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Overlapping Stigmas as Predictors of Attitudes towards People Living with HIV/AIDS among Youth Healthcare Professionals in Nigeria

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Abstract

Living with HIV is often connected with some overlapping experiences that are stigmatising and could aggravate attitude towards people living with HIV/AIDS (PLWHA). This study examined the influence of overlapping stigmas (homophobia, ethnic discrimination, sexism, injection drug use, and sex work) on the attitude towards PLWHA of serving healthcare professionals in the National Youth Service Corps (NYSC) Nigeria. NYSC members comprised fresh Nigerian graduates of tertiary institutions who were 30 years and below on mandatory service to the nation. NYSC members totalling 325 participants responded to structured psychological scales. This study utilised a survey research design and employed appropriate statistical analysis such as regression. The results revealed that overlapping stigmas jointly accounted for (55.1%) of the total variation in Attitude towards PLWHA. All the overlapping stigmas significantly correlated with Attitude towards PLWHA. The implication of the findings was discussed in line with the decline of HIV/AIDS and implementation of the agenda of Sustainable Development Goals.

Keywords: Attitude towards people living with HIV/AIDS, overlapping stigmas, youth healthcare professionals, HIV/AIDS key affected population.

Introduction

Despite active interventions, the Human immunodeficiency virus/acquired immunodeficiency syndrome (HIV/AIDS) pandemic remains a significant public health problem affecting all countries, leaving an undeniable mark globally. Nigeria is said to have the second-largest HIV epidemic in the world and one of the highest rates of new infection in sub-Saharan Africa (NACA, 2017; NACA, 2013; USAID, 2013; Federal Ministry of Health, 2013). Although other countries in Africa such as South Africa (19%) and Zambia (11.5%) have a higher HIV prevalence among adults in comparison to Nigeria (1.3%), the percentage translates to about 1.9 million people living with HIV in 2019 (NAIIS, 2019). Also, HIV has been viewed as a negative consequence of poor sexual judgment, resulting in a discriminatory attitude towards people living with HIV/AIDS.

Discriminatory attitude towards people living with HIV/AIDS (PLWHA) has been widely

reported resulting in abuse reactions (Lau & Tsui, 2003; Danziger, 1994; King, 1989; Blendon & Donelan, 1988). Living with HIV is often connected with some overlapping experiences that are stigmatising and could aggravate attitude towards people living with HIV/AIDS (PLWHA). Those most at risk to HIV (e.g. key affected populations) with overlapping experiences often face stigma and discrimination (Okonkwo, Ameh, Otu, & Okpara, 2017). Typical overlapping stigmas include homophobia, ethnic discrimination, sexism, sex work and injection drug use. Women PLWHA, for instance, were framed as having a 'dirty' and 'immoral' disease, and women sex workers as vectors of the disease of HIV/AIDS (Logie, James, Tharao & Loutfy, 2011). Discrimination of sex work is often a hindrance to voluntary HIV treatment (Parker & Aggleton, 2003).

The misconstrued knowledge of the modes of transmission of HIV could influence the high prevalence of harmful and discriminatory attitude towards PLWHA (Okonkwo, Ameh, Otu, & Okpara, 2017). and healthcare professionals could have such discriminatory attitudes (Elamin, Raja'a, Adetunji, Khalid, Sadiqq & Ademola, 2019). The healthcare professionals form the first line point of contact with the PLWHA and may exacerbate patients' health problem with their attitudes. Provision of healthcare to people living with HIV/AIDS (PLWHA) can be a challenging task. There are reports of medical doctors and dentists discriminating against PLWHA (Seacat et al., 2009).

The theory of intersectionality based on the conceptualisation of Crenshaw (1991) that stigma exists on interrelated components. The theory suggests that there is an interaction of multiple elements of social identity (e.g. sexism and racism) and social systems (e.g. power) (Crenshaw, 1991; Hankivsky & Cormier, 2009). These elements' intersection creates an outcome that is not the sum or addition of their parts but relatively interactive. According to Crenshaw (1991), intersectionality occurs when overlap among social identities such as gender, race, sexual orientation, ethnicity and social class combines with social systems of power. Intersectionality forms experiences that oppress or take advantage of people.

Intersectionality is simply about how certain aspects of one's social identity enhance one's access to good things or exposure to bad things in life. Hence, there exist inequality and differences which birth stereotypes and prejudices. The difference is exemplified by groups most differentially affected by HIV, such as individuals involved in sex work, injection drug users and homosexual men (Parker & Aggleton, 2003). People experiencing overlapping stigmas may have marginalised social identities and may have multiple forms of oppression. The intersection of social systems and social inequality enhances discrimination (Link & Phelan, 2001; Parker & Aggleton, 2003).

Stigma is when an individual is viewed negatively, defined and labelled by a particular characteristic or attributes (e.g gender, disability or HIV/AIDS). Such an individual is categorized into a stereotyped group and this results in negative attitudes and beliefs. Negative attitudes and beliefs toward this group create prejudice which leads to negative actions and discrimination. For instance, the healthcare professional may negatively respond to PLWHA in the course of rendering healthcare service; especially, PLWHA who are further differentiated with overlapping stigmas like homophobia, ethnicity, sexism, injection drug use, or sex work. The stigmatisation and discrimination stereotyped group experience can compound their problem. It may cause the individual to avoid treatment because of the fear of being stigmatised by healthcare professionals. Research among PLWHA reveals a model of overlapping stigmas (racism, sexism, homophobia/transphobia, stigma against sex work, stigma against injection drug use) (Earnshaw & Chaudoir, 2009; Logie *et al.* 2011 and Reidpath & Chan, 2005).

Some researchers have shown that negative attitude towards PLWHA is exhibited by healthcare professionals (Earnshaw et. al. 2014, Elamin et. al, 2019). Studies also indicated that women living with HIV reported they feel stigmatised by healthcare professionals in Canada

(Nyblade, Stangl, Weiss & Ashburn, 2009) and Nigeria (Dahlui, Oche, & Adekunjo et al., 2015). Other studies found ethnicity (Wong and Nur Syuhada, 2011); homophobia (Ayala & Santos, 2016); sexism (Lluberes, 2016; amfAR, 2015; Dellar, Dlamini, & Karim, 2015; Taiwo, 2015;); injection drug use (Aceijas, Oppenheimer, Stimson, Ashcroft, Matic, & Hickman, 2005) and sex work (Stangl, Lloyd, Brady, Holland, & Baral, 2013; van der Elst, Smith, Gichuru, Wahome, Musyoki, Muraguri, Fegan, Duby, Bekker, Bender, Graham, Operario, & Sanders, 2013; Earnshaw & Chaudoir, 2009; Reidpath & Chan, 2005; Brown, Macintyre, & Trujillo, 2003) as predictors of attitude towards PLWHA. Logie, James, Tharao & Loutfy (2011) found that marginalised women living with HIV in Ontario experience overlapping forms of discrimination from racism, sexism, homophobia and transphobia acting as barriers to health, wellbeing and access to care. Furthermore, Wagner, Girard, McShane, Margolese and Hart (2017) noted each of the measures of overlapping stigma (homophobia, racism, stigma against injection drug use, stigma against sex work), except sexism contributed significantly as predictors of the stereotypes and prejudice dimensions of the attitudes towards PLWHA. Wagner et al. (2017) also indicated that homophobia and stigma against sex work contributed significantly to the discrimination dimension of the attitudes towards PLWHA.

The fear of stigma and discrimination affects the willingness of people to be tested for HIV. One in eight people living with HIV is denied healthcare services because of stigma and discrimination (UNAIDS, 2015). Only about one million Nigerians are on treatment. However, the prevalence of women is 1.9 per cent, and that of men is 0.9 per cent. Women aged 15-49 years are twice more affected by HIV than men (NAIIS, 2019). Despite the alarming figures, it must, however, be noted that HIV/AIDS prevalence in Nigeria is highly under-reported. Those most at risk to HIV (key affected populations) continue to face stigma and discrimination (UNAIDS, 2017).

It is the healthcare professionals who are the frontline contact with the PLWHA in the cause of treatment; hence it is essential to determine the attitude of youth health professionals towards PLWHA. There is, therefore, a need to consider the interrelationship of overlapping stigmas. Healthcare professionals provide healthcare services. Nonetheless, the key affected population may not access treatment, even though it is free. Healthcare professionals are critical to the realisation and implementation of the eradication of HIV/AIDS. The purpose of this study, therefore, is to examine the influence of interrelated HIV- stigmas (homophobia, ethnicity, sexism, injection drug use, and sex work) among youth health professionals on their attitudes towards PLWHA in Nigeria.

Method

Research Design

This study made use of a survey research design. The study was conducted in five geopolitical zones of Nigeria and the Federal Capital Territory (FCT). The cities selected were Sokoto (Sokoto State, North West), Ilorin (Kwara State, North Central), Ipaja (Lagos State) and Ado-Ekiti (Ekiti State) both in South West. Others were Owerri (Imo State, South East) and Port-Harcourt (Rivers State, South-South). Finally, Abuja was selected because of its position as the national capital. The independent variables are homophobia, ethnic discrimination, sexism, sex work and injection drug use. The dependent variable is attitude towards PLWHA.

Participants

National Youth Service Corps (NYSC) comprised members of all ethnic groups in Nigeria who are graduates aged 30 years or below. There were 318,474 youth corps members in Nigeria in 2018 (NYSC, 2018). The target population for this study were mainly the health care professionals among the youth corps members. Since their population was greater than 10,000, Araoye (2004) formula was adopted to calculate the sample size for this study. NYSC healthcare professionals used as participants comprise psychologists, nurses, laboratory scientists, doctors, physiotherapies and social workers. The NYSC National Youth Service Corps healthcare professionals were selected as participants because they are young newcomers into the health profession targeted for early

stigma reduction interventions. Three hundred and twenty-five (325) male and female participants were purposively selected.

Instruments

Attitude towards people living with HIV/AIDS (PLWHA) was measured with the Health Care Provider HIV/AIDS Stigma Scale (HPASS) developed by Wagner, Hart, McShane, Margolese and Girard (2014). it is a 30-item scale that has three subscales: prejudice, stereotypes, and discrimination. The authors indicated that the total scale has an internal consistency (Cronbach's alpha) of .94 while each of its 3 subscales namely prejudice, stereotypes, and discrimination has Cronbach's alphas of .91, .82, and .92. Items were scored on a 5-point Likert-type scale with the following anchors: 1 = extremely uncharacteristic; 2 = somewhat uncharacteristic, 3 = uncertain, 4 = somewhat characteristics, and 5 = extremely characteristic. Some of the items are "I worry about contracting HIV from HIV patients" and "I would rather not come into physical contact with HIV patients". A high score indicates a high attitude of prejudice, stereotype and discrimination towards PLWHA. Low scores indicate a low attitude of prejudice, stereotype and discrimination towards PLWHA. (HPASS measures stigma, which reflects a negative attitude). The present study found reliability estimates (Cronbach's α) for the three subscale Prejudice, Stereotype and Discrimination to range from 0.70 – 0.86. The total scale has a good measure of internal consistency (Cronbach's α of 0.882).

Ethnic discrimination Scale; an 8-item scale by Shariff - Marco, Landrine, Reeve, Krieger, Gee, Williams, Mays, Ponce, Alegría, Liu, Willis, and Johnson (2011) was used to measure ethnic discrimination. The one-stage approach was used such that each item was a direct attribute of discrimination to race/ethnicity. For example, Participants were asked the following questions: "In the past 12 months, how often "Have you been treated with less respect than other people because [of your race/ethnicity]?" Items in the Ethnic Discrimination Scale include "Have you treated unfairly PLWHA at the clinic/hospital because of their race/ethnicity?" and "Have you acted to PLWHA as if you are better than them because of their race/ethnicity?" Cronbach's alpha for the one-stage is 0.88, also the one-stage approach was closer to the acceptable standard for individual-level assessment at >.90 (Nunnally and Bernstein, 1994). This study reported a very good measure of internal consistency (Cronbach's α) of 0.986

Sexism was measured by the Modern Sexism Scale (MSS) developed by Swim, Aikin, Hall and Hunter (1995). MSS is an 8-item scale that covers denial of continuing discrimination, antagonism toward women's demands, and resentment about special favours for women. The MSS was edited from "American" references to "Canadian" and to "Nigerian" for the current study. The scale uses a 5-point Likert-type scale (1 = strongly agree; 5 = strongly disagree). Items in the Sexism Scale include items "It is easy to understand the anger of women's groups in Nigeria" and "Discrimination against women is no longer a problem in Nigeria" The authors indicated Cronbach's alpha =.81 This study reports a good measure of internal consistency (Cronbach's α) of 0.84)

Homophobia was measured by the Homophobia Scale (HS) developed by Wright, Adams, and Bernat (1999). It has a 25-item with three subscales: negative cognitions, negative affect and avoidance, and negative affect and aggression. Participants answer on a 5-point Likert-type scale of 1 (strongly agree) to 5 (strongly disagree). The authors reported internal consistency Cronbach's alpha of .94. Items in the scale include "Organisations which promote gay rights are necessary" and "Marriage between homosexual individuals is acceptable." This study reported reliability estimates (Cronbach's α) of the three subscales (Behaviour/Negative Affect, Affect/Behavioural Aggression, and Cognitive Negativism) as 0.797, 0.608 and 0.203 respectively, suggesting the subscales of the Homophobia Scale has low to high level of internal consistency. The overall scale has a good

measure of internal consistency (Cronbach's α of 0.79).

Attitudes towards Sex Work was measured by an adapted version of the Sex Worker Stigma Index (SWSI; Liu et al., 2011). The SWSI is a 10-item scale that examines perceived stigma by sex workers. The scale has two subscales Perceived Stigma from the community domain and Perceived Stigma from a family with Cronbach's α coefficients 0.87 and 0.88 respectively. The authors indicated that the total scale has an internal consistency of .85. Items in the scale include "If my family disclosed being a sex worker, I would desert my family" and "If some people disclosed to me they were a sex worker, I would not talk with them." This study found reliability estimates (Cronbach's α) of the two subscales Perceived Stigma from community domain and Perceived Stigma from family as0.930, and 0.863 respectively, suggesting each domain has a reliable measure of internal consistency. The overall scale has a very high measure of internal consistency (Cronbach's α of 0.95).

Attitudes toward Injection Drug Use was measured by the Attitudes Toward Injection Drug Use Scale (ATIS) by Brener and von Hippel (2008). it consists of 10 items adapted from (Herek, 1994). The author reported that the ATIS has internal consistency (Cronbach's alpha = .80). Sample items in the scale are "Injecting drug use is immoral" and "People should feel sympathetic and understanding of injecting drug users" This study found that the overall scale has a good measure of internal consistency (Cronbach's α) of 0.88)

Procedure

NYSC healthcare professionals totalling 325 responded to structured psychological scales in a questionnaire booklet. The participants were assured of their confidentiality, and participation was voluntary. The questionnaires were given to the participants by research assistants, filled and were retrieved during the Youth corps members' weekly Community Development Service (CDS) meeting at the Local Government Areas (LGA) headquarters in each of the selected states. Participants were also given a consent form to fill their consent. Participants were thanked for their participation and time. Out of 500 copies of questionnaires distributed, 325 (65%) were filled correctly and returned are included in the analysis. The researcher got ethical approval from Redeemer's University Ethics Committee (RUN-IREC) before data was collected for this study. The research assistants also received letters of introduction from the Department of Behavioural Studies at the same University.

Results

Table 1: Participants Socio-demographic Characteristics Variables

Variables	Frequency (%)	Mean±SD
Gender		
Female	180 (55.4)	
Male	145 (44.6)	
Age	25.68	±2.23
<25 years	99 (30.5)	
25 – 30 years	205 (63.1)	
Not Reported	21 (6.5)	
Religion		
Christianity	289 (88.9)	
Islam	33 (10.2)	
Traditional	3 (0.9)	
Level of Religiosity		
1 – 3	23 (7.1)	
4 – 5	144 (44.3)	
6 –7	135 (41.5)	

Not Reported	23 (7.1)
Region of Service	
North Central	165 (50.8)
North West	21 (6.5)
South West	85 (26.2)
South East	33 (10.2)
South South	21 (6.5)
Region of Origin	
North Central	88 (27.1)
North West	11 (3.4)
North East	3 (0.9)
South West	131 (40.3)
South East	68 (20.9)
South South	17 (5.2)
Not Reported	7 (2.2)

Participants Socio-demographic Characteristics

A total of 325 young healthcare professionals that participated in the survey on Attitudes towards People Living with HIV/AIDS were included in this analysis. The participants' socio-demographic characteristics are presented in Table 1. Male participants were 44.6%, more than half (55.4%) of the participants were females. Majority (63.1%) were at least 25years of age (Mean = 25.68 years, SD = 2.23 years) and 30.5% were less than 25 years. Also, most (88.9%) of the young healthcare professionals profess to be Christian, while 10.2% profess Islam. Some 44.3% of them have their level of religiosity to be between 4 – 5. Also, more than half (57.2%) of the participants' region of service were in the North, and more than half (66.5%) of the participants' region of origin was from the South (Table 1).

Table 2: Pearson Moment Correlation Coefficients of the study variables.

	Mean	SD	1	2	3	4	5	6
Attitude towards PLWHA (1)	105.72	14.6						
Homophobia (2)	88.65	9.63	0.561*					
Ethnic Discrimination (3)	21.53	6.65	-0.145*	0.272*				
Sexism (4)	28.89	7.29	0.424*	0.195*	0.050			
Sex Worker Stigma (5)	33.14	6.49	0.183*	0.206*	0.386*	0.383*		
Injection Drug Use (6)	34.73	8.02	0.385*	0.099	0.153*	0.749*	0.635*	

*Significant at 5% level of confidence

Inter-correlational Analysis

Table 2 shows the inter-relationship among included variables (Attitude towards PLWHA, Homophobia, Ethnic Discrimination, Sexism, Sex Worker Stigma, and Injection Drug Use) using Pearson's Moments Correlation Analysis at 5% level of significance. This was performed to see how each variable correlated with one another. Most of the variables Homophilia {r (324) = 0.561}; Sexism {r (324) = 0.424}; Sex worker stigma {r (324) = 0.183} and Injection Drug Use {r (324) = 0.385} were positively and significantly correlated with Attitude towards PLWHA. It was only Ethnic Discrimination {r (324) = -0.145} related negatively and significantly with Attitude towards PLWHA

(Table 2). Furthermore Table 2 reveals all the 5 overlapping stigmas (homophobia, ethnic discrimination, sexism, sex work and injection drug use) have positively significant relationship with each other as follows: Homophobia has positive significant relationship with ethnic discrimination {r (324) = 0.272}; Homophobia with sexism {r (324) = 0.195}, and Homophobia with sex work {r (324) = 0.206}; ethnic discrimination with sex work {r (324) = 0.386} and with injection drug use {r (324) = 0.153}; sexism with sex work {r (324) = 0.383}; sexism and injection drug use {r (324) = 0.749} and sex work with injection drug use {r (324) = 0.635}. The exceptions were homophobia injection drug use {r (324) = 0.099} and ethnic discrimination and sexism {r (324) = 0.050}.

The hypothesis that overlapping stigmas (homophobia, ethnic discrimination, sexism, sex work and injection drug use) will significantly independently and jointly predict attitude towards PLWHA Was tested using the multiple linear regression analysis. The results are presented in Tables 3.

Table 3: Multiple Regression Analysis showing Joint Prediction on Attitude towards PLWHA

Variables	Beta	t	R^2	ΔR^2	df	F	p
Constant		2.305*	0.558	0.551	324	80.532	<0.001
Homophobia	1.022	15.476**					
Ethnic Discrimination	-0.775	8.282**					
Sexism	0.145	1.208					
Sex Worker Stigma	-0.168	1.374					
Injection Drug Use	0.688	5.318**					

**p<0.01

The result presented in Table 3 shows the Adj. R Square of 0.551 indicates that the five predictors (homophobia, ethnic discrimination, sexism, sex worker stigma and injection drug use) of Attitude towards PLWHA jointly accounted for more than half (55.1%) of the total variation in Attitude towards PLWHA. Also, Table 3 reveals that the analysis of multiple regression data produced a statistically significant F-ratio value (F (2, 322) = 80.532, P<0.001). Table 3 further shows the independent contribution of Homophobia, Ethnic Discrimination, Sexism, Sex Worker Stigma and Injection Drug Use. When observed singly, only three of these predictors Homophobia (β = 1.022, t = 15.476, p<0.001), Ethnic Discrimination (β = -0.775, t = 8.282, p<0.001) and that Injection Drug Use (β = 0.688, t =5.138, p<0.001) independently and significantly predicted Attitude towards PLWHA. However, Sexism (β = .145, t = 1.208, p=228) and Sex Worker Stigma (β = -.168, t = 1.374, p=0.170) did not. The results partially supported the hypothesis as all variables jointly contributed a significant amount of the variance in attitude towards PLWHA. However, only three of the five overlapping stigmas homophobia, ethnic discrimination, and injection drug use independently predicted Attitude towards PLWHA.

Discussion

The findings that overlapping stigmas (homophobia, ethnic discrimination, sexism, sex work and injection drug use) jointly predicted attitude towards PLWHA is confirmed and supported the findings of (Wagner, Girard, McShane, Margolese & Hart, 2017). Although in the present study only three of the overlapping stigmas Homophobia, Ethnic Discrimination and Injection Drug Use showed significant independent predictions of Attitude towards PLWHA that overlapping stigmas predicted Attitude towards PLWHA. However, Sexism and Sex Worker Stigma do not significantly predict Attitude towards PLWHA. These findings further

corroborate previous studies of ethnicity (Wong and Nur Syuhada, 2011); homophobia (Ayala & Santos, 2016); sexism (Lluberes, 2016; mfAR, 2015; Dellar, Dlamini, & Karim, 2015; Taiwo, 2015); injection drug use (Aceijas, Oppenheimer, Stimson, Ashcroft, Matic, & Hickman, 2005) and sex work (Stangl, Lloyd, Brady, Holland, & Baral, 2013; Earnshaw & Chaudoir, 2009; Reidpath & Chan, 2005) as predictors of attitude towards PLWHA.

The findings of significant intercorrelation between of each of overlapping stigmas and attitude towards PLWHA supported the findings of Wagner, Girard, McShane, Margolese and Hart, 2017 that all overlapping stigmas have significant correlation with attitude towards PLWHA. In the present study, most of the overlapping stigmas were positively and significantly correlated with Attitude towards PLWHA. This finding further indicated that increase in overlapping stigmas experience of the PLWHA may result in increased discriminating attitude towards PLWHA by healthcare professionals. Noting that the more the experience of overlapping stigmas by the PLWHA, the more the discrimination exhibited by the healthcare professionals. Conversely, it was only ethnic discrimination that was negatively and significantly correlated with Attitude towards PLWHA. This indicated that as ethnic discrimination experience of the PLWHA decreases, there is increased discriminating attitude towards PLWHA by healthcare professionals. That is the less the experience of ethnic discrimination by the PLWHA, the more the discrimination exhibited by the healthcare professionals. The findings are in line with the theory of intersectionality based on the conceptualisation of Crenshaw (1991). The PLWHA experiences multiple stigmas for as much of the stereotyped groups one finds oneself. The PLWHA with experience of overlapping stigmas withdraws from treatment providers.

Implication and Recommendation

The findings from this study have implications on the attitude of youth healthcare professionals towards PLWHA. It shows that these young professionals exhibit discriminating attitude and negative actions in the healthcare services and responses to PLWHA; they are likely to stigmatise people living with HIV. It is recommended that Healthcare professionals should be given professional trainings on HIV/AIDS to limit stigmatisation of PLWHA especially the key affected population who have overlapping experiences. There should be decline of all types of stigma be it overlapping stigmas or stigma of living with HIV and end all forms of stigmatisation against PLWHA in line with Sustainable Development Goal 5. To ensure human rights of all groups of people and inclusive equality for PLWHA with overlapping experiences. For equality of key affected population among PLWHA in line with Sustainable Development Goal 5. Entreat PLWHA with overlapping experiences to go for treatment to drive sustainable all-inclusive health care for all PLWHA in line with Sustainable Development Goal 3.

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References

Aceijas, C., Oppenheimer, E., Stimson, G. V., Ashcroft, R. E., Matic, S., & Hickman, M. (2006). Antiretroviral treatment for injecting drug users in developing and transitional countries 1 year before the end of the 'Treating 3 million by 2005. Making it happen. The WHO strategy' ('3by5'). *Addiction, 101* (9) 1246-1253. doi: 10.1111/j.1360-0443.2006.01509.x

Aggleton, P. & Parker R. (2002). World AIDS Campaign 2002-2003: A conceptual framework and basis for action: HIV/AIDS Stigma and Discrimination. UNAIDS Best Practice Collection 2002.

Araoye, M.O. (2003). *Research Methodology with Statistics for Health and Social Sciences.* Ilorin: Nathadex Publishers.

Ayala, G. & Santos, G. M. (2016). 'Will the global HIV response fail gay and bisexual men and other men who have sex with men?' *Journal of International AIDS Society 19* (1) 21098.

Blendon, R. J. & Donelan, K. (1988). Discrimination Against People with AIDS: The Public's Survey on Perspective. *New England Journal of Medicine 319*, 1022–1026. doi: 10.1056/NEJM198810133191522

Brener, L., & von Hippel, W. (2008). Measuring attitudes toward injecting drug users and people

with hepatitis C. *Substance Use and Misuse*, *43*, 295–302. doi:10.1080/10826080701202627

Brown, L., Macintyre, K., & Trujillo, L. (2003). Interventions to reduce HIV/AIDS stigma: what have we learned? *AIDS education and prevention: official publication of the International Society for AIDS Education 15* (1) 49–69.

Crenshaw, K. (1991*)*. Mapping the Margins: *Intersectionality*, Identity Politics, and Violence against Women of Color. Stanford Law.

Dahlui, M., Azahar, N., Bulgiba, A., Zaki, R., Oche, O. M. & Adekunjo, F. O. (2015). HIV/AIDS related stigma and discrimination against PLWHA in Nigerian Population. *PLoS ONE 10* (12) e0143749doi:10.1371/journal.pone.0143749

Danziger, R. (1994). The social impact of HIV/AIDS in developing countries. *Social Science and Medicine 39* (7), 905-917.

Dellar, R. C., Dlamini, S., & Karim, Q. A. (2015). 'Adolescent girls and young women: key populations for HIV epidemic control' *JIAS 18* (Supplement 1):19408

Elamin, M. O., Raja'a, Y., Adetunji, H. A., Khalid, S. & Sadiqq, R. (2019). Stigma and discrimination among health care providers towards people living with HIV/AIDS (PLWHA). *International Journal of Public Health Scienc, 8* (1), 36 – 44.

Earnshaw, V. A., & Chaudoir, S. R. (2009). From conceptualizing to measuring HIV stigma: A review of HIV stigma mechanism measures. *AIDS and Behavior 13,* 1160–1177. doi:10.1371/journal.pone.0162826

Federal Ministry of Health (2013). National HIV & AIDS and Reproductive Health Survey 2012. NARHS Plus II.

Hankivsky, O. & Cormier, R. (2009). *Intersectionality: Moving women's health and policy forward.* Vancouver, Canada: Women's Health Research Network.

Herek, G. M., & Glunt, E. K. (1988), An epidemic of stigma. Public reactions to AIDS. *American Psychologist 43* (11) 886–891.

King, M. B. (1989) Prejudice and AIDS: The views and experiences of people with HIV infection. *AIDS Care: Psychological and Socio-medical Aspects of AIDS/HIV 1* (2) 137-143, DOI:10.1080/0954012890826024

Lau, J. T. F. & Tsui, H. Y. (2003). Surveillance of discriminatory attitudes toward people living with HIV/AIDS among the general public in Hong Kong from 1994 to 2000. *Disability and Rehabilitation*, 25, 1354–1360. doi: 10.1080/0963828031000161634 9Link, B. G., & Phelan, J. C. (2001) Conceptualizing Stigma. *Annual Review of Sociology 27*, 363–385.

Liu, S. H., Srikrishnan, A. K., Zelaya, C. E., Solomon, S., Celentano, D. D., & Sherman, S. G. (2011). Measuring perceived stigma in female sex workers in Chennai, India. *AIDSCare 23*, 619–627. doi:10.1080/09540121.2010.525606

Lluberes, C. (2016). This is why AIDS is sexist and why continued investment is more important than ever. Retrieved from https://www.one.org/international/blog/this-is-why-aids-is-sexist-and-why-continued-investment-is-more-important-than-ever/

Logie, C., Williams, C. C., Wang, Y. &. Loutf, M. et al (2019) Adapting stigma mechanism frameworks to explore complex pathways between intersectional stigma and HIV-related health outcomes among women living with HIV in Canada *Social Science & Medicine 232*

Logie, C. H., James, L., Tharao, W., & Loutfy, M. R. (2011). HIV, gender, race, sexual orientation, and sex work: A qualitative study of intersectional stigma experienced by HIV positive women in Ontario, Canada. *PLoS Medicine 8*, e1001124. doi:10.1371/journal. pmed.1001124

Mahajan, A. P., Sayles, J. N., Patel, V. A., Remien, R. H., Sawires, S. R., Ortiz, D. J., Coates, T. J. (2008). Stigma in the HIV/AIDS epidemic: A review of the literature and recommendations for the way forward. *AIDS*, *22*, S67–S79. doi:10.1097/01. aids.0000327438.13291.62

NACA (2017). National Strategic Framework on HIV and AIDS: 2017 -2021

National Youth Service Corps (NYSC) (2018). National Youth Service Corps Year Book by National Directorate Headquarters Abuja.

National Youth Service Corps (NYSC) (2013). Retrieved February 8th 2013 from www.nysc.gov/.ng/about/about/p.hp.

Nigeria National Agency for the Control of AIDS (2012). Global AIDS Response: Country Progress Report. GARPR; Abuja, Nigeria

Nigeria HIV/AIDS Indicator and Impact Survey (NAIIS) National Factsheet (2019)

https://naca.gov.ng/wp-content/uploads/2019/03/NAIIS-PA-NATIONAL-FACTSHEET-FINAL.pdf

Nyblade L, Stangl A, Weiss E, Ashburn K. (2009) Combating HIV stigma in health care settings: what works? *Journal of International AIDS Society 2* (15). www.jiasociety.org/content/12/1/15. doi:10.1186/1758-2652-12-15.

Okonkwo, U, Ameh S., Otu, A & Okpara, H. (2017) HIV-related knowledge, attitude and practices of healthy adults in Cross River State Nigeria: a population based-survey. *Pan African Medical Journal 27,* 170. doi: 10.11604/pamj.2017.27.170.12082

Parker, R., & Aggleton, P. (2003). HIV and AIDS-related stigma and discrimination: A conceptual framework and implications for action. *Social Science & Medicine 57,* 13-24.

Pleck, J. H., O'Donnell L., O'Donnell, C. & Snarey, J. (1988). AIDS-phobia, contact with AIDS, and AIDS-related job stress in hospital workers. *Journal of Homosexuality* 15, 3–4, 41–54. doi:10.1300/J082v15n03_02.

Reidpath, D. D., & Chan, K. Y. (2005). A method for the quantitative analysis of the layering of HIV-related stigma. *AIDS care* 17 (4) 425–32. doi: 10.1080/09540120412331319769

Shariff-Marco, S. Breen, N., Landrine, H., Reeve, B. B., Krieger, N., Gee, G. C., Williams, D. R. Mays, V. M., Ponce, N. A., Alegría, M. Liu, B., Gordon Willis, G. & Johnson, T. P. (2011). Measuring everyday racial/ethnic discrimination in health surveys: How Best to Ask the Questions, in One or Two Stages, Across Multiple Racial/Ethnic Groups? *Du Bois Rev. 8,* 1, 159–177. Published online 2011 Apr 15. doi: 10.1017/S1742058X11000129

Stangl, A. L., Lloyd, J. K., Brady, L. M., Holland, C. E., & Baral, S. (2013). A systematic review of interventions to reduce HIV-related stigma and discrimination from 2002 to 2013: how far have we come? *Journal of the International AIDS Society 16* (3 Suppl 2): 18734.

Swim, J. K., Aikin, K. J., Hall, W. S., & Hunter, B. A. (1995). Sexism and racism: Old-fashioned and modern prejudices. *Journal of Personality and Social Psychology 68*, 199–214. doi:10.1037/0022-3514.68.2.199

Taiwo, A. O. (2015). The Role of Gender and Psychosocial Factors on Perceived Vulnerability to HIV/AIDS Infection among Young and Middle Aged Adults in Benin City, Nigeria. *Journal of Psychology and Psychotherapy 5,* 175. doi:10.4172/2161-0487.1000175

The Foundation of AIDS Research (amfAR) (2015). Statistics: Women and HI/AIDS.

United States Agency International Development (2013). HIV/AIDS Health Profile: Sub-Saharan Africa.

UNAIDS (2015) "On the Fast-Track to end AIDS by 2030: Focus on location and population'.

UNAIDS (2017) 'Agenda for zero discrimination in health-care settings'.

UNAIDS (2018) Global HIV & AIDS statistics-2018 fact sheets.

van der Elst, E. M., Smith, A. D., Gichuru, E., Wahome, E., Musyoki, H., Muraguri, N., Fegan, G., Duby, Z., Bekker, L., Bender, B., Graham, S. M., Operario, D., & Sanders, E. J. (2013). Men who have sex with men sensitivity training reduces homoprejudice and increases knowledge among Kenyan healthcare providers in coastal Kenya. *Journal of the International AIDS Society 16* (Suppl 3) 18748.

Wagner, A. C., Girard, T., McShane, K. E., Margolese, S. & Hart, T. A., (2017) Hiv-Related Stigma And Overlapping Stigmas Towards People Living With Hiv Among Health Care Trainees In Canada Aids *Education and Prevention 29,* (4) 364–376.

Wagner, A. C., Hart, T. A., McShane, K. E., Margolese, S., & Girard, T. A. (2014). Health care provider attitudes and beliefs about people living with HIV: Initial validation of the health care provider HIV/AIDS Stigma Scale (HPASS). *AIDS and Behavior 18*, 2397–2408. doi:10.1007/s10461-014- 0834-8

Wong, L. P. & Nur Syuhada A. R. (2011). Stigmatization and discrimination towards people living with or affected by HIV/AIDS by the general public in Malaysia. *Southern Asian Journal of Tropical Medicine and Public Health 42* (5) 1119-29.

Wright, L. W., Adams, H. E., & Bernat, J. (1999). Development and validation of the Homophobia Scale. *Journal of Psychopathology and Behavioral Assessment 21*, 337–347.