WOMEN MULTIPLE SEXUAL PARTNERSHIP ON HIV PREVALENCE IN CALABAR METROPOLIS, CRS, NIGERIA

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ABSTRACT

This study aimed at investigating community perception of factors facilitating the transmission of HIV/AIDS among women in Calabar Metropolis, Nigeria. Survey research design was adopted in conducting the study and Four hundred (400) respondents were used for this study applying purposive and accidental sampling techniques for data collection. The work employed questionnaire and focus group discussion (FGD) as primary sources of data and secondary sources from relevant texts. Independent t-test analysis was adopted to test the hypotheses while and data presented in simple percentages. The major findings showed that keeping multiple sexual partners significantly influence transmission of HIV/AIDS among women in Calabar Metropolis. In addition, poverty status of women which predisposes them to depending on menfolk grossly makes women susceptible to HIV/AIDS infection. It was recommended that women must be empowered economically, culturally, socially and access to education, with respect to their human rights should be increased to reduce dependability on men to control the spread of HIV/AIDS. Convenient access to HIV information, counseling and referrals should be increased to eliminate the scourge of the infection in communities.

Keywords: *Sexual partners, Women, HIV/AIDS, Poverty, Economic status.*

1. Introduction

The greatest problem of man today is HIV/AIDS pandemic which took the world by storm over two decades ago as it continued to wreak havoc on human population especially women and girls. This could be attributed to poverty, keeping of multiple-sexual partners, lack of economic power to credit facilities, low economic status among women, livelihood insecurity, socio-cultural and environmental factors [Federal Ministry of Health (FMOH, 2010)]. HIV/AIDS constitute a major problem and poses a threat to general advancement of the nations especially in African Sub region with greater patients' percentage resulting in over two thirds population of the world (Emeka, et al, 2014). The magnitude of the epidemic has placed Nigeria among the most infected nations with disease burden of (3.6 million) as of the end of 2003 next to India and South Africa (Federal Ministry of Health, 2010).

In Nigeria about 600,000 people are said to be on Antiretroviral Therapy (ART) {National Agency for the control of HIV/AIDS (NACA, 2016); World Health Organization (WHO, 2010). About 296,000 new infections for adult and 74,000 for children (Smith 2017) Vertical transmission for mother-to-child (MTCT) with 10 percent of total infection worldwide and Nigeria is said to be contributing about 30 percent of HIV among pregnant women globally (Oladapo et al, 2005, and UNAIDS, 2012). Women susceptibility could be due to their biological and anatomical nature, social and epidemiological factors and poverty (WHO, 2007). Biologically, the semen contains much percentage of HIV virus compared to the vaginal secretions. Furthermore, female reproductive anatomy exposes women more easily to contracting sexually transmitted infections (STIs) compared to men. On the other hand, men genitals are external and susceptible to cold temperature, soap, and water, thus creating a less desirable environment for bacteria and viruses. Women are vulnerable to contracting with (STIs) causing organism, and their vagina provides warm and protective environment that allows invading organisms to multiply and thrive. Given these biological differences, many females have higher chances of contracting the virus through heterosexual means. Epidemiological vulnerability is common with women who marry elderly men. These men have greater chances of vulnerability to HIV infections (WHO, 2010). Women are economically dependent on men for survival and this utter dependence

gradually destroy women's decision-making capacity with regard to disease prevention and seeking of health care services.

Social vulnerability is seen as the society and communities expect women to be more passive in sexual relationships (FMOH, 2010). Women are mostly open to danger because of existence with many sexual relations from their male partners, most often also, a woman's decision-making power concerning condom use and consensual intercourse is compromised due to social position and expectations. The orientation given to young girls and women to be willing and accept partners' sexual pleasures against their desire can be a key factor to their susceptibility (Erinosho, et al, 2012).Women's major risk to HIV infection is unprotected heterosexual intercourse which accounts for 38% of transmission (Federal Ministry of Health, 2009). Heterosexual infection is common worldwide and about 80-90% in Africa (Udoh, et al 2009). The primary mode of heterosexual transmission is sexual activity without condom use, placing the burden of HIV prevention on the women thus increasing vulnerability to HIV infection especially in the communities. In many cases women have negotiated protection such as condom use but the men had objected saying that condom use reduces the sensation during sexual intercourse.

Emmanuel et al, (2019) stated that women who are married or cohabiting confirmed that they will not use condom because they believe that their male partners are not HIV infected or have tested negative to HIV thus suggesting blind trust. Low perception of risk of HIV is another factor for poor or lack of condom use. Intimidation, threats of mistrust by male partners make female partner not to use condom (UNAID, 2007).Stigma and discrimination prevent disclosure of HIV status and also restrain individuals from seeking HIV counseling and testing. Discrimination and stigmatization in societies for infected HIV women prevent their help-seeking for treatment due to fear of rejection by husband thus increasing vulnerability to HIV infection.

HIV transmission among women has also been linked to poverty. Majority of women practice unprotected sex involving older men either for gifts, house rents, school fees, clothing and feeding. This involves intergenerational and transactional sex which facilitates HIV transmission. Lack and wants compel women to seek work as prostitutes. This lead to vulnerability to HIV infection (WHO, 2010, FMOH, 2010). Transactional and intergenerational sex could lead to violence against women, such as rape which increases HIV vulnerability (Seth et al, 2007). Alcoholism, drugs and smoking are seen as major contributing factors to HIV infection because condom use is not important when a man and women are both drunk. Alcoholism always result in casual and unprotected sex. Socially, the people of Calabar Metropolis enjoy colorful celebrations such as social and religious activities like discos, cinemas, traditional dances, film shows, wedding parties, games and sports, traditional ceremonies, traditional rites, funeral rites, initiation ceremonies and healing rites (worship centers) spiritual churches and other social factors influencing HIV/AIDs transmission among women.

In male dominated societies including Nigeria, women are viewed as inferior to men and consequently assigned low status. In such culture, the practice of sexual intercourse by old men with a virgin is tolerated. This is believed that sexual intercourse involving a virgin may purify and heal a man of HIV disease. These practices increase a woman's vulnerability to HIV infection (Gray, 2003, Agaba et al, 2016, Seth et al, 2007). The frightening figure of HIV in the country and Cross River State especially girls/women call for speedy measures in government, Civil Society Organizations (CSOs), Non-Governmental Organization (NGOs), Oand communities in reducing surge of the plague. There is need for urgent data generation with appropriate health programme targeted for eradication of infection among women in Calabar Metropolis. Against this background, the study was conducted in Calabar Metropolis to examine specific variables such as: poverty and keeping multiple-sexual partners.

2. Literature Review

2.1 Relationship between multiple sexual partnership and transmission of HIV/AIDS

Increased modernity, modernization, information, multiple sexual partners, sexual violence and abuse are all involved in the transmission of HIV/AIDS among women (Oyefara, 2013). Socially, women and girls are often easy targets for sex by older men who think that young women are not exposed to HIV. The young girls may be shy and unable to refuse or to ask the man to use condom. As a result, they are exposed to greater risk of infection. Premarital chastity is associated with sexual liaison. Christianity brought its own influence on Africans by reinforcing a deep-seated adult discomfort discussing sexuality and non-condom use by partners. This taboo of not discussing sexuality outside of the traditional initiative rites has been a contributing factor to sexual liaison and networking. In some case, the cultural taboo has been a major obstacle to implementing family life education and this may be responsible for HIV/AIDS transmission (Emeka, 2014).

The lingering traditions and the modern influences of sexual permissiveness, sexual networking, and taboos have created a confusing situation for African women and girls. Loss of moral and religious values are many reasons for HIV scourge in the society especially among women. Normal relationship is one man to one wife, one sexual partner, being faithful. In modern sexual relationship, it is one man to wife, girlfriends, women friends, house helps, staff, and employees. And on the other hand, woman to husband, boyfriends, male friends, employer, sugar daddy, etc. (Onoja et al, 2004).Akani et al (2006) affirmed that majority of people acquire HIV through sexual contact with an infected person. One common way of contracting HIV is unprotected sex with an infected person and sexual networking. A study was conducted by Yamanis, et al (2010) on current numerous sexual relations and HIV spread in individuals living with HIV/AIDS in Tanzania.HIV incidence in Tanzania was highest globally due to numerous sexual networks. Purpose of study was to ascertain the danger in numerous relationships among HIV patients.

The methodology included confidential private brief interviewers for HIV positive and negative clients who were trained on ART. Socio-demographic indices and period of infection discovery were used. Findings indicated that response of 63 percent and 309 (62 percent) respondents were recently on multiple sexual relationships. 247 (80 percent) acknowledged single partner in last month and 62 (20 percent) admitted having many relationships at same period. Those who need safer sex methods were more than 80 percent. This is in line with similar findings which stated that individuals who use condoms with many sexual partners are in danger of contracting HIV than those who have a single sex partner. Individuals with numerous partners also find it very difficult disclosed or revealed their status.

Another study by Seth et al, (2007) concluded that numerous sexual relationships are not uncommon with HIV positive individuals in Botswana. The high HIV prevalence in Botswana is perceived to be due to the fact that people are initiated into sexual activity at a very tender age with numerous concurrent life time casual sexual contacts (Cattel, 2001). A sexual network is created when men and women become linked to each other through the people they have had sex with recently. A chain links each person to their cohort and those other sexual relations and it continues as more men and women become linked together in a sexual trap. Frankly speaking if men and women in a society have few individual linked in sexual networking, the fewer people have infection. If a couple stays faithful to each other during the time they are together, they are isolated from the sexual network. HIV cannot be transmitted from them to others (Oladapo, 2005). The view is in line with theoretical mode as they forecast that rise in incidence ratio of concomitant relationship is an important index for HIV scourge (WHO, 2007).

2.2 Theoretical Framework

The culture of poverty

The culture of poverty is similar in different societies and circumstances because cultures is learned, shared and transmitted through behaviour of a social group. Poverty is created by the transmission over generations of set of beliefs, values, norms and skills that are socially transmitted. The culture of poverty was first introduced by the American anthropologist Oscar Lewis in the 1950s. He carried out field work among the urban poor in Mexico and Pureto Rico. Lewis differentiated culture of poverty into the following: on the individual level are a feeling of marginalization, helplessness, inferiority complex, low self-esteem and self-worth.

On the family level is characterized by free union or consensual manages and a high incidence of abandonment of mothers and children leading to single family headed households by women. For the community, it leads to lack of effective participation and integration in the major decisions of the larger society. Lewis argues that culture of poverty can be used to explain the situation of the poor, especially women in third world countries.

Situational theory of poverty

This theory is seen as a reaction to situation constraints which they poor are constrained by the fact of their situation such as low income, unemployment which condition them to act the way they do. The theory noted that the poor would readily change their behaviour in response to a new set of circumstance once the constraint of poverty is removed (Johnson & Mason, 2012). The poor will change their behaviour patterns and seize any available opportunities to improve their poor status. The implication of this situational constraint theory is that once constraints are removed their behaviour will change. Implication of poverty theory is that poverty has developed a woman's face of the disease. This is suppressing the woman, suppressing control of her body, resources and her whole life thus rendering her helpless and incapable to bargain for condom use and inability to say "No" to casual sex (Shur, 2009). The attendant hardship, loss of life and reduced productivity result in HIV related diseases which increase household poverty for the affected individuals and communities and economic depletion of the country (Oyefara 2013; Sen, 2005). Implied here is that poverty has resulted in increasing incidence of sexual exploitation and trafficking of our young women for commercial sex work, transactional and inter-generational sex. These activities continued based on deal and consensus. Commercial sex work has a high toll on women's emotional, psychological and spiritual wellbeing (Smith,2017). Often times when these women are diagnosed positive they will bear the brunt of the blame and suffer severe social and economic consequences including stigma and discrimination. Poverty restricts access of people (women) not only to food, but also to reliable and well-paying jobs, sound education, and opportunities as well as appropriate health care.

The effect of poor nutrition can lead to physical, and poor mental development thus making an individual prone to illnesses and diseases. Hunger spurs risky behaviour that accelerates women emanates from the erroneous belief that their duties are restricted to bearing children and home keeping, the denial of access to basic services or products, and the discrimination against them in job opportunities. This traditions of viewing women as properties and baby making machines should be stop. They are burdened with the responsibilities to look after the children, family, cook and keep home. In order to meet basic needs women should have survival means and efficiency (Subramanim & Kawachi, 2004). Women should be accorded opportunities for higher education, access to credit facilities, healthcare, and enabling environment to alleviate poverty and enhance good quality of life (Sen, 2005). Embarking on recruitment drive, small business start-up (Brady, 2019).

Empowering women and guaranteeing them their economic and social rights is not an option. In the AIDS epidemic, it prevents death and ensures that one of the greatest barriers to the health of populations and economic development is eliminated". Our politicians, religious leaders, community leaders, organizations should formulate policies and laws to remove gender bias against women.

Women should have access to land in order to ensure the development of their economic potentials (Dilger, 2003).Poverty theory is criticized because it does not address the root causes sufficiently and also being unable to highlight the measures to tackle this burning issue. These issues are the deep rooted patriarchy which makes us to say, it is a man's world; because the world is seen and interpreted from the male perspective. This system result in discrimination in terms of resource allocation, job placement, unequal pay for same work performed by both male and female (Sivard et al, 1995).

3. Methodology

Survey design was adopted for this study. It was considered appropriate as a useful tool in studying individual attitudes and opinion towards community perception and contributions in HIV transmission. Study area was Calabar Metropolis made up of Calabar Municipality and Calabar South. Calabar Municipality has 35 autonomous communities and Calabar South. while Calabar South has 12 political wards with a population of 191,515 both sexes and female population of 88,184 as recorded by National Population Census (2006).

Calabar Metropolis has high prevalence rate according to 2010 ANC Sero Sentinel Survey of 10.4 percent, this is higher than the state prevalence of 7.1 percent (ANC 2010). The reason could be due to her proximity with AkwaIbom 10.9 percent which has prevalence next to Benue of 12.7 percent (NACA, 2016). Despite all the concentration of HIV/AIDS intervention, Calabar Metropolis still ranks highest in the state. This is due to high presence of Commercial Sex Workers (CSW), Uniformed Service Men (USM), Cross border trading. The problem of high prevalence made the researcher to study those factors that lead to HIV/AIDS transmission among women in Calabar Metropolis. The research was restricted to only women/girls (married and unmarried). Three hospitals were used; (UCTH), (GHC) and Lawrence Henshaw Memorial Hospital, (LHMHC). Five communities: IkotIshie, Ikot Ansa, IkotEneobong, IkotOmin and IkotEkpo were selected for the study.

A multi-stage non-probability sampling technique involving the purposive and accidental sampling was adopted for this study. A total sample of four hundred (400) respondents was selected for the study. Instruments used for this research were the questionnaire and the focus group discussion (FGD). The structured questions consist of a Likert type scale items with rating from (strongly agreed to strongly disagreed) to measure the community perception of factors facilitating the spread of HIV/AIDS among women. The second instrument was the Focus Group Discussions which comprised 10 participants, a moderator or facilitator note taker and an observer. Altogether, three focus group sessions were undertaken with the following category of persons. Male youth group from Calabar Municipality, female youth group from Calabar South, adult male group from Calabar Municipality, adult female group from Calabar South, HIV positive male group from Teaching Hospital, HIV positive group from General Hospital and Lawrence Henshaw Memorial Hospital. Statistical analysis technique was Independent t-test analysis**.**

4. Result and discussion

Table1: Demographic indices of respondents

Variables	**No. of respondents**	**Percentage**
Age	**(%)**	
20-30	118	29.5
31-39	132	33
40- and above	150	37.8
Total	**400**	**100**
Religious affiliation		
Christianity	238	59.5
Moslem	12	3
ATR	150	37.8

Total	**400**	**100**
Marital status		
Single	110	27.5
Married	240	60
Divorce/Separated	50	12.5
Total	**400**	**100**
Educational level		
Primary	48	12
Secondary	262	65.5
Tertiary	90	22.5
Total	**400**	**100**
Occupation		
Farming	135	33.75
Business	70	17.5
Civil servant	195	48.75
Total	**400**	**100**

Source: Field survey.

Findings in Table 1 shows 29.5 percent (n=118) representing the total respondents were between 20-30 years, 33 percent (n=136) were between 31-40 years while 37.8 percent (n=150) were 41 and above years. For religion, the result is that 59.5 percent (n=238) were Christians 3 percent (n=12) were Muslim, while 37.5 percent (n=150) were African traditional worshippers. Implication on age factor revealed that majority are in their prime of years which are target groups for HIV infection. Those who profess Christianity were many and they patronize prayer houses for assignment and fake prophecies which lead to denial of HIV and possible treatment and protection. Those who practice African Traditional Religion (ATR) belief in witchcraft and never seek orthodox treatment.

Similarly, for marital status, it is shown that 27.5 percent (n=110) respondents were single, 48.75 percent (n=240) were married while 12.5 percent (n=50) were divorced/separated. In educational level, the result shows that 12 percent (n=48) only attained primary education, 22.5 percent (n=262) attained secondary education, while 30 percent (n=90) attained tertiary education. Also, for occupation, the result shows that 33.75 percent (n=135) respondents were farmers, 17.5 percent (n=70) were businessmen and women, while 48.75 percent (n=195) were civil servants. Implication is that majority are singles, most active sexually and with multiple sexual partners. Education shows that majority stopped at primary schools. These individual lack decision-making power in sexual issues. Many also were civil servant with low salary, poor accommodation and feeding habit lead to risky sexual behaviour and multiple sexual partners thus increasing their chances of getting HIV infection.

Hypothesis: The null hypothesis stated that keeping multiple sexual partners does not significantly impact on transmission of HIV/AIDs among women.

Table2: T-test analysis of the influence of multiple sexual partners on transmission of HIV/AIDs among women in Calabar (N=400).

Number of sex partners	N	$\overline{X}$	SD	t-value
Single	180	16.57	2.21	
Multiple	220	16.26	2.42	5.66*
Total	400	16.85	2.53	

*Significant at .05 level, critical t = 1.96, df = 198

Result on Table 2 revealed that the computed t-value of 5.66 is higher than the important t-value of 1.96 at .05 level of significance with 398 degrees of freedom. With this result the negative hypothesis which stated that multiple sexual partnership does not significantly influence transmission of HIV/AIDs among women was rejected. This result therefore implies that multiple sexual partners significantly influence transmission of HIV/AIDs among women in Calabar Metropolis.

Keeping numerous sexual relations and transmission of HIV/AIDS among women in Calabar Metropolis

Result showed an influence in keeping multiple sexual partners and transmission of HIV among women. This is in line with Ogbuji, (2005); Emeka et al (2014) they stated that majority of individuals got infected through unsafe sex with some infected persons. Other modes of transmission are contaminated needles, blood and blood products of those infected. On focus group discussion at Lawrence Henshaw Memorial Hospital (LHMH), the finding revealed that both men and women actually maintained sexual network, especially women who are single and need men to survive. They become linked to each other through the people they have had sex with though not openly. HIV is transmitted among community members through this sexual networking and women become more vulnerable.

During FGD sessions in University of Calabar Teaching Hospital, it was the general expression among discussant that; women are involved in multiple sexual partnership (they have more than one sexual partners) they do not often use condom because condom reduces sensation without full satisfaction. Similarly, the discussants shared that most women/girls are involved in alcoholic consumption, drugs and smoking that heightens the possibility of HIV spread. From discussants at General Hospital further evidence points to the fact that having multiple sexual partners actually helped the women and young girls to sustain themselves in schools and their business. They were aware of the effect of unprotected sex, having multiple sexual partners but seem not to care much about the consequences leading to transmission of infection (STIs) such as syphilis and HIV transmission.

The implications of this to the study is that the level of awareness on the HIV spread should be increased and avoidance of dangerous behaviour, use of unsterilized needles, syringes, tattooing or piercing of ear loops, unscreened blood transfusion. They noted that risky behaviour such as smoking drugs and alcoholism should be stopped. Discussants also noted that lack of disclosure and poor HIV counseling and testing increases HIV transmission among women in this area. They further asserted that stigma and discrimination against women prevents disclosure of HIV status and prevent people coming out for HIV counseling and testing. Stigma is directly linked to gender perceptions of women. Stigma lead to increase HIV/AIDS spread due to effect of label accorded those with HIV.

Moreover, the position of the researcher is that adequate advocacy through awareness campaign to the public to avoid multiple sexual partners in this area. Emphasis on condom use consistently and correctly during sexual intercourse as well as HIV counseling and testing be made available to all persons. Those who tested negative to protect themselves while HIV positive to protect themselves from re-infection as well as love ones from being infected. This implies that multiple sexual partners, sexual violence and abuse, trafficking in women and young girls as well as Sexually Transmitted Infections (STTs) increases possibility of getting infected with HIV. Protecting right of women and ending prostitution and discrimination are the means of reducing women's vulnerability to HIV/AIDS.

5. Conclusion

Women vulnerability to HIV is complex problem, which is synergistically link to a number of factors such as poverty, keeping multiple sexual partners, women lack of access to credit (income), low social status of women, livelihood, insecurity and female circumcision. In male highly dominated societies where women issues and their say are typically "muted", they should be allowed to air their feelings as regards sexual matters such as use

of condom correctly and consistently and also microbicides which are major protective ways of stemming the tides of HIV among women in Calabar Metropolis. Even if they notice their partners' unfaithfulness, they cannot refuse casual sex or even negotiate condom use due to women's low social status, poor education and lack of good paying jobs.

Most importantly, women must be empowered economically, culturally, socially and increased access to education, health care services, with respect to their human rights for the fight against the epidemic to be sustained for it control. The world cannot solve its HIV problems without, once and for all, dealing with the patriarchal and human characteristics which produced it. The consensus is that the answer to the issue for women and AIDS is in radical restoration and changes in women's economic and social life. However, this study has reported some significant improvement to the field of Medical Sociology.

- That real transmission of HIV among women is a function of an integrative assembly of various variables such as poverty, lack of women's access to credit facilities, low social status of women, all culminating to livelihood insecurity and keeping of multiple sexual partners.
- The orientation of the girl- child upbringing in which they are taught early in life to be typically silence as regarding sexual discourse makes them to give preference to the satisfaction of their husbands without argument about sexual practice and are vulnerable to HIV infection. This is so because social vulnerability is nurtured as the society and community expect women to be passive in sexual relationship. It means that the less women are exposed to the presence of multiple partners through their primary male partner, the less the women's sexual decision-making (i.e. condom use and consensual intercourse) is compromised due to the social position.
- That HIV transmission among women goes beyond poverty to the colorful social and religious celebrations such as discos, cinemas, traditional dances, film shows, wedding parties, games and sports, traditional ceremonies, activities of spiritual churches. The sustenance of these celebrations is the social force energizing and fueling the spread of HIV/AIDS among women in Calabar Metropolis.

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References

1. Anyanwu, B. N. Nwaebu, F. C., Uchegbu, U. M. &Ugwuegbulam, J. N. (2006). Prevalence of sexually transmitted diseases (STDs) in Owerri, Nigeria. International Journal of Environmental Health Research. 6, 153 – 158.
2. Akani, C.I, Ojule, A. C, Opurum, H. C, John, C.T (2006) Seroprevalence of HIV antibodies in pregnant women in Port Harcourt, Nigeria. Nigeria Journal of Medicine 15(1) 44-48, doi:10.4314/njm.v15i1/37114
3. Agaba, P.A, Makai R, Bankat CT, Chebu P.R, Apena T, Iyaji-Paul O, Idoko J.A. (2016) Sexual behavior and risk factors for HIV infection among young people aged 15-24 years in North-Central Nigeria. Journal of Medicine in the Tropics; 18:60-7doi: 10.4103/2276-7096.19221
4. Brady, D. (2019) Theories of the causes of poverty. Annual Review of Sociology 45 (1) https://doi.org/10.1146/annurev-soc-073018-022550
5. Cattell, V. (2001) Poor people, poor places, and poor health: The mediating role of social networks and social capital. Social Science & Medicine. 52(10);1501–1516. doi:10.1016/s0277-9536(00)00259-8
6. Davis, E. P & Miguel, S. (2015) Economic theory of poverty. https://www.jrf.org.uk/report/economic-theories-poverty.
7. Dilger, H. (2003). Sexuality, AIDS and the lures of modernity: Reflexibility and

morality among young people in rural Tanzania. Medical Anthropology; 22: 23 - 52.
8. Emeka, N. I, Ibeh B.O, Ogbulie T.E (2014) High HIV sero-prevalence among students of institutions of higher education in Southeast Nigeria. Asian Pacific Journal of Tropical Disease, 4(2):159-165, doi: 10.1016/S2222-1808(14)60334-0
9. Emmanuel, G., Folayan, M.O., Ochonye, B. (2019)HIV sexual risk behavior and preferred HIV prevention service outlet by men who have sex with men in Nigeria. BMC Health Service Research 19(2), 261 - 269. doi.org/10.1186/s12913-019-4108-z
10. Ekanem, E.E, Afolabi B.M., Nuga A.O., Adebajo S.B. Sexual behavior, HIV-related knowledge and condom use by intra city commercial bus drivers and motor park attendants in Lagos, Nigeria. African Journal of Reproductive Health2005;9(1):78-87.
11. Erinosho, O, UcheIsiugo-Abanihe, Richard Joseph and Dike, N (2012) Persistence of Risky Sexual Behaviours and HIV/AIDS: Evidence from Qualitative Data in Three Nigerian Communities**.** African Journal of Reproductive Health / La Revue Africaine de la Santé Reproductive, 6 (1), 113-123
12. Federal Ministry of Health(2010). Technical report on baseline HIV/AIDS Sero-surveillance and incidence rates, risks and behaviour assessment amongst prison inmates, staff of the paramilitary services and the FMIA, Abuja.
13. Gray B. (2003) Social exclusion, poverty, health and social care in tower hamlets: The perspectives of families on the impact of family support service. British Journal of Social Work. 33:361–380.
14. Johnson, C. K & Mason, P.L (2012) Theories of poverty: Traditional explanations and New directions. The Oxford Handbook of Economics of poverty. https://www.oxfordhandbooks.com/view/10.1093
15. National Agency for The Control of AIDS (2016) Fact sheet: Women, girls and gender equality and HIV in Nigeria. http://naca.gov.ng
16. National Agency for The Control of AIDS (2013) Mini prevalence package intervention: a simple implementation guide. http://naca.gov.ng
17. Oyefara, J.C. (2013)Food insecurity, HIV/AIDS pandemic and sexual behavior of female commercial sex workers in Lagos metropolis, Nigeria. Journal of Social Aspects of HIV/AIDS;4(2):626–635.doi:10.1080/17290376.2007.9724884
18. Oyefara, L.J, (2013) Sexual Behavior, HIV/AIDS Epidemic and Sustainable Development in Nigeria: A Gender Perspective. Reproductive Health Studies, 4 (3) 141 -149, doi: 10.5296/jsr.v4i1.3386
19. Ogbuji C.O. (2005) Knowledge about HIV/AIDS and sexual practice among University of Ibadan students. African Journal of Medicine & Science ;34(1):25-31.
20. Oladapo O.T., Sule-Odu A.O., Daniel O.J., Fakoya T.A. (2005) Sexual behavior and contraceptive practice among future doctors in southwest Nigeria. Journal of Obstetrics and Gynaecology;25(1):44-8
21. Onoja, A. J., Nasidi, A., Abu, A., Braimoh, G., Inyang, U. &Wambabe, C. (2004). HIV-1 Sero prevalence and incidence among commercial sex workers in three major Nigerian cities international conference on AIDS, wEpeC62 18.
22. Sen, A. K (2005). Human rights and capabilities. Journal of Human Development.6 (2): 151–166. doi:10.1080/14649880500120491.
23. Smith, D. J. (2017). Modern marriage, men's extramarital sex and HIV risk in Southern Eastern Nigeria, American Journal of Public Health, 97, 6, 997 - 1005.
24. Shur, E. (2009). Sexuality, condom use and gender norms among Brazilian Teenagers Reproductive Health Matters 2(1): 22-31.
25. Sivard, R. L., A. Braver and R. Cook (1995). Women: Women and AIDS in a World Survey, Washington, D.C.: World Priorities. A Paper presented at workshop on Infection Diseases: Ecological and Economic Approaches ICTP, Trieste. Italy: 13-15. unpublished Paper.
26. Subramanian, S.V, &Kawachi, I. (2004) Income inequality and health: What have

we learned so far? Epidemiologic Reviews. 26:78–91. doi: 10.1093/epirev/mxh003
27. Udoh I. A, Mantell,J. E, Sandfort, T, and Eighmy,T.(2009)Potential pathways to HIV/AIDS transmission in the Niger Delta of Nigeria: Poverty, migration and commercial sex.AIDS Care. 21(5): 567–574. doi: 10.1080/09540120802301840
28. UNAIDS (2017). Report on the Global epidemic: Retrieved on May 20, from http:// www. unAIDS. org/ en/ knowledge. center/HIV Data/Global Report.
29. UNAIDS/UNFPA/UNIFEM (2012). Young women and the HIV Epidemic", Development Journal of the Society for International Development 1(2): 16-19.
30. UNDP. (2016) Niger Delta human development report, Nigeria.. [Retrieved October 31, 2019]. from http://web.ng.undp.org/documents/nigeria-delta-hdr.pdf.
31. WHO (2010). AIDS epidemic update [Retrieved Dec 23, 2019]. from http://data.unaids.org/pub/EPISlides/2007/2007_epiupdate_en.pdf
32. WHO (2008). Towards Universal Access: Scaling up priority HIV/AIDS intervention in the health sector. Progress Report, Geneva.
33. WHO (2007). World Health Organization Commission on Social Determinants, Achieving health equity – from root causes to fair outcomes, Geneva, Switzerland: http://who/whglibdoc.who.int/publications/2007/interimstatement.
34. WHO, UNAIDS, UNICEF (2008). Towards Universal access. Scaling up priority HIV/AIDS interventions in the health sector, progress Report Geneva; WHO.
35. Yamanis, T. J, Maman, S, Mbwambo, J.K, Kajuala, L (2010) Social venues that protect against and promote HIV risk for young men in Tanzania. Social Science & Medicine. 1(7) 1601-1609 doi:10.1016/j.socsci med.2010.07.039