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A scoping review of sexual minority women's health in Latin America and the Caribbean

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Abstract

Objectives: Despite research documenting significant health disparities among sexual minority women (lesbian, bisexual, and other non-heterosexual women) in high-income countries, few studies of sexual minority women's health have been conducted in low- and middle-income countries. The purpose of this scoping review was to examine the empirical literature related to the health disparities and health needs of sexual minority women in Latin America and the Caribbean (LAC), and to identify research gaps and priorities.

Design: A scoping review methodology was used.

Data sources: We conducted a comprehensive search of seven electronic databases. The search strategy combined keywords in three areas: sexual minority women, health, and LAC. English, Spanish, and Portuguese language studies published through 2017 in peer-reviewed journals were included.

Review methods: A total 1471 articles were retrieved. An additional 5 articles were identified following descendancy search; 3 of these met inclusion criteria. After removal of duplicates and title and abstract screening, we screened the full text of 37 articles, of which 22 (representing 18 distinct studies) met inclusion criteria. At least two authors independently reviewed and abstracted data from all articles.

Results: More than half of the studies were conducted in Brazil (n = 9) and Mexico (n = 5). Sexual health was the most studied health issue (n = 11). Sexual minority women were at elevated risk for sexually transmitted infections related to low use of barrier contraceptive methods during sexual encounters with men. Findings suggest that sexual minority women are generally distrustful of healthcare providers and view the healthcare system as heteronormative. Providers are believed to lack the knowledge and skills to provide culturally competent care to sexual minority women. Sexual minority women generally reported low levels of sexual health education and reluctance in seeking preventive screenings due to fear of mistreatment from healthcare providers. Sexual minority women also reported higher rates of poor mental health, disordered eating, and substance

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use (current tobacco and alcohol use) than heterosexual women. Gender-based violence was identified as a significant concern for sexual minority women in LAC.

Conclusions: Significant knowledge gaps regarding sexual minority women's health in LAC were identified. Additional investigation of understudied areas where health disparities have been observed in other global regions is needed. Future research should explore how the unique social stressors sexual minority women experience impact their health. Nurses and other healthcare providers in the region need training in providing culturally appropriate care for this population.

Keywords

Sexual minority women; Women's health; Latin America and the Caribbean; health disparities

1. Introduction

Leading health organizations worldwide (Australian Human Rights Commission, 2014; Institute of Medicine, 2011; National Institutes of Health, 2015; Office of Disease Prevention and Health Promotion, 2018; The World Bank, 2017; World Health Organization, 2013) have recently focused on promoting the health of sexual minority women (SMW; lesbian, bisexual, and other nonheterosexual). Multiple studies have documented significant health disparities among SMW in high-income countries such as higher rates of tobacco use (Clark et al., 2016; Kerr et al., 2015; McCabe et al., 2017; Meads et al., 2007), heavy drinking (Hughes et al., 2010a, 2010b, 2010c), obesity (Caceres et al., 2017, 2018; Eliason et al., 2015), breast cancer (Austin et al., 2012; Boehmer et al., 2014), hyperglycemia (Caceres et al., 2018; Kinsky et al., 2016), and poor mental health (Plöderl and Tremblay, 2015; Semlyen et al., 2016; Steele et al., 2009). SMW also report higher rates of violence/victimization (Drabble et al., 2013; Katz-Wise and Hyde, 2012; Szalacha et al., 2017), greater mistrust of healthcare providers (Brotman et al., 2003; Hart and Bowen, 2009) and lower use of preventive services (Dilley et al., 2010; Qureshi et al., 2018) that can potentially impair their wellbeing.

In 2011, the Institute of Medicine in the United States released a report that highlighted high rates of discrimination and victimization experienced by SMW (Institute of Medicine, 2011). In 2013, the World Health Organization identified the need to address minority stressors (e.g., institutionalized prejudice, social exclusion, and anti-homosexual violence) to improve the health and wellbeing of sexual minorities globally (World Health Organization, 2013). These stressors, attributable to sexual minority status, are posited to contribute to poor health outcomes (Meyer, 2003). Despite a growing understanding of the health needs of SMW in the United States and other high-income countries, we know little about the health of SMW living in low- and middle-income countries (LMICs).

The intersections of homophobic and sexist attitudes in Latin America and the Caribbean (LAC) make SMW particularly vulnerable to social stress and its associated health risks, particularly those who do not conform to traditional gender roles and feminine appearance (Costa et al., 2013). In LAC gender roles and expectations are strongly shaped by cultural beliefs. Less than one in four women in Latin America feel that women in their countries are treated with respect (Gallup, 2015). In 2017, the United Nations determined LAC as the

most violent region in the world, outside conflict contexts, for women (United Nations Development Program, 2017). In fact, LAC was identified as having the highest rate of sexual violence against women (United Nations Development Program, 2017). Further, 14 out of the 25 countries with the highest rates of female violent deaths are located in LAC (Widmer and Pavesi, 2016). This is particularly relevant to SMW who may challenge gender stereotypes and, therefore, become targets of bias-motivated discrimination and violence.

Acceptance of sexual minorities varies greatly across LAC. Same-sex sexual behavior among men is criminalized in Guyana and eight countries in the Caribbean, six of these countries also criminalize same-sex behavior among women (International Lesbian, Gay, Bisexual, Trans and Intersex Association, 2017a; Inter-American Commission on Human Rights and Organization of American States, 2015). Decriminalization of same-sex behavior is a recent phenomenon in some countries in LAC with four countries (Belize, Nicaragua, Panama, and Trinidad and Tobago) eliminating criminalization of same-sex behavior within the past decade. Further, two recent studies found high levels of negative attitudes towards sexual minorities in the Caribbean (Beck et al., 2017)—substantially higher than other regions in the Americas (International Lesbian, Gay, Bisexual, Trans, and Intersex Association, 2017b). For instance, individuals from the Caribbean were more likely than those in Central and South America to: 1) oppose equal rights for sexual minorities (19%), 2) support criminalization of same-sex sexual activity (22%), and 3) feel uncomfortable socializing with sexual minorities (27%) (International Lesbian, Gay, Bisexual, Trans, and Intersex Association, 2017b). A recent study conducted in eight Latin American countries found that older adults (age 60 or older), male participants, those with fewer years of formal education, and participants who were more religious expressed more negative attitudes toward older gay/lesbian individuals (Villar et al., 2018). Further, prejudicial attitudes towards sexual minorities are present across age groups. Approximately 34% of adolescents surveyed across six countries in LAC believed homosexuality should be considered a mental illness (Chaux and León, 2016). Attitudes toward lesbian, gay, bisexual, and transgender (LGBT) people varied substantially across these six countries with Mexican adolescents reporting more positive attitudes towards sexual minorities than those from the Dominican Republic and Guatemala (Chaux and León, 2016). Yet, a recent study in Mexico indicated that 43% of those surveyed expressed unwillingness to live in the same household with a sexual minority individual (National Council to Prevent Discrimination, 2010). Despite these high rates of negative attitudes, acceptance of sexual minorities remains higher in LAC than in Asia and Africa (International Lesbian, Gay, Bisexual, Trans and Intersex Association, 2017b).

Although homophobic and sexist attitudes may be higher in LAC than in many parts of the world (International Lesbian, Gay, Bisexual, Trans, and Intersex Association, 2017b), few studies have examined the health status or health needs of SMW in this region. Tat et al. (2015) conducted a systematic review of studies on the sexual health of women who have sex with women (WSW) in LMICs. The authors identified increased risk for sexually transmitted infections (STIs), including HIV, in Brazilian SMW that was primarily related to engaging in sexual activity with men without using safer sex practices (Tat et al., 2015). With the exception of sexual health, little is known about the health of SMW living in LAC. Alencar Albuquerque et al. (2016) conducted a systematic review of 14 studies to examine

barriers to healthcare use among sexual and gender minorities. Most of the studies were conducted in the United States with limited representation from studies in LAC. In addition, SMW were underrepresented in comparison to sexual minority men (SMM) (Alencar Albuquerque et al., 2016). Similarly, a systematic review investigating suicide risk in LGBT people identified 45 relevant studies. The majority of studies were conducted in the United States, Canada, the United Kingdom, and Australia, with only two studies conducted in Mexico (Tomicic et al., 2016).

As the largest healthcare profession worldwide nurses play a significant role in reducing health disparities among vulnerable populations, including SMW. Nurses provide over 90% of all health services globally (Pan American Health Organization/World Health Organization, 2016) and use a holistic approach to care, which emphasizes health promotion and disease prevention (De Bortoli Cassiani and Zua, 2014). Given the significant impact of social and economic determinants on health and wellbeing, nurses should be competent in identifying and mitigating factors that threaten the health and wellbeing of vulnerable populations (Wilson et al., 2016, 2012). Few studies in LAC have examined the role of nurses in providing care to LGBT patients. However, a recent study conducted in Brazil found that LGBT persons generally mistrust healthcare providers and believe they lack the appropriate expertise to provide culturally tailored care for the LGBT population (Moscheta et al., 2016).

The context in which SMW in LAC live creates unique health risks in this population that remain poorly understood. Although SMW are underrepresented in health research overall (Boehmer, 2002; Coulter et al., 2014), even less attention has been paid to SMW's health in LMICs. Therefore, the purpose of this scoping review was to examine the empirical literature related to the health disparities and health needs of SMW in LAC with the overarching goal of identifying gaps and priorities to guide future research.

2. Materials and methods

We conducted a search of the empirical literature published through 2017 in seven electronic databases: PubMed, Scielo, LILACS, PsycINFO, LGBT Life, Embase, and CINAHL. These databases were chosen with the help of an informationist at our health sciences library to provide the most comprehensive coverage of relevant studies conducted in LAC. The search strategy combined search terms in three categories: the population of interest (SMW), the topic of interest (health), and the geographic region of interest (LAC) (Fig. 1). Search terms for SMW included various phrases used to describe this population in health sciences research (e.g., lesbian, bisexual, women who have sex with women). Search terms for health topics included health, physical health, mental health, violence, sexual health, reproductive health, and substance use. Search terms for LAC included the names of all countries in this region according to the World Bank (The World Bank, 2018). Search terms within each category were combined using the Boolean operator "or." Then the search results across the three categories were combined using the Boolean operator "and." Ancestry and descendency search of retrieved studies was performed to identify additional articles.

Inclusion criteria were empirical studies about SMW's health published in peer-reviewed journals in English, Spanish, or Portuguese. Studies that included both SMW and SMM were included if they reported findings separately by gender. We excluded systematic/literature reviews, articles that reported on psychometric development and testing, healthcare professionals' views about sexual minorities, prevalence estimates of sexual minority populations, studies conducted with Latino migrants or refugees in a non-Latin American country, conference abstracts, case studies, and reports in the grey literature. We screened all titles and abstracts after completing the ancestry and descendency search. Two authors then reviewed the full text of each article. Data were abstracted if the article met inclusion criteria. Any disagreements between these two authors were discussed with a third author until consensus was achieved.

We created and used data extraction matrices to summarize key features of the studies. Categories in the data extraction matrices were country/countries where the research was conducted, population(s) included in the study, first author/year, study design, objectives, recruitment strategy, sample characteristics, and key findings.

3. Results

Our search yielded a total of 1471 articles as shown in the PRISMA diagram (Fig. 2). An additional 5 articles were identified following descendency search; 3 of these met inclusion criteria. After removal of duplicates and title and abstract screening, we screened the full text of 37 articles, of which 22 met inclusion criteria.

Table 1 summarizes study characteristics for the 22 included articles (representing 18 distinct studies). Although the inclusion criteria did not set limits on earliest publication dates, the earliest studies included were conducted in 2005. The majority of studies were conducted in Brazil (n = 9), followed by Mexico (n = 5), Argentina (n = 3), and Chile (n = 2). We found one study in each of the following countries: Colombia, Guyana, and St. Lucia (Fig. 3). Two studies included samples from multiple countries. Bloomfield et al. (2011) included participants from several Latin American countries (Argentina, Brazil, Costa Rica, Nicaragua, and Uruguay) and a study by Traeen et al. (2009) included participants from Cuba as well as other countries outside the LAC region. In terms of study design, the majority of the studies (n = 13) used quantitative methods; 6 were qualitative, and 3 used mixed method approaches. All studies used a cross-sectional design. Nearly all of the studies used non-probability sampling methods (e.g., convenience, purposive, and snowball); only one study used a representative sample (Ortiz-Hernández et al., 2009). Sample sizes ranged widely, from six to 1484 participants with authors of two articles not reporting their sample sizes (Mertehikian, 2017; Mora and Monteiro, 2010). The age of participants also varied across studies. Only two studies focused solely on sexual minority adolescents (Diaz Montes et al., 2005; Ortiz-Hernández et al., 2009). Four studies included both adolescent and adult participants (Anaid Ramórez-Aguilar et al., 2016; Ortiz-Hernández, 2005; Ortiz-Hernández and García Torres, 2005; Ortiz-Hernández and Granados-Cosme, 2006) and the remaining studies included only individuals who were age 18 or older. No studies focused exclusively on sexual minority older adults. With the exception of a study conducted in Guyana (Rambarran and Simpson, 2016), the remaining studies did not mention whether transgender

women (who identify as a woman and were assigned the male sex at birth) were included in their samples.

Sexual orientation was most commonly defined using measures of sexual identity (n = 12) and sexual behavior (n = 4). One study asked about gender of romantic partners (n = 1) as a proxy for sexual orientation. Four studies conducted by Ortiz-Hernández and colleagues used multiple dimensions (attraction, behavior, and identity) to assess sexual orientation (Ortiz-Hernández, 2005; Ortiz-Hernández et al., 2009; Ortiz-Hernández and García Torres, 2005; Ortiz-Hernández and Granados-Cosme, 2006). The remaining study (Monteiro et al., 2010) did not operationally define sexual orientation.

Study findings are summarized in Table 2. The majority of studies focused on sexual health (n = 11). Fewer focused on mental health (n = 8), substance use (n = 5), violence and/or marginalization (n = 4), or healthcare experiences (n = 6). One study focused on cognitive function. Some studies focused on more than one of these topical areas. Below we review the key findings organized by topic (Table 2).

3.1. Sexual health

As noted above, 11 studies focused on sexual health, specifically risk for HIV or other STIs. The majority (n = 7) of these studies were conducted in Brazil. Two studies explored perceptions of STI risk in SMW. Lesbian women identified themselves as having low risk for HIV compared to heterosexual women (Monteiro et al., 2010), but recognized a heightened risk of HIV when having sex with bisexual women or with men (Mora and Monteiro, 2010). However, both lesbian and bisexual women had few concerns regarding risk for STIs and HIV (Monteiro et al., 2010). Pinto et al. (2005) examined the prevalence of STIs among 145 Brazilian women who reported having had same-sex relationships. The prevalence rates of human papilloma virus (6.2%), chlamydia (1.8%), and HIV (2.9%) were low. Of the participants who reported having a male sexual partner in the past year (23.4%), less than half used condoms during sexual encounters (Pinto et al., 2005). Similarly, 77.5% of SMW in a cross-sectional study conducted in Argentina reported not using any barrier protection (e.g., dental dams) during sexual encounters with women (Silberman et al., 2016). da Silva Oliveria et al. (2017) investigated knowledge, attitudes, and practices related to HIV risk in 94 WSW in Brazil. They found that approximately two-thirds of study participants had adequate knowledge of HIV prevention and treatment (da Silva Oliveira et al., 2017). In contrast, in a study of SMW in Argentina, Silberman et al. (2016) found that less than half of the study participants felt they had adequate knowledge of STI prevention.

Findings from the studies included in this review suggest that SMW receive little information about sexual health from healthcare providers (Diaz Montes et al., 2005; Mertehikian, 2017; Silberman et al., 2016). A study conducted in Chile among adolescents (ages 13–17) found that sexual minority girls were nearly three times as likely as heterosexual girls to report not receiving adequate sexual health education (Diaz Montes et al., 2005). Silberman et al. (2016) also found that SMW in Argentina had low rates of receiving sexual health education. In this study, more than 90% of participants reported never receiving STI information from a healthcare provider. Overall, SMW in Argentina

reported obtaining sexual health information from friends and/or Internet sources (Mertehikian, 2017; Silberman et al., 2016).

3.2. Mental health

Among the studies that examined mental health, three were conducted in Mexico, two in Chile, and the remaining three studies were conducted in Colombia, Cuba, and St. Lucia. Diaz Montes et al. (2005) found that sexual minority adolescent girls in Colombia had significantly higher rates of depressive symptoms (OR = 1.10, 95% CI 1.01–1.18) and higher scores on a validated eating disorder questionnaire (OR 1.59, 95% CI 1.05–2.40) relative to heterosexual girls. Similarly, SMW in Mexico were more likely than their heterosexual counterparts to report poor mental health (Ortiz-Hernández, 2005; Ortiz-Hernández and García Torres, 2005). Although SMW in Mexico reported higher rates of past suicide attempts than SMM (Ortiz-Hernández, 2005), a study in Chile found they had lower rates of current suicide intent than SMM (Barrientos et al., 2017). An additional study in Chile investigated the impact of system justification (defined as the belief that oppression of sexual minorities in society is justified) on anxiety and depressive symptoms in sexual minorities (Bahamondes-Correa, 2016). Results of multivariate analyses showed that system justification was associated with increased anxiety and depressive symptoms among SMM, but not among SMW (Bahamondes-Correa, 2016). Another report of findings from the same study found that SMW reported higher levels of life satisfaction ($p < 0.01$) and better interpersonal relationships than SMM ($p < 0.001$) (Barrientos et al., 2017). Anaid Ramirez-Aguilar et al. (2016) investigated differences in anxiety and depressive symptoms among adolescents and young adults in Mexico. Bisexual women had higher scores on both the Beck Anxiety and Beck Depression Inventories than lesbian women, but not heterosexual women. No differences were noted between lesbian and heterosexual women. Furthermore, a qualitative study conducted in St. Lucia ($n = 9$) identified perceived consequences of marginalization of sexual minorities on their health. Participants identified depression, anxiety, fear, and social isolation as possible consequences (Couzens et al., 2017). Træen et al. (2009) assessed differences in quality of life among sexual minority and heterosexual college students in Cuba, India, South Africa, and Norway. Findings were reported separately by country. Approximately 38.6% of the total 872 participants were recruited from Cuba, of which 29 identified as sexual minorities (11 women and 18 men). Despite the small sample size the researchers found that SMW reported significantly higher fear and anger relative to heterosexual women.

3.3 Substance use

A total of five studies examined substance use among SMW in LAC. Sexual minority adolescent girls in Mexico reported significantly higher rates of current tobacco use and alcohol use than their heterosexual counterparts (Ortiz-Hernández et al., 2009). These disparities in substance use were primarily explained by experiences of discrimination and violence. Approximately 21% of SMW in a study conducted in Mexico met criteria for alcoholism using the Alcohol Use Disorder Identification Test (AUDIT) (Ortiz-Hernández and García Torres, 2005). Also, sexual minority adolescent girls in Colombia reported significantly greater illicit drug use compared to heterosexual girls (OR 6.21, 95% CI 1.24–31.30) (Diaz Montes et al., 2005). SMW in Pinto and colleagues' (2005) study reported

frequent use of tobacco (46.9%), alcohol (62.1%), marijuana (40.2%), and cocaine (16.1%) in the past year, but no participants reported use of injection drugs. Bloomfield et al. (2011) analyzed international data from the Gender, Alcohol, and Culture Study (GENACS) to examine sexual orientation differences in the prevalence of high-volume drinking and binge drinking. Although GENACS was conducted in five Latin American and Caribbean countries (including Argentina, Brazil, Costa Rica, Nicaragua, Uruguay), only 21 women from this region were identified as sexual minority and no differences in alcohol use were observed between SMW and heterosexual women (Bloomfield et al., 2011).

3.4. Violence/Marginalization

A total of four studies examined violence and/or marginalization in SMW. A qualitative study conducted in Brazil explored lesbian women's (n = 6) perceptions of gender-based violence in their country (Calado Dantas et al., 2016). Participants' narratives emphasized the significant role that gender-based violence played in their lives, including corrective rape perpetrated by male family members. They also reported believing that healthcare providers lacked an understanding of health issues that affect lesbian women and were unprepared to address intimate partner violence that occurred in lesbian relationships (Calado Dantas et al., 2016). Ortiz-Hernández and Granados-Cosme (2006) found that SMW and SMM in Mexico reported high rates of violence during childhood, primarily attributed to their non-conformity to ascribed gender roles; SMM were more likely than SMW to report such experiences. SMW most frequently identified their mothers as perpetrators of violence during childhood (Ortiz-Hernández and Granados-Cosme, 2006). In addition, SMW in Mexico were more likely than SMM to report experiencing childhood physical abuse (Ortiz-Hernández and García Torres, 2005). Lastly, SMW in St. Lucia described the pervasive influence of discrimination on their everyday life and how skin color contributes to unequal treatment of the sexual minority community (Couzens et al., 2017). Participants believed there is greater tolerance for light-skinned sexual minorities in St. Lucia and that dark-skinned sexual minorities are less accepted. A dark-skinned lesbian participant reported she had become socially isolated due to fear of experiencing discrimination. Overall, participants identified that higher levels of education as a buffer of discrimination as well as a means to greater financial opportunities in society (Couzens et al., 2017).

3.5. Healthcare experiences

Although only two studies, Mertehikian (2017) and Silberman et al. (2016), focused on sexual healthcare, participants in five out of six studies that assessed healthcare experiences of SMW exclusively discussed these encounters in relation to sexual health. Nearly one-quarter of SMW in a study conducted in Brazil had never had a Pap test (Barbosa and Facchini, 2009). SMW in this study were more likely to identify as having masculine attributes (Barbosa and Facchini, 2009). Thus, SMW in Brazil generally reported they had little need for gynecological care (Barbosa and Facchini, 2009; de Lima Garcia et al., 2016). Moreover, in a sample of 161 women in Argentina the majority of participants reported visiting a healthcare provider in the past year, but only a small number (17.2%) indicated that their healthcare providers had asked them their sexual orientation (Silberman et al., 2016). A qualitative study of 16 SMW in Guyana explored interactions with the healthcare system (Rambarran and Simpson, 2016). Participants generally reported that healthcare

providers rarely discussed sexual health with them (Mertehikian, 2017; Rambarran and Simpson, 2016). They felt that healthcare providers pathologize sexual minorities and that healthcare settings were heteronormative—the assumption that all patients are heterosexual or belief that being heterosexual is preferred over other sexual orientations (Barbosa and Facchini, 2009; Mertehikian, 2017; Rambarran and Simpson, 2016; Silberman et al., 2016). SMW in several studies indicated that they feared disclosing their sexual orientation to healthcare providers and felt vulnerable in healthcare encounters (Barbosa and Facchini, 2009; Gomes de Carvalho et al., 2013; Rambarran and Simpson, 2016). They also felt that healthcare providers lacked the knowledge to provide adequate care to SMW (Gomes de Carvalho et al., 2013; Mertehikian, 2017). These factors were cited as reasons for infrequent use of healthcare services.

3.6. Cognitive function

One study conducted in Mexico investigated sex and sexual orientation differences in cognitive function (e.g., memory, attention) among 73 adolescent and young adult participants (ages 16–30) (Anaid Ramírez-Aguilar et al., 2016). No significant sex and/or sexual orientation differences were noted.

4. Discussion

Findings from this review underscore the substantial sexual orientation-related health risks and health disparities among SMW in LAC and allowed us to identify many knowledge gaps regarding the health of SMW in this region. As the first review to focus exclusively on the health of SMW in this geographic region, our findings provide important directions for future research and opportunities to improve SMW's health in LAC.

Sexual health was the most prominent health issue examined. Our results corroborate the work of Tat et al. (2015) who found that WSW in LMICs report high rates of risky sexual behaviors. SMW in the current review were at increased risk of STIs primarily related to low use of barrier contraceptive methods during sexual encounters with men (da Silva Oliveira et al., 2017; Mora and Monteiro, 2010; Pinto et al., 2005). Our findings are also consistent with the results of two previous studies that found similar rates of low condom use among SMW from China and the United States (Wang et al., 2012; Ybarra et al., 2016). Results are contradictory regarding knowledge of sexual health with SMW in Brazil reporting high levels of STI knowledge (da Silva Oliveira et al., 2017; Gomes de Carvalho et al., 2013) and those in Argentina and Colombia reporting low levels (Diaz Montes et al., 2005; Silberman et al., 2016). Therefore, our findings highlight the need for sexual health education to reduce the sexual health risks observed among SMW in this world region. Although the majority of included studies that examined sexual health focused on STIs, it is important to note that sexual health encompasses other concerns (e.g., sexual dysfunction, reproductive choices) (World Health Organization, 2014). More research is needed that examines other aspects of sexual health in SMW living in LAC in addition to STI risk and prevention.

SMW in the included studies were reluctant to engage with the healthcare system. Participants indicated that the approach to gynecological care was heteronormative and they were uncomfortable when seeking such care (Barbosa and Facchini, 2009; Mertehikian,

2017; Rambarran and Simpson, 2016; Silberman et al., 2016). Discomfort with the healthcare system has also been found among sexual minorities in other parts of the world. For example, Gowen and Wings-Yanez (2014) found that sexual minority youth in the United States view sexual health education as unresponsive to the needs of sexual minorities. Further, SMW in Brazil reported lower rates of Pap tests and gynecological care in the past year (Barbosa and Facchini, 2009), which is consistent with evidence from the United States (Buchmueller and Carpenter, 2010; Kerker et al., 2006) and France (Chetcuti et al., 2013). Perceived lower risk of STIs reported by participants in two studies (Monteiro et al., 2010; Mora and Monteiro, 2010) is similar to findings from a recent analysis of data from the National Survey of Family Growth in the United States (Agénor et al., 2017). The studies included in this review that examined healthcare experiences of SMW focused mostly on sexual health. However, it appears SMW believe nurses and other healthcare providers in LAC lack the skills to provide culturally competent care, particularly as it relates to sexual health.

Adolescent and young SMW in the studies reviewed were more likely than their heterosexual peers to report substance use and poor mental health (Diaz Montes et al., 2005; Ortiz-Hernández, 2005; Ortiz-Hernández and García Torres, 2005). Sexual minority adolescent girls in one of the studies reported higher levels of depressive symptoms than a comparison group of heterosexual girls (Diaz Montes et al., 2005). These researchers also found that sexual minority adolescent girls had higher scores than heterosexual girls on a validated eating disorder questionnaire. In the United States there is contradictory evidence regarding sexual orientation differences in eating disorders, with some evidence suggesting SMW have higher rates of disordered eating compared to heterosexual women (Austin et al., 2013; Mor et al., 2015) and others finding no difference (Feldman and Meyer, 2007). Research on substance use among SMW in LAC is limited, especially in light of higher rates of tobacco and heavy drinking reported in the few studies we found on this topic (Ortiz-Hernández et al., 2009; Ortiz-Hernández and García Torres, 2005). Similarly, Diaz Montes et al. (2005) found sexual minority adolescent girls in Colombia reported higher rates of illicit drug use relative to heterosexual girls, which corroborates data from the United States (Corliss et al., 2010; Marshal et al., 2012).

Nurses and other healthcare providers in LAC should be educated about health issues that are prevalent in this population (e.g., poor mental health, substance use). These data indicate that SMW in LAC have specific health concerns (e.g. mental health and substance use) that should be addressed by healthcare providers. Health promotion efforts that target this population should take into account the unique social determinants that impact SMW's health, however, to achieve this it is necessary to incorporate LGBT content into the education of nurses and other health professions. Further, in order to promote the health of SMW and other vulnerable populations there is a need to strengthen public health nursing education in LAC as most nursing education has focused on acute care services (Joyce et al., 2017).

The 22 articles included in this review highlight the impact of minority stress (e.g., victimization, discrimination) on the health of SMW. Participants in Calado Dantas et al. (2016) study identified gender-based violence as a common concern of SMW. Corrective

rape has been described as a major health issue for SMW in South Africa (Muller and Hughes, 2016) and in other parts of the world (Bhalla, 2015; South China Morning Post, 2018). Only one study in the present review discussed corrective rape as an issue for SMW in Brazil. Therefore, the extent of this practice in LAC is unknown. SMW in Mexico reported higher rates of violence across the lifecourse (Ortiz-Hernández and García Torres, 2005; Ortiz-Hernández and Granados-Cosme, 2006), which is consistent with evidence from a recent meta-analysis of 65 studies conducted in several nations (including the United States, England, South Africa, and Netherlands) (Katz-Wise and Hyde, 2012). Overall, there is a lack of quantitative research examining the association of minority stressors and health among SMW in Latin America. Although several nations in the region, particularly in the Caribbean, criminalize same-sex sexual behavior, little is known about the impact of these policies on the health of SMW. A recent survey of eight countries in LAC found that heterosexual individuals who lived in countries where sexual minorities had greater legal rights (e.g., same-sex marriage, legal adoption by same-sex adoption, and hate crimes based on sexual orientation) reported more positive attitudes toward gay men and lesbian women (Villar et al., 2018). Future studies should investigate the influence of violence exposure, institutionalized homophobia, and protective policies on the health and wellbeing of SMW in LAC.

Given that older SMW were underrepresented in this review, additional research is needed to determine whether the observed mental health and substance use disparities among SMW persist as they age. This is a significant gap in the extant literature as LAC is expected to experience a 30% increase in their older adult population between 2010–2050 (National Academy of Sciences, Engineering, and Medicine, 2015).

4.1. Limitations

Although this review of 22 articles provides a baseline understanding about the health of SMW in LAC, several limitations of our review and the studies included in the review should be considered when evaluating the findings. First, because we chose to include only studies published in peer-reviewed journals we missed findings from unpublished research. Despite conducting a comprehensive review of several electronic databases, the studies included in this review were conducted in only ten LAC countries. This limits the generalizability of findings to other countries in the region. All included studies were cross-sectional. The lack of prospective designs makes it difficult to establish causality and identify the impact of minority stressors (e.g., victimization, marginalization, discrimination) on the health of SMW. Given that only one study employed non-probability sampling, the extent or impact of selection bias across studies is unknown. Participants in the studies reviewed may have characteristics and health risks that are different from the larger population of SMW from their respective geographic areas. Most of the studies reviewed had small sample sizes, which further limits the generalizability of findings. There was little discussion regarding heterogeneity in health outcomes across subgroups of SMW (e.g., lesbian vs. bisexual women, racial/ethnic and low-income SMW). Indeed, only Couzens et al. (2017) examined the impact of skin color on experiences of marginalization. Similarly, only one study mentioned inclusion of transgender women who identified as SMW in their sample (Rambarran and Simpson, 2016). Transgender women who may also

identify as non-heterosexual may be at particularly high risk for violence and discrimination compared to both other sexual minority and heterosexual women in LAC (Inter-American Commission on Human Rights and Organization of American States, 2015). Therefore, the examination of heterogeneity in health outcomes across subgroups of SMW in LAC is an area in need of further research.

5. Conclusion

In addition to highlighting the nascent body of research on SMW's health in LAC, this review demonstrates that further research is needed to elucidate the unique health needs of SMW in LAC. Additional research should explore how the social stressors experienced by SMW in LAC impact their health. There is a need for research that examines a wider breadth of health conditions beyond sexual health. Our findings have significant implications for nurses and other healthcare providers in LAC since SMW are reluctant to seek healthcare due to fear of discrimination. Initiatives to increase the ability of healthcare providers in the region to care for SMW's unique health risks are urgently needed.

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What is already known about the topic?

- Growing evidence from high-income countries suggests that sexual minority (e.g., lesbian, bisexual, and other non-heterosexual) women experience significant health disparities compared to heterosexual women. However, little is known about the health of sexual minority women living in low- and middle-income countries.
- Despite high rates of homophobia and sexual violence against women there has been limited research on the health of sexual minority women in Latin America and the Caribbean.

What this paper adds

- Most research on sexual minority women's health in Latin America and the Caribbean has focused on sexual health to the exclusion of other health outcomes.
- Health disparities (including mental health, substance use, and violence) among sexual minority women in Latin America and the Caribbean are consistent with those observed in the United States and other high-income countries.
- Sexual minority women are generally reluctant to seek healthcare and feel healthcare providers lack the knowledge to adequately address their health concerns.

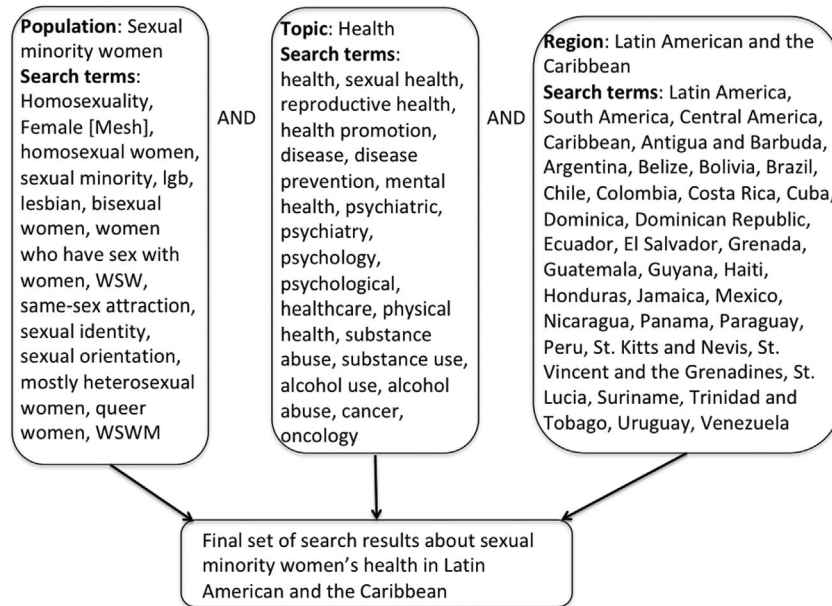


Fig. 1.
Search Strategy.

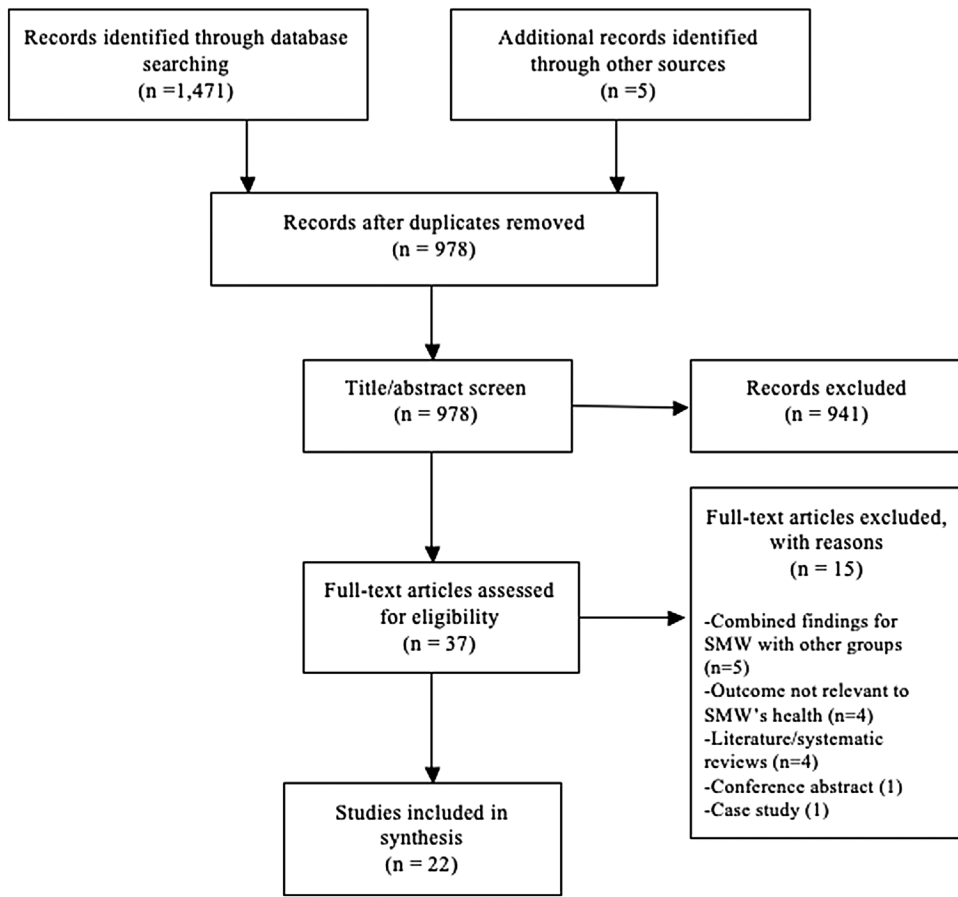


Fig. 2.
PRISMA A FLOW Diagram.



Fig. 3.
Included Studies by Location.

Study characteristics.

Table 1

First Author, Year	Study Design	Recruitment Strategy	Location	Sample	Age Range or Mean	Sexual Orientation Measure
Anaid Ramírez-Aguilar et al., 2016.	Cross-sectional	Convenience	Mexico	73 (including 15 lesbian women, 15 bisexual women, and 13 gay men)	16–30 years	Sexual identity
Bahamondes-Correa, 2016 ^{***}	Cross-sectional	Convenience	Chile	467 (268 gay men and 199 lesbian women)	18–67 years	Sexual identity
Barbosa and Facchini, 2009	Qualitative: ethnography and in-depth interviews	Convenience	Brazil	30 women who have sex with women	18–45 years	Sexual identity
Barrientos et al., 2017 ^{***}	Cross-sectional	Snowball	Chile	447 (191 lesbian women, 256 gay men)	18–67 years	Sexual identity
Bloomfield et al., 2011	Secondary analysis of data from the Gender, Alcohol, and Culture: An International Study (GENACIS) which	Differed by country	International (Latin American countries included: Argentina, Brazil, Costa Rica, Nicaragua, Uruguay)	3968 adult participants (122 lesbians, 126 gay men, 1830 heterosexual women, 1890 heterosexual men)	Over 18 years old	Gender of romantic partner
Calado Dantas et al., 2016.	Qualitative: semi-structured interviews	Convenience	Brazil	6 lesbian women	20–23 years	Sexual identity
Couzens et al., 2017.	Qualitative: semi structured interviews	Purposive	St. Lucia	9 sexual minority women and men	18–46 years	Sexual identity
da Silva Oliveira et al., 2017.	Cross-sectional	Snowball	Brazil	91 women who have sex with women	26–33 years	Sexual behavior
de Lima Garcia et al., 2016.	Qualitative: semi-structured interviews	Snowball	Brazil	30 (6 lesbian, 3 bisexual, 12 gay, 9 transgender [gender identity not reported])	18–51 years	Sexual identity
Díaz Montes et al., 2005.	Cross-sectional	Convenience	Colombia	432 participants (213 girls and 42 identified as gay/lesbian, bisexual or questioning)	13–17 years	Sexual identity
Gomes de Carvalho et al., 2013.	Qualitative: semi-structured interviews	Convenience	Brazil	9 SMW	25–40 years	Sexual identity
Mertehikian, 2017.	Qualitative: semi-structured interviews	Snowball	Argentina	Not reported	18–29 years	Sexual identity
Monteiro et al., 2010. [*]	Mixed methods: interviews and questionnaires	Convenience	Brazil	72 sexual minorities (no breakdown by sexual orientation)	18–26 years	Not specified

First Author, Year	Study Design	Recruitment Strategy	Location	Sample	Age Range or Mean	Sexual Orientation Measure
Mora and Monteiro, 2010. [*]	Mixed methods: ethnography, in-depth interviews, and questionnaires	Convenience	Brazil	Not reported	18–26 years	Sexual behavior
Ortiz-Hernández, 2005. ^{**}	Cross-sectional	Convenience	Mexico	506 sexual minorities (188 lesbian and bisexual women, 318 gay and bisexual men)	13–70 years	Attraction, sexual behavior, and identity
Ortiz-Hernández and García Torres, 2005. ^{**}	Cross-sectional	Convenience	Mexico	506 sexual minorities (188 lesbian and bisexual women, 318 gay and bisexual men)	13–70 years	Attraction, sexual behavior, and identity
Ortiz-Hernández and Granados-Cosme, 2006. ^{**}	Cross-sectional	Convenience	Mexico	506 sexual minorities (188 lesbian and bisexual women, 318 gay and bisexual men)	13–70 years	Attraction, sexual behavior, and identity
Ortiz-Hernandez, et al., 2009.	Secondary analysis of the 2005 National Youth Survey	Probability	Mexico	12,796 participants (1484 same-sex attracted, 179 reported same-sex behavior, 230 identified as lesbian, gay, or bisexual)	12–29 years	Attraction, sexual behavior, and identity
Pinto et al., 2005.	Cross-sectional	Convenience	Brazil	145 women who have sex with women	18–50+ years	Sexual behavior
Rambarran and Simpson, 2016.	Qualitative: semi structured interviews	Convenience	Guyana	16 SMW	20–40+ years	Sexual identity
Silberman et al., 2016.	Cross-sectional	Convenience	Argentina	161 women who have sex with women	Mean age: 29.3 years	Sexual behavior
Traeen et al., 2009	Cross-sectional	Convenience	International (Cuba, India, South Africa, and Norway)	872 participants (337 from Cuba of which 29 identified as gay/lesbian, bisexual or questioning)	20–40+ years	Sexual identity

Note. The 22 included articles represent 18 distinct studies.

^{*} Monteiro et al. (2010) and Mora and Monteiro (2010) reported findings from the same study.

^{**} Ortiz-Hernández (2005), Ortiz-Hernández and García Torres (2005), and Ortiz-Hernández and Granados-Cosme (2006) reported findings from the same study.

^{***} Bahamondes-Correa (2016) and Barrientos et al. (2017) reported findings from the same study.

Table 2

Summary of study findings.

First Author, Year	Objective	Key Findings
Anaid Ramirez-Aguilar et al., 2016.	Investigate sex and sexual orientation differences in cognitive function among young adults.	<ul style="list-style-type: none"> Bisexual women reported higher depression and anxiety than lesbian women. No significant sex and/or sexual orientation differences in cognition function were noted.
Bahamondes-Correa, 2016****	Test the effects of system justification beliefs on psychological distress (anxiety and depression symptoms) and examine the mediating role of internalized homonegativity among gay and lesbian individuals.	<ul style="list-style-type: none"> Mediation analyses indicated system justification was associated with poor mental health in gay men, but not SMW.
Barbosa and Facchini, 2009	Explore perceptions of the relationship between access to healthcare and representations of gender and sexuality, among women who have sex with women.	<ul style="list-style-type: none"> 50% of participants received gynecological care at least annually. 7 out of 30 participants had never had a Pap test. Women who reported low or no use of gynecological care perceived little need for these services. Participants considered gynecological visits unpleasant as they believed their bodies would be exposed revealing "masculine aspects of their bodies" and therefore, revealing their sexual orientation to healthcare providers.
Barrientos et al., 2017****	Assess the mental health and wellbeing of Chilean gay men and lesbian women.	<ul style="list-style-type: none"> Subjective wellbeing, measured with the Satisfaction with Life Scale, was higher in lesbian women relative to gay men ($p = 0.01$). Lesbian women also reported better interpersonal relationships than gay men ($p < 0.001$). Gay men reported higher rates of suicidal intent (9.0%) than lesbian women (6.5%).
Bloomfield et al., 2011	Examine the prevalence of high-volume and binge drinking in gay men and lesbians compared to heterosexuals in a large international study of gender, alcohol and culture.	<ul style="list-style-type: none"> SMW had no difference in alcohol use, except in the United States where lesbians had higher rates of high volume and binge drinking than heterosexual women.
Calado Dantas et al., 2016.	Describe gender-based violence in lesbian women in same-sex relationships.	<ul style="list-style-type: none"> Participants perceived gender-based violence as a problem for lesbian women. Participants stated healthcare providers were not prepared to address lesbian health issues. No proper treatment for interpersonal violence exists for women in same-sex relationships. Experiences with violence and stigma ranged from corrective rape by family members to being described as "naughty" by men in their lives.
Couzens et al., 2017.	Explore experiences of homophobia among lesbian, gay, and bisexual people in St. Lucia.	<p>Two themes emerged:</p> <ol style="list-style-type: none"> Skin-color oriented tolerance <ul style="list-style-type: none"> Participants reported greater tolerance for light-skinned sexual minorities.

First Author, Year	Objective	Key Findings
da Silva Oliveira et al., 2017.	Evaluate knowledge, attitudes and practices related to the prevention and transmission of HIV/AIDS in women who have sex with women.	<ul style="list-style-type: none"> • A lesbian participant reported education provides an opportunity to achieve social status similar to that of heterosexual people and White gay men. • Perceived health consequences of homophobia included poor mental health (specifically depression and anxiety). <p>2</p> <ul style="list-style-type: none"> • North vs. South divide: <ul style="list-style-type: none"> • More tolerance generally observed in the North. • Participants often conceal their sexual orientation to avoid discrimination and violence. • The majority of participants (68%) had adequate HIV/AIDS prevention and treatment knowledge. • 63% had positive attitudes toward HIV/AIDS prevention and treatment • Only 53% described using adequate prevention of HIV/AIDS.
de Lima Garcia et al., 2016.	Investigate perceptions of health and social inequities experienced by lesbian, gay, bisexual, and transgender individuals when accessing healthcare.	<ul style="list-style-type: none"> • One lesbian participant identified good mental health, nutrition, and education as necessary to being healthy. • A lesbian participant indicated it is difficult to seek healthcare services when providers are not aware of the LGBT population's needs. • The six lesbian women interviewed in this study indicated little need for preventive cervical and breast cancer screening.
Diaz Montes et al., 2005.	Assess the association between the sexual orientation and depressive symptoms in adolescents.	<ul style="list-style-type: none"> • Sexual minority girls reported higher rates of depressive symptoms than heterosexual girls. • Sexual minority girls denied receiving sexual health education, had higher scores on eating disorder scale, and higher rates of illegal drug use in their lifetime.
Gomes de Carvalho et al., 2013.	Identify the perception of lesbian and bisexual women regarding healthcare services and prevention of STIs.	<ul style="list-style-type: none"> • Most participants (6/9) indicated their use of healthcare was mostly for preventive gynecological services. • Some felt embarrassed by gynecological examination. • Healthcare was seen as aimed toward meeting the needs of heterosexual women. • Few healthcare providers ask about sexual orientation and SMW do not feel welcomed within the healthcare system. • Healthcare providers lack knowledge to care for SMW, particularly gynecologists. • Participants had high knowledge of STIs and STI prevention. • The importance of using protection especially during sexual encounters with men was identified.
Mertehikian, 2017.	Describe the sexual and reproductive healthcare practices of lesbian and bisexual women.	<p>Three themes emerged:</p> <p>1</p> <ul style="list-style-type: none"> • Hostility experienced during gynecological exams. <ul style="list-style-type: none"> • Participants used the adjectives uncomfortable, scary, and distressing to describe gynecological visits. • They perceived healthcare providers as hostile to non-heterosexual women.

First Author, Year	Objective	Key Findings
Monteiro et al., 2010. *	Examine the role of sexual identity and gender on representations and practices of risk and protection against STIs and HIV.	<ul style="list-style-type: none"> • One participant discussed stark differences in her healthcare treatment when she started to identify as a lesbian. When she identified herself as a lesbian she felt she was judged and discriminated against by providers.
Mora and Monteiro, 2010. *	Explore the vulnerability of women who have sex with women to STIs and HIV in Brazil.	<ol style="list-style-type: none"> 2 Lack of appropriate healthcare for women who have sex with women. <ul style="list-style-type: none"> • Healthcare providers assumed participants were heterosexual. • Participants felt that upon disclosing their sexual identity, healthcare providers did not deliver any information or screening. • Healthcare providers appear to know little about sexual practices of women who have sex with women.
Ortiz-Hernández, 2005. **	Identify whether minority stressors were associated with worse mental health (suicidal ideation, past suicide attempts, poor mental health, and alcoholism) among sexual minorities.	<ol style="list-style-type: none"> 3 Alternative strategies used to correct lack of adequate attention from healthcare providers. <ul style="list-style-type: none"> • Participants reported receiving information on health and STI prevention from other SMW in their social circles and from information posted by SMW on the Internet. • Some participants felt that SMW's health should be integrated into larger initiatives focused on women's health.
Ortiz-Hernández and Garria-Torres, 2005. **	Estimate the prevalence of suicidal ideation, suicide attempts, mental disorders, and alcoholism in bisexuals, lesbians, and gays in Mexico City and identify discrimination and violence as risk factors for poor mental health in this population.	<ul style="list-style-type: none"> • Lesbians view themselves as having low risk of HIV. • SMW reported few concerns about pregnancy, AIDS, or other STIs were found. • Lesbians perceive bisexual women as being at higher risk for HIV due to their sexual relationships with men. • Women believed they were at highest risk for HIV risk when having sex with female bisexual partners and with men. • Sexual experiences with men were common among SMW. • Rates of past suicide attempts were higher among SMW than SMM (21% v. 12%, $p = 0.01$) • Poor mental health was higher for SMW compared to SMM (33% vs. 23%, $p = 0.02$). • SMW reported higher rates of physical abuse than SMM (10% vs. 5%, $p = 0.03$). • SMW also reported higher rates of poor mental health relative to SMM (33% vs. 23%, $p = 0.02$).

First Author, Year	Objective	Key Findings
Ortiz-Hernández and Granados-Cosme, 2006.**	Examine the prevalence of violence against bisexual, lesbian, and gay people.	<ul style="list-style-type: none"> Participants reported violence during childhood related to defying gender stereotypes. SMM were more often victims of violence than SMW. SMW were significantly more likely to identify their mothers as aggressors than other members of their communities.
Ortiz-Hernandez, et al., 2009.	Analyze mediators and moderators of the relationship between sexual orientation, self-rated health, and cigarette and alcohol use among Mexican youth.	<ul style="list-style-type: none"> Sexual minority youth were more likely to smoke and report having experienced family violence and hate crimes than heterosexual youth. SMW had higher risk of lifetime and current cigarette use, and current alcohol use than their heterosexual peers. Disparities in self-rated health and substance use according to sexual orientation were explained by experiences of discrimination and violence.
Pinto et al., 2005.	Describe prevalence of STIs in women who have sex with women and identify behavioral factors associated with the presence of STIs in this population.	<ul style="list-style-type: none"> 23.4% of participants had engaged in sexual relations with members of the opposite sex in the past year. 32% who had had sex with men in the past 3 years reported their male sexual partners were gay or bisexual. 12.4% reported engaging in sexual activities with HIV positive partners.
Rambaran and Simpson, 2016.	Explore how Guyanese SMW experience healthcare interactions.	<ul style="list-style-type: none"> Themes included infrequent health care use attributed to various influences (e.g., fear of sexuality disclosure, disrespected in the health care system). There are few discussions with healthcare providers about SMW's sexual health and female preventative care. SMW felt pathologized by healthcare providers.
Silberman et al., 2016.	Describe barriers to sexual healthcare for women who have sex with women.	<ul style="list-style-type: none"> 97.5% of participants had previously visited a healthcare provider. Nearly 1/5 had been asked their sexual orientation by healthcare provider. 93.6% reported never receiving STI information from a healthcare provider. Almost half (48.4%) reported having knowledge of STI prevention. More than half (51.6%) reported receiving information on STIs from friends or the internet
Traeen et al., 2009	Examine differences in quality of life among heterosexual men and women, and lesbian/gay and bisexual university students four countries.	<ul style="list-style-type: none"> SMW in Cuba reported being more fearful and angry than heterosexual women.

Note. The 22 included articles represent 18 distinct studies.

* Monteiro et al. (2010) and Mora and Monteiro (2010) reported findings from the same study.

** Ortiz-Hernández (2005), Ortiz-Hernández and García Torres (2005), and Ortiz-Hernández and Granados-Cosme (2006) reported findings from the same study.

*** Bahamondes-Correa (2016) and Barrantos et al. (2017) reported findings from the same study.