

Awareness, Risk Perception and Expressed Feelings Towards People Living with HIV/AIDS among Nigerian Dental Patients

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ABSTRACT

Objective: HIV/AIDS related issues among dental patients have been relatively understudied. The objective of this study was to assess the awareness, risk perception and expressed feelings towards people living with HIV/AIDS among dental patients

Methods: This cross-sectional study was conducted among adult male and female dental patients attending University of Benin Teaching Hospital, Benin City between August, 2016 and October, 2017. The obtained data were subjected to univariate analysis in form of frequencies, percentages and means and bivariate analysis in form of cross-tabulations using IBM SPSS version 20.0. The test for significance was done with Chi-square statistics and statistical significance was set at $P < 0.05$.

Results: Awareness of HIV/AIDS was expressed by 93.4% of the participants. Health workers were the leading source of information among the participants on HIV/AIDS. Nearly half of the participants described HIV infection as serious and deadly. About two-thirds (61.9%) and one-tenth (9.4%) of the participants felt sorry and disgusted towards people living with HIV/AIDS respectively. About two-thirds (65.6%) of the participants expressed zero risk to HIV/AIDS. Younger people, males, singles, lower income earners, less religious participants, previous dental visitors and those that know someone who has or is suspected of having HIV/AIDS reported lower HIV/AIDS perception risk

Conclusion: HIV/AIDS awareness was high with multiple sources of information among the participants. Self-perceived risk toward HIV was low but expressed feeling toward people living with HIV/AIDS was predominantly sympathetic. Strategies that focus on influencing risk-perception are deemed necessary to facilitate zero transmission of the infection.

Keywords: awareness, HIV/AIDS, risk perception, feelings

INTRODUCTION

HIV infection is one of the most devastating infectious diseases to have emerged in the history of mankind. The first case of the disease in Nigeria was reported in Lagos in a 13-year-old female sex worker in 1986 (Nasidi & Harry, 2006). Since then, it has affected all social and ethnic groups, and exerted devastating

impacts in Nigeria in terms of morbidity and mortality, with the highest prevalence rates recorded in young

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adults. Awofala & Ogundele (2018) stated that there are obvious negative impacts of HIV on the people in such areas as health, economy, welfare, employment, social progress and criminal justice sectors in Nigeria.

This condition, HIV/AIDS has no cure but it is treatable with antiretroviral drugs. Although, the drugs have improved the survival of affected people, HIV/AIDS has remained a significant public health threat for decades. Emphasis has been on prevention and control of HIV infection before and after the advent of antiretroviral drugs using the information, education and communication models. Although, efforts have reached nooks and crannies of Nigeria, however there is paucity of HIV awareness assessment among dental patients.

Self-perceived risk is an individual's perception of the likelihood to contract a disease. Perception of risk to a disease, is considered to play a role in tilting individuals towards the adoption of protective behaviour. Risk perception as a key feature of many health behaviour theories, has been cited as an important motivator of preventive behaviours (Janz & Becker, 1984; Witte, 1992; Vernon, 1999). The voluntariness to take precautionary actions against a disease considerably depends on the awareness and risk perception of the disease.

Understanding risk perceptions toward HIV/AIDS may play a role in the control of the disease. Self-perceived HIV-risk has been documented as an important factor in the uptake of HIV testing in varied populations and settings (Peltzer et al., 2002; Tenkorang & Matlack-Tyndale, 2013; Nel et al., 2013; Tenkorang, 2016) and is also considered, an integral component in motivating HIV/AIDS risk avoidance (Gerrard et al., 1996). Incorrect risk perceptions may impede efforts to diagnose and treat infected persons as low perceived risk of HIV infection may hinder diagnostic efforts especially in high seroprevalence areas. Low self-perceived HIV risk hinders commitment to behaviour change and has been linked with stigmatizing attitudes towards People Living with HIV/AIDS (PLWHA) (Maughan-Brown, 2010; Tsai & Venkataramani, 2015). There is a continued need to better understand individuals' perceptions of what is serious, what is risky and what is best for their health. However, there is paucity of information on awareness, risk perception and expressed feelings towards PLWHA among dental patients. The objective of this study was to assess the awareness, risk perception and expressed

feelings towards PLWHA among Nigerian dental patients.

MATERIALS AND METHODS

This cross-sectional study was conducted among adult male and female dental patients attending University of Benin Teaching Hospital, Benin City between August, 2016 and October, 2017. A total of 160 participants were recruited which exceeded the 131 minimum sample size calculated using formula for the epidemiological study, $n = Z^2pq/d^2$. Where n = minimum sample size, Z is the standard normal deviate at 95% confidence interval set at 1.96, p is 90.6%, which is the prevalence of university of Ibadan undergraduate population with a positive attitude towards HIV/AIDS (Oladebo & Brieger, 1994), q is $1 - p$ and d is degree of acceptable error which is 5% set at 0.05.

An interviewer-administered questionnaire which elicited information on demographic characteristics, awareness of HIV, sources of information on HIV, perceived description of HIV, self-perceived risk towards contracting HIV infection and expressed feelings towards PLWHA. Participation in this study was voluntary and written informed consent was obtained from the participants. The obtained data were subjected to univariate analysis in form of frequencies and percentages and bivariate analysis in form of cross-tabulations using IBM SPSS version 20.0. Monthly income earning power among the participants was categorized as low (<50,000 naira), Medium (50,000-100,000 naira) and High (100,000 naira) status based on self-reported monthly income. Participants that attend church or mosques for activities or prayers rarely or once a month were categorized as being less religious while those that attend at least once weekly or biweekly were categorized as more religious. The test for significance was done with Chi-square statistics and statistical significance was set at $P < 0.05$.

RESULTS

The majority of the participants were aged 21-30 years (56.9%), females (55.6%), singles (80.0%), low monthly income earners (71.3%), more religious (80.6%) and do not know someone living with or suspected to have HIV/AIDS (75.0%) (Table 1). Awareness of HIV/AIDS was expressed by 93.4% of the participants (Figure 1). The leading source of information among the participants on HIV/AIDS was health workers (Table 2). Nearly half

(45.7%) of the participants described HIV infection as serious and deadly (Figure 2).

About two-thirds (61.9%) and one-tenth (9.4%) of the participants felt sorry and disgusted towards PLWHA (Figure 3). About two-thirds (65.6%) of the participants expressed zero risk to HIV/AIDS (Figure 4). Participants

source of information on HIV/AIDS in this study was health workers which contrasted from findings among dental patients attending university college hospital, Ibadan which reported electronic media as the most common source of information (Arigbede et al., 2011).

Table 1: Demographic characteristics of the participants

Characteristics	Frequency (n)	Percent (%)
Age (years)		
≤21	32	20.0
21-30	91	56.9
>30	37	23.1
Gender		
Male	71	44.4
Female	89	55.6
Marital status		
Single	128	80.0
Married	32	20.0
Monthly income earning power		
Low	136	85.1
Medium	15	9.4
High	9	5.6
How often do you attend religious service/activity in your community?		
Less religious	31	19.4
More religious	129	80.6
Is this your first time of visiting the dentist?		
Yes	80	50.0
No	80	50.0
Do you know someone who has or is suspected of having HIV?		
Yes	40	25
No	120	75
Total	160	100.0

aged 21-30 years, males, singles, lower income earners, less religious participants, previous dental visitors and those that know someone living with or is suspected of living with HIV/AIDS. reported lower HIV/AIDS perception risk (Table 2)

DISCUSSION

The sustained campaign on HIV/AIDS and impact of HIV infection globally and in Nigeria may have resulted in improved awareness about the condition among the Nigerian public, as majority (93.1%) of the participants in this study were aware of HIV/AIDS. The awareness level is encouraging with almost one-third (28.9%) of the participants reporting multiple sources of information on HIV/AIDS. The most common

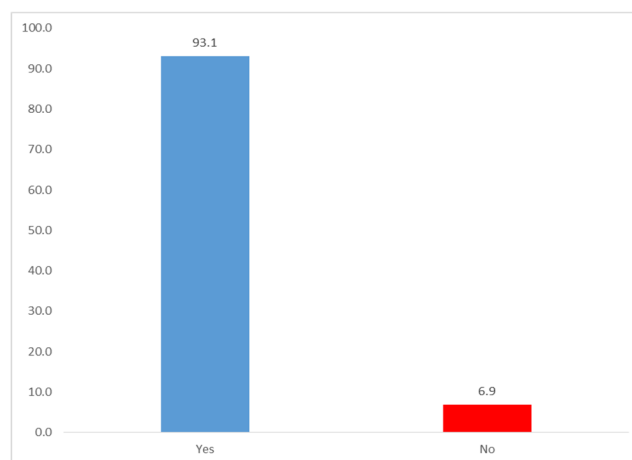


Figure 1: HIV awareness among the participants

clearly signify that dental patients in this study may be aware of proper information relating to HIV/AIDS. Parents/relatives and life testimony of HIV-infected

persons remained a minor source of information which posits that sexual health information is still not or poorly discussed in Nigerian households and that there

Table 2: Association between demographic characteristics, HIV/AIDS awareness and HIV/AIDS risk perception among the participants

Characteristics	Zero risk n(%)	Risk n(%)	P- value
Age (years)			0.009
≤20	20 (62.5)	12 (37.5)	
21-30	53 (58.2)	38 (41.8)	
>30	32 (86.5)	5 (13.5)	
Gender			0.001
Male	37 (52.1)	34 (47.9)	
Female	68 (76.4)	21 (23.6)	
Marital status			0.096
Single	80 (62.5)	48 (37.5)	
Married	25 (78.1)	7 (21.9)	
Monthly income earning power			0.240
Low	91 (66.9)	45 (33.1)	
Medium	7 (46.7)	8 (53.3)	
High	7 (77.8)	2 (22.2)	
Religiosity			0.324
Less	18 (58.1)	13 (41.9)	
More	87 (67.4)	42 (32.6)	
Dental visit			0.244
First	56 (70.0)	24 (30.0)	
Previous	49 (61.3)	31 (38.8)	
know someone who has or is suspected of having HIV/AIDS			0.102
Yes	22 (55.0)	18 (45.0)	
No	83 (69.2)	37 (30.8)	
Awareness of HIV/AIDS			0.144
Yes	100 (67.1)	49 (32.9)	
No	5 (45.5)	6 (54.5)	
Total	105(65.6)	55 (34.4)	

Table 2: Source of information on HIV/AIDS among the participants

Variable	Frequency (n)	Percent (%)
Health workers	34	22.8
Poster displayed in public places	25	16.8
Television show	15	10.1
Newspaper and Magazine	12	8.1
Radio programme	11	7.4
Parents	4	2.7
Internet	2	1.3
Relatives	2	1.3
Life testimony of infected person	2	1.3
Multiple response	43	28.9
Total	149	100.0

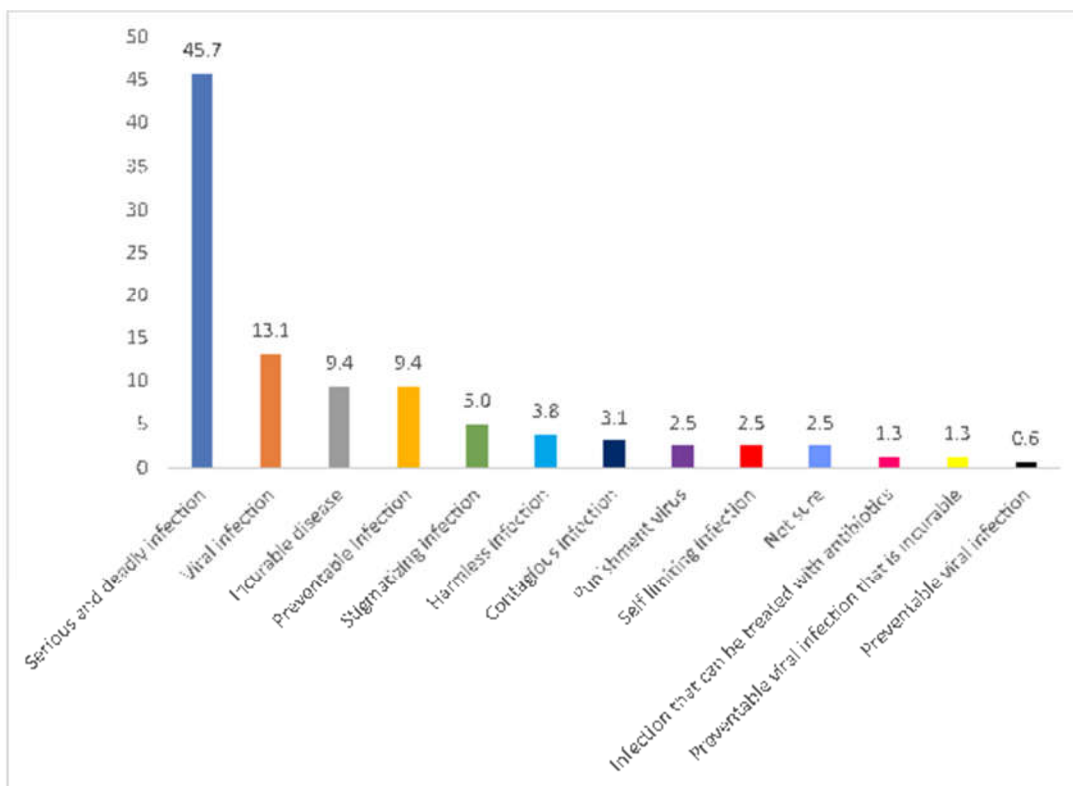


Figure 2: Description of HIV infection among the participant

is low likelihood of PLWHA disclosing their status due to stigma and discrimination respectively.

The adverse (13.2%) expressed feeling (3.8% angry, 9.4% disgusted) towards PLWHA by the participants though in midst of high prevalence of sympathetic feeling (61.9%) may intricate hinder life testimony of PLWHA, reasonably. This may have lent credence to the fact that most PLWHA do not disclose their HIV status because of the fear of stigmatization and discrimination. As much as seventy five percent of participants in this study claimed they do not know someone living with HIV/AIDS which may be a contributory explanation of low HIV/AIDS status disclosure.

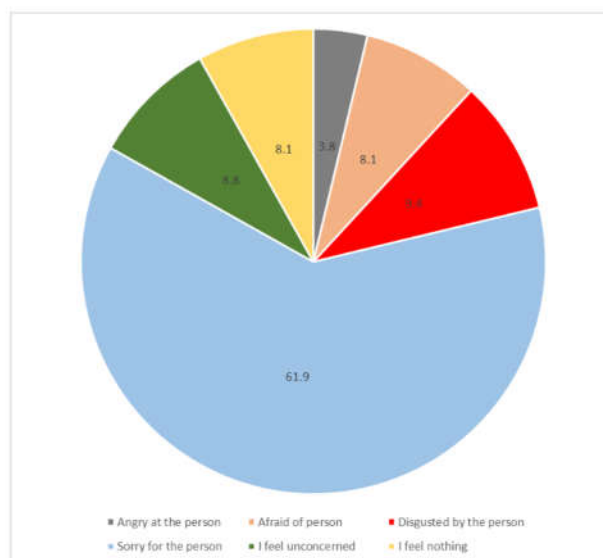


Figure 3: Expressed feeling towards people living with HIV/AIDS among the participants

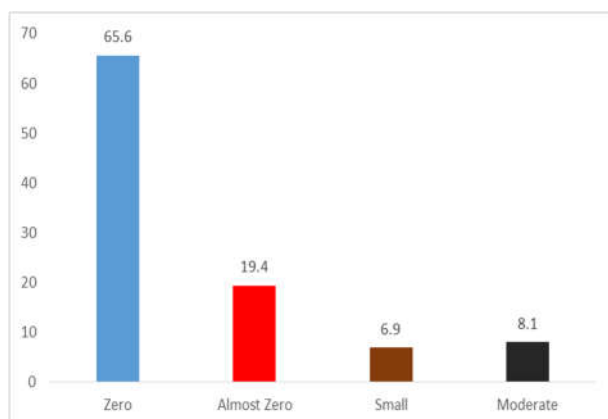


Figure 4: Self perceived risk of contracting HIV/AIDS among the participants

The correct description of HIV as a serious and deadly infection (43.8%), a viral infection (13.1%), incurable disease (9.4%) among the participants could be considered may be related to obvious negative impact of HIV/AIDS on almost all sectors of human endeavour in Nigeria. However, it was lower than the values reported for Nigerian dental technology and therapy students (Azodo et al., 2013; Azodo et al., 2014) and also among university students in Ibadan, Nigeria which had medical sciences students as part of study population (Oladepo & Brieger, 1994). The higher values in compared studies may be explained by the relatively good information about HIV/AIDS among health professional students than lay persons. The erroneous description of the infection as harmless (3.8%), self-limiting/ punishment virus (2.5%), antibiotic sensitive infection (1.3%), and contagious infection was also reported among the participants. There is therefore a need for proper education of HIV/AIDS related issues among dental patients which will to a large extent help in improving understanding of the HIV/AIDS in the studied populace.

Risk perceptions are influenced by the information that is most salient or available to an individual (Tversky & Kahneman, 1973). Risk perceptions can be optimistic (low) or pessimistic (high) (Radcliffe & Klein, 2002) but unrealistic optimistic risk perception is quite prevalent in the general population (Waters et al., 2011).

However, risk perceptions tend to become more pessimistic with a health threat seen as immediate, uncontrollable or dreaded (Shepperd et al., 2000). In this study, 34.4% reported risk perception to HIV/AIDS which was lower than 52.0% reported about 2 decades

ago among university students in Ibadan, Nigeria (Oladepo & Brieger, 1994) but higher than 21.9% reported among youths in Lagos, Nigeria (Durojaiye, 2008) and 2.3% reported among students of a tertiary institution in Ede, Osun State (Odu et al., 2008).

The low self-reported risk of contracting HIV among the participants was evident as about two-thirds (65.6%) of the participants who reported having zero risk of contracting HIV/AIDS. The reduction of threat of HIV/AIDS represented in the media may have influenced the risk perception among the participants (Slovic, 1987) but may also be related to poverty, denial, shame, guilt, and silence as a result of association of the infection with sinful sexual acts in Africa (Caldwell et al 1993; Schoepf, 1998). The low risk perception in this study could be due to unrealistic optimism because uncontrollable and dreadful nature of the disease reduced with the advent of antiretroviral drugs which resulted in improved survival and quality of life of PLWHA. The background knowledge that unrealistic optimism yields lower motivation to engage in health protective behaviors that would mitigate risk (Dillard et al., 2009), and its link with objective negative health outcomes (Ferrer et al., 2012) call for urgent attention. Younger people, males, singles, lower income earners who are of higher risk to the disease reported higher HIV/AIDS risk perception. The more religious participants reported lower risk perception to HIV/AIDS as religion has been shown to be associated with a reduction in risky health behaviours (Gäbler et al., 2017). Participants that know someone who has or is suspected of living with HIV/AIDS reported higher HIV/AIDS risk perception which can be likened to the higher risk perception for disease in individuals whose family member has been diagnosed with the disease (Chen & Kaphingst, 2011). Previous dental visiting participants reported higher risk perception to HIV/AIDS which may be as a result of invasive nature of most dental procedures. However, the adoption and compliance with standard precaution by dental health care personnel make the risk of disease transmission, negligible.

CONCLUSION

The reported HIV/AIDS awareness was high and the leading source of information was health workers. Self-perceived risk toward HIV was mainly low and expressed feeling toward people living with HIV/AIDS was dominantly sympathetic. Strategies that focus on

influencing risk-perception are deemed necessary facilitate zero transmission of the infection.

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