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The ecology of sexual health of sexual minorities in Guatemala City

SCOTT D. RHODES[1,2*], JORGE ALONZO[1], LILLI MANN[1], MARIO DOWNS[1], MARIO ANDRADE[3], CINDY WILKS[4], FLORENCE M. SIMÁN[5], OMAR MARTINEZ[6], CLAIRE ABRAHAM[1], GUILLERMO R. VILLATORO[7] and LAURA H. BACHMANN[8]

[1]*Department of Social Sciences and Health Policy, Wake Forest School of Medicine, Winston-Salem, NC, USA,* [2]*Section on Infectious Diseases, Wake Forest School of Medicine, Winston-Salem, NC, USA,* [3]*APAES-Solidaridad, Guatemala City, Guatemala,* [4]*Miami, FL, USA,* [5]*Health Programs/Programas de Salud, El Pueblo, Inc, Raleigh, NC, USA,* [6]*HIV Center for Clinical and Behavioral Studies, Columbia University, New York, NY, USA,* [7]*Unidad de Epidemiologia, Hospital Roosevelt, Guatemala City, Guatemala and* [8]*Section on Infectious Diseases, Department of Internal Medicine, Wake Forest School of Medicine, Winston-Salem, NC, USA*

**Corresponding author. E-mail: srhodes@wakehealth.edu*

SUMMARY

Guatemalan gay and bisexual men, men who have sex with men (MSM), and transgender persons carry disproportionate burden of HIV and other sexually transmitted infections compared with other Guatemalan subgroups. However, little is known about the determinants of sexual health to inform health promotion and disease prevention interventions among these sexual minorities. We sought to explore sexual health and HIV risk among Guatemalan sexual minorities, using a community-based participatory research approach. We conducted 8 focus groups ($n = 87$ participants total) and 10 individual in-depth interviews with gay and bisexual men, MSM, and transgender persons. Using constant comparison, an approach to grounded theory, we analyzed verbatim transcripts and identified 24 themes that we organized into five ecological factors influencing sexual health: intrapersonal (e.g. misconceptions about HIV transmission, low perceived susceptibility and lack of condoms use skills); interpersonal (e.g. family rejection and condom use as a barrier to intimacy); community (e.g. discrimination and stigma); institutional (e.g. limited access to health promotion resources); and public policy (e.g. perceived lack of provider confidentiality and anti-gay rhetoric). There is profound need for multiple-level interventions to ensure that Guatemalan sexual minorities have the knowledge and skills needed to reduce sexual risk. Interventions are warranted to increase social support among sexual minorities, reduce negative perspectives about sexual minorities, develop institutional resources to meet the needs of sexual minorities and reduce harmful anti-gay rhetoric. Understanding and intervening on the identified factors is especially important given that the health of Guatemalan sexual minorities has been to-date neglected.

Key words: HIV/AIDS; community based participatory research; condom use; sexual health

Guatemala has a rapidly accelerating and concentrated HIV epidemic. Guatemalan sexual minorities, specifically gay and bisexual men, men who have sex with men (MSM) and transgender persons, are disproportionately affected by HIV. Although prevalence estimates are imprecise due to lack of testing resources, low rates of testing among individuals, and poor reporting and surveillance (Barczyk *et al.*, 2010), up to 150 000 people are estimated to be living with

HIV, and every day nearly 30 people become infected with HIV. MSM have ~10 times the incidence rate compared with the rest of the population (Soto *et al.*, 2007).

National prevalence is estimated to be ~1% (0.5–2.7%) among adults, and ~70% of all those with HIV live in Guatemala City, the largest urban area within the country. Overall, prevalence among MSM is estimated to be ~11%, while prevalence among male and female sex workers is ~5%. Further, HIV prevalence among MSM living in Guatemala City is estimated to be as high as 18%. No cases of infection have been reported by injecting drug use (Ministerio de Salud Publica y Asistencia Social Programa Nacional de Prevencion y Control de ITS VIH y SIDA, 2007).

In addition, Guatemalan sexual minorities are disproportionally affected by sexually transmitted infections (STIs). For example, gay and bisexual men, MSM, transgender persons, and sex workers and their clients have consistently higher prevalences of syphilis (Zoni *et al.*, 2013).

Little HIV prevention research has been initiated in Central America (Miller *et al.*, 2013; Paz-Bailey *et al.*, 2013). Because of its limited resources, the Guatemala government focuses its efforts on understanding the scale of its HIV epidemic and expanding HIV treatment to those with HIV. Thus, we sought to explore sexual health and HIV risk among Guatemalan gay men, MSM and transgender persons, using a community-based participatory research (CBPR) approach.

METHODS

The bi-national CBPR partnership

This study was conducted by a bi-national CBPR partnership comprised of lay community members, including Guatemalan gay men and immigrant Latino gay and bisexual men living in the USA, and organizational representatives, business owners and academic researchers from both Guatemala and North Carolina. Blending the lived experiences of community members; the experiences of organizational representatives based in ongoing service provision; and sound science have the potential to develop more informed understandings of health-related phenomena and thus produce interventions that are more relevant, more culturally congruent, more likely to be adopted and maintained over time and more likely to be successful (Israel *et al.*, 1998; Eng *et al.*, 2005; Cashman *et al.*, 2008; Wallerstein *et al.*, 2008; Rhodes *et al.*, 2010, 2011a, 2013b; Rhodes, 2012). Similarly, study designs that are informed by multiple perspectives may be more authentic to the community and its members' natural ways of doing things. Thus, recruitment benchmarks, including enrollment and retention rates, may be higher; measurement, more precise; data collection, more acceptable, complete and meaningful; analysis and interpretation of findings, more accurate; and broad dissemination to impact both research and practice, more likely (Rhodes *et al.*, 2013b).

Development of the partnership and study conceptualization

An academic partner (first author) was a Peace Corps volunteer in 1991–1994 in Huehuetenango, Guatemala. During his service in Guatemala, he also volunteered with Asociación de Prevención y Ayuda a Enfermos de SIDA (APAES)-Solidaridad, a non-governmental organization (NGO) working in Guatemala City. Staff of APAES-Solidaridad continue to provide HIV prevention education, street outreach, and counseling and testing services, and advocate on behalf of vulnerable populations that are disproportionately affected by HIV, particularly sexual minorities and sex workers. The director of APAES-Solidaridad and the academic partner continued to see one another during periodic visits and through email, Facebook and Skype. They brainstormed ways in which sexual health research being conducted in North Carolina could be built upon in Guatemala City. The CBPR partnership that the academic partner is part of in North Carolina has several ongoing sexual health interventions designed for recently arrived immigrant Latinos in North Carolina in general (Rhodes *et al.*, 2009, 2011b, 2012a; Rhodes, 2012) and for Latino sexual minorities, in particular (Rhodes, 2012; Rhodes *et al.*, 2012b, 2013a), that may be refined for Guatemalan gay and bisexual men, MSM and transgender persons.

The academic researcher presented the idea of partnering with APAES-Solidaridad to the North Carolina-based CBPR partnership, and partners agreed that the similarities between communities in North Carolina and Guatemala were profound. North Carolina has one of the fastest-growing immigrant Latino populations in

the USA, and many of these immigrants come from southern Mexico and Guatemala (US Census Bureau, 2009; Dockterman and Velasco, 2010). Representatives from the partnership and representatives from Guatemala began to identify other partners within Guatemala. New organizational partners included representatives from Hospital Roosevelt in Guatemala City. This government-funded hospital has both inpatient and outpatient infectious disease units specializing in HIV testing, care and treatment. Other new partners included a gay Guatemalan university professor, three local gay business owners and three Guatemalan gay men.

Together, the newly formed bi-national partnership designed a formative study to explore sexual health among gay and bisexual men, MSM and transgender persons in Guatemala City. Throughout the design of the study, partnership members successfully applied CBPR principles (Israel *et al.*, 2005; Rhodes *et al.*, 2011a; Rhodes, 2012) during each step of the research process—from conception (described above) to study design and conduct, data analysis and interpretation, and dissemination of findings.

Study design and conduct

We chose focus groups and in-depth interviewing given that these methodologies can (i) provide the opportunity to investigate participant responses and reactions to issues more fully than methodologies that collect data from participants individually or have closed-ended questions with predefined response options; (ii) allow new areas of inquiry to emerge; and (iii) reveal key perspectives and nuances that researchers may not be able to foresee (Goetz and LeCompte, 1984; Miles and Huberman, 1994; Charmaz, 2006). Moreover, group interaction is an explicit component of focus groups. Rather than the moderator asking each person to respond to a question in turn, participants are encouraged to talk to one another, ask questions, exchange anecdotes and comment on one another's experiences and perspectives (Kitzinger, 1994, 1995).

To increase validity, standardized guides were used to introduce each methodology, outline the focus group or interview process and lead the discussion. Development of these guides was an iterative process that included all partners including representatives from Guatemala and the USA. The process included: literature review; brainstorm of domains and constructs; and development, review and revision of questions and probes (for clarification) and prompts (for detail). The guides, outlined in Table 1, were crafted with careful consideration to wording, sequence and content.

Participant demographic data were collected using a brief low-literacy assessment that included: age; country of birth; sexual identity; educational attainment; employment status; current living situation; and sexual behavior with men and women.

The focus groups and interviews were held in gay-owned restaurants during off hours. Eligibility criteria included being $\geq$18 years of age; self-identifying as male and reporting sex with another man since age $\geq$18 years old or being transgender; living in Guatemala City; speaking Spanish; and providing informed consent. APAES-Solidaridad staff and volunteers coordinated recruitment. Purposive snowball sampling was used to ensure a broad spectrum of participants in the focus groups. Interview participants also were recruited based on their formal and informal leadership roles in the community.

Each focus group and interview also was audio-recorded with participant permission and conducted by one of two native Spanish-speaking

Table 1: Domains and abbreviated sample items from the focus group moderator's and the in-depth interview guides

General health
What kinds of things do you think about when you think about being healthy?
What are your health priorities?
Where do you go for health care?
Sexual health
When you hear of, or think about HIV and AIDS, what do you think about?
What worries about HIV do you have?
What do you know about sexually transmitted diseases?
What about sexually transmitted diseases? What do you know about them?
How can someone protect himself from these types of illnesses?
Besides using condoms what do men like yourself do to protect themselves?
What do you do to protect yourself?
Why do some people take risks and others do not?
How does alcohol or other drugs affect sexual risk?
How does religion affect sexual risk?
How does culture affect risk?
You know we are almost 30 years into the HIV epidemic, but gay and bisexual men, MSM, and transgender persons continue to be most affected, how would you explain that?
Conclusions
What else would you like to share today?

gay men from the North Carolina partnership. These focus group moderators and interviewers were experienced in these qualitative data collection methodologies and cross-cultural sexual health research. The first author served as one of the notetakers. Focus groups and interviews averaged 90 and 45 min, respectively. Each participant received dinner and $20.00 US compensation for his or her time.

Human subject review and study oversight were provided by the Institutional Review Board (IRB) of Wake Forest University Health Sciences and El Comité de Ética Independiente Zugueme, the in-country IRB. Signed informed consent was obtained from each participant.

Data analysis and interpretation

Focus group discussions and interviews were transcribed verbatim by a professional transcriptionist. Transcripts were verified and discrepancies corrected by reviewing each transcript while listening to the recording.

Constant comparison, an approach to grounded theory, was used. It is well-suited for systematically uncovering participants' meanings and furthering interpretive understandings (Miles and Huberman, 1994; Charmaz, 2006). Constant comparison combines inductive coding with simultaneous comparison, beginning with initial observations and undergoing continual refinement (Goetz and LeCompte, 1984). Rather than beginning the inquiry process with a preconceived notion of what was occurring, we focused on understanding the breadth of experiences and building understanding in real-world patterns through grounded theory (Glaser and Strauss, 1967). This approach is useful when little is known about a phenomenon (e.g. sexual health among Guatemalan sexual minorities). Furthermore, the goal of our analysis was to identify common themes and not quantify participant experiences (Miles and Huberman, 1994).

Partners in Guatemala and the USA individually read, reread and coded the same three transcripts. They then convened and compared codes and developed a common coding system and data dictionary. All subsequent transcripts were coded by at least two analysts using this coding system, while allowing for new codes to emerge. After coding assigned transcripts, each analyst developed a coding matrix to allow for the identification of similarities and differences within and across participants, allowing for triangulation of findings for a multidimensional understanding of experiences (Miles and Huberman, 1994). The analysts compared and revised matrices and finalized themes. Themes were then presented to the CBPR partnership in both English and Spanish to further verify their reliability and validity (e.g. rigor, credibility and trustworthiness) (Golafshani, 2003).

We explored sample characteristics using descriptive statistics, including frequencies and percentages or means, and standard deviations (SD) using SPSS 19.

RESULTS

Participants

Although we planned to recruit 60 focus group participants, we enrolled 87 focus group participants who participated in eight focus groups. Mean age of focus group participants was 28 years old; three-fourths self-identified as male while nearly a quarter self-identified as transgender. Nearly one half reported more than high school education and 62% reported being currently employed; and 8 reported being sex workers. Nearly three-fourths reported having had multiple male partners in the past 3 months; mean number of male partners among those reporting multiple male partners in the past 3 months was 7.9.

Interview participants included owners of a gay bar, a restaurant and a small printing business; a bartender; the managers of a local online social and sexual networking site for gay and bisexual men, MSM, and transgender persons and an adult theater; the director of a local NGO focusing on support for those living with HIV and AIDS; a university professor and student; and a director of an HIV-related community-based organization.

Select characteristics of focus group and interview participants are provided in Table 2.

Qualitative findings

Qualitative data analysis identified 24 themes (Table 3) which we organized into five ecological domains of factors influencing sexual health in general and HIV in particular: intrapersonal, interpersonal, community, institutional and public policy.

Table 2: Select characteristics of focus group ($n = 87$) and in-depth interview participants ($n = 10$)

Characteristic	Mean ± SD or *n* (%), as appropriate	
	Focus group	Interview
Age in years	27.97 (± 8.8; range 18–60)	36.5 (± 7.0; range 23–44)
Country of birth		
Colombia	1 (1.1)	0
Guatemala	81 (93.1)	9 (90)
El Salvador	2 (2.2)	0
Honduras	3 (3.5)	0
Venezuela	0	1 (10)
Among those born in Guatemala: Departmento (state) of birth	($n = 81$)	($n = 9$)
Alta Verapaz	1 (1.2)	0
El Progreso	2 (2.5)	0
El Quiché	1 (1.2)	0
Escuintla	1 (1.2)	0
Guatemala	53 (65.4)	5 (55.6)
Izabal	4 (4.9)	0
Jalapa	1 (1.2)	0
Jutiapa	1 (1.2)	0
Peten	1 (1.2)	0
Quetzaltenango	3 (3.7)	0
Retalhuleu	1 (1.2)	0
Sacatepéquez	0	1 (11.1)
San Marcos	3 (3.7)	0
Santa Rosa	1 (1.2)	1 (11.1)
Suchitepéquez	2 (2.5)	0
Zacapa	2 (2.5)	1 (11.1)
Departmento (state) not reported	7 (8.6)	1 (11.1)
Gender		
Male	64 (73.6)	10 (100)
Male-to-female transgender	21 (24.1)	
Female-to-male transgender	2 (2.3)	
Educational attainment		
None	2 (2.3)	0
Some primary education	4 (4.6)	1 (10)
Primary (completed 6 years of schooling)	12 (13.8)	2 (20)
Some secondary	10 (11.5)	1 (10)
Secondary (completed 9 years of schooling)	17 (19.5)	3 (30)
More than secondary	42 (48.3)	3 (30)
Currently employed	54 (62.1)	8 (80)
Current living situation		
Live with male sexual partner	13 (14.9)	
Live with female sexual partner	1 (1.1)	
Live with other family member	34 (39.1)	
Live alone	28 (32.2)	
Other	11 (12.6)	
Multiple male sex partners past 3 months	63 (72.4)	
Mean number of male partners among those reporting multiple male partners past 3 months	7.9 (±9.2; range 2–50)	
Multiple female sex partners past 3 months	6 (6.9)	
Multiple male or female sex partners past 3 months	67 (77.0)	

Intrapersonal factors

Participants lacked knowledge of sexual health and had profound misconceptions about HIV and STI transmission and prevention. Participants reported that: HIV can be transmitted in the air; the insertive partner during anal sex cannot contract disease, including STIs; HIV is a 'gay disease' and 'straight' married men are risk free; if a sexual encounter is brief, there is no risk for disease transmission; and it is possible to determine whether someone is HIV positive by looking at him or her. Participants also did not know where or how to get tested for HIV and

Table 3: Sexual health themes identified by ecological domain

Intrapersonal
Misconceptions about HIV and STI transmission and prevention
Low perceived susceptibility to HIV and STIs
Negative perceptions about condoms
Lack of condom use skills
Internalized homo-negativity
Depression and substance use
Interpersonal
Sexual health and sexuality not discussed within families
Family rejection for being gay, same sex behavior, being transgender
Condom use perceived as a barrier to connectedness and intimacy
Assumption that sex within the context of love is risk free
Arousal associated with non-condom use
Sex worker clients do not want to use condoms
Community
Intra- and inter-group discrimination
Machismo and masculinity
Lack of access to low-cost condoms
Lack of safe and private space to negotiate sex and condom use
Stigma associated with being HIV positive
Institutional
Limited access to testing
Lack of affordable health centers/professionals in general, and lack of clinics and providers that are sensitive to gay men, MSM and transgender persons in particular
Lack of targeted health promotion and disease prevention materials
Stigmatization by church
Limited governmental resources for those living with HIV results in little motivation to get tested
Public policy
Perceived lack of clinic and provider confidentiality
Any-gay rhetoric compromises the sexual health of gay and bisexual men, MSM, and transgender persons

other STIs. Most participants also had low perceived susceptibility for HIV infection.

Participants also reported having negative perceptions about condoms. Condoms were perceived as reducing the ability to maintain an erection for the insertive partner and uncomfortable for the receptive partner during anal sex. Similarly, participants lacked condom use skills. For example, some did not know how to correctly use a condom (e.g. how to open a condom package and unroll a condom), and some reported that condoms could be reused.

Participants reported feelings of internalized homo-negativity. Some participants held negative stereotypes about gay and bisexual men, MSM, and transgender persons and negative attitudes about themselves. Finally, participants reported depression and substance use as influencing sexual risk. As a participant noted, 'A person thinks he is not worthy of anything, that he has no value'.

Interpersonal factors

Participants reported that sexual health and sexuality are not discussed within families. They reported this silence led to their knowing little about sexual health. They also noted that many sexual minorities are rejected by their families based on their identities and/or same-sex behavior. This rejection can lead to homelessness, survival sex, depression and alcohol and drug use.

Participants highlighted the importance of closeness, particularly among those in relationships and 'in love', and identified condom use as a barrier to connectedness, trust and intimacy between sexual partners. Similarly, some participants reported that sex within the context of love is risk free. A participant noted, 'When one is in love, there is no consideration for condoms, not for me, and not for men I know; after all, it is love and that cannot be bad.'

Participants also reported that some gay and bisexual men, MSM and transgender persons perceive condom-less sex to be sexually appealing, arousing and '*caliente*' ['hot']. Exchanging semen during anal sex was identified as erotic for both insertive and receptive partners.

Finally, participants reported that clients of sex workers do not want to use condoms. As a participant reported, 'None of my clients want to use condoms so I don't.'

Community factors

Participants reported both intra- and inter-group discrimination. Some participants suggested that a hierarchy existed based on social-economic status, skin color, perceived masculinity and/or racial background within networks of gay and bisexual men, MSM and transgender persons. For example, those perceived to have fewer economic resources, have darker skin, be less masculine or be more indigenous were reported to have less 'power' in relationships and negotiating safety.

Discrimination by others outside sexual minority communities also was identified as contributing to sexual risk. Participants reported that overall Guatemalan society is intolerant of sexual minorities and discrimination affects how gay and bisexual men, MSM and transgender persons feel about themselves (affecting their mental health), whether they engage in health-

promoting versus health-compromising behaviors, whether they seek and are able to obtain health services, and the quality of these services.

Some participants reported that manhood can be affirmed through sex. Participants reported that Guatemalan men are pressured to prove their masculinity through having multiple partners and engaging in other risk behaviors. Participants added that this ongoing 'need' to prove one's manhood may be heightened because gay and bisexual men and MSM are not considered to be 'real' men; their self-image and self-esteem suffer, which may contribute to depression and subsequent risk behaviors.

Given the need to prove their manhood, pressure not to use condoms was identified as particularly strong. A participant noted, 'I am not a true Guatemalan man because I am gay, so I do not use condoms to prove to others and to myself that I am a man.' Participants also suggested that for some using condoms requires acknowledging one's same-sex behavior, and this recognition contributes to one's sense of reduced masculinity.

Participants reported that they lacked access to condoms in general and free or low-cost condoms, in particular. Participants reported that condoms were not easily accessible within Guatemala City at pharmacies, bars and clubs, movie theaters, or hotels. They also noted that NGOs sometimes provide condoms but NGO supply is limited and not constant. Participants reported that condoms are non-existent outside of Guatemala City.

Participants reported that the lack of privacy restricts condom negotiation and use. For example, living with one's family was identified as restricting privacy and limiting lengthier condom negotiation and use. When they do have opportunity to have sex, some participants reported that sex may be hurried; thus, condom use is less likely. Identified spaces for sex included dark rooms of bars/clubs, saunas, public restrooms, movie theaters, parks and 'hook-up hotels'. Further, those living on the street also reported that sex is often quick and may occur in an empty building, alley way, or doorway; they may not be prepared (e.g. have an available condom) or make the time to correctly use a condom.

Finally, stigma was identified as a barrier to HIV testing. Participants noted that for some, it is preferable not to know one's own HIV status in order not to face the social stigma that those who are positive must face.

Institutional factors

Participants reported limited testing resources. Furthermore, participants noted that there is a lack of health clinics/centers and health providers that are both affordable and welcoming to sexual minorities. A participant noted, 'There aren't places or clinics that accept homosexual people or transgender or transsexuals or sexual workers . . . and when one goes to a health center to be seen, there is always discrimination, there are always people who discriminate against you.' Participants noted a lack of targeted health promotion and disease prevention materials designed for, and congruent to, the realities of Guatemalan sexual minorities.

Participants also reported the negative impact of religion because sexual minorities may be viewed as 'sinners'. Participants reported that they felt rejected by their churches and reported that churches promote both internal and external homo-negativity and stigmatization of sexual minorities. Some participants reported depression as a result of losing the strength and sense of purpose previously provided by their faith. Participants also reported that some MSM may marry women to 'overcome their sins', but some may continue to have sex with men, including male sex workers. A participant suggested, 'To be married and have sex with other men occasionally is not viewed as sinful as succumbing to life as a gay man.'

Participants noted the impact of limited governmental resources for prevention, care and treatment of HIV. They noted that with such a dearth of resources, there is little motivation to get tested.

Public policy

Participants identified two overarching themes related to public policy. First, participants perceived that providers and their clinic staff, including those associated with government- and non-government-sponsored clinics and health centers providing general and sexual health services, do not maintain confidentiality of patient information including their disclosed sexual behaviors. This further reduced their motivation to be tested.

Second, participants noted overall cultural intolerance for sexual minorities within Guatemala and used the current presidential election as an example. While these data were being collected, a national forum was held in which Guatemala's

presidential candidates spoke out against homosexuality, including gay unions and adoption by gay parents. A participant noted, 'This is a hard way to live when a candidate for president goes on record calling homosexuality an "abomination".' Another participant added, 'Of eleven candidates, I think at least nine have spoken out against people like me, gay men; this is no way to live, having government leaders who speak out against who I am as a person and whose policies deny me my rights.'

DISCUSSION

Given the limited of data available that document the needs and influencing factors of sexual health among Guatemalan gay and bisexual men, MSM and transgender persons (Boyce *et al.*, 2012), we designed this study to explore sexual health and HIV risk among Guatemalan sexual minorities. In this study, we identified 24 themes that we organized into five ecological domains. Several deserve highlighting.

First, Guatemalan sexual minorities reported profound misconceptions about HIV and STI transmission and prevention. These findings illustrate the need for comprehensive prevention programming that includes increasing basic knowledge and skills to reduce risk. We are in the fourth decade of the HIV epidemic; education is a foundation on which prevention efforts can be placed.

Furthermore, there is a need for increased social support for sexual health. Families and schools do not discuss sex and sexuality. They cannot turn to siblings or friends. Although natural helping interventions have been conducted, health-related outcome data remains scant (Amirkhanian *et al.*, 2003; Rhodes *et al.*, 2007; Booth *et al.*, 2011); future research could develop, implement and evaluate the effectiveness of natural helping interventions that harness naturally existing social networks and build capacity of sexual minorities.

Moreover, attitudes about risk and safety also need to be addressed, especially within the context of relationships. For example, prevention programming could reframe attitudes around intimacy and promote the use of condoms within the context of arousal, relationships, intimacy, trust and love.

We also found that much work is needed to meet the health promotion and disease prevention needs of sex workers. Similarly found in other studies of sex work (Aral and St Lawrence, 2002; Fitzgerald *et al.*, 2010), sex workers in this study reported caving to client pressures not to use condoms because they knew that there were other sex workers who would provide condom-less sex. Moreover, married men tended to be a common type of client among sex workers, and participants perceived married men to be risk free.

We identified high levels of perceived discrimination based on socio-economic status, skin color, perceived masculinity and indigenous status. Within-group discrimination has been identified in other samples of sexual minorities, and interventions are being developed to increase social support and community identity across community subgroups (Rhodes *et al.*, 2011a, 2013a).

There also is need for interventions to positively change community-level perspectives about what it means to be a sexual minority to reduce discrimination. However, there remains a need in the science and practice of health promotion to develop, implement and evaluate interventions designed to change negative community norms, expectations and attitudes that fuel discrimination (Institute of Medicine, 2000, 2003, 2011). In addition, reducing perceived healthcare provider discrimination may be a more immediate intermediate goal. Interventions could include training providers on the needs and priorities of sexual minorities and how to create safe spaces and facilitate disclosure of sexual minority identities and risk behaviors.

Because of the dearth of low-cost and/or free condoms, intervention efforts are needed to increase access to condoms. Also, stigma related to being HIV positive was identified as a barrier to testing and knowing one's status. This finding suggests the need for interventions to reframe HIV infection and reduce stigma. Interventions with promise to reduce HIV stigma tend to be comprehensive, use multiple channels and target entire communities not only those with HIV or those considered to be at increased risk (Sengupta *et al.*, 2011).

Interventions at the institutional level may include increasing number and/or capacity of testing, treatment and care services (including counseling services) and ensuring that these services are culturally congruent (e.g. accepting and welcoming of, and tailored for, Guatemalan sexual minorities). Furthermore, educational materials

that specifically address the needs and priorities of sexual minorities in meaningful ways are needed. These materials must be appropriate for lower-literacy communities given that some participants reported limited Spanish-language reading proficiency. Although we conducted focus groups and interviews in Spanish, Guatemala has over 20 distinct indigenous languages. Future research must be conducted to understand the needs of Guatemalans whose first language is not Spanish; indigenous language-specific materials and interventions may be required.

Participants also perceived a lack of confidentiality at clinics and by providers. Thus, interventions for clinic staff and providers may be necessary to ensure proper procedures for maintaining the confidentiality of patients are adhered to. Subsequently, trust will need to be built among Guatemalan sexual minorities through media campaigns perhaps to build their confidence that visits and disclosure are indeed confidential.

Participants also noted the deep-seated anti-gay sentiment that permeates Guatemala contributes to both internal and external homonegativity and negatively impacts the psychosocial wellbeing and physical health of sexual minorities. Much work is needed to change the context in which they live. Although same-sex behavior is legal in Guatemala, Guatemala laws do not prohibit discrimination on the basis of sexual or gender identity in areas such as employment, education, housing, health care, banking or other public accommodations, such as cafes, restaurants, nightclubs and cinemas. Thus, both policies and attitudes must be changed in order to ensure that sexual minorities are not living within a context that jeopardizes their health. There may be various strategies to bring about these changes, but two potential options include mobilizing and strengthening in-country movements to create change and garnering external support for improvements in the human rights of sexual minorities in Guatemala.

The use of CBPR

Keys to partnership and power sharing included discussion and refinement of, and adherence to, partnership principles that our CBPR partnership in North Carolina developed and refined over the past decade (Rhodes, 2012) that were based on existing partnership principles (Israel *et al.*, 1998; Eng *et al.*, 2005; Cashman *et al.*, 2008; Wallerstein *et al.*, 2008); open acknowledgement and discussion of inequities related to experiences and resources (e.g. a higher-resourced partnership in the USA and lower-resourced community-based organizations in Guatemala City); problem solving related to the challenges inherent in the geographic distance between North Carolina and Guatemala (e.g. use of Skype); and other facilitators that our partnership as identified as key to success (e.g. commitment to social inclusion and positive and ecologic perspectives, agreement on priorities, friendship among partners, cultural humility and comprehensive engagement of outsiders into the core functions of the research team (Rhodes *et al.*, in press). Furthermore, all decisions were made through iterative discussion and consensus. We also were careful to ensure that all partners involved were well compensated for their time, including their intellectual contributions.

We were particularly successful in recruiting participants; although we had proposed to collect data from 60 focus group participants, we had 87 participants. This is a result of the trust and the positive reputation of in-country partners who coordinated recruitment. It also may reflect the desire of sexual minorities to participate in health promoting activities. Furthermore, we did not expect to recruit such large numbers of transgender persons; their data raised awareness among our partnership of the needs and priorities of this vulnerable subgroup; more work is needed to explore the needs of transgender persons.

We used a partnership approach to data analysis, interpretation and dissemination that we contend leads to increased insightfulness and subsequent use of findings.

Limitations

Our findings cannot be generalized to all Guatemalan sexual minorities; for example, our sample was urban and all were fluent in Spanish. However, for the purposes of formative research, our findings may inform HIV prevention with sexual minorities from similar communities and backgrounds. Further, although the methods used generated rich qualitative data, the presence of peers during focus groups may have prohibited discussion of stigmatized behaviors. However, this may be a step to investigate issues shrouded in stigma and silence. Further research using alternate data collection methodologies may

provide further data and insights into risk behaviors in this community.

Conclusions

With increasingly disproportionate rates of HIV, a need exists to explore, understand and intervene upon factors associated with exposure and transmission among communities most at risk. Little is understood about the Latin American epidemic from a behavioral perspective, and the limited resources available for health promotion and disease prevention have meant that even those at increased risk (i.e. sexual minorities) do not get the prevention programming needed. This study serves as a step to better understand HIV exposure and transmission within Guatemala.

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