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Perception and predictors of HIV status disclosure among people living with HIV/AIDS in Sokoto, Nigeria

Ismaila Ahmed-Mohammed^{1*}, Mohammed T. Ibrahim^{1,2}, Kehinde J. Awosan^{1,2}, Hindatu M. Tukur³, Maryam M. Ahmad⁴

Department of Community Medicine, Usmanu Danfodiyo University Teaching Hospital, Sokoto, Nigeria
 Department of Community Health, Usmanu Danfodiyo University, Sokoto, Nigeria
 Department of Family Medicine, Usmanu Danfodiyo University Teaching Hospital, Sokoto, Nigeria
 Department of Nursing Sciences, Usmanu Danfodiyo University, Sokoto, Nigeria

ABSTRACT

Background: Non-disclosure of HIV status particularly in the developing countries where large proportions of new HIV infections occur within HIV sero-discordant couples is a serious threat to HIV/AIDS prevention and control in these countries. Aim: This study was conducted to examine the perception and predictors of HIV status disclosure among people living with HIV/AIDS (PLWHA) in Sokoto, Nigeria. Materials and Methods: This was a cross-sectional study among 381 PLWHA (selected by systematic sampling technique) accessing treatment and care in the health facilities across the three levels of care in Sokoto metropolis, Nigeria. A semi-structured interviewer-administered questionnaire was used to collect data on the research variables. Data were analyzed using IBM SPSS version 22 statistical computer software package. Results: Less than half 138 (39.3%) of the 370 respondents that completed the questionnaire perceived it necessary to disclose their HIV status to somebody. Of these, the majority (52.1%) perceived the risks associated with disclosure to be more than the benefits, and considered fear of the consequences (59.4%) as the major barrier to the practice. A little above half of respondents (55.9%) disclosed their HIV positive status to someone. Of these, only about a third (36.7%) disclosed to their spouses or partners; and being counseled on status disclosure and receiving financial support from their spouses or partners were the predictors of HIV status disclosure among the respondents. Conclusion: The findings of this study underscore the need for HIV/AIDS care providers to give sufficient attention to counseling on disclosure in the care of PLWHA, while all stakeholders should intensify awareness campaigns on the need for their spouses or partners to give them the necessary financial and emotional support.

Keywords: HIV status disclosure, perception, predictors, PLWHA

INTRODUCTION

Although, the number of new HIV infections worldwide declined by about 35% from 3.4 million in 2001 to 2 million in 2014, the transmission of the disease remains disproportionately high in sub-Saharan Africa which houses about 70% of new HIV infections globally despite the rapid expansion of access to HIV voluntary counseling and testing (VCT) across the continent (UNAIDS, 2014; Masiye and Ssekubugu, 2008; WHO, 2007; UNAIDS, 2008). Recent surveys in several sub-Saharan African countries show decreasing condom use and/or an increase in the number of sexual partners (Masiye and Ssekubugu, 2008). Nigeria is among the countries with the highest burden of HIV worldwide, with an estimated 3,229,757 people living with HIV,

220,393 new HIV infections, and 210,031 AIDS related deaths in 2013 (Salami et al., 2011). Also, the main mode of HIV transmission among adults in Nigeria is through heterosexual intercourse, and about two-fifths (42%) of these infections occur among persons that are generally perceived as 'low-risk', because it involves a subpopulation that are either cohabiting or married, and condom use among this group is usually low (Salami et al., 2011).

The high HIV transmission rates in the sub-Saharan African countries despite the rapid expansion of access to HIV voluntary counseling and testing (VCT) services across the continent shows that while it is important for

*Corresponding Author: Dr. Ismaila Ahmed-Mohammed, Department of Community Medicine, Usmanu Danfodiyo University, Teaching Hospital, Sokoto, Nigeria. E-mail: ismaila.ahmed2007@gmail.com

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individuals to know their HIV status, it is equally important for them to disclose the results to their sexual partners (WHO, 2007; UNAIDS, 2008).

The potential preventive health benefits of disclosure have been emphasized in health research and programs with a particular focus on HIV disclosure to sexual partners (Allen et al., 2007). Disclosure of HIV positive status gives any potential or current sexual partners the opportunity to adopt behaviors that protect them from HIV infection. Conversely, if HIV positive individuals do not share their HIV test results, sexual partners are instead forced to rely on subjective assessments of a spouse, partner or potential partner's HIV status, and these assessments are often unreliable (Anglewicz and Chintsanya, 2011). HIV status disclosure between spouses or sexual partners is particularly relevant for halting the spread of HIV/AIDS particularly in sub-Saharan Africa (SSA) because HIV discordant couples now represent the majority of HIV infected couples across the continent (De-Walque, 2007), and a large proportion of new HIV infections in this region occurs within discordant couples either in legal marriages or in long-term stable partnerships. Disclosure is also important for the health of HIV infected individuals, as it enables them to receive the necessary emotional and physical support from their families and friends, encourages their partners to be tested, facilitates access to anti-retroviral treatment, and motivates their sexual partners to seek testing, change behavior and ultimately decrease transmission of HIV (Antelman et al., 2001; Farquhar et al., 2001; Maman et al., 2003; King et al., 2008).

In addition, disclosure may facilitate other health behaviors that may improve the management of HIV, for example, women who disclose their status to partners may be more likely to participate in programs for the prevention of HIV transmission from mothers to their infants; and by adequately addressing the emotional, social and practical sequelae of their HIV positive status, they may be more willing to adopt and maintain behaviors such as cessation of breastfeeding or adherence to treatment regimens (Betancourt et al., 2010; Obermeyer et al., 2011). A cause for concern is the fact that despite the increase in campaigns and the number of people getting tested, research indicates that substantial proportions of individuals diagnosed with HIV do not reveal their serostatus to those around them, including their sexual partners, particularly in the developing countries where the average HIV status disclosure rate was estimated at 49% as compared to the developed countries where the average disclosure rate was 79% (WHO, 2004, Obermeyer et al., 2011; Olagbuji et al., 2011); and HIV status non-disclosure obviously constitutes a serious threat to HIV prevention and control especially in view of the evidence that large proportions of new HIV infections occur among HIV sero-discordant couples (Linda, 2013; Eyawo et al., 2010). Evidence from research has shown that HIV status disclosure is majorly influenced by the way it is perceived by those living with the infection, and with the main barrier to disclosure being fear of the consequences post disclosure, such as stigmatization, disgrace to family and self, rejection, abnormal reaction from their sexual partners, rejection, intimate partner violence, domestic violence and divorce, among others (Kumar et al., 2006; Eyawo et al., 2010; Adeyomo et al., 2011; Chandra et al., 2003).

Also, several studies have established associations between HIV status disclosure and some factors such as the discloser's experience (positive or negative reactions), motivations, personal and cultural beliefs, risk-benefit assessments, individual circumstances, previous experiences, perceived degree of control over private information, and knowledge of the HIV status of partner (Ebuenyi et al., 2014; Masupe et al., 2012; Tshisuyi, 2014). Understanding the perception and predictors of HIV status disclosure among people living with HIV/AIDS is important in identifying the barriers to the practice, and in developing appropriate strategies for promoting the practice among them. This study was conducted to examine the perception and predictors of HIV status disclosure among people living with HIV/AIDS in Sokoto, Nigeria.

MATERIALS AND METHODS Study Design, Population and Area

A cross-sectional study was conducted among people living with HIV/AIDS accessing treatment and care in the health facilities across the three levels of care in Sokoto metropolis, Nigeria, from June to August 2016. There are 3 primary health care centers, one secondary one tertiary health facilities providing comprehensive HIV/AIDS services for 11,256 registered clients in Sokoto metropolis, Nigeria. All HIV positive clients ≥ 18 years old who have been accessing treatment, care and support at any of the study centers for a period of at least 3 months prior to the study and consented to participate were considered eligible for enrollment into the study, while those with severe debilitating conditions were excluded.

Sample Size Estimation and Sampling Technique

The sample size was estimated at 362 using the statistical formula for calculating the sample size for descriptive studies (Ibrahim, 2009), a 61.5% prevalence of HIV status disclosure in a previous study (Adeyomo et al., 2011), and a precision level of 5%. It was then adjusted to 381 in anticipation of a 95% response rate. The eligible participants were selected by systematic sampling technique using the list of clients accessing services in each of the selected facilities to constitute the sampling frame. Proportionate allocation was done in determining the number of participants that were enrolled in the respective facilities.

Data Collection and Analysis

interviewer-administered semi-structured questionnaire was used to obtain information on the respondents' socio-demographic characteristics, and the perception and predictors of HIV status disclosure among them. Ten resident doctors from the Department of Community Medicine, Usmanu Danfodiyo University Teaching Hospital, Sokoto, Nigeria, assisted in data collection after being trained on the objectives of the study, use of the research instrument, and interpersonal communication skills. The questionnaire was pretested on people living with HIV/AIDS accessing treatment and care at General Hospital, Yabo, Nigeria. This was done to check the feasibility of the use of the instrument and to familiarize the research assistants with the instrument. Data were analyzed using IBM Statistical Package for the Social Sciences (SPSS) version 22.0 software. Quantitative variables were summarized using mean and standard deviation, while qualitative variables were summarized using frequency and percentage. Frequency distribution tables were constructed; and cross tabulations were done to examine the relationship between categorical variables. The chi-square test was used to determine the factors associated with HIV status disclosure, while logistic regression analysis was used to determine the predictors of HIV status disclosure. All levels of significance were set at p < 0.05.

Ethical Consideration

Institutional ethical clearance was obtained from the Research and Ethics Committee of Usmanu Danfodiyo University Teaching Hospital, Sokoto, Nigeria. Permission to conduct the study was obtained from the management of the facilities used as study centers, while informed written consent was also obtained from the participants after explaining to them the purpose of the study and assurance of confidentiality.

RESULTS

Socio-demographic characteristics of respondents

Three hundred and seventy out of the 380 questionnaires administered were adequately filled and found suitable for analysis, giving a response rate of 97.4%. The mean age of the respondents was 37.0 ± 11.0 years. Most 345 (93.2%) of the 370 respondents were aged 21 to 50 years, and majority of them were females (63.9%), married (64.1%), and were Muslims (80.4%). Larger proportions of respondents had only primary education (39.5%) and were artisans/petty traders (32.2%) as shown in Table 1.

Table 1: Socio-demographic characteristics of respondents

Variables	Frequency (%) n = 370
Age groups (years)	
18-20	20 (5.0)
21-30	105 (26.0)
31-40	125 (30.9)
41-50	115 (28.5)
≥51	39 (9.6)
Sex	
Male	146 (36.1)
Female	258 (63.9)
Marital status	
Single	40 (10.8)
Married	237 (64.1)
Divorced	27 (7.3)
Widowed	66 (17.8)
Religion	((2.4)
Christianity	77 (19.1)
Islam	325 (80.4)
Traditional	2 (0.5)
Educational status	440 (04.0)
No formal education	113 (31.0)
Primary	144 (39.5)
Secondary	35 (9.6)
Tertiary	73 (19.9)
Occupation	00 (04.0)
Unemployed	92 (24.8)
Farmer	41 (11.0)
Artisan/Petty trader	119 (32.2)
Business	75 (20.2)
Civil servant	43 (11.8)

Respondents' perception on HIV status disclosure

Less than half 138 (39.3%) of the 370 respondents were of the opinion that it was necessary or important for them to disclose their HIV status to somebody. Among the 138 respondents who considered it necessary to disclose, as much as 126 (91.3%) specified the most important person to disclose to. Of these, larger proportion 46 (33.8%) were of the opinion that their parents were the most important persons to disclose to, while 32.4% and 23.5% would prefer to disclose to their

Table 2: Respondents' perception on HIV status disclosure			
Variables	Frequency (%)		
Perceived it necessary to disclose HIV status (n = 370)			
Yes	138 (39.3)		
No	232 (62.7)		
Persons that are most important to disclose HIV status to (n = 126)	,		
Spouse	32 (23.5)		
Partner	44 (32.4)		
Parent	46 (33.8)		
Friend	3 (2.2)		
Relative	7 (5.1)		
Others	4 (2.9)		
Perceived benefits of HIV status disclosure (n = 358)			
It encourages family support	122 (34.1)		
It reduces self-burden and promote self-confidence	49 (13.7)		
It promotes safer sex practices	103 (28.8)		
It encourages partner's screening	58 (16.2)		
Believed that it has benefits but could not specify	158 (44.1)		
Did not know	15 (4.2)		
Perception on benefits-risks of HIV status disclosure (n = 361)			
The benefit is greater than the risk	126 (34.9)		
The risk is greater than the benefit	188 (52.1)		
There is no difference	36 (10.0)		
Did not know	11 (3.0)		
Perceived fear as a cause of not disclosing HIV positive status (n= 262)			
Yes	215 (59.4)		
No	147 (40.6)		
*Reasons for fear (n = 215)			
Fear of job loss/denial of employment	42 (9.0)		
Fear of discrimination and maltreatment from family members	108 (23.2)		
Fear of loss of friends	118 (25.3)		
Fear of partner becoming violent	20 (4.3)		
Fear of people gossiping about them	115 (24.7)		
Fear of being divorced or kicked out of home	21 (4.5)		
Fear of children being abused or discriminated against	17 (3.6)		
Fear of not getting care in the hospital	3 (0.6)		
Others	12 (2.6)		
Did not know	10 (2.1)		
Opinion on making HIV status disclosure mandatory (n = 362)			
Yes	165 (45.6)		
No	150 (41.4)		
Indifferent	47 (13.0)		

^{*}Multiple responses allowed

partners and spouses respectively. Close to half 158 (44.1%) of the 358 respondents that indicated their perception on the benefits of HIV status disclosure believed that HIV status disclosure has benefits but could not specify any, while about a third believed that it encourages family support (34.1%), and promotes safer sex practices (28.8%). Majority, 188 (52.1%) of the 361 respondents that indicated their perception on the benefits versus risks of HIV status disclosure were of the opinion that the risks associated with HIV status disclosure are more than the benefits that would be derived from the disclosure.

Majority of respondents (59.4%) were of the opinion that fear could be responsible for non-disclosure; and fear of loss of friends (25.3%), fear of being gossiped about (24.7%) and fear of discrimination and maltreatment by family members (23.2%) were the most commonly cited reasons for non- disclosure. Of the 362 respondents that indicated their opinion on making HIV status disclosure mandatory, a larger proportion 165 (45.6%) were of the opinion that it should be made mandatory (Table 2).

Table 3: HIV status disclosure practices of respondents			
Variables	Frequency (%)		
Disclosure of HIV positive status (n = 370)			
Ever disclosed	207 (55.9)		
Never disclosed	163 (44.1)		
Person disclosed to (n = 207)	. ,		
Parent	83 (25.4)		
Spouse	68 (20.8)		
Partner	52 (15.9)		
Biological child	70 (21.4)		
Relative	29 (8.9)		
Friend	24 (7.3)		
Pastor	1 (0.3)		
Immediate reactions and behaviors of spouses and partners to whom	n respondents		
disclosed their HIV status (n = 120)			
Shock and disbelief	25 (20.8)		
Anger	9 (7.5)		
Consoling	54 (45.0)		
Not surprised	27 (22.5)		
Others (sobbed, fainted, slapped)	5 (4.1)		
Subsequent reactions and behaviors of spouses and partners to whom	n respondents		
disclosed their HIV status (n = 120)			
Supportive	84 (70.0)		
Rejection	25 (20.8)		
Indifferent	11 (9.2)		

HIV status disclosure practices of respondents

A little above half 207 (55.9%) of the 370 respondents disclosed their HIV positive status to someone; of these, the persons most commonly disclosed to were parents (25.4%), biological children (21.4%), spouses (20.8%), and partners (15.9%). Among the 120 respondents that disclosed to their spouses or partners, a larger proportion 54 (45.0%) indicated that the immediate reaction of their spouses or partners was consoling, 27 (22.5%) indicated that their spouses/partners were not surprised, while 25 (20.8%) indicated that their spouses/partners expressed shock and disbelief. Majority of respondents 84 (70.0%) indicated that their spouses/partners' subsequent reaction was supportive, while only about a fifth of them (20.8%) experienced rejection (Table 3).

Factors associated with HIV status disclosure among respondents

HIV status disclosure was found to be associated with being counseled on disclosure, knowing the spouse/partner's HIV status, not being afraid of disclosure, receiving financial support from spouse or partner, believing that disclosure encourages family support, believing that disclosure has benefits, and believing that the benefit of disclosure is greater than the risk. The proportion of respondents that disclosed their HIV status was significantly higher (p < 0.05) among those that were counseled (65.1%) as compared to those that were not (46.4%); it was significantly higher among those that knew their spouses or partners' HIV status (61.6%) as compared to those that did not (47.5%); it was significantly higher among those that were not afraid of disclosure (64.6%) as compared to those that were afraid of disclosure (50.2%); and it was significantly higher among those that received financial support from their spouses or partners (61.6%) as compared to those that did not (44.8%). Also, the proportion of respondents that disclosed their HIV status was significantly higher (p < 0.05) among those that believed that disclosure encourages family support (63.1%) as compared to those that did not (52.1%); it was significantly higher among those that believed that disclosure has benefits (61.5%) as compared to those that did not (48.7%); and it was significantly higher among those that perceived the benefits of disclosure to be more than the risks (66.7%) as compared to those that perceived the risks to be more than the benefits (52.1%) as shown in Table 4.

Variables	ssociated with HIV status	Test of significance		
variables	HIV status disclosure Disclosed Not disclosed		Test of significance	
	Frequency (%)	Frequency (%)		
Counseling on disclosure				
Counseled (n =189)	123 (65.1)*	66 (34.9)	$\chi^2 = 12.995$,	
Not counseled (n = 181)	84 (46.4)	97 (53.6)	p = 0.001	
Spouse/partner HIV status			•	
Positive (n = 138)	85 (61.6)*	53 (38.4)	$\chi^2 = 4.657$,	
Negative (n = 99)	47 (47.5)	52 (52.5)	p = 0.031	
Age group (years)	400 (50 5)	400 (40.5)	2	
≤ 40 (n = 258)	138 (53.5)	120 (46.5)	$\chi^2 = 2.089$,	
> 40 (n = 112)	69 (61.6)	43 (38.4)	p = 0.148	
Sex Male (n = 135)	68 (50.4)	67 (49.6)	$\chi^2 = 2.681$,	
Female (n = 135)	139 (59.1)	96 (40.9)	$\chi = 2.061$, $p = 0.102$	
Religion	139 (39.1)	90 (40.9)	p = 0.102	
Christianity (n = 71)	41 (57.7)	30 (42.3)	$\chi^2 = 0.131$,	
Islam (n = 298)	165 (55.4)	133 (44.6)	$\chi = 0.131$, $p = 0.717$	
Educational status		.55 (1.1.5)	p = 0.717	
Uneducated (n = 168)	87 (51.8)	81 (48.2)	$\chi^2 = 1.850$,	
Educated (n = 197)	116 (58.9)	81 (41.1)	p = 0.174	
Occupational status	\/	,	,	
Unemployed (n = 42)	27 (64.3)	15 (35.7)	$\chi^2 = 1.337$,	
Employed (n = 328)	180 (54.9)	148 (45.1)	p = 0.248	
Marital status			·	
Married (n = 237)	127 (53.6)	110 (46.4)	$\chi^2 = 1.489$,	
Not married (n = 133)	80 (60.2)	53 (39.8)	p = 0.222	
Fear of disclosure				
Yes (n = 215)	108 (50.2)	107 (49.8)	$\chi^2 = 7.456$,	
No (n = 147)	95 (64.6)*	52 (35.4)	p = 0.024	
No response (n = 8)	4 (50.0)	4 (50.0)		
Received financial support from				
spouse or partner	106 (61 6)*	66 (29.4)	2 44 740	
Yes (n = 172)	106 (61.6)*	66 (38.4)	$\chi^2 = 11.713$,	
No (n = 105) No response (n = 24)	47 (44.8) 8 (33.3)	58 (55.2) 16 (66.7)	p = 0.003	
Believed that disclosure	8 (33.3)	10 (00.7)		
encourages family support				
Yes (n = 122)	77 (63.1)*	45 (36.9)	$\chi^2 = 3.944$,	
No (n = 236)	123 (52.1)	113 (47.9)	p = 0.047	
Believed that disclosure	· (- - ··)		F = 0.0 11	
promotes safer sex practices				
Yes (n = 103)	55 (55.3)	46 (44.7)	$\chi^2 = 0.016$,	
No (n = 255)	143 (56.1)	112 (43.9)	p = 0.899	
Believed that disclosure	, ,	• ,	·	
encourages partner's screening				
Yes (n = 58)	37 (63.8)	21 (36.2)	$\chi^2 = 1.764$,	
No (n = 300)	163 (54.3)	137 (45.7)	p = 0.184	
Believed that disclosure has				
benefits (but could not specify)	400 (04 =):	77 (22 7)	2	
Yes (n = 200)	123 (61.5)*	77 (38.5)	$\chi^2 = 5.834$,	
No (n = 158)	77 (48.7)	81 (53.1)	p = 0.016	
Perceived benefit-risk of				
disclosure	04 (66 7)*	42 (22 2)	2 44 500	
Benefit is greater than risk	84 (66.7)*	42 (33.3)	$\chi^2 = 11.506$,	
(n = 126) Risk is greater than benefit	08 (52 1)	90 (47 9)	p = 0.009	
Risk is greater than benefit (n = 188)	98 (52.1)	90 (47.9)		
No difference between	14 (38.9)	22 (61.1)		
benefit and risk (n = 36)	14 (50.8)	22 (01.1)		
20110111 GITG 113N (11 - 30)		4 (36.4)		

^{*}Statistically significant (p < 0.05)

Variables	Odds Ratio (OR)	95% confidence interval		P value
	_	Lower limit	Upper limit	
Disclosure counseling	2.624	1.558	4.420	< 0.001
Knowledge of spouse or partner's HIV status	0.211	0.016	2.742	0.211
Fear of disclosure	0.313	0.035	2.794	0.313
Availability of financial support	4.843	1.708	13.726	0.002
Encourage family support	0.922	0.441	1.928	0.992
Unspecified benefits	0.785	0.400	1.541	0.785
Risk-benefit of disclosure	1.336	0.291	6.129	1.336

Constant: HIV status disclosure

Predictors of HIV status disclosure among respondents

In logistic regression analysis, the predictors of HIV status disclosure among the respondents were counseling on disclosure and availability of financial support. Respondents that were counseled on disclosure were almost 3 times more likely to disclose (OR = 2.624, 95% CI = 1.558-4.420, p < 0.001) as compared to those that were not, while respondents that received financial support from spouse or partner were more than 4 times more likely to disclose their status (OR = 4.843, 95% CI = 1.708-13.726, p = 0.002) as compared to those that did not (Table 5).

DISCUSSION

This study examined the perception and predictors of HIV status disclosure among people living with HIV/AIDS in Sokoto metropolis, Nigeria. Less than half (39.3%) of the respondents perceived it necessary to disclose their HIV status; and of these, only about a third and less would disclose to their spouses or partners. This could be due to the fact that less than half of respondents (44.1%) believed that disclosing HIV status has any benefit at all, while majority of them (52.1%) believed that the risk associated with status disclosure is greater than the benefit. This study found that the largely negative disposition to HIV status disclosure by the respondents in this study was due to the fear majority of them (59.4%) had for it as a result of the consequences, particularly, fear of loss of friends (25.3%), fear of people gossiping about them (24.7%), and fear of discrimination and maltreatment from family members (23.2%). It is therefore not surprising that less than two-thirds of respondents (55.9%) have ever disclosed their HIV status, and only about a third of the disclosures (36.7%) were specific to spouse or partner. The findings of this study are in consonance with the findings in studies conducted in several developing

countries, and they in essence confirm the fact that the generally low HIV status disclosure in many developing countries is rooted in the prevalent fear of the adverse consequences of the practice in these countries.

However, the disclosure rates obtained in this study are higher than the disclosure rates reported in a study conducted in Ilorin, North-central Nigeria, where a disclosure rate of 39.5% was reported, and less than a fifth of respondents (18.6%) disclosed to their spouses (Salami et al., 2011). While the finding of 55.9% general disclosure in this study is similar to the 52.9% disclosure rate that was reported in a study involving HIV positive adolescents and young adults in Accra, Ghana (Kenu et al., 2014), it is much lower than the 89% disclosure rate that was obtained in a study conducted among women in a PMTCT programme in Jos, Nigeria (Sagay et al., 2006), and the 97.1% disclosure rate that was reported in a study conducted among HIV positive pregnant women attending a prevention of mother to child transmission (PMTCT) clinic in Nnewi, Southeastern Nigeria (Igwegbe and Ugboaja, 2010). The latter study also reported a much higher rate of disclosure to husbands (90%), but a lower disclosure rate to family members (11.4%) as compared to this study (Igwegbe and Ugboaja, 2010). The higher rates of disclosures to spouses or partners in the latter studies as compared to this study could be as a result of the structured nature of ANC and PMTCT programs.

In contrast to the relatively low HIV status disclosure to sexual partners (36.7%) among the respondents in this study, high disclosure rates were obtained in studies conducted several African countries including Mali (73%), Ghana (78.6%), Uganda (83.8%), and Cameroon (86.3%) (Cisse et al., 2016; Obiri-Yeboah et al., 2015; Batte et al., 2015; Loubiere et al., 2009); but while the disclosure rates were higher in the latter studies than this study, the reasons for non-disclosure in this study and the latter studies were principally fear of the consequences of disclosure. Similarly, studies conducted

across Nigeria and other places principally reported fear of the consequences of disclosure as the main barrier to the practice. A study conducted in Lagos, South western Nigeria, reported perceived fear as the most common reason (65%) for non-disclosure (Adeyomo et al., 2011). In a study conducted in Nnewi, South eastern Nigeria, the only issue found to be of concern as regard non-disclosure to husbands was perception of fear of divorce (Igwegbe and Ugboaja, 2010). Similarly, in a study conducted in Dar es Salaam, Tanzania, about half (52%) of those that did not disclose, reported perceived fear of their partners' reaction as the main reason for

(52%) of those that did not disclose, reported perceived fear of their partners' reaction as the main reason for non-disclosure (Maman et al., 2003). A study conducted in Bobo-Dioulasso in Burkina Faso, also reported that women were reluctant to inform their partners of their HIV status for fear of being stigmatized by relatives and friends (Issiaka et al., 2001).

Although, counseling on disclosure, knowing spouse or partners' HIV status, lack of fear of disclosure, perceiving that disclosure encourages family support, perceiving that the benefit of disclosure is greater than its risk, and obtaining financial benefits from spouse or partner were the factors that were found to be associated with disclosure of HIV status among the respondents in the study, while the predictors of disclosure were counseling on disclosure and availability of financial support. These findings are in consonance with the findings in studies conducted in Nigeria and other places. Similar to the findings in this study, studies conducted in the Niger Delta region of Nigeria (Ebuenyi et al., 2014), and Botswana (Tshisuyi et al., 2014), found HIV status disclosure to be associated with knowing the partner's HIV status, while studies conducted in South India (Chandra et al., 2003), and Jamaica (Clarke et al., 2010), found HIV status disclosure to be associated with emotional and material support from family members. The findings of this study, in essence, highlights the pivotal role of counseling and family support in facilitating HIV status disclosure among people living with HIV/AIDS, and the need for HIV/AIDS care provider to give sufficient attention to counseling on disclosure in the care of PLWHA, while all stakeholders should intensify awareness campaigns on the need for their spouses or partners to give them the necessary financial and emotional support.

CONCLUSION

This study showed low levels of perception of the relevance and benefits of HIV status disclosure among PLWHA in Sokoto, Nigeria, with the most commonly

perceived barrier being fear of the consequences of the practice. Also, HIV status disclosure was relatively low among the respondents with the predictors being counseling on disclosure and availability of financial support from spouse or partner. HIV/AIDS care providers should give sufficient attention to counseling on disclosure in the care of PLWHA, while all stakeholders should intensify awareness campaigns on the need for their spouses or partners to give them the necessary financial and emotional support.

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Conflict of interest

None declared.

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