based psychotherapeutic approaches and family integration initiatives (exploring disclosure and subsequent family dynamics) are also essential.

The majority of participants in this study who experienced some form of homophobic abuse did not receive psychological help, indicating that persons could be underestimating the psychological impact of chronic exposure to these stressors. Although more than half of the participants reported having such negative experiences more than three times per month, nearly half of them felt that there was no need for counseling. Because sexual minorities could be failing to recognize early the benefit of mental health interventions, educational efforts aimed at improving both sexual minorities' and service organization staff's ability to make this recognition early is warranted. Nearly seventy percent of the study participants met criteria for an Axis I disorder in their lifetime, but only about ten percent reported ever receiving counseling. Mental health needs of sexual minorities in Jamaica remain largely unmet. Improving the human resource capacity of local human rights and LGBT support groups to offer interventions by trained mental health professionals, as well as ensuring that public health facilities are better responsive to these needs is also essential in reducing mental health risks among sexual minorities in Jamaica.

The criminalization of same-sex intimacy in Jamaica makes it difficult for sexual minorities to access redress, and increases their risk for homophobic violence, as indicated by the high prevalence of negative/abusive experiences in this study. Additionally, such a social environment has also been shown to impede STI prevention efforts (HRW, 2004). Our recommendation is that efforts should be aimed at developing social and public health policies to eliminate discrimination and violence against sexual minorities.

Study limitations

Primary limitations of this study are the small sample size, recruitment of participants through self-directed convenience sampling, and the absence of a heterosexual control group. That the majority of study participants were men may be due to greater hostility towards male homosexuality than towards female, prompting men to access the various support groups more frequently than women. This observation is consistent with other studies that have found that lesbian and bisexual women participate in LGBT support groups less often than gay and bisexual men (Meyer et al., 2008; Waldo, Hesson-McInnis & D'Augelli, 1998). Furthermore, the recruitment of participants through support service organizations may have biased toward participants who are experiencing some psychosocial difficulty and means that these findings may not be applicable to the wider population of sexual minorities in Jamaica.

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Table 1

Prevalence of Axis I Psychiatric Disorders using the Structured Clinical Interview for DSM-IV- TR among a Convenience Sample of Sexual Minorities in Jamaica, N=62.

	Lifetime prevalence		Prevalence in past mont	
Axis I Disorder	N	%	N	%
Major Depressive Disorder	28	45.2	8	12.9
Substance Use Disorder (Alcohol)	16	25.8	2	3.2
Substance Use Disorder (Cannabis)	8	12.9	5	8.1
Primary Psychosis	5	8.1	3	4.8
Specific Phobia	6	7.0	1	1.6
Post Traumatic Stress Disorder	4	6.5	3	4.8
Bipolar I Disorder	4	6.5	2	3.2
Bipolar II Disorder	1	1.6	1	1.6
Obsessive Compulsive Disorder	3	4.8	2	3.2
Substance Use Disorder (other)	2	3.2	1	1.6
Anorexia Nervosa	2	3.2	1	1.6
Bulimia Nervosa	1	1.6	1	1.6
Major Depressive Disorder (substance)	1	1.6	0	0
Substance Use Disorder (Cocaine)	1	1.6	0	0
Dysthymic Disorder	1	1.6	0	0

Note. Although some diagnoses are mutually exclusive, several patients had multiple diagnoses.

 $\label{eq:Table 2} \textbf{Table 2}$ Negative Experiences among a Convenience Sample of Sexual Minorities in Jamaica (N=61)

	Axis I d	isorder	
Factors	Yesa	Nob	Statistics
Negative experiences			
Physical violence	6	4	$\chi^2(1) = 6.36, p = .012$
Eviction	5	3	$\chi^2(1) = 5.68, p = .017$
Discrimination	12	21	ns
Threats of violence	10	16	ns
Harassment	8	14	ns
Withdrawal of family support	5	3	ns
Name calling	14	31	ns
Overall negative experiences	16	37	ns
Negative family relations	7	5	$\chi^2(1) = 7.15, p = .008$
Lesbian or bisexual orientation	11	16	$\chi^{2}(6) = 16.2, p = .013$
High comfort level with orientation	12	37	ns
High level of openness with orientation	8	14	ns
Access to LGBT services	13	25	ns
Male	11	39	ns

Note. ns = nonsignificant.

 $a_{n=17.}$

 $b_{n=47.}$

 $\label{eq:Table 3} \label{eq:Table 3} \mbox{Multivariate Logistic Regression Analyses for Factors Associated with Axis I Disorders for a Convenience Sample of Sexual Minorities in Jamaica (N=61)$

	Axis I Disorder in			
Factors	<u> </u>		Adjusted Odds Ratio (95% CI)	<i>p</i> -value ^a
Gender				
Male	39 (78.0)	11 (22.0)	1.00 (referent)	.029
Female	6 (54.5)	5 (45.5)	6.03 (1.20, 30.4)	
Sexual orientation				
Bisexual	14 (70.0)	6 (30.0)	1.00 (referent)	
Homosexual	29 (76.3)	9 (23.7)	0.58 (0.14, 2.33)	.441
Other	2 (66.7)	1 (33.3)	0.36 (0.022, 5.74)	.469
Family relations				
Negative	5 (41.7)	7 (58.3)	1.00 (referent)	.003
Positive	40 (81.6)	9 (18.4)	0.12 (0.02, 0.47)	
Withdrawal of fan	nily support			
No	41 (78.8)	11 (21.2)	1.00 (referent)	.032
Yes	4 (44.4)	5 (55.6)	8.21 (1.13, 59.3)	
Evicted				
No	42 (79.2)	11 (20.8)	1.00 (referent)	.012
Yes	3 (37.5)	5 (62.5)	11.4 (1.53, 85.3)	
Threats of violence	e			
No	29 (80.6)	7 (19.4)	1.00 (referent)	.036
Yes	16 (64.0)	9 (36.0)	4.63 (1.00, 21.4)	
Openness with sex	tual orientation			
Low	31 (77.5)	9 (22.5)	1.00 (referent)	.027
High	14 (66.7)	7 (33.3)	5.91 (1.10, 31.9)	
Comfort with ories	ntation			
Low	8 (61.5)	5 (38.5)	1.00 (referent)	.674
High	37 (77.1)	11 (22.9)	0.72 (0.16, 3.25)	
Access to LGBT s	ervices			
No	20 (83.3)	4 (16.7)	1.00 (referent)	
Yes	25 (67.6)	12 (32.4)	4.23 (0.85, 21.2)	.057

Note. For multiple logistic regression analyses we adjusted for gender, sexual orientation and quality of relationship with family. Family relations were considered positive if participants reported *getting along OK* or *very well* with family, openness was considered *low* if there was disclosure of sexual orientation to less than fifty percent of acquaintances or family, and *high* if more than fifty per cent. Personal comfort with sexual orientation was coded on a scale of 1 (*least comfortable*) to 5 (*most comfortable*); 1–3 were considered low and 4–5 as high.

^a p values were obtained by likelihood ratio test.