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Stigma related to sex work among men who engage in transactional sex with men in Ho Chi Minh City, Vietnam

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Abstract

Objectives Male sex workers (MSW) in Vietnam face high levels of stigma related to sex work, which may be associated with depression and increased vulnerability to HIV.

Methods In 2010, 300 MSW completed a behavioral and psychosocial survey. Multivariable models assessed factors associated with sex work-related stigma and the association between stigma and depression.

Results Factors associated with increased stigma included having disclosed sexual orientation to healthcare workers (b 1.75, 95 % CI 0.69–2.80), meeting clients in the street/

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M. J. Mimiaga Department of Psychiatry, Harvard Medical School/ Massachusetts General Hospital, 1 Bowdoin Square, 7th Floor, Boston, MA 02114, USA park (b 1.42, 95 % CI 0.32–2.52), and having been forced to have sex without a condom (b 2.36, 95 % CI 1.27–3.45). Factors associated with decreased stigma included meeting clients via the telephone or internet (b –1.26, 95 % CI –2.39 to –0.12) and receiving financial support from family or friends (b –1.31, 95 % CI –2.46 to –0.17). Stigma was significantly associated with increased odds of depression (AOR 1.07, 95 % CI 1.01–1.15).

Conclusions Addressing stigma and depression in HIV prevention interventions is crucial for tailoring these programs to MSWs' needs, and may result in decreased HIV spread.

Keywords HIV · Sex workers · Male sex workers · Vietnam · Depression · Stigma

Introduction

Vietnam is disproportionately affected by the HIV epidemic amongst countries in Southeast Asia (Colby and Cao 2004; Rao et al. 2010; Garcia et al. 2012). The HIV epidemic in Vietnam is concentrated in high-risk populations, including injection drug users, male and female sex workers, and men who have sex with men (MSM) (Hoang et al. 2006, 2009). Male sex workers (MSWs), who are men who exchange sex for money, goods, or other drugs primarily with other men in Vietnam, are at particularly high risk for HIV acquisition and transmission, and are a crucial group for focusing HIV prevention efforts (Hoang et al. 2006, 2009; Nguyen et al. 2007; Mimiaga et al. 2013). A large proportion of MSW in Vietnam are in urban areas, are frequently migrants from other regions, and have unstable housing (Clatts et al. 2007; Biello et al. 2013). MSW in Ho Chi Minh City tend to be young, with the



majority of individuals under the age of 30 (Biello et al. 2013).

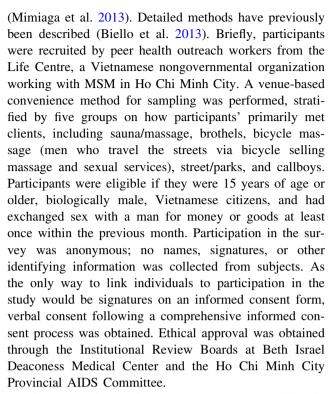
Sex work, drug use, and male-male sexual behavior are considered to be "social evils" in Vietnam (Tran et al. 2005; Luong 2006; Rao et al. 2010), introducing stigma and discrimination for this population. Stigma can broadly be defined as negative attitudes, relative powerlessness, and loss of status related to a particular characteristic (King et al. 2013). In other contexts, experiences of stigma and discrimination are associated with increased risk for HIV infection, possibly through social isolation, depression, and subsequent increase in risky sexual practices, such as engaging in unprotected anal sex (UAS) and drug or alcohol use during sex (Diaz et al. 2001; Thomas et al. 2012). In addition, stigma and discrimination have been shown to be associated with reduced care-seeking behavior in Vietnam (Thanh et al. 2012). Individual experiences of sexual minority stigma, which is generally defined as lack of power, regard, and inferior status of members of sexual minorities, can be grouped into three categories: enacted stigma, which includes explicit behavior including use of derogatory language and active shunning and discrimination, and sexual assault or violence; felt stigma which refers to the expectation of enacted stigma; and self-stigma, which incorporates stigma into one's feelings towards the self (Herek 2007). Among female sex workers, stigma has been shown to be independently associated with HIV testing; HIV-related stigma (stigma related specifically to being HIV-infected) has been shown to be associated with decreased HIV testing and sex work-related stigma (stigma related specifically to being a sex worker) with increased testing (King et al. 2013). Male sex workers in particular may experience stigma from multiple dimensions.

Few studies have specifically assessed sex work-related stigma among men. The aim of the present study was two-pronged. First, to better understand factors related to sex work-related stigma among Vietnamese MSW, we assessed correlates of sex work-related stigma in this population. Second, to understand how sex work-related stigma affects mental health and vulnerability to HIV, we assessed the association between sex work-related stigma and depression and sexual risk-taking behavior.

Methods

Participants and procedures

In 2010, 300 participants completed a quantitative behavioral and psychosocial survey assessing their demographic information, sexual risk behaviors, experience with sex work, and psychosocial factors. The survey was developed following initial formative qualitative work



Stigma associated with sex work was assessed by six questions, each on a 4-point Likert scale. Questions assessing stigma were categorized according to three different types of stigma: enacted, felt, and self-stigma (Herek 2007). Questions assessing the three dimensions of stigma are listed in Table 1. Possible responses for each stigmarelated question included: "never" (coded with a score of 0), "once or twice" (with a score of 1), "a few times" (with a score of 2), and "many times" (with a score of 3). A principal components analysis was used to identify component(s) that should be retained from the correlation matrix of the six stigma-related questions. One component was identified with an eigenvalue >1 (eigenvalue 2.81), indicating that although the scale assessed three dimensions of stigma, they were all measuring the same construct (Floyd and Widaman 1995). This component score correlated almost perfectly ($\rho > 0.99$) with a composite stigma score which added the responses to each of the 6 stigmarelated questions, with a score of 0 for "never", 1 for "once or twice", 2 for "a few times" and 3 for "many times". Thus, for ease of interpretation, we used the composite stigma score as the stigma variable for all analyses. The composite stigma score had a range of possible values of 0-18. Internal consistency among the six items was assessed with Cronbach's alpha.

Potential factors assessed with respect to their association with stigma included age, education (higher education versus secondary or primary), religion (any religion versus no religion), marital status (ever married versus single), income, receiving income from a source other than sex



Table 1 Participant responses to questions regarding experience with stigma, Vietnam, 2010

Question	Response, N (%)		
How often have you been made fun of or called names for engaging in sex work?	Never—190 (63.8) Once or twice—26 (8.7) A few times—45 (15.1) Many times—37 (12.4)		
How often have you been hit, beaten, or sexually assaulted for engaging in sex work?	Never—259 (87.2) Once or twice—20 (6.7) A few times—11 (3.7) Many times—7 (2.4)		
How often have you heard that sex work or sex workers are not normal?	Never—54 (18.1) Once or twice—48 (16.1) A few times—93 (31.1) Many times—104 (34.8)		
How often have you felt that people would dislike you if they know that you are a sex worker?	Never—75 (25.3) Once or twice—54 (18.2) A few times—90 (30.4) Many times—77 (26.0)		
How often have you felt afraid of being harassed or arrested by the police for engaging in sex work?	Never—116 (38.9) Once or twice—32 (10.7) A few times—62 (20.8) Many times—88 (29.5)		
How often have people's comments and actions toward sex workers affected your emotional and mental well-being?	Never—115 (38.5) Once or twice—45 (15.1) A few times—75 (25.1) Many times—64 (24.1)		

work, sexual orientation (bisexual, homosexual, or heterosexual), ever having had sex with a woman, receiving financial support from family/friends, disclosure of sexual orientation to other MSWs, non-MSW friends, family members, and healthcare providers, reasons for starting in sex work (economic, drug-related, forced, or for pleasure or excitement), gender of clients, location of meeting clients (in the street or park, by telephone or internet, in a massage studio, bar, or café, in a brothel, or through friends or a mami), having been forced to have sex without a condom, and belief that carrying condoms will make police think one is a sex worker.

Depression was measured using the 10-item Center for Epidemiologic Studies Depression Scale (CES-D 10) (Zhang et al. 2012). Participants were classified as "depressed" if they had significant depressive symptoms as defined by a score of 10 or above on the CES-D 10. Unprotected anal sex (UAS) was assessed by questions asking if the participant had had UAS in the past month with commercial or non-commercial partners. UAS in this study was defined as any UAS in the past month with either a commercial or non-commercial male partner. Number of

partners was assessed by asking participants how many male customers and male sex partners they had had in the past month.

Statistical analysis

An alpha level of <0.05 was considered significant for all analyses. Bivariate analyses between the composite stigma score and demographic, social support, and experience with sex work-related variables were performed using linear regression. A multiple linear regression model was created examining stigma associated with sex work, and backwards elimination with a cutoff of $P \le 0.15$ was used to determine the final variables to retain in the model. Briefly, backwards elimination begins with all candidate variables in the model, and removes them one by one starting with the variable with the largest P value until all variables in the model are $P \le 0.15$. Multivariable logistic regression models with the following independent variables were then created: (1) depression; (2) UAS with a commercial partner in the last month; (3) UAS with noncommercial in the last month; (4) number of male commercial partners in last month and (5) number of male noncommercial partners in the last month. The dependent variable of interest in these models was the composite stigma score, adjusted for each variable that was significant in the stigma model. All analyses were conducted in Stata 12.0 (StataCorp, College Station, TX).

Results

Of the 300 MSWs who completed the survey, 293 (97.7 %) completed the questions assessing their level of stigma associated with sex work. Table 1 lists the frequencies of responses to each of the 6 sex work-related stigma questions. Internal consistency among the 6 items was acceptable (Cronbach's $\alpha=0.76$). The mean stigma score was 7.1 (SD 4.4), and ranged from 0 to 18 and the median stigma score was 7 (interquartile range 4–10), suggesting it was approximately normally distributed.

Table 2 lists descriptive statistics for demographic, social support, and experience with sex work-related variables as well as results of bivariate and multiple linear regression models assessing correlates of sex work-related stigma. In a multiple linear regression model, factors associated with decreased stigma included usually meeting clients via telephone or Internet versus not meeting clients via telephone or Internet (adjusted b –1.26, 95 % CI –2.39 to –0.12, P = 0.03) and receiving financial support from family or friends (adjusted b –1.31, 95 % CI –2.46 to –0.17, P = 0.025). Factors associated with increased stigma included disclosure of sexual orientation to healthcare



Table 2 Bivariate and multivariable models assessing correlates of sex work-related stigma, Vietnam, 2010

Predictor	N (%)/mean (SD)	Coefficient (95 % CI) ^a	P	Adjusted coefficient (95 % CI) ^b	P
Demographics				_	_
Age (years)	22.35 (5.0)	0.09 (-0.015 to 0.19)	0.09	_	_
Education (higher education vs. primary or secondary)	Primary or secondary—126 (42 %) High school or above—173 (58 %)	0.82 (-0.22 to 1.85)	0.12	0.99 (-0.09 to 2.07)	0.07
Religion (no religion vs. any religion)	No religion—71 (23.7 %) Any religion—228 (76.3 %)	-0.73 (-0.46 to 1.92)	0.23	-	_
Married	Married or divorced—13 (4.3 %) Single—287 (95.7 %)	-1.77 (-4.25 to 0.71)	0.16	-	-
Income (×100,000 VND)	39.71 (31.02)	-0.0012 (-0.018 to 0.015)	0.88	-	-
Receiving financial support from a job other than sex work	105 (35.0 %)	0.09 (-0.99 to 1.17)	0.87	_	-
Sexual orientation	Bisexual—94 (31.5 %)	-1.58 (-2.73 to -0.43)	0.007	_	-
	Heterosexual—48 (16.1 %)	-0.18 (-1.62 to 1.27)	0.81		
	Not sure—6 (2.0 %)	-1.41 (-5.36 to 2.53)	0.48		
	Homosexual—150 (50.3 %) ^c	**	**		
Gender identity	Bóng lộ (effeminate)—31 (10.3 %)	1.60 (-0.10 to 3.29)	0.065	_	-
	Trai thẳng (masculine)—90 (30.0 %)	-0.91 (-2.04 to 0.23)	0.12		
	Bóng kín ("straight boy")—176 (58.7 %)	**	**		
Ever had sex with a woman	105 (35.0 %)	-2.12 (-3.17 to -1.08)	< 0.001	-	-
Social support				-	-
Receiving financial support from family/friend	91 (30.3 %)	-1.25 (-2.36 to -0.15)	0.026	-1.31 (-2.46 to -0.17)	0.025
Other MSWs know about sexual orientation	240 (85.4 %)	2.42 (0.93 to 3.91)	0.002	1.51 (0.05 to 2.96)	0.07
Non-MSW friends know about sexual orientation	152 (54.1 %)	0.70 (-0.36 to 1.77)	0.19	-	-
Family members know about sexual orientation	81 (28.8 %)	0.49 (-0.69 to 1.67)	0.41	_	-
Healthcare providers know about sexual orientation	129 (49.4 %)	2.11 (1.02 to 3.20)	< 0.001	1.75 (0.69 to 2.80)	0.001
Experience with sex work				-	-
Economic reasons for starting in sex work	257 (85.7 %)	0.60 (-0.88 to 2.07)	0.43	_	_
Drug-related reasons for starting sex work	5 (1.7 %)	-0.28 (-4.23 to 3.67)	0.89	_	-
Forced to start in sex work	8 (2.7 %)	0.57 (-2.58 to 3.71)	0.72	_	-
Started in sex work for pleasure or excitement	96 (32.0 %)	1.11 (0.02 to 2.20)	0.046	0.90 (-0.23 to 2.03)	0.12
Gender of clients	Mostly men, some women—29 (9.7 %) Mostly women—11 (3.7 %)	-1.69 (-3.40 to 0.022) -4.40 (-7.04 to -1.76)	0.053 0.001	_	_
	Men only—260 (86.7 %) ^c	**	**		
Usually meet clients in the street or park	118 (39.3 %)	2.02 (0.99 to 3.04)	< 0.001	1.42 (0.32 to 2.52)	0.01
Usually meet clients by telephone or internet	209 (69.7 %)	-0.92 (-2.03 to 0.18)	0.10	-1.26 (-2.39 to -0.12)	0.03
Usually meet clients in massage studio, café, or bar	101 (33.7 %)	-1.20 (-2.27 to -0.12)	0.03	-1.02 (-2.11 to 0.07)	0.07
Usually meet clients in a brothel	53 (17.7 %)	-0.59 (-1.94 to 0.76)	0.39	-	-



Table 2 continued

Predictor	N (%)/mean (SD)	Coefficient (95 % CI) ^a	P	Adjusted coefficient (95 % CI) ^b	P
Usually meet clients through friends or mami	44 (14.7 %)	0.27 (-1.18 to 1.71)	0.72	-	-
Been forced to have sex without a condom	101 (34.0 %)	2.80 (1.76 to 3.83)	< 0.001	2.36 (1.27 to 3.45)	< 0.001
Carrying condoms will make police thing you are a sex worker	81 (27.0 %)	0.24 (-0.91 to 1.40)	0.68	-	-

^{95 %} CI 95 % confidence interval

workers (adjusted b 1.75, 95 % CI 0.69–2.80, P = 0.001), meeting customers in the street or park versus not meeting clients in the street/park (adjusted b 1.42, 95 % CI 0.32–2.52, P = 0.01), and having been forced to have sex without a condom (adjusted b 2.36, 95 % CI 1.27–3.45, P < 0.001).

Of the 300 participants, 147 (47.3 %) had significant depressive symptoms. Ninety-eight (32.8 %) had engaged in UAS in the last month with any partner: 74 (24.7 %) with a commercial partner and 65 (21.7 %) with a noncommercial partner. Mean number of commercial partners in the last month was 11.7 (SD 12.9) and male non-commercial partners was 9.0 (SD 11.0). Table 3 lists multivariable models for the association between sex work-related stigma and depression and sexual risk behaviors adjusted for factors that were retained in the final stigma model. Sex work-related stigma was significantly associated with increased odds of depression (AOR 1.07, 95 % CI 1.01-1.15, P=0.03), but was not associated with UAS with commercial or non-commercial male partners, or number of partners in the last month.

Discussion

A large proportion of participants in this study reported experiencing stigma related to sex work. Sex work is known to be highly stigmatized in Vietnam (Tran et al. 2005), and it is likely that men who engage in transactional sex experience stigma from multiple dimensions, including sexual minority and sex work-related stigma. Venue in which MSW met clients was significantly associated with sex work-related stigma. Meeting clients in a street or park was associated with increased stigma, whereas meeting clients indirectly via telephone or the Internet was associated with lower levels of stigma. MSW who met their clients in public venues, such as streets or parks, may have been more visible and thus more vulnerable to

Table 3 Multivariable models assessing relationship between sex work-related stigma and depression, unprotected anal sex in last month with commercial and non-commercial partners, and number of partners in the last month, Vietnam 2010

Outcome	Effect size (95 % CI)	P
Depression	AOR 1.07 (1.01 to 1.15)	0.03
Unprotected anal sex in the last month with commercial partner	AOR 0.93 (0.86 to 1.00)	0.054
Unprotected anal sex in the last month with non-commercial partner	AOR 0.97 (0.90 to 1.05)	0.44
Number of male commercial partners in the last month	0.12 (-0.27 to 0.51)	0.55
Number of male partners in the last month	-0.20 (-0.56 to 0.15)	0.27

Separate model for each outcome adjusted for variables retained in the multiple linear regression model of correlates associated with sex work-related stigma including education, financial support from family/friends, having disclosed sexual orientation to other MSWs and healthcare workers, started in sex work for excitement, meeting clients in the street/park, via telephone/internet, or in massage studio, café, or bar, and having been forced to have sex without a condom

discrimination and stigma as compared to those who met clients in less public forums. As it confers greater enacted sex work-related stigma, the venue in which MSW meet their clients is an important component of the risk environment for MSW in Ho Chi Minh City, and as such is an important contextual factor in terms of vulnerability (Rhodes 2009). To our knowledge, these findings are one of the first to explore the relationship between venue and stigma with MSW. Consideration of venue is important in understanding HIV-related risk among MSW in Ho Chi Minh City for multiple reasons, and includes sex work-related stigma.

For MSW in this study, receiving financial support from family or friends was associated with a lower stigma score. Financial support may indicate a level of overall social



^a Bivariate linear regression model predicting composite stigma score

^b Multiple linear regression model selected via backwards elimination with a P value cutoff of 0.15

c Reference group

support that is protective against felt and self-stigma. Some suggest that receiving financial support could also indicate that participants are less reliant on sex work for financial reasons and thus may feel less pressure to engage in transactional sex or engage in sexual acts that are more risky because the client is offering additional money (Lau et al. 2009). However, more than one-third of participants received income from a job other than sex work, and this was not associated with stigma, suggesting that there may be a social factor involved that is protective against experiences of sex work-related stigma. Current research indicates that social stigma is associated with social isolation and lack of social support (Emlet 2007; Li et al. 2009). This may be particularly salient for MSW in Vietnam, given that both male-male sexual behavior and sex work are stigmatized and sex work is illegal. Individuals may feel isolated from their social support networks if they are not comfortable discussing their sexual identity or engagement in sex work.

In addition to stigma related to sex work, homosexuality is stigmatized in Vietnam, although particularly in urban areas this may be decreasing (Colby and Cao 2004; Blanc 2005; Berry et al. 2013). In this study, disclosure of sexual orientation to healthcare workers was significantly assoincreased sex ciated with work-related stigma. Discrimination towards MSM from the healthcare sector is particularly concerning, as health care stigmatization known to deter MSM from access services in the future (Thanh et al. 2012; Ma et al. 2012; Risher et al. 2013). Non-engagement in care may place individuals at higher risk for HIV, STIs, and poor health outcomes (Ngo et al. 2009; Thanh et al. 2012). It is important to note that peer outreach workers have played a key role in linking MSM with HIV counseling and testing and other related services in Ho Chi Minh City (Mimiaga et al. 2013). Future research is needed to explore the role that peer educators could play in fostering supportive relationships between MSW and their providers.

In the current study, nearly half of participants reported significant depressive symptoms, and stigma related to sex work among MSWs was significantly associated with increased odds of depression, although this effect was modest. Stigma and depression have been shown to be associated in a variety of settings (Simbayi et al. 2007; Thi et al. 2008; Wu et al. 2008; Li et al. 2009; Kingori et al. 2012; Wohl et al. 2012; Logie et al. 2013). Since the current study was cross-sectional, we could not assess the temporality of the relationship between depression and sex work-related stigma. Studies suggest that self-stigma is intimately linked with depression and other mental health disorders. In one study in India, a country with high levels of MSM-related stigma (Setia et al. 2010), stigma related to gender non-conformity, in addition to stigma related to

HIV and sexuality, was found to be an important component of understanding depression in HIV-uninfected MSM (Logie et al. 2012). Stigma related to sex work and depression among MSWs in Vietnam may be explained by a similar conceptual model.

The results of this study should be interpreted in the context of limitations. This study was cross-sectional, so it is difficult to assess temporal trends with factors associated with stigma. However, since the CES-D measured depression in the prior week and stigma was likely experienced previously, temporality may be inferred, thus providing evidence of the effect of stigma on development of depression. Data in this study were collected via selfreport, and thus are subject to recall and social desirability bias. Self-reported sexual risk behavior may be underreported, due to social desirability bias, and objective measures of sexual risk behavior are not widely available. Although sampling was stratified by venue, this study employed convenience sampling, and thus it may not be representative of the broader population of MSW in Ho Chi Minh City. Finally, a validated scale for assessing sex work-related stigma is not available for this population, and full external validation of the stigma measure was outside the scope of this study. The scale showed moderate internal consistency, and results indicating that sex work-related stigma was not associated with either sexual orientation or gender indicate that this scale is measuring dimensions of sex work stigma specifically, and not sexual or gender minority stigma. The measures assessed multiple dimensions of stigma related to sex work, including explicit experiences (enacted stigma), expectation of stigma (felt stigma) and internalization of experienced stigma (selfstigma)—all of which were identified by a single component in the principal components analysis. However, further qualitative research to explore the dimensions of this scale would enhance its external validity, and continued efforts should be made to improve future scales to ensure their reliability and validity.

The context in which MSW experience sex work-related stigma is complex, and is important to understand in order to contextualize HIV risk-taking behavior and to better target HIV prevention programs. There may be an additive or synergistic effect of social stigma from multiple sources, which may be particularly important among MSW. Further work should be done to assess how other sources of stigma among MSW in Vietnam, such as HIV, engaging in MSM behaviors, or gender non-conformity, differentially or in conjunction affect depression and sexual risk-taking. HIV prevention interventions should consider the large burden of depression in this population and include linkage to mental health care. Future HIV prevention interventions with MSW should address stigma related to sex work as an important contextual barrier to participation in such



programs, in order to ensure that these interventions meet MSWs' needs.

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Conflict of interest The authors declare that they have no conflict of interest.

Ethical standards All study procedures complied with current laws of the country in which they were performed. This study conformed to the tenets of the Declaration of Helsinki.

References

- Berry MC, Go VF, Quan VM et al (2013) Social environment and HIV risk among MSM in Hanoi and Thai Nguyen. AIDS Care 25:38–42. doi:10.1080/09540121.2012.687808
- Biello KB, Colby D, Closson E, Mimiaga MJ (2013) The syndemic condition of psychosocial problems and HIV risk among male sex workers in Ho Chi Minh City, Vietnam. AIDS Behav. doi:10.1007/s10461-013-0632-8
- Blanc M-E (2005) Social construction of male homosexualities in Vietnam. Some keys to understanding discrimination and implications for HIV prevention strategy. Int Soc Sci J 57:661–673
- Clatts MC, Gian LM, Goldsamt LA, Yi H (2007) Male sex work and HIV risk among young heroin users in Hanoi, Vietnam. Sex Health 4:261–267
- Colby D, Cao NH (2004) Men who have sex with men and HIV in Vietnam: a review. AIDS Educ Prev 16:45–54
- Diaz RM, Ayala G, Bein E et al (2001) The Impact of homophobia, poverty, and racism on the mental health of gay and bisexual Latino men: findings from 3 US cities. Am J Public Health 91:927–932
- Emlet CA (2007) An examination of the social networks and social isolation in older and younger adults living with HIV/AIDS. Health Soc Work 31:299–308
- Floyd FJ, Widaman KF (1995) Factor analysis in the development and refinement of clinical assessment instruments. Psychol Assess 7:286–299
- Garcia MC, Meyer SB, Ward P (2012) Elevated HIV prevalence and risk behaviours among men who have sex with men (MSM) in Vietnam: a systematic review. BMJ Open 2:e001511–e001511. doi:10.1136/bmjopen-2012-001511
- Herek GM (2007) Confronting sexual stigma and prejudice: theory and practice. J Soc Issues 63:905–925
- Hoang TV, Tuan NA, Mills SJ et al (2006) Results from the HIV/STI integrated biological and behavioral surveillance (IBBS) in Vietnam: 2005–2006. Ministry of Health, Vietnam
- Hoang TV, Tuan NA, Mills SJ et al (2009) Results from the HIV/STI integrated biological and behavioral surveillance (IBBS) in Vietnam—round II 2009. Ministry of Health, Vietnam
- King EJ, Maman S, Bowling JM et al (2013) The influence of stigma and discrimination on female sex workers' access to HIV services in St. Petersburg, Russia. AIDS Behav 17:2597–2603. doi:10.1007/s10461-013-0447-7
- Kingori C, Reece M, Obeng S et al (2012) Impact of internalized stigma on HIV prevention behaviors among HIV-infected individuals seeking HIV care in Kenya. AIDS Patient Care STDs 26:761–768. doi:10.1089/apc.2012.0258

- Lau JTF, Cai W-D, Tsui HY et al (2009) Psychosocial factors in association with condom use during commercial sex among migrant male sex workers living in Shenzhen, Mainland China who serve cross-border Hong Kong male clients. AIDS Behav 13:939–948. doi:10.1007/s10461-009-9591-5
- Li L, Lee S-J, Thammawijaya P et al (2009) Stigma, social support, and depression among people living with HIV in Thailand. AIDS Care 21:1007–1013. doi:10.1080/09540120802614358
- Logie CH, Newman PA, Chakrapani V, Shunmugam M (2012) Adapting the minority stress model: associations between gender non-conformity stigma, HIV-related stigma and depression among men who have sex with men in South India. Soc Sci Med 74:1261–1268. doi:10.1016/j.socscimed.2012.01.008
- Logie C, James L, Tharao W, Loutfy M (2013) Associations between HIV-related stigma, racial discrimination, gender discrimination, and depression among HIV-positive African, Caribbean, and Black Women in Ontario, Canada. AIDS Patient Care STDs 27:114–122. doi:10.1089/apc.2012.0296
- Luong HV (2006) Structure, practice, and history: contemporary anthropological research on Vietnam. J Vietnam Stud 1:371–409
- Ma W, Raymond HF, Wilson EC et al (2012) Participation of HIV prevention programs among men who have sex with men in two cities of China—a mixed method study. BMC Public Health 12:1–13. doi:10.1186/1471-2458-12-847
- Mimiaga MJ, Reisner SL, Closson EF et al (2013) Self-perceived HIV risk and the use of risk reduction strategies among men who engage in transactional sex with other men in Ho Chi Minh City, Vietnam. AIDS Care 25:1039–1044. doi:10.1080/09540121. 2012.748873
- Ngo DA, Ross MW, Phan H et al (2009) Male homosexual identities, relationships, and practices among young men who have sex with men in Vietnam: implications for HIV prevention. AIDS Educ Prev 21:251–265
- Nguyen TA, Nguyen HT, Le GT, Detels R (2007) Prevalence and risk factors associated with HIV infection among men having sex with men in Ho Chi Minh City, Vietnam. AIDS Behav 12:476–482. doi:10.1007/s10461-007-9267-y
- Rao PJ, Mboi N, Phoolchaoren W, Sarkar S (2010) AIDS in Asia amid competing priorities: a review of national responses to HIV. AIDS 24:S41–S48
- Rhodes T (2009) Risk environments and drug harms: a social science for harm reduction approach. Int J Drug Policy 20:193–201
- Risher K, Adams D, Sithole B et al (2013) Sexual stigma and discrimination as barriers to seeking appropriate healthcare among men who have sex with men in Swaziland. J Int AIDS Soc. doi:10.7448/IAS.16.3.18715
- Setia MS, Sivasubramanian M, Anand V et al (2010) Married men who have sex with men: the bridge to HIV prevention in Mumbai, India. Int J Public Health 55:687–691. doi:10.1007/ s00038-010-0173-0
- Simbayi LC, Kalichman S, Strebel A et al (2007) Internalized stigma, discrimination, and depression among men and women living with HIV/AIDS in Cape Town, South Africa. Soc Sci Med 64:1823–1831. doi:10.1016/j.socscimed.2007.01.006
- Thanh DC, Moland KM, Fylkesnes K (2012) Persisting stigma reduces the utilisation of HIV-related care and support services in Viet Nam. BMC Health Serv Res 12:428. doi:10.1186/1472-6963-12-428
- Thi MDA, Brickley DB, Vinh DTN et al (2008) A qualitative study of stigma and discrimination against people living with HIV in Ho Chi Minh City. Vietnam. AIDS Behav 12:63–70. doi:10.1007/s10461-008-9374-4
- Thomas B, Mimiaga MJ, Mayer KH et al (2012) The influence of stigma on HIV risk behavior among men who have sex with men in Chennai, India. AIDS Care 24:1401–1406. doi:10.1080/09540121.2012.672717



- Tran TN, Detels R, Long HT, Lan HP (2005) Drug use among female sex workers in Hanoi, Vietnam. Addiction 100:619–625. doi:10. 1111/j.1360-0443.2005.01055.x
- Wohl AR, Galvan FH, Carlos J-A et al (2012) A comparison of MSM stigma HIV stigma. and depression in HIV-positive Latino and African American men who have sex with men (MSM). AIDS Behav. doi:10.1007/s10461-012-0385-9
- Wu DY, Munoz M, Espiritu B et al (2008) Burden of depression among impoverished HIV-positive women in Peru. J Acquir Immune Defic Syndr 48:500–504
- Zhang W, O'Brien N, Forrest JI et al (2012) Validating a Shortened Depression Scale (10 Item CES-D) among HIV-positive people in British Columbia, Canada. PLoS One 7:e40793. doi:10.1371/journal.pone.0040793.t004

