#### ORIGINAL RESEARCH ARTICLE

# Prevalence of Internalized Homophobia and HIV Associated Risks among Men who have Sex with Men in Nigeria

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#### **Abstract**

This study assessed the level of internalized homophobia and associated factors among men who have sex with men (MSM) in Nigeria. Using respondent driven sampling, MSM were recruited in Lagos and Ibadan between July and September, 2006. Internalized homophobia was assessed as a negative composite score using an 11-item scale. A total of 1,125 MSM were interviewed. About 44.4% self-identified as homosexual or gay while 55% regarded themselves as bisexual. About a third of the respondents reported internalized homophobia. With homosexual/gay men as reference, respondents who self-identified as bisexual were two times more likely [AOR 2.1; 95 CI: 1.6 - 2.9, p<0.001] to report internalized homophobia. Those who were HIV positive were also twice as likely to report internalized homophobia compared to those who were HIV negative [AOR 1.8; 95% CI: 1.2 - 2.7, p=0.004]. As internalized homophobia impedes acceptance of HIV prevention programming, identifying MSM who experience internalized homophobia is integral to the success of HIV prevention programming in Nigeria (*Afr J Reprod Health 2012; 16[4]: 21-28*).

#### Résumé

Cette étude a évalué le niveau de l'homophobie intériorisée et les facteurs qui y sont liés chez les hommes qui ont des rapports sexuels avec des hommes (HSH) au Nigeria. A l'aide d'un échantillonnage basé sur les interviews, les HSH ont été recrutés à Lagos et à Ibadan entre les mois de juillet et septembre, 2006. L'homophobie intériorisée a été évaluée par un indice négatif composite en utilisant une échelle de 11 items. Au total, 1.125 HSH ont été interviewés. À peu près 44,4% se sont identifiés comme des homosexuels tandis que 55% se considéraient comme des bisexuels. Environ un tiers des interviewés ont signalé l'homophobie intériorisée. En se servant des hommes homosexuels comme référence, les interviewés qui se sont identifiés comme bisexuels avaient deux fois plus la possibilité [AOR 2,1; IC 95: 1,6 - 2,9, p <0,001] de signaler l'homophobie intériorisée. Ceux qui étaient séropositifs avaient également deux fois plus la possibilité de signaler l'homophobie intériorisée par rapport à ceux qui étaient séronégatifs [AOR: 1,8; IC à 95%: 1,2 - 2,7, p = 0,004]. Etant donné que l'homophobie intériorisée empêche l'acceptation de la prévention de la programmation du VIH, l'identification des HSH qui éprouvent l'homophobie intériorisée fait partie intégrante de la réussite de la prévention de la programmation du VIH au Nigéria (*Afr J Reprod Health 2012; 16[4]: 21-28*).

Keywords: Men who have sex with men, Internalized homophobia, Nigeria, Bisexuality, Gay

## Introduction

Nigeria with an estimated population of over 167 million people in 2011<sup>1</sup> has the second highest burden of HIV and AIDS in sub-Saharan Africa. Current estimates suggest approximately 3 million Nigerians are living with HIV<sup>2</sup>. The modes of HIV transmission study undertaken in Nigeria attributed 23% of new infections to three most-atrisk populations (comprising men who have sex with men (MSM), injecting drug users (IDUs) and

female sex workers (FSWs), with MSM alone contributing about 10%<sup>3</sup>.

HIV prevalence among MSM is the second highest in Nigeria <sup>(4)</sup> after female sex workers, yet funding and policies for HIV prevention interventions, care and treatment are severely inadequate in quantity and quality. Without adequate and appropriate interventions, MSM will continue to be at risk for HIV transmission and infection. MSM in Nigeria continue to experience extremely high levels of stigma, discrimination and criminalization which result in them becoming

more hidden, using more discreet methods to meet and socialize with their peers and thereby becoming harder to reach with appropriate prevention interventions.

The literature indicates that MSM report the experience of varying degrees of internalized homophobia, defined here as self-hatred and shame resulting from negative stereotypes, beliefs and prejudice about homosexuality leading to devaluation and internal conflicts<sup>5,9</sup>. Homophobia towards oneself is found to be inextricably linked with broader social attitudes and norms that stigmatize and discriminate against MSM and homosexuality<sup>5</sup>. Although in western societies, negative stereotyping against men who have sex with men has reduced significantly, this does not hold true for all countries, which explains the variation of internalized homophobia across societies, cultures and contexts 10,12. (2011)<sup>10</sup>, in his study, found widespread levels of homophobia among Belgian adolescents despite various legal reforms in the country against discrimination of gay women and men. Andersen and Fetner (2008)11 provided a macro view to tolerance and acceptance of MSM. They proposed that as national income inequality increases, tolerance to homosexuality declines. They also provided evidence to show that as economic development increases, tolerance increases. This may explain why the professional and managerial classes are generally more tolerant to homosexuals than the working class.

Internalized homophobia has been reported to be associated with relationship satisfaction, extent of attraction to men and women, membership and length of social time spent with gay groups, disclosure of HIV status and identity<sup>13-15</sup>. This indicates the need to design programs that address the issue. In addition, the presence of internalized homophobia has been found to be negatively linked to level of awareness of available HIV prevention services in the community, a change in perceptions of condom use self-efficacy and the extent to which people feel similar to and relate with other members of their community<sup>16</sup>.

Few studies in sub-Saharan African settings have carefully examined the issue of internalized homophobia in the context of HIV prevention and impact mitigation. The present study examines the correlates of internalized homophobia and the HIV-associated risks among MSM in Nigeria.

# **Methods**

### Study site

The study was conducted in Lagos and Ibadan, two bustling metropolitan and major commercial cities located in the south west of Nigeria, with population sizes of approximately 15 million and 2.5 million respectively.

# Study size and power calculations

Given the lack of data of internalized homophobia among MSM in Nigeria, we used HIV prevalence to estimate the required sample size. HIV has been linked with internalized homophobia. We used an estimated HIV prevalence of 10-25% to calculate the minimum sample size required to estimate the prevalence of HIV with a desired precision of +/-4%, non-response of 45% and design effect of 1.4. Adequate power to detect significant differences in effects was defined as 80% and above.

#### Study population and sampling design

MSM were defined as any man  $\geq 16$  years who had engaged in oral or anal sex with another man in the last 12 months. To increase the sample representativeness of the hidden population of MSM for which no sampling frame exists, a crosssectional study involving respondent driven sampling was employed to recruit respondents into the study<sup>17,18</sup>. Unlike convenience sampling techniques, the respondent driven mechanism has been widely reported to provide diverse samples of MSM and population based estimates of a specific trait that are asymptotically unbiased<sup>18,19</sup>. It involves the use of peers and compensation for participating and recruiting peers<sup>17</sup>. Efforts were made to diversify the seeds (initial recruits that started the referral system) in RDS<sup>17</sup>. Thirty-eight seeds were selected. Each seed was given three uniquely coded referral coupons and \$5-13 as compensation for travel, effort and time in participating and recruiting peers into the study. Each recruit was in turn given three coupons to

refer three peers and this continued until the sample size was reached. Coupons were limited to three to prevent an over representation of particular traits in the sample, as recommended by Heckathorn, 1997 <sup>17</sup>. Due to the sensitivity of the special precautions were taken conducting the study procedures to maximize the safety and confidentiality of participants. The study protocol was reviewed and approved by the University of Toronto Research Ethics Board (REB) and the Lagos University Teaching Nigeria Ethics Hospital, Review Participation in the study was voluntary and did not in any way compromise participant's access to services offered by service providers. Free condoms and lubricants were also provided to participants.

# Behavioural data, biological sample collection and analysis

A structured questionnaire was used to collect information on socio-demographic characteristics, network size, sexual identity, sexual preferences and behaviours, partner characteristics and sexual mixing patterns. Internalized homophobia was measured using an eleven-item scale which included questions on homosexuality and its effect on level of comfort and how it affects relationship with friends and family members (the scale adequately captured internalized homophobia; Cronbach's  $\alpha = 0.79$ ). Items included "I am glad to be a man who has sex with men," "I wish I were heterosexual" and "Life as a homosexual is not as rewarding as life as a heterosexual." A three-point Likert scale was used to assess each item with answers varying from "strongly disagree, neutral and strongly agree" and having a score of -1 to 1 depending on the type of question. Questions supporting homosexuality e.g. "I am glad to be a man who has sex with men" which denoted a positive attitude to homosexual identity were assigned a score of -1, 0 or 1 for strongly disagree, neutral and agree respectively, whereas a question like "I wish I were heterosexual," was assigned a score of 1, 0, and -1 for strongly disagree, neutral and agree respectively. This created a balance in the scoring system and credited negative scores for questions suggestive of internalized homophobia.

A composite index score was calculated with negative scores indicating the presence of internalized homophobia and the more negative the scores, the higher the levels of internalized homophobia. Subsequently, the scores were recategorized into binary variable "0/1" with "0" representing all negative values and 1 representing all values  $\geq 0$  and used as the dependent variable in the logistic regression. The scale was examined using principal component analysis and this showed that a scale with all eleven items was the best scale to adequately characterize internalized homophobia.

Following completion of the behavioural interview, HIV counseling and testing were offered to study participants who elected to be tested. HIV testing followed the WHO/UNAIDS HIV testing strategy III using two enzyme immune-absorbent assays (EIAs) - Genetic Systems LAV EIA – [GS] (Bio-Rad Laboratories Blood Virus Division Redmond, WA) and Microelisa System [V] Vironostika HIV-1 (Organon Teknika Corp. Durham, NC). Using the parallel algorithm, all the blood specimens were simultaneously tested with the two tests - GS and V. All samples were assayed at the Harvard/AIDS Prevention Initiative, Central Research Laboratory located within the Lagos University Teaching Hospital.

Results of HIV tests were given to respondents at the end of the study visit with post-test counseling. Respondents who tested positive were referred to government ART clinics confirmatory test and further management.

Data were analyzed using RDSAT software version 5.6 for adjusted prevalence of internalized homophobia and STATA version 10.0 (Stata Corporation). We conducted descriptive analyses for demographic variables including age, marital status, employment and educational attainment using RDSAT software to adjust for recruitment patterns and the relative sizes of participants' (www.respondentdrivensampling.org). RDS recruitment coupled with RDSAT data analysis produced population-based estimates. Individualized weights based on the outcome variable (internalized homophobia) were generated in RDSAT and exported to the STATA software for regression analyses (bivariate and multivariate

analysis). Selection of independent variables into the regression model was determined through literature and theoretical concepts. Selection of internalized homophobia risk factors into the model was determined if bivariate analysis was significant at p-values of less than 0.2. A p-value < 0.05 was considered to be significant for all tests conducted.

## Results

Table 1 summarizes the characteristics of the study population. All 1125 study participants were recruited by peers through the respondent driven sampling method. Median age was 22 years (IQR 20 - 26 years) with the majority of the respondents (71%) being less than 25 years. Median age of sexual debut with a man was 18 years (IQR 15 – 20 years) and the median number of male sex partners was 3 (IQR 2 – 5 partners) with 76% of the respondents having two or more male sexual partners in the last 12 months prior to the study. HIV prevalence in the study population was 13.4%. Over 96% of respondents had completed at least secondary level education and 35% had completed tertiary level education. Only 43.3% of the respondents were employed and majority were single (97%). For sexual identity, 44.4% selfidentified themselves as homosexual or gay and 55% as bisexual. Given that less than 1% of the respondents regarded themselves as heterosexual and transgender, they were categorized within the bisexual group for analysis. For sexual preference, 56% indicated they preferred to have sex with a man while 16% preferred sex with a woman. About a third had had sex with  $\geq 2$  female partners in the last 12 months preceding the study. Overall, 37% of the respondents had been forced to have sex in the 12 months preceding the study, 30% engaged in transactional sex (defined as buying or selling sex) and 10% of the respondents had bought sex while 27% had sold sex in the 12 months preceding the study.

Internalized homophobia as determined by a negative composite score on an eleven-item scale was experienced by about a third of the respondents. Table 2 summarizes responses to internalized homophobia scale items. The majority (78%) agreed they were glad to be MSM and 82% agreed their sexual orientation did not make them inferior. About a third wished they were heterosexual. Although 75% reported no regrets about their sexuality, 40% agreed they will accept the opportunity to be heterosexual.

For the logistic regression, variables that significant demonstrated associations with internalized homophobia in the bivariate analyses were modeled in a multivariate analysis to determine factors associated with internalized homophobia. Age, having more than two female partners in the past 12 months, HIV status, sexual identity and employment status showed significant associations with internalized homophobia at the bivariate level (p<0.05). Respondents who selfidentified as bisexuals were two times more likely [AOR 2.1; 95 CI: 1.6 - 2.9, p<0.001] to report the presence of internalized homophobia compared to respondents who self-identified as homosexuals /gay. Those who were HIV positive were also twice as likely to report internalized homophobia compared to those who were negative [AOR 1.8; 95% CI: 1.2 - 2.7, p=0.004]. Age, having two or more female partners and employment status were not significantly associated with internalized homophobia.

### **Discussion**

The concept of internalized homophobia is new in Nigeria. There is mounting evidence that MSM cut across all educational, marital and socio-economic strata in Nigeria. This is the first study in Nigeria to examine and report that about a third of MSM Nigeria experience varying degrees of internalized homophobia. This is even more so among MSM who self-identify as bisexual and among those who are HIV positive. The high levels of internalized homophobia experienced by bisexual men may not be unconnected to internal conflicts resulting from the dual lives they lead because of the cultural norms attached to marriage from which they are not exempt. Additionally, the internal responses to high levels of stigma, discrimination and homophobia against MSM further reinforce internalized homophobia. This finding is congruent to a recent study of internalized homophobia in South Africa<sup>5</sup>. Further research that examines depression in this group of

**Table 1:** Characteristics of study population (n=1125)

	Total %	Presence of	Absence of homophobia% (95%	p-value‡
	(n)	homophobia%(95%		
		CI)	CI)	
Age				
<25 years	71.2 (801)	30.3 (27.2 - 33.5)	67.7 (66.5 - 72.9)	
> 25 years	28.8 (324)	37.4 (32.1 - 42.6)	62.7 (57.3 - 67.9)	0.023
HIV prevalence	13.4 (145)	45.5 (37.3 – 53.7)	54.5 (46.3 – 62.6)	< 0.001
Median age=22 years (IQR	20 - 26yrs)			
Age at sexual debut with a	man=18yrs (IQI	R 15 - 20 yrs)		
Education				
Primary	2.7 (30)	36.7 (19.1 - 54.2)	63.3 (45.7 - 80.8)	
Secondary	62.4 (700)	32.1 (28.7 - 35.6)	67.9 (64.4 - 71.3)	
Tertiary	34.9 (392)	32.7 (28.0 - 37.3)	67.4 (62.7 - 72.0)	0.869
Employment status	` /	` /	` /	
Employed	43.3(487)	35.5 (31.3 - 39.8)	64.5 (60.2 - 68.7)	
Unemployed	56.7 (638)	29.9 (26.4 - 33.5)	70.1 (66.5 - 73.6)	0.047
Marital status	()	( )	(	
Married/co-habituating	2.9 (33)	42.2 (25.3 - 59.6)	57.6 (40.4 - 74.7)	
Single	96.5 (1086)	32.2 (29.4 - 35.0)	67.8 (65.0 - 70.5)	0.218
<b>Sexual Identity</b>	` ,	,	, ,	
Homosexual	21.6 (243)	24.7 (19.3 - 30.1)	75.3 (69.9 - 80.7)	
Gay	22.8 (257)	19.8 (15.0 - 24.7)	80.2 (75.3 - 85.1)	
Bisexual	55.2 (621)	40.1 (36.2 - 44.0)	59.9 (56.4 - 63.8)	
Heterosexual/transgender	0.4(4)	*	*	< 0.001
≥ 2 Male partners				
Yes	76.2 (857)	32.0 (28.8 - 35.1)	68.0 (64.9 - 71.2)	
No	23.8 (268)	33.6 (27.9 - 39.30	66.4 (60.8 - 72.1)	0.623
≥ 2 female partners				
Yes	30.8 (347)	40.3 (35.2 - 45.5)	59.7 (54.5 - 64.8)	
No	69.2 (778)	28.8 (25.6 - 32.0)	71.2 (68.0 - 74.4)	< 0.001
Was forced to have sex				
Yes	37.2 (419)	35.3 (30.7 - 39.9)	64.7 (60.1 - 69.3)	
No	62.8 (706)	30.6 (27.2 - 34.0)	69.4 (66.0 - 72.8)	0.101
Sold sex				
Yes	27.1 (305)	35.1 (29.7 - 40.5)	64.9 (59.6 - 70.3)	
No	72.9 (820)	31.3 (28.2 - 34.5)	68.7 (65.5 - 71.8)	0.233
Bought sex	0.6 (4.00)			
Yes	9.6 (108)	36.1 (27.0 - 45.2)	63.9 (54.8 - 73.0)	0.20
No	90.4 (1017)	32.0 (29.1 - 34.8)	68.0 (65.2 - 70.9)	0.38

<sup>\*</sup>Sample size too small to compute CI; ‡Chi square

individuals may shed more light on the association between bisexuality and internalized homophobia.

Thus, for HIV prevention and education programs targeted at MSM to be effective, it is important for interventions to recognize that there are sub-sets of the MSM population and behaviour change messages may not meet the needs of all MSM because of the gulf in the content and quality of the messages between the providers and beneficiaries. It may also be the case that bisexual men being sexually active in both homosexual and heterosexual relationships are potential receivers and transmitters within both populations, putting themselves and others at increased risk of HIV and other sexually transmitted infections. Further studies to understand the diversity of sexuality and its experience among MSM in Nigeria are required to improve appropriate prevention interventions for this population.

Table 2: Assessment of Internalized Homophobia among Men who have Sex with Men

	Extent of Agreement		
Scale items	Disagree n (%)	Neutral n (%)	Agree n (%)
I am glad to be MSM	205 (18.2%)	46 (9.1%)	874 (77.7%)
My sexual identity does not make me inferior	187 (16.6%)	18 (1.6%)	920 (81.8%)
If there was a pill to change my sexuality, I will take it	698 (62.0%)	44 (3.9%)	383 (34.0%)
It will not bother me if I had children who were MSM	475 (42.2%)	59 (5.2%)	591 (52.5%)
I wish I were heterosexual	704 (62.6%)	47 (4.2%)	374 (33.2%)
I have no regrets about my sexuality	232 (20.6%)	34 (3.0%)	859 (76.4%)
When I am sexually attracted to a man, I do not mind if others know how I feel	492 (43.7%)	51 (4.5%)	582 (51.7%)
Life as a homosexual is not as rewarding as life as a heterosexual	595 (52.9%)	45 (4.0%)	485 (43.1%)
I feel my sexuality embarrasses my family	253 (22.5%)	35 (3.1%)	837 (74.4%)
If it were possible, I will accept the opportunity to be heterosexual	612 (54.4%)	59 (5.2%)	454 (40.4%)
I feel I have to pretend to be heterosexual to be acceptable to family and friends around me	272 (24.2%)	27 (2.4%)	826 (73.4%)

Table 3: Multivariate analysis of risk factors associated with internalized homophobia among MSM

	N (%)	Crude OR (95% CI)	Adjusted OR (95% CI)	p-value
years)				
,	801 (71.2)			
	324 (28.8)	1.4 (1.0 - 1.8)	0.9 (0.7 - 1.2)	0.449
orevalence				
	940 (86.6)			
	145 (13.4)	1.9 (1.3 – 2.7)	1.8(1.2-2.7)	0.004
male partners				
	778 (69.2)			
	347 (30.8)	1.7 (1.3 - 2.2)	1.2 (0.9 - 1.6)	0.344
l identity				
sexual/gay	500 (44.6)			
ual	621 (55.4)	2.4 (1.8 - 3.1)	2.1 (1.5 - 2.8)	< 0.0001
oyment status				
yed	487 (43.3)			
ployed	638 (56.7)	1.3 (1.0 - 1.7)	1.1 (0.9 - 1.5)	0.368
•	, ,	1.3 (1.0 - 1.7)	1.1 (0.9 - 1	.5)

The positive association of HIV positivity and internalized homophobia raises serious concern as regards HIV transmission. If homophobia creates a feeling of self shame, internal conflicts and allows one to hold negative attitudes towards themselves as a result of their sexual identity and gender nonconformity, then a cycle of self destruction from anxiety, substance misuse and other adverse mental and psychosocial health outcomes may

present a thick wall of resistance to the uptake of HIV prevention interventions <sup>20,22</sup>. Huebner et al., 2002<sup>16</sup> showed that the presence of internalized homophobia creates barriers to HIV intervention. This includes reduced awareness of HIV prevention services available to MSM, an inverse relationship to change in perception of condom use and efficacy and poor relationship with other members of the group. Such situations would

demand more efforts to impact appreciable change in sexual risk behaviours. Thus, early detection and the establishment of culturally sensitive programs that address the root causes of internalized homophobia are imperative as a routine screening procedure for MSM who are HIV positive<sup>20</sup>.

Stigma has a role to play in the existence of internalized homophobia among MSM<sup>23</sup> Andersen and Fretner<sup>11</sup> and Stulhofer and Rimac<sup>12</sup> have shown an association between economic development and negative attitudes homosexuals. These authors suggest that economic development that does not take into account economic equality between professionals and working class will not increase tolerance to homosexuals in the society<sup>11</sup>. In this light, Nigeria as an economy presents a classical case of wide economic inequality. In addition to Nigerian traditional values of religion and heterosexuality, this inequality may be one of the multitudes of reasons for high stigma for MSM. While the present study did not examine income or profession, whether an individual was employed was associated with internalized homophobia in the bivariable analyses but lost its statistical significance when adjusted for other variables in the multivariate model. Future studies that stratify respondents by social class and or profession may provide a better insight into the association between social class and internalized homophobia. Elsewhere, Lung Vu et al.5 found significant association between low level of education and internalized homophobia. Our study showed no relationship, a finding that may be explained by the possibility that in a highly homophobic society like Nigeria, despite any educational level, MSM remain driven to hide their sexuality from peers. family and the society at large. Thus, in the Nigerian cultural perspective, being of high economic status and attaining high educational level or the reverse may not affect one's sexualityrelated attitudes.

The finding in this study of the presence of internalized homophobia among MSM in Nigeria has significant implications for policy and programming in HIV prevention and behaviour change communication. As studies have shown that the presence of internalized homophobia

creates barriers to HIV intervention16, it is imperative that HIV prevention interventions employ mechanisms to identify the presence of internalized homophobia among the target groups of those interventions. One mechanism to do this would be for prevention programs to incorporate sexual orientation values-clarification services for MSM and providing job aids and structured measures to elicit and identify internalized homophobia to prevent further worsening of the mental and physical well being of MSM. This should increase uptake of the prevention intervention and improve the overall outcomes of interventions to individual MSM and the society at large. Furthermore, epidemiological and social research is needed to better understand the full ramifications of internalized homophobia as it impacts on MSM and the larger society.

This study has some limitations. Although population based estimates have been computed using the respondent driven sampling analytical tool (RDSAT) which accounts for over or under representation of MSM network and also allows for the computation of individualized weights based on recruitment patterns, the generalizability of the findings of this study to all MSM in Nigeria is a challenge to ascertain. Nonetheless, the large sample size of this study presents significant findings with regard to levels of internalized homophobia in this population. Similar studies on internalized homophobia among MSM are urgently needed across Nigeria to validate this study.

Currently, the medical and nursing students' training curricula do not include modules on sexual diversity and sexuality issues. The findings from this study strengthen the case for the incorporation of these topics in the medical and nursing curricula at both the undergraduate and graduate levels. In addition, this study should stimulate further research into the relationship between internalized homophobia and the sexual health-seeking behaviours of most-at-risk populations in general. More specifically, it should be seen as a call to action to influence change in programming for HIV prevention intervention for MSM in Nigeria.

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# References

- 1. National Population Commission. Nigeria's over 167 million Population: Implications and Challenges; http://www.population.giv.ng (accessed 23 March 2012).
- 2. Federal Ministry of Health, Technical Report of HIV Sentinel Survey Among Women Attending Antenatal Clinic in Nigeria. 2010.
- 3. National Agency for the Control of AIDS. Modes of HIV Transmission in Nigeria, 2010.
- 4. National AIDS/STI Control Programme, Federal Ministry of Health. HIV/STI Integrated Biological and Behavioural Surveillance Survey (IBBSS), Nigeria: Federal Ministry of Health, 2007.
- 5. Lung Vu, Waimar Tun, Meredith Sheehy. Levels and Correlates of Internalized Homophobia Among Men Who Sex with Men in Pretoria, South Africa. AIDS Behav April 2011.
- 6. Petros G, Airhihenbuwa CO, Simbayi L, Ramlagan S, Brown B. HIV/AIDS and 'othering' in South Africa: the blame goes on. Cult Health Sex. 2006; 8(1):67-77.Jan-Feb.
- 7. Skinner D, Mfecane S. Stigma, discrimination and the implications for people living with HIV/AIDS in South Africa. SAHARA J. 2004;1(3):157-64.
- 8. Meyer IH, Dean L. Patterns of sexual behavior and risk taking among young New York City gay men. AIDS Educ Prev. 1995;7(Suppl 5):13-23.
- 9. Herek GM, Cogan JC, Gillis JR, Glunt EK. Correlations of Internalized Homophobia in a Community Sample of Lesbians and Gay Men. Journal of the Gay and Lesbian Medical Association. 1997, 2 17-25.

- 10. Hooghe M. The impact of gendered friendship patterns on the prevalence of homophobia among Belgian late adolescents. Arch Sex Behav. 2011 Jun;40(3):543-50.
- 11. Robert Andersen and Tina Fetner. 2008. Economic Inequality and Intolerance: Attitudes toward Homosexuality in 35 Democracies. American Journal of Political Science 52:942-58.
- 12. Stulhofer A, Rimac I. Determinants of Homonegativity in Europe. *Journal of Sex Research* 2009; 46(1), 24 - 32.
- 13. Dudley MG. RS, Korflage BA., Zimmerman RS. Correlates of High Risk Sexual Behaviour among Young Men who have Sex with Men. AIDS Education and Prevention 2004;16(4):328-340.
- 14. CDC. Unrecognized HIV Infections, Risk Behaviours and Perceptions of Risk Among Young Black Men who have sex with men in 6 US cities. 1994-1998. MMWR Weekly 2002;51(33):733-736.
- 15. Ross MW, Rosser BRS. Measurement and correlates of internalized homophobia: A factor analytic study. Journal of Clinical Psychology 1996 52(1): 15-21.
- 16. Huebner DM, Davis MC, Nemeroff CJ, Aiken LS. The impact of internalized homophobia on HIV preventive interventions. Am J Community Psychol. 2002 Jun;30(3):327-48.
- 17. Heckathorn DD. Respondent-driven sampling: A new approach to the study of hidden populations. Social Problems 1997; 44:174-99.
- 18. Carballo-Diéguez A, Balan I, Marone R, Pando MA, Dolezal C, Barreda V, Leu CS, Avila MM. Use of respondent driven sampling (RDS) generates a very diverse sample of men who have sex with men (MSM) in Buenos Aires, Argentina. PLoS One 2011; 6(11):e27447. Epub 2011 Nov 10.
- 19. Malekinejad M, Johnston LG, Kendall C, Kerr LR, Rifkin MR, et al. Using respondent-driven sampling methodology for HIV biological and behavioural surveillance in international settings: A systematic review. AIDS Behaviour 2008; 12: 105-130.
- 20. Mayer KH, Bekker LG, Stall R, Grulich EA, Colfax G, Lama JR, Comprehensive clinical care for men who have sex with men: an integrated approach. The Lancet, 2012; 380:378 – 387.
- 21. Beyrer C, Sullivan PS, Sanchez J, Dowdy D, Altman D, Trapence G, Collins C, Katabira E, Kazatchkine M, Sidibe M, Mayer KH. A call to action for comprehensive HIV services for men who have sex with men. The Lancet, 2012; 380:424 – 438.
- 22. Odunsi B. Romancing the foe: The HIV Epidemic and the case for a pragmatic stance on prostitution and illicit drug use in Nigeria. HeinOnline. 2010; 4 Malawi L.J. 216 http://heinonline.org)
- 23. Goffman E. Frame Analysis: An Essay on the Organization of Experience. 1974 Harper and Row, New York.