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Integrating male sexual diversity into violence prevention efforts with men and boys: evidence from the Asia-Pacific Region

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ABSTRACT

Men's perpetration of gender-based violence remains a global public health issue. Violence prevention experts call for engagement of boys and men to change social norms around masculinity in order to prevent gender-based violence. Yet, men do not comprise a homogenous category. Drawing on probability estimates of men who report same-sex practices and preferences captured in a multi-country gender-based violence prevention survey in the Asia-Pacific region, we test the effects of sexuality-related factors on men's adverse life experiences. We find that sexual minority men face statistically higher risk of lifetime adversity related to gender-based violence, stemming from gender inequitable norms in society. Sexuality is thus a key axis of differentiation among men in the Asia-Pacific region, influencing health and wellbeing and reflecting men's differential engagement with dominant norms of masculinity. Integrating awareness of male sexual diversity into gender-based violence prevention interventions, particularly those that work with boys and men, and bridging violence prevention programming between sexual minority communities and women, are essential to tackle the root drivers of violence.

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Asia-Pacific; gender inequality; homophobia; male sexuality; masculinity; violence prevention

Introduction

Men's perpetration of violence against women and other men remains a global public health issue (Abrahams et al. 2014; Devries et al. 2013; Fulu et al. 2013; Jewkes et al. 2013). In the Asia-Pacific region, comparable prevalence estimates of the most common form of gender-based violence – abuse of women by intimate male partners – ranges from 15 to 68% (Garcia-Moreno et al. 2006; SPC 2009). A growing proportion of public health interventions involve boys and men[1] – alongside girls and women – to reduce men's perpetration of violence (Flood 2015). As men's use of violence against women and other men is upheld by norms around manhood promoting male aggression, power and control over women and other men (Connell 2005), the inclusion of boys and men into prevention interventions is necessary (Flood 2011; Jewkes, Flood, and Lang 2015; Ricardo, Eads, and Barker 2011). Yet

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despite this progress, the violence prevention field assumes a homogenous, heterosexual gender category of men (Flood 2015).

Male sexuality is rarely addressed within public health violence prevention discourse, either in the Asia-Pacific region or globally (Flood 2015). Yet, (hetero)sexuality is a core component of the hegemonic masculinities that drive men's use of violence against women as well as men (Connell 2005; Fleming et al. 2015). Homophobia and anti-gay violence are central to the policing of heterosexuality among men (Connell 2005; Panfil 2014; Pascoe and Bridges 2015). Despite drawing from critical gender theories (Jewkes et al. 2015), gender-based violence prevention discourse largely assumes violence by heterosexual men against heterosexual women. This focus overlooks violence within sexual and gender minorities, such as same-sex intimate partner violence (Goldenberg et al. 2016) and the conceptual connections between men's violence against women and men's violence against sexual minority men (Fleming et al. 2015). It also precludes the possibility that men's experiences and perpetration of violence may vary based on their sexuality.

This study uses probability-based, site representative data to assess whether sexual minority men differentially experience lifetime adversity in the Asia-Pacific region compared to non-sexual minority men. The results enhance our understanding of how gender systems affect men based on their sexuality and underscore why evidence-based violence prevention work with boys and men must account for male sexual diversity. First we discuss the theoretical premises of engaging boys and men in gender-based violence prevention and the position of sexuality and sexual minority men therein. We then empirically test the effects of non-heteronormative sexuality on men's adverse life experiences using data from the UNDP, UNFPA, UN Women and UNV Multi-country Study on Men and Violence in Asia-Pacific (UN MCS) (Fulu et al. 2013). We demonstrate that – far from being a homogenous group – men face different risks and vulnerabilities to lifetime adversity based on their sexual behaviours and preferences. We discuss the implications for gender-based violence prevention interventions, particularly those involving boys and men.

Theory and practice of gender, sexuality and violence

Boys and men as allies in violence prevention

Involving boys and men as partners to prevent gender-based violence makes good sense, given that men are the primary perpetrators of violence (Flood 2011). The term gender-based violence underscores the systemic gender inequality that drives men's violence (Jewkes, Flood, and Lang 2015). Underpinning this violence are hegemonic masculinities valued above other masculinities and all forms of femininity (Connell 2005). While hegemonic masculinity serves as an ideal, many men struggle to attain this version of manhood, with harmful consequences (Courtenay 2000; Jewkes et al. 2015). Thus, transformation of dominant beliefs of what it means to be a man can shift the inequitable distribution of gendered power in society, reduce gender-based violence and improve women and men's lives (Jewkes, Flood, and Lang 2015; Jewkes et al. 2015). Although masculinity scholarship underscores the inherent hierarchies among men by class, race/ethnicity and sexuality (Connell 2005; Messerschmidt 1993), the connection between hegemonic masculinity and heterosexuality is often overlooked in violence prevention practice (Flood 2015). Here we touch briefly on how sexuality

operates within inequitable gender systems and the implications for sexual minority men in the Asia-Pacific region.

Heterosexuality and homophobia within gender systems

Critical gender and sexuality scholarship shows how gender and sexuality are intimately related (Connell 2009), yet discrete (Dowsett 1996; Weeks 2010). Sexuality comprises a complex web of gender identities, roles, pleasures, intimacies, sexual orientations and reproduction that are culturally and historically produced. Male and female sexualities are socially constructed within gendered systems of power (Weeks 2010) and sociohistorical structures of sexual knowledge and practice (Dowsett 1996).

Heterosexuality serves as a key dimension of hegemonic masculinity and social gender systems (Connell 2005). Hierarchies among masculinities subordinate non-heterosexual or less overtly heterosexual masculinities to heterosexual versions of manhood (Connell 2005). These hierarchies are maintained through social consensus around the hegemonic ideal (Jewkes et al. 2015), but also violence or the threat of violence against non-heternormative men (Collins 2000, 131). Within this system, society accords value and advantages to those men who engage in normative sexuality (e.g., heterosexual marriage to a woman) and stigmatises those who do not (e.g., men who have sex with men) (Rubin 1984). Thus, while all men benefit from patriarchal dividends, some men benefit more than others (Connell 2005). It is notable that the relationships between masculinity and sexuality are culturally and historically specific. Herdt's (1984) ethnographic research among men in Melanesia illustrates how homosexual practices served as ritual markers of adult masculinity and were valued. Yet, across the contemporary Asia-Pacific region, non-heternormative sexualities are largely stigmatised or even criminalised (Itaborahy and Zhu 2014) and patriarchal belief systems emphasising male dominance over women and non-heterosexual men drive men's use of violence (Fulu et al. 2013; Jewkes et al. 2013). These gender systems, in turn, shape the experiences of sexual minority men.

Gender-based violence and sexual minority men in the Asia-Pacific region

The Asia-Pacific region boasts remarkable diversity in sexual minority identities, practices and discourses (Besnier and Alexeyeff 2014; Herdt 1984; Jackson 1999; Khan et al. 2005; Wieringa, Blackwood and Bhaiya 2007). Yet, despite this diversity, social prejudice and discrimination against non-heterosexual practices and preferences remain pervasive (Chakrapani et al. 2007; Choi, Hudes, and Steward 2008; Liu and Choi 2006; Logie et al. 2012; Shaw et al. 2012; Sivasubramanian et al. 2011), even in cultures where sexual minorities are relatively visible (Jackson 1999). Within heteronormative gender systems, sexual minority men face sexual and physical violence, harassment and stigma as a result of their sexual orientation (Choi, Hudes, and Steward 2008; Liu and Choi 2006; Sivasubramanian et al. 2011), gender presentation (Chakrapani et al. 2007; Shaw et al. 2012) and same-sex sexual behaviours (Logie et al. 2012). Where hegemonic ideals of masculinity revolve around marriage and fatherhood, sexual minority men face social pressure to marry women (Khan et al. 2005), and often do so to deflect suspicion from their sexual orientation (Liu and Choi 2006). These relationship patterns can result in concurrent (often hidden) sexual relations with women

and men (Choi, Hudes, and Steward 2008). Men in same-sex partnerships also experience and perpetrate intimate partner violence (Dunkle et al. 2013).

The disadvantage of sexual minority men within the gender structure is rarely theorised in gender-based violence prevention. A stark example is the inadequacy of intimate partner violence theories to explain abuse among same-sex couples (Goldenberg et al. 2016). As Courtenay (2000) argues, 'too often, factors such as … sexuality are simply treated by health sciences as variables to be controlled for in statistical analyses' (1390). Here we make sexuality the centre of analysis, using probability-based population data on men's sexuality and experiences and use of violence in the Asia-Pacific region, and discuss the implications for violence prevention.

This analysis fills a methodological gap in the literature on male sexuality and sexual minority health in the Asia-Pacific region (Cáceres et al. 2006). Research with sexual minorities often relies on non-probability-based samples of sexual minority men (Choi, Hudes, and Steward 2008; Logie et al. 2012; Shaw et al. 2012). Low validity due to sampling bias, and limited comparability are challenges to the field (Cáceres et al. 2006). We use rare comparable, population-based estimates of sexual minority men in five sites/countries across the Asia-Pacific region to examine differences in socioeconomic characteristics, adverse life events related to interpersonal violence and health outcomes between men who engage in same-sex sexual behaviours or preferences and men who report only sexual attraction to and sex with women. Thus, we are able to compare population estimates of sexual minority men with non-sexual minority men[2] to test the presence of social stratification by sexuality on men's adverse life experiences, including violence.

Materials and methods

Study design

We use data from the UN MCS (Fulu et al. 2013), a cross-country comparable population-based cross-sectional survey on masculinities and men's use and experiences of violence. The study was implemented between 2010 and 2013 by Partners for Prevention, a regional joint United Nations Development Programme (UNDP), United Nations Population Fund (UNFPA), United Nations Entity for Gender Equality and the Empowerment of Women (UN Women) and United Nations Volunteers (UNV) gender-based violence prevention programme. The UN MCS was designed to examine men's perpetration of violence against women and other men, and associated factors. We use data from Cambodia, China, Indonesia, Sri Lanka and Papua New Guinea-Bougainville. The survey was translated into locally appropriate languages. Cognitive testing was conducted in each site to ensure that questions and translations captured the original intent of the question. The survey asked questions on homosexual behaviours and sexual preferences. The study used multi-stage cluster sampling methods to obtain probability samples of men aged 18–49 years, using comparable questionnaires across sites. Trained male interviewers conducted face-to-face interviews in local languages using audio-enhanced personal digital assistants (PDAs). Respondents self-administered the most sensitive questions, including questions on homosexual activities and preferences. The average response rate across all five countries was 85.1%. The study received ethics approval in 2010 from the Medical Research Council of South Africa Ethics

Committee and national ethics boards in each country. Full details of the study methodology are presented elsewhere (Fulu et al. 2013).

Defining sexual minority status

Men were classified as sexual minority if they reported yes to the following questions: 'Have you ever had sex or done something sexual with a boy or a man?' or 'Which of the following acts have you done with a man because you wanted to: masturbation, oral sex, thigh sex, anal sex?' Men were also categorised as sexual minority if they reported transactional sex with a male or transgender sex worker, or reported any sexual attraction to men or to both women and men. The latter inclusion reflects the role of sexual attraction in sexual minority status (Sell 2007) and expands the narrow public health focus on sexual behaviours (Young and Meyer 2005). Some studies use only oral/anal sex to estimate behaviour-based sexual minority status (e.g., Dunkle et al. 2013). Sensitivity analysis found no significant difference on covariates based on different classifications of sexual minority status. Thus, we use the broadest definition. Non-consensual sex was not included in the category parameters. The survey did not ask self-reported sexual orientation, which is a limitation of the sample parameters. See Table 1 for criteria to define the sexual minority men sample.

Covariates

We estimate differences between sexual minority men and non-sexual minority men on: sociodemographic characteristics, including age, educational attainment, socioeconomic status, work history, marital status and sexual practices within marriage; adverse life experiences, including child maltreatment, bullying during childhood, experiences of homophobic abuse, male-on-male sexual violence victimisation and perpetration, intimate partner violence against a female partner, experiencing street violence and participation in gangs or collective violence; and health outcomes, including current depressive symptoms, life satisfaction, current alcohol abuse and past year drug use. We present covariate descriptions in Appendix I.

Statistical analysis

The study design provided a self-weighted sample with equal sampling fractions, but not based on men's sexual behaviours and preferences, which was not part of the original sampling strategy (Fulu et al. 2013). To accommodate differential rates of same-sex behaviours and preferences, we weighted the analysis based on reported consensual same-sex sex and/

Table 1. Criteria to define sexual minority men sample.

Inclusion criteria	Exclusion criteria
• Reported any sex or any sexual activity with a boy or man; *or* • Reported any of the following acts with a man because he wanted to: masturbation, oral sex, thigh sex, anal sex; *or* • Ever engaged in transactional sex with a male or transgender sex worker; *or* • Reported any sexual attraction to men or to both women and men	• Reported only sex with *and* sexual attraction to women; *or* • Reported non-consensual male sexual assault victimisation *and* did not fulfill any of the inclusion criteria

Table 2. Percentage of men who report same-sex behaviours or attraction, study sites in five countries in the Asia-Pacific region, 2012–2013.[‡]

	Cambodia (*n* = 1753) (%)	China (*n* = 933) (%)	Indonesia (*n* = 2490) (%)	Papua New Guinea-Bougainville (*n* = 827) (%)	Sri Lanka (*n* = 1345) (%)	Regional (*n* = 7348) (%)
Sexual minority status measure						
1. Reported sexual attraction to men or ever engaged in any consensual same-sex sexual activity	6.56	14.58	6.47	16.32	15.91	10.36
2. Reported consensual same-sex sexual activity only	5.19	5.57	2.05	7.62	7.81	4.93
3. Reported consensual oral or anal same-sex sexual activity only	2.40	1.50	0.52	2.66	3.12	1.81
4. Reported sexual attraction to men only	2.80	10.56	4.87	10.40	8.94	6.46

[‡]Row 1 includes all men who report any sexual attraction to men or who report ever engaging in any consensual male-on-male sexual activity. This is the full category. Rows 2–4 provide different breakdowns of this category based on sexual practices or sexual preferences.

Table 3. Percentages or means and bivariate differences on sociodemographic characteristics and adverse life experiences, by category of male sexual practices and preferences, pooled comparable data from study sites in five countries in the Asia-Pacific region, 2011–2013.*

	All men (n = 7348)	Men who report consensual same-sex behaviours or preferences (n = 761)	Men who report sex with and sexual attraction to women only (n = 6587)	p- value‡
Covariates	% or Mean (SD)			
Sociodemographic characteristics				
Age				
18–24	26.32	27.73	26.16	0.09
25–34	33.61	30.09	34.02	
35–49	40.07	42.18	39.82	
Any high school attainment	72.10	62.42	73.22	< 0.001
Wealth category				
Low	5.89	12.88	5.09	< 0.001
Medium	61.15	58.08	61.50	
High	32.96	29.04	33.41	
Unemployed	17.62	19.58	17.40	0.14
Ever married/cohabited with a woman	71.00	69.51	72.00	0.25
Last sex not with main (female) partner*	11.46	18.92	10.60	< 0.001
Last sex not with a main (female) partner *missing cases*	24.02	26.68	23.71	
Lifetime adversity and psychological health				
Frequent child emotional abuse and neglect	30.63	41.13	29.42	< 0.001
Child physical abuse	40.23	43.23	39.88	0.07
Child sexual abuse	14.13	26.68	12.68	< 0.001
Witnessed abuse of mother	25.30	31.67	24.56	< 0.001
Teased or bullied as child	29.68	38.37	28.68	< 0.001
Victim of violence outside the home (last 12 months)	15.79	29.30	14.22	< 0.001
Victim of homophobic abuse	3.21	11.56	2.25	< 0.001
Ever victim of male-on-male sexual violence	4.25	16.43	2.84	< 0.001
Ever perpetrated physical or sexual intimate partner violence (female partner)	36.88	47.17	35.69	< 0.001
Ever perpetrated physical or sexual intimate partner violence (female partner) *missing cases*	14.36	13.27	14.48	
Lifetime perpetration of male-on-male sexual violence	3.73	16.95	2.20	< 0.001
Ever participated in a gang	10.72	21.42	9.49	< 0.001
Alcohol abuse	14.21	19.19	13.63	< 0.001
Any past year drug use	10.94	28.12	8.96	< 0.001
Life satisfaction (range 4–16)	8.58 (2.36)	8.24(2.55)	8.62(2.33)	< 0.001
Depression (range 10–39)	14.59 (4.77)	15.74(5.37)	14.46(4.67)	< 0.001

*Cambodia, China, Indonesia, Papua New Guinea-Bougainville, Sri Lanka.
‡Chi-square tests used to calculate p-value difference in percent distribution of all variables between men who report only sexual attraction to and sex with women versus men who report sexual attraction to or sex with men.

or sexual attraction by country/site. We used STATA/IC 13.0 for analysis. We defined sites within countries as strata and enumeration areas as clusters to account for survey design. A total of 1.81% men did not respond to any of questions used to define sexual minority status and were dropped from the sample. Given the low percentage, these dropped observations

Table 4. Multivariable logistic regression models of consensual same-sex sexual practices or reported same-sex preferences regressed on sociodemographic characteristics and adverse life experiences, data from study sites in five countries in the Asia-Pacific region, 2011–2013.*‡

	Model 1 (n = 7348)		Model 2 (n = 7348)		Model 3 (n = 7348)	
Covariates	OR (95% CI)	p	OR (95% CI)	p	OR (95% CI)	p
Sociodemographic characteristics						
Age						
18–24	*Ref*				*Ref*	
25–34	0.93 (0.73–1.19)	0.568			0.98 (0.76–1.26)	0.867
35–49	1.05 (0.81–1.36)	0.724			1.13 (0.85–1.49)	0.398
Any high school attainment	0.53 (0.43–0.64)	< 0.001			0.51 (0.41–0.63)	< 0.001
Wealth status						
Low	*Ref*				*Ref*	
Medium	0.39 (0.29–0.51)	< 0.001			0.63 (0.46–0.86)	0.003
High	0.30 (0.22–0.40)	< 0.001			0.52 (0.36–0.73)	< 0.001
Unemployed	0.96 (0.78–1.19)	0.732			0.90 (0.72–1.13)	0.358
Ever married/ cohabited with a woman	1.10 (0.81–1.50)	0.542			0.84 (0.59–1.18)	0.318
Last sex not with main (female) partner	2.03 (1.59–2.60)	< 0.001			1.23 (0.93–1.61)	0.141
Lifetime adversity and psychological health						
Frequent child emotional abuse and neglect			1.05 (0.98–1.13)	0.194	1.04 (0.97–1.12)	0.270
Child physical abuse			0.80 (0.66–0.97)	0.026	0.80 (0.66–0.98)	0.029
Child sexual abuse			1.47 (1.18–1.84)	0.001	1.48 (1.18–1.85)	0.001
Witnessed abuse of mother			0.80 (0.64–1.00)	0.049	0.78 (0.63–0.98)	0.036
Teased or bullied as child			1.22 (1.00–1.48)	0.048	1.25 (1.03–1.52)	0.025
Victim of violence outside the home (past 12 months)			1.69 (1.35–2.11)	< 0.001	1.61 (1.28–2.02)	< 0.001
Victim of homophobic abuse			1.79 (1.26–2.55)	0.001	1.74 (1.22–2.48)	0.002
Ever victim of male-on-male sexual violence			3.94 (2.94–5.28)	< 0.001	4.03 (2.99–5.43)	< 0.001
Any perpetration of male-on-male sexual violence			4.06 (2.98–5.53)	< 0.001	3.66 (2.67–5.02)	< 0.001
Any perpetration of physical and/or sexual intimate (female) partner violence			1.13 (0.93–1.37)	0.229	1.19 (0.97–1.46)	0.091
Any gang participation			1.24 (0.96–1.60)	0.095	1.25 (0.97–1.62)	0.083
Current alcohol abuse			0.89 (0.70–1.14)	0.359	0.96 (0.75–1.23)	0.733
Past year drug use			1.97 (1.56–2.49)	< 0.001	1.79 (1.40–2.27)	< 0.001
Life satisfaction			0.93 (0.90–0.97)	< 0.001	0.93 (0.90–0.97)	< 0.001
Current depressive symptomology			1.02 (1.00–1.04)	0.059	1.01 (0.99–1.03)	0.493

*Cambodia, China, Indonesia, Papua New Guinea-Bougainville, Sri Lanka.

‡All models adjusted for country/site, enumeration area (cluster sampling) and missingness on variables for last sex not with main (female) partner and any perpetration of physical or sexual intimate (female) partner violence, odds ratios not shown.

are unlikely to bias the results substantially. Missing values on the depression scale were imputed using the country-specific mean value. No other imputations were conducted. We applied complete case analysis, taking missingness into account for covariates on perpetration of intimate partner violence and last sexual partner. The final sample of all men included in the analysis was 7348.

We estimated the percentage of men who report any consensual same-sex sex and/or sexual attraction, as well as percentage of men who report only sexual behaviours, only oral/anal sexual practices and only sexual attraction to other men by country (Table 2). We then used the pooled regional sample of men who report any consensual same-sex sex and/or sexual attraction. Pearson's χ^2 tests were used to estimate bivariate percent differences by

sexual practices and preferences on all covariates (Table 3). We estimate random effects multivariable logistic regression models to measure differential exposure to covariates based on men's categorisation into the sexual minority sample, accounting for country/site and survey cluster (Table 4). Sexual minority group membership served as the outcome variable in multivariable logistic regression models. Using Hosmer-Lemeshow tests to assess model fit, the fully adjusted multiple logistic regression model on adverse life experiences (Model 3, Table 4), shows strong fit ($p > 0.05$).

Results

Men's same-sex sexual behaviours and preferences

The percentage of men who reported sexual attraction to men or consensual same-sex sexual activity ranged from 6.5% in Indonesia to 16.3% in PNG-Bougainville (Table 2). A total of 761 men (10.4%) in the combined regional sample reported sexual attraction to men or consensual same-sex sexual activity. Of this regional sample of 761 sexual minority men, 362 reported consensual anal, oral, thigh or masturbatory sexual activity with a man; slightly more of the regional sample reported sexual attraction to men ($n = 472$).

Sociodemographic and relationship characteristics

Sexual minority men were less likely to report any high school attainment (62.4%), and more likely to be in the low wealth category (12.9%) compared to men who reported sex with and sexual attraction to women only (Table 3). There was no significant difference in percentage distributions of age, unemployment, work stress or marriage/cohabitation by male sexual practices and preferences. Sexual minority men were more likely to report that their last sexual encounter took place outside their primary heterosexual relationship (18.9%) compared to other men (10.6%). These sociodemographic patterns by male sexual practices and preferences remained consistent, even after adjusting for all other sociodemographic characteristics (Table 4, Model 1).

Adverse life incidents by male sexual behaviours and preferences

Bivariate percentage distributions for all childhood or adulthood adverse life experiences were higher among sexual minority men compared to non-sexual minority men (Table 3). After adjusting for other adverse life experiences (Table 4, Model 2), respondents who reported experiences of child sexual abuse (AOR 1.5, $p = 0.001$), teasing or bullying as a child (AOR 1.2, $p = 0.05$), past year violence victimisation outside the home (AOR 1.7, $p < 0.001$), exposure to homophobic abuse (AOR 1.8, $p = 0.001$), victimisation of male-on-male sexual violence (AOR 3.9, $p < 0.001$), perpetration of male-on-male sexual violence (AOR 4.1, $p < 0.001$), past year drug use (AOR 2.0, $p < 0.001$) and lower life satisfaction (AOR 0.9, $p < 0.001$) had higher adjusted odds of reporting sexual minority status. However, exposure to violence in childhood was not uniformly associated with reporting sexual minority status. For example, respondents who experienced child physical abuse (AOR 0.8, $p = 0.01$) or witnessed their mother being abused (AOR 0.8, $p = 0.05$) were less likely to report sexual minority status. These patterns remain largely consistent in the final model (Model 3, Table 4) adjusting

for all sociodemographic characteristics, with the exception of differential reporting of last sexual experience, which was not significant in the full model.

Discussion

Probability-based population data from five countries across the Asia-Pacific region reveal variation in men's same-sex practices and preferences, while consistently demonstrating higher exposure to adverse life incidents among sexual minority men compared to their peers who reported only sex with and sexual attraction to women. Country estimates of consensual male same-sex sexual practices are largely consistent with regional prevalence trends (Cáceres et al. 2006), although slightly inflated due to inclusion of sexual preference questions. These results point to the salience of same-sex sexual *preference* as a key dimension of measuring sexual minority populations in the Asia-Pacific region.

Disparity and conformity across socioeconomic indicators

Sexual minority men experience economic disadvantages despite conforming to dominant social norms around masculinity on marriage and family life, suggesting that they do not fully benefit from patriarchal dividends (Connell 2005). Divergent rates of high school attendance and socioeconomic status by sexual practices and preferences suggest early and consistent life course differentiation in opportunity structures. Yet, sexual minority men engaged in dominant paradigms of heterosexual marriage as a defining feature of hegemonic masculinity across the region (Khan et al. 2005).

These patterns allude to the strength of social norms around masculinity. Research on men's adherence to other aspects of hegemonic masculinity show connections between norms and poor social outcomes (Courtenay 2000), including risk of perpetrating violence against women (Fulu et al. 2013; Jewkes et al. 2013). This study found no adjusted difference in partner violence perpetration based on same-sex sexual practices or preferences, once accounting for differential exposure to documented risk factors for partner violence (Fulu et al. 2013). Yet further research is needed to assess whether the underlying drivers of partner violence may vary by sexual orientation, such as marital satisfaction.

Adversity across the life course

The differential odds of experiencing adverse life incidents by same-sex sexual practices and preferences underscore pervasive homophobia across the Asia-Pacific region and its harmful effects on men's lives and health (Chakrapani et al. 2007; Courtenay 2000). Significant bivariate differences by same-sex practices and preferences for bullying and most forms of home-based childhood maltreatment may signal early adversity due to same-sex preferences and practices (McLaughlin et al. 2012). In adulthood, sexual minority men faced higher odds of adverse life incidents related to interpersonal violence, such as homophobic abuse. For more feminine-presenting men, this may be a result of visual 'cues' that are perceived as same-sex sexuality, that consequently puts them at greater risk of homophobic harassment in public spaces (Shaw et al. 2012). Increased risk of violence outside the home may be due to men's self-defence against perceived threats. For example, sexual minority men may be motivated

to physically retaliate to homophobic hostility in order to publically reaffirm masculinity (toughness, strength and aggression) and curtail future incidents of harassment (Panfil 2014).

Sexual minority men also report significantly higher frequency of sexual violence victimisation and perpetration. High prevalence of sexual violence may be due to more frequent engagement in risk behaviours (e.g., drug use Nehl et al. 2015 or early sexual debut Shaw et al. 2012) or environmental conditions under which men seek other same-sex sexual partners (e.g., unsafe/isolated neighbourhood locations). Gender display and performance may also be related to violence perpetration and victimisation. Feminine-presenting men are more likely to report higher rates of sexual violence victimisation due to perceptions of non-heteronormative sexuality (Shaw et al. 2012). However, in other settings, gender non-conformity and homosexual practices are distinct and this risk may be less salient (Herdt 1984).

Sexual minorities and mental health

Higher rates of drug use and lower life satisfaction were found among sexual minority men, which is consistent with previous research (e.g., Nehl et al. 2015; Sivasubramanian et al. 2011). Continuous depression scores do not significantly differ by sexual practices and preferences after adjusting for other covariates. However, current depressive symptoms using a cut point of > 7 for the abbreviated Center for Epidemiologic Studies Depression (CES-D) scale used in previous studies (Fulu et al. 2013) did show significant differences (data not shown). This discrepancy suggests the need for psychometric validation of the CES-D scale for sexual minority populations in the Asia-Pacific region. While the cross-sectional nature of this study precludes assumptions of causality, these adverse health outcomes may be consequences of lifetime exposure to homophobic discrimination (Meyer 2003).

Implications for prevention

The conversation on integrating sexuality into gender-based violence prevention remains nascent in high-income settings (PreventConnect 2016) and largely absent in low- and middle-income settings (Flood 2015). Yet these results from a probability-based representative sample underscore how men experience violence and adversity differently within inequitable gender systems based on their non-heteronormative sexuality.

We present two major directions for action, cognisant that the conversation is just beginning. First, we propose systematic integration of sexual minority experiences into violence prevention interventions, given the high exposure to life adversity among sexual minority men. To start, we need more inclusive language around gender and sexual identity. Violence prevention historically focuses on preventing violence against women and girls. Incorporating sexual and gender minorities under the term 'gender-based violence' provides a more nuanced perspective of how gender systems shape individual experiences of violence, discrimination, abuse and harassment based on gender and sexual identity (Myrttinen, Naujoks, and El-Bushra 2014).

Interventions and programmes can reflect this wider approach. Intervention priorities include child protection programmes to address specific vulnerabilities of children who exhibit or engage in same-sex preferences and relationships; efforts to address sexual violence and its effects on health and wellbeing among sexual minority youth; integration of

same-sex partnerships into intimate partner violence prevention interventions; and policies to tackle structural homophobia and sexual inequality across multiple sectors from schools to workplaces.

Second, we propose that violence prevention interventions that engage boys and men must openly talk about and account for sexual diversity within groups of men. The evidence shows that men's experiences diverge based on sexuality. Open and frank discussion and reflection of sexual diversity among men can promote masculinities beyond the normative model (Namy et al. 2015). Further, the conceptual shift from work with individual men and boys to transforming systemic gender inequalities (Jewkes, Flood, and Lang 2015) opens up the opportunity to also transform systemic homophobia. Violence against women and violence against sexual minority men stem from common root causes: gender norms and social constructions of masculinity. Systemic gender inequality cannot be divorced from systemic homophobia. Transformation of both macro-level inequalities must be addressed to prevent violence and promote gender justice.

Study strengths and limitations

These data capture representative and comparable, probability-based population estimates of and differential exposure to life adversity among sexual minority men from the largest data-set on men, health and violence in the Asia-Pacific region to date. The use of audio-enhanced PDAs to self-administer questions around same-sex preferences and behaviours likely allowed for more honest and open disclosure of sexual preferences and/or practices that are widely stigmatised (in some cases, criminalised) across the region.

There are some limitations to this analysis. In particular, the survey was not originally designed to capture data on the lives of sexual minority men. Consequently, we lack data on same-sex intimate partnerships and self-reported sexual identification, key criterion for defining sexual minority populations (Sell 2007; Young and Meyer 2005). Future survey measurement of sexuality in Asia-Pacific must consider culturally-specific practices and norms. The Western-derived three-part measurement approach to sexuality – attraction, orientation and practice (Young and Meyer 2005) – may not resonate across diverse cultural sexuality systems. Better measurement systems are needed to identify salient aspects of sexuality, such as identities, cultural obligations and norms, consenting practices and meanings of sexual practices (Dowsett 1996), to build theoretically-informed health surveys that capture culturally meaningful dimensions of sex and sexuality.

A related limitation is statistical pooling of sexual minority men across five diverse countries, each with their unique cultural ideologies, symbols and meanings of sexuality and masculinity. This risks homogenising the culturally-specific effects of gender and sexuality systems on men's risk of adversity and health outcomes. We statistically accommodated this limitation by controlling for country/site and survey cluster sampling design. Theoretically, we concur with Johnson, Jackson and Herdt's (2000) vantage point of *critical regionalities*, as do other regionally oriented sexuality scholars (Besnier and Alexeyoff 2014), as a useful tool with which to compare sociological patterns in a broadly defined area of the world, while acknowledging the diversity therein.

Conclusion

Sexuality is a central axis of differentiation among men in the Asia-Pacific region that contributes to disparities in life trajectories and health outcomes, even after controlling for social and economic factors. The divergent experiences of sexual minority men illustrate differential life trajectories shaped by sexual identities, attractions and practices. At the same time, sexuality intersects with other axes of social stratification, such as gender, to create complex hierarchies of power and control. Sexuality stratifies societies in which social inequalities persist. These results underscore the need to integrate sexuality into global gender-based violence prevention. In particular, integration of sexual minority experiences into violence prevention means expanding violence prevention efforts with boys and men to account for men's sexual diversity.

Notes

1. Although this study focuses on adult men, we use the phrase 'engaging boys and men' as the most-used term in violence prevention (see, for example, Ricardo, Eads and Barker [2011]), and to emphasise the need to include boys and young men in violence prevention efforts.
2. We use the term 'sexual minority men' to denote men who engage in same-sex sexual activity *or* express same-sex sexual preferences. We expand upon the public health behavioural category of men who have sex with men to include more identity-based criteria for measuring sexual orientation (Sell 2007; Young and Meyer 2005) and to reflect the diversity of sexuality in the Asia-Pacific region (Besnier and Alexeyeff 2014; Herdt 1984; Jackson 1999; Khan et al. 2005; Wieringa, Blackwood and Bhaiya 2007).

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Appendix 1. Operational definitions for covariates.

Covariate	Definition
Sociodemographic characteristics	
Age (years)	Age tertiles: 18–24, 25–34 and 35–49
Attended high school	Individual completed any high school-level education
Wealth status	A categorical wealth score (range of 2–8) based on reported food insecurity and difficulty mobilising resources in case of an emergency. Low scores indicate high levels of food insecurity and difficulty mobilising resources, capturing low wealth.
Unemployment	Unemployed at the time of survey
Relationship and sexual practices	
Ever heterosexual marriage/cohabitation	Ever married or lived with a woman
Last sex not with main (female) partner	Last sexual encounter was with someone other than wife/main (female) partner
Experiences of interpersonal violence	
Child maltreatment	Before age 18 years respondent had at least one of the following experiences often or very often:
Emotional abuse/neglect	Lived in different households at different times; was told he was lazy or stupid or weak by someone in his family; was insulted or humiliated by someone in his family in front of other people; both of his parents were too drunk or drugged to take care of him; spent time outside the home and none of the adults at home knew where he was.
Physical abuse	Was beaten at home with a belt or stick or whip or something else which was hard; was beaten so hard at home that it left a mark or bruise
Sexual abuse	Someone touched his buttocks or genitals or made him touch them when he did not want to; had sex with someone because he was threatened or frightened or forced
Witnessed abuse of mother	Witnessed his mother beaten by a partner
Teased or bullied by peers	Often or very often was bullied, teased or harassed in school or neighbourhood
Victim of violence outside the home (past 12 months)	Experienced any of the following outside the home: punched or hit; threatened with a knife or other weapon (excluding firearms); threatened with a gun
Victim of homophobic abuse	Ever been called names or faced derogatory remarks because he was thought to be effeminate or 'sissy' or been subjected to threats of violence or actual violence because he was thought to be effeminate, gay, attracted to men and/or having sex with men
Victim of male-on-male sexual violence	Persuaded or forced to have sex or do something sexual when he did not want to
Gang participation	Participated one or more times in a gang or collective violence
Perpetrated male-on-male sexual violence	Reported once or more than once doing something sexual with a boy or man without his consent or through force or perpetrating oral/anal rape, alone or with other men
Perpetrated physical and/or sexual intimate partner violence against female partner	Reported at least one act of physical violence or at least one act of sexual violence against an intimate (female) partner in their lifetime
Psychological factors and substance abuse	
Alcohol abuse	Current alcohol abuse was measured using a dichtomous variable based on the modified AUDIT scale, combining frequency of drinking, number of drinks consumed, frequency of binge-drinking, feelings of guilt or remorse after drinking and failure to do what is expected due to alcohol consumption
Drug use	Reported any use of drugs in the past 12 months
Depressive symptoms	Men's current depressive symptoms were measured using an abbreviated version of the Centre for Epidemiologic Studies Depression scale. Overall, the mean score was 14.58 and Chronbach's Alpha was 0.84.
Life satisfaction	Measured by four questions, each having a four-point Likert response option (strongly agree to strongly disagree): 'In most ways, my life is close to my ideal', 'The conditions in my life are excellent', 'I am satisfied with my life', 'So far I have gotten the important things I want in life'. Scores ranged from 4 to 16, with a mean of 8.6. Chronbach's alpha was 0.78