International Archives of Medicine and Medical Sciences

Original Article

Print ISSN: 2705-1404; Online ISSN: 2705-1412
DOI: https://doi.org/10.33515/iamms/2019.001/1

Attitudes and practices related to stigma and discrimination against persons living with HIV/AIDS among health workers in a tertiary care facility in Sokoto, Nigeria

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ABSTRACT

Background: Several studies have established strong links between stigma and discrimination against PLWHA by health workers and poor utilization of HIV/AIDS prevention and care services by them. **Aim:** This study aimed to assess the attitudes and practices related to stigma and discrimination against persons living with HIV/ AIDS (PLWHA) among health workers in a tertiary care facility in Sokoto, Nigeria. **Materials and Methods:** This was a cross-sectional study among 258 health workers selected by systematic sampling technique. A structured self-administered questionnaire was used to collect data on the research variables. Data were analyzed using IBM SPSS version 20 statistical computer software package. **Results**: The mean age of the respondents was 32.9 ± 9.3 years; majority of them were males (52.3%), married (67.1%), and were nurses (67.1%). Majority of respondents showed negative attitudes (indicating stigma) towards PLWHA, as 74.0% would prefer to refer them to other physicians for treatment, and 67.4% were not comfortable with giving injections or performing invasive procedures on PLWHA. Large proportions of respondents had been involved in discriminatory practices against PLWHA such as testing patients for HIV without consent (41.1%), and administering a differential treatment for patients with HIV/AIDS (48.1%). **Conclusion:** Attitudes and practices related to stigma and discrimination against PLWHA were very prevalent among the respondents in this study. Management of hospitals, government and other stakeholders involved in HIV/AIDS prevention and care should ensure full implementation of the strategic interventions for eliminating stigma and discrimination against PLWHA to prevent a resurgence of HIV/AIDS epidemic across the country.

Keywords: Attitudes, practices, stigma, discrimination, PLWHA, health workers

INTRODUCTION

The burden of Human Immunodeficiency Virus and Acquired Immune Deficiency Syndrome (HIV/AIDS) remains unacceptably high globally with 36.7million people living with HIV, 1.8million people newly infected with HIV, and 1.0million AIDS-related deaths in 2016. Noticeably, the burden of HIV/AIDS is disproportionately high in sub-Saharan Africa with the continent accounting for 64% of new HIV infections and 70.1% of AIDS-related deaths in 2016 (UNAIDS, 2017).

HIV/AIDS is a serious public health problem in Nigeria, and the country has the second highest burden of HIV infection in the world with about 3.6million people infected (NACA, 2017). The Government of Nigeria through the National Agency for the Control of AIDS (NACA) have committed huge amount of resources to fighting the epidemic in the country in collaboration with other stakeholders. One of the focal points of the efforts made to control the epidemic in Nigeria was the development of the National Strategic Framework (NSF) 2010-2015 which provided a structure and plan for advancing the multi-sectoral response to the epidemic in Nigeria. Its goals were to reduce the number of new infections, produce equitable care and support, mitigate the impact of the infections and engender local ownership and sustainability (NACA, 2017).

Although some successes were recorded, the burden of HIV/AIDS remains high in Nigeria, thus the current National Strategic Framework 2017-2021 was designed to fast-track the national response towards ending AIDS in Nigeria by 2030.

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Received: 08-01-2019 Revised: 21-02-2019 Published: 28-02-2019

The thematic areas of the current framework include prevention of HIV among general and key populations; HIV testing services; elimination of mother-to-child transmission of HIV; HIV treatment; and care, support and adherence (NACA, 2017).

The worrisome aspect is the fact that despite the huge amount of resources committed to making the vision of an AIDS-free Nigeria with zero new infections and zero AIDS-related discrimination and stigma a reality, the reverse is true, as the services are grossly underutilized due to the prevalent stigma and discrimination against persons living with HIV/AIDS (PLWHA) in the country, similar to the situation in other places; and in situations where PLWHA make efforts to access care in many health facilities across the globe, they are either denied care, or they are offered sub-standard services (Dong et al., 2018; Kabbash et al., 2018; Mundt and Briggs, 2016; Dahlui et al., 2015; Elford et al., 2008).

Several studies have established strong links between stigma (i.e., being treated by the society as if one should be ashamed of his or her situation) and discrimination (i.e., the practice of treating one person or group differently from another in an unfair way) against PLWHA by healthcare workers and poor utilization of HIV counseling, screening and treatment services, as well as poor compliance with HIV infection prevention practices by them (Fiorentino et al., 2018; Genberg et al., 2009; Neupane et al., 2010; Arrey et al., 2017; Dos Santos et al., 2014). A study conducted among PLWHA in France reported that a substantial proportion of them had experienced stigma and discrimination by health workers with 17% declaring health care renunciation in the preceding year; and this was found to be directly associated with high levels of social insecurity, major depressive episodes and low HIV testing (Fiorentino et al., 2018).

Similarly, a four-country HIV prevention trial in sub-Saharan Africa (Tanzania, Zimbabwe and South Africa) and northern Thailand reported that negative attitudes were related to never having tested for HIV, lacking knowledge of ARVs, and never having discussed HIV/AIDS (Genberg et al., 2009). It is appalling that in many developing countries across the world PLWHA are subjected to extreme forms of stigma including physical and financial restrictions, abandonment, broken relationships, social isolation and humiliation (Neupane et al., 2010; Arrey et al., 2017; Dos Santos et al., 2014).
Currently the rates of new HIV infections is disproportionately high among young women across sub-Saharan Africa, with concomitant high rates of mother-to-child transmission which has been estimated to account for 90% of HIV infections in children under the age of 15 years (UNAIDS, 2011a; UNAIDS, 2011b). Whereas, interventions during pregnancy, labor, delivery or breastfeeding are known to reduce the transmission of HIV from mother-to-child from 15-45% in the absence of any intervention to below 5% with effective interventions during these periods, the number of pregnant women visiting the health facilities remains low, as does the number of health facilities providing PMTCT services in the sub-Saharan African countries (WHO, 2017; UNAIDS, 2017).

It is therefore very disturbing that stigma and discrimination against PLWHA have compounded the existing challenges to the prevention of mother-to-child transmission of HIV in many sub-Saharan Africa countries including Kenya (Turan et al., 2008), Uganda (Kitara and Aloyo, 2012), Togo (Saka et al., 2017), and Nigeria (Owolabi et al., 2012) as pregnant women who are infected with HIV either avoid or are denied health facility delivery services due to these maladies.

Similar to the situation in many sub-Saharan African countries, studies conducted across Nigeria majorly reported high prevalence of stigma and discrimination against PLWHA by health workers (Aguwa et al., 2015; Omosanya et al., 2014; Adebajo et al., 2003). It is therefore not surprising (but very disturbing) that in 2016 only 32% of pregnant women living with HIV in Nigeria received antiretroviral treatment to prevent mother-to-child transmission of HIV (which was far below the 80% universal access that was recommended for the elimination of mother-to-child transmission of HIV by the World Health Organization, and the National Strategic Framework 2017-2021 target of antiretroviral therapy for 95% of all HIV positive pregnant and breastfeeding mothers in Nigeria by 2021), and with Sokoto state (the study area) being the state with the lowest ART coverage in Nigeria.

Also, just 34.7% of pregnant women in Nigeria were tested for HIV as part of their antenatal care (which was also far below the NSF 2017-2021 target of HIV testing for 95% of pregnant women in Nigeria by 2021), and mother-to-child transmission of HIV still remaining at a high rate of 22% (UNAIDS, 2017; WHO, 2010; NACA, 2015; NACA, 2017]. While stigma and discrimination against PLWHA have been found to constitute serious barriers to the utilization of the grossly inadequate facilities designated for their care in studies conducted

across Nigeria, little is known about these phenomena in Sokoto, Nigeria. This study was conducted assess the attitudes and practices related to stigma and discrimination against persons living with HIV/AIDS among health workers in a tertiary care facility in Sokoto, Nigeria.

MATERIALS AND METHODS

Study Design, Population and Area

A cross-sectional descriptive study was conducted among health workers in Specialist Hospital, Sokoto, Northwestern Nigeria, in October and November 2016. The hospital is a tertiary healthcare facility with a bed capacity of 270; it receives referrals from the primary and secondary health facilities within and outside Sokoto state, and it is also one of the centers designated for caring for PLWHA in Sokoto state, Nigeria. Health workers that have worked for at least one year in the hospital and gave their consent to participate were considered eligible for enrolment into the study.

Sample Size Estimation and Sampling Technique

The sample size was estimated at 254 using the statistical formula for calculating the required sample size for descriptive studies (Araoye, 2004), a 34.7% prevalence of negative attitude to PLWHA among health workers in a previous study (Adebajo et al., 2003), a precision level of 5%, and a finite population of 952 health workers in the hospital (obtained from institution records). It was adjusted to 267 in anticipation of a 95% response rate. The eligible participants were selected by systematic sampling technique in the 11 departments of the hospital using the staff list in the respective departments to constitute the sampling frame. The number of participants to be enrolled into the study in each department was determined by proportionate allocation based their staff strength.

Data Collection and Analysis

A set of pretested, structured, self-administered questionnaire was used to obtain information on the respondents' socio-demographic characteristics, and attitudes and practices related to stigma and discrimination against PLWHA. The questionnaire was pretested on 20 health workers at Usmanu Danfodiyo University Teaching Hospital, Sokoto, Nigeria (another centre designated for caring for PLWHA in Sokoto state, Nigeria). The questionnaire was modified for clarity based on the observations made during the pretesting. Five resident doctors assisted in questionnaire administration after pre-training on the conduct of survey research, the objectives of the study, selection of study subjects and questionnaire administration.

Data were analyzed using IBM Statistical Package for the Social Sciences (SPSS) version 20.0 software. Quantitative variables were summarized using mean and standard deviations, while qualitative variables were summarized using frequencies and percentages.

Ethical Consideration

Institutional ethical clearance was obtained from the Ethical Committee of the Ministry of Health, Sokoto state, Nigeria. Permission to conduct the study was obtained from the Management of the hospital; and informed written consent was also obtained from the participants before questionnaire administration.

RESULTS

Socio-demographic characteristics of respondents

Out of the 267 questionnaires administered, 258 were adequately completed and found suitable for analysis, giving a response rate of 96.6%. The ages of the respondents ranged from 20 to 55 years (mean = 32.9 $\pm$ 9.3 years), and a larger proportion of them (46.9%) were aged 20 to 29 years. Majority of respondents were males (52.3%), married (67.1%), and most of them were Muslims (82.9%). Also, majority of respondents were nurses (59.3%) and have practiced for less than a decade (67.8%) as shown in Table 1.

Table 1: Socio-demographic characteristics of respondents

Variables	Frequency (%) n = 258
Age groups (years)	
20-29	121 (46.9)
30-39	80 (31.0)
40-49	41 (15.9)
≥50	16 (6.2)
Sex	
Male	135 (52.3)
Female	123 (47.7)
Marital status	
Single	80 (31.0)
Married	173 (67.1)
Separated	5 (1.9)
Religion	
Islam	214 (82.9)
Christianity	44 (17.1)
Cadre	
Doctor	28 (10.9)
Nurse	153 (59.3)
*Others	77 (29.8)
Length of practice (years)	
<10	175 (67.8)
≥ 10	83 (32.2)

*Others: Pharmacist, Laboratory scientist, Medical records

Table 2: Respondents' attitudes to PLWHA

Attitudes to PLWHA	Response	
	Yes Frequency (%)	No Frequency (%)
*Would prefer to refer persons with HIV/AIDS to my colleagues	191 (74.0)	67 (26.0)
*Would prefer to refer persons at high risk for HIV/AIDS to my colleagues	183 (70.9)	75 (29.1)
Comfortable giving injections to, collecting blood from, or setting IV drip for PLWHA	113 (43.8)	145 (56.2)
Comfortable dressing wounds of PLWHA	193 (74.8)	65 (25.2)
Comfortable suturing wounds of PLWHA	126 (48.8)	132 (51.2)
Comfortable performing surgery or invasive procedures on PLWHA	84 (32.6)	174 (67.4)
Comfortable giving injections or performing surgery or invasive procedures on clients with unknown HIV status	90 (34.9)	168 (65.1)
Comfortable in assisting a woman with HIV/AIDS in labour	195 (75.6)	63 (24.4)
Would provide general treatment for PLWHA	109 (42.2)	149 (57.8)
Would provide high risk treatment for PLWHA	168 (65.1)	90 (34.9)
Comfortable assisting or being assisted by a colleague who is infected with HIV	137 (53.1)	121 (46.9)
Comfortable in sharing bathroom with a colleague who is infected with HIV	219 (84.9)	39 (15.1)
Would buy vegetables from PLWHA	230 (89.1)	28 (10.9)

***Yes** indicates negative attitude (while **No** indicates negative attitude for the other items)

Table 3: Discriminatory practices against PLWHA by respondents

Discriminatory practices against PLWHA	Response	
	Yes Frequency (%)	No Frequency (%)
Ever tested patients for HIV without consent	106 (41.1)	152 (58.9)
Ever compulsorily performed HIV testing for patients before surgery	34 (13.2)	224 (86.8)
Ever refused to care for a patient with HIV/AIDS	85 (32.9)	173 (67.1)
Ever refused a patient with HIV/AIDS admission to the hospital	68 (26.4)	190 (73.6)
Ever refused a patient with HIV/AIDS surgery or other invasive procedures	19 (7.4)	239 (92.6)
Ever administered a differential treatment for patients on the grounds of HIV/AIDS status	124 (48.1)	134 (51.9)
Ever disclosed a patient's HIV status to a colleague who was not directly involved in the management of the case	111 (43.0)	147 (57.0)
Ever disclosed a patient's HIV status to his/her family members without his/her consent	81 (31.4)	177 (68.6)
Ever verbally mistreated a patient with HIV/AIDS	6 (2.3)	252 (97.7)

Respondents' attitudes to PLWHA

Majority of respondents showed negative attitudes (indicating stigma) towards PLWHA. Majority of respondents would prefer to refer persons with HIV/AIDS (74.0%) and persons at high risk for HIV/AIDS (70.9%) to their colleagues for treatment rather than treat such persons themselves. Majority of respondents were not comfortable with giving injections (56.2%), or performing surgery or invasive procedures on PLWHA (67.4%) and clients with unknown HIV status (65.1%). About two-thirds of respondents (65.1%) would provide high risk treatment for PLWHA, and close to half of them (46.9%) were not comfortable assisting or being assisted by a colleague who is infected with HIV (Table 2).

Discriminatory practices against PLWHA by respondents

Large proportions of respondents had been involved in discriminatory practices against PLWHA. Close to half of respondents have ever tested patients for HIV without consent (41.1%), administered a differential treatment for patients with HIV/AIDS (48.1%) and disclosed a patient's HIV status to a colleague who was not directly involved in the management of the case (43.0%). Other discriminatory practices ever committed against PLWHA by the respondents are shown in Table 3.

DISCUSSION

Whereas, the high levels of negative attitudes (indicating stigma) towards PLWHA among the respondents in this study are similar to the findings in other studies conducted in Nigeria, it is much higher than the findings in studies conducted in other places. Also, while the 46.9% prevalence of respondents that were not comfortable assisting or being assisted by a colleague infected with HIV in this study is in agreement with the 47.2% prevalence of respondents that were not willing to work in the same office with a PLWHA in a study conducted among health workers in Lagos, Nigeria, the 74.0% prevalence of respondents that were unwilling to care for patients with HIV infection in this study is quite high as compared with the 40.0% prevalence obtained in a study conducted among health workers at Tanta University Hospital, Egypt (Kabbash et al., 2018).

Similarly, in another study among health workers in Mexico, only 23% were not willing to buy food from a PLWHA (Infante et al., 2006). The higher levels of stigma against PLWHA among health workers in Nigeria as compared to their counterparts in other countries could be due to differences in on-the-job training on HIV/AIDS, as well as disparities in availability of facilities for reducing the risk of nosocomial infection with HIV. Unlike the situation in Nigeria, 75% of the respondents in the study conducted in Mexico (Infante et al., 2006) reported having received training related to HIV/AIDS, while 42.0% of the respondents in the study conducted in Egypt (Kabbash et al., 2018) reported having enough supply for reducing risk of nosocomial infections.

The high proportion of respondents with negative attitude towards performing surgery or invasive procedures on PLWHA in this study (67.4%) could be due to fear of contracting the disease from their patients; this is corroborated by the finding in a study among health workers at a tertiary hospital in KwaZulu-Natal, South Africa (Famoroti et al., 2013) that reported that patients were tested for HIV without informed consent before surgery due to fear of being infected with HIV.

While the high levels of discriminatory practices against PLWHA by the respondents in this study and in other studies conducted across Nigeria are in tandem with the findings in studies conducted in other places (many of which reported higher levels of discriminatory practices as compared to Nigeria), a cause for concern is the unethical practices associated with it. Whereas, less than half (41.1%) of the respondents in this study have ever tested patients for HIV without consent, majority of respondents (65.3%) in a study conducted among health workers in China reported testing patients for HIV without obtaining their consent (Dong et al., 2018).

Evidence from studies conducted among PLWHA in both developed and developing countries revealed not only high rates of discrimination against them at the healthcare facilities, but also its multi-dimensional nature. In a study among PLWHA in London, UK, nearly one-third (29.9%) of respondents said they had been discriminated against because of their HIV infection; and of those who reported experiencing HIV-related discrimination, almost a half (49.6%) said this had involved a health worker (Elford et al., 2008). A study among PLWHA in New Zealand (Mundt and Briggs, 2016) reported that 47.0% of respondents had ever experienced HIV-related discrimination by a health worker. Another study by Bird et al. (2004) reported that 71.0% of patients reported having experienced discrimination when receiving treatment for HIV based on their race or color, while 66.0% reported discrimination attributed to their socio-economic status.

Similarly, to the situation in the developed countries, studies conducted among PLWHA in many developing countries also reported high rates of discrimination at the healthcare facilities (Saka et al., 2017; Turan et al., 2008; Owolabi et al., 2012; Dos Santos et al., 2014). A notable finding in studies conducted in Nigeria and other sub-Saharan African countries is the near perfect correlation between the reported high rates of stigma and discrimination against PLWHA by health workers (Famoroti et al., 2013; Adebajo et al., 2003) and self-reported experience of stigma and discrimination at the healthcare facilities by high proportions of PLWHA (Agunwa et al., 2015; Dahlui et al., 2015; Amo-Adjei and Darteh, 2013; Saka et al., 2017; Maughan-Brown and Spaull, 2014).

The high levels of negative attitudes and practices related to stigma and discrimination against PLWHA among the respondents in this study are disturbing as they suggest wide gaps in the implementation of the strategic interventions for ensuring that 90% of PLWHA in Nigeria have access to positive health, dignity and prevention (PHDP) related services by 2021; and these invariably threaten the achievement of the National Strategic Framework vision of an AIDS free Nigeria with zero new infection and zero AIDS-related discrimination and stigma by 2030 in view of their adverse effects on utilization of HIV/AIDS prevention and care services (NACA, 2017).

These findings underscore the need for Management of hospitals, government and other stakeholders involved in HIV/AIDS prevention and care in Nigeria to ensure full implementation of the strategic interventions for eliminating stigma and discrimination against PLWHA (including capacity building for health workers and other service providers on relevant codes of conduct and respect for human dignity; and strengthening of behavior change communication (BCC) targeted at reducing stigma and discrimination against PLWHA) (NACA, 2017) in order to prevent a resurgence of HIV/AIDS epidemic across the country.

CONCLUSION

Attitudes and practices related to stigma and discrimination against PLWHA were very prevalent among the respondents in this study. Management of hospitals, government and other stakeholders involved in HIV/AIDS prevention and care in Nigeria should ensure full implementation of the strategic interventions for eliminating stigma and discrimination against PLWHA to prevent a resurgence of HIV/AIDS epidemic across the country.

Acknowledgements

The authors appreciate the Management of Specialist Hospital, Sokoto, Nigeria, and all the health workers that participated in the study for their cooperation.

Source of support

Nil.

Conflict of interest

None declared.

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How to cite this article: Arisegi SA, Tomori BA (2019). Attitudes and practices related to stigma and discrimination against persons living with HIV/AIDS among health workers in a tertiary care facility in Sokoto, Nigeria. Int. Arch. Med. Med. Sci. 1(1): 1-7.