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Sociodemographics Characteristics Of Hiv/Aids Patients Attending Hiv Clinics In A Tertiary Health Facility In South-South, Nigeria: A 10 Years Retrospective Study.

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Abstract
Background: *in 2018, african region was worst hit with 25.7 million people living with hiv and in nigeria an estimated 1.9 million people living with hiv. Socio-demographic factors point to important predictors of hiv infection as has been well documented. These factors highlight trends in the pattern of spread of the disease and in turn aid policy and planning.*
Objective: *the aim of this study is to assess the socio-demographic factors among people living with hiv in federal medical centre, asaba.*
Methodology: *this was a hospital-based retrospective cross-sectional record review from january 2009 to december 2018, carried out in the hiv/aids programme at the department of public health. Data were collected from case notes of 1788 plhiv managed for hiv/aids using a proforma. To describe their socio-demographics and adherence level to treatment, analyzed with ibm statistical product and service solutions (spss) version 20. Results were presented as percentages, mean, standard deviation*
Results: *a greater proportion 726 (40.6%) of the patients were in the age group of 30 -39.9 years with a mean age of 37.40 ± 10.12 years, the female patients were 1281 (71.6%) and males 507 (28.4%). One thousand two hundred and fourteen (67.9%) of the patients had secondary level of education, 360 (20.1%) had tertiary education and1275 (71.3%) of the patients were married,*
Conclusion: *among the socio-demographics characteristics of our patients elicited are been female, married, having a secondary level of education and been self-employed.*
Keywords: *sociodemographic characteristics, hiv/aids, patients, tertiary facility, nigeria.*

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I. Introduction

Human immunodeficiency virus (hiv) is a virus that attacks and eventually destroys the body's immune system if left to run its course. Infection with the virus results in a chronic disease with considerable morbidity and mortality. Since the first cases were reported in 1981, there have been reputable advancements in the holistic care of people living with the disease globally.

In 2018, 37.9 million people were living with hiv/aids out of which 36.2 million were adults.[1] of this global population, the african region is worst hit with 25.7 million people living with hiv in 2018 and accounting for almost two-thirds of the global total of new hiv infections.[2] hiv has been a major public health menace in this region.

Hiv prevalence varies greatly within countries, between countries, and amongst various sub-regions owing to various factors. Demographic factors point to important predictors of hiv infection as has been well documented. These factors highlight trends in the pattern of the spread of the disease and in turn aid policy and planning.

Several studies have shown that the population of women affected by the disease is much higher than their male counterparts and the disease is in fact highest in black african females.[3,4,5] in south africa where the burden of disease is highest globally, the 2012 national survey indicated a prevalence of 14.4% among females as compared to 9.9% among males.[3] tenkorang in his study on marriage, widowhood, divorce, and hiv risks among women in sub-saharan africa mentioned that women aged 15-24 are about eight times more likely to be hiv positive than their male counterparts[6] while a study in lagos, nigeria concluded that females now have twice the disease burden than males.[7]

Socioculturally, data from south africa posit higher rates of infection among unmarried when compared to married people.[3] this is supported by another study in kenya where it was found that marital dissolution is associated with elevated risks of hiv infection.[8] in four national hiv surveys conducted in south africa, black africans had the highest prevalence of the disease compared to other races.[5] regarding education as an influence on serostatus, two studies in nigeria noted that the bulk of study participants were those with secondary levels of education.[7,9]

Socioeconomic factors are well documented in propagating the spread of hiv as evidenced by the sheer amount of people living with hiv in sub-saharan africa. Poverty which is widespread in this region predisposes to transactional sex thereby contributing to the disparity in the female-to-male ratio of hiv-positive individuals in the region.[10]

Nigeria recently reported a national hiv prevalence of 1.4% among adults aged 15-49 years which is an improvement on previous estimates of prevalence at 2.8%.[11] an estimated 1.9 million people are living with hiv in the country with women twice as likely to live with the disease than men.[12] the decrease in prevalence rates shows that there is progress being made in increasing accessibility to art for people living with hiv. The epidemic has more impact in certain areas of the nation with the south-south zone of the country having the highest prevalence (3.1%) among adults aged 15-49 years and the north west zone having the least prevalence (0.6%).[11] nigeria has a mixed epidemic pattern driven by key population groups which include female sex workers, men who have sex with men and people who inject drugs. These key population groups together with their partners make up an estimated 3.4% of the adult population and account for 40% of new hiv infections.[12]

Delta state which is our study area and a prominent south-south state ranked 8th with a prevalence rate of 1.9% amongst the 36 states and federal capital territory in nigeria.[13] this falls within the medium prevalence states which include rates between 1.0 -1.9%.

Owing to the global economic and health impacts of the hiv epidemic, there has been a continuous need to identify, monitor, and evaluate several factors that can predispose to the increased incidence and prevalence of the disease. As has already been established, demographic and socio-economic indices point to several areas of associations that enable the spread of this epidemic. Therefore, the importance of studying these factors to ensure better healthcare delivery, planning, distribution of resources, and strategic interventions cannot be overemphasized. These studies have been effectively carried out in several states but not much has been done in asaba, delta state.

The objective of this study is therefore to assess the socio-demographic factors among people living with hiv in federal medical centre, asaba in a bid to draw up possible plans of action in curbing the propagation of the disease and reducing susceptibility to infection. This study also aims to add to existing literature from other states in the country.

II. Materials and methods

Study area

The study was carried out in the federal medical centre, asaba, delta state. Federal medical centre asaba, is a tertiary health institution established by the federal government of nigeria in 1998. It is a 350 bedded hospital and has the highest patient attendance in the state[1]. It provides primary, secondary, and tertiary health care services as well as serving as a referral centre for people in the state and neighboring states of anambra, edo and kogi. The centre offers services in all clinical specialties; laboratory medicine, obstetrics and gynaecology, internal medicine, surgery, family medicine, radiology, paediatrics, social/welfare as well as public health. The public health department runs the endemic disease clinics which consist of the hiv, viral haemorrhagic fever (vhfs), and tuberculosis clinics among others, these clinics run weekly with an average of 100 old cases and 3 to 5 new cases for retroviral disease per week and manned by specialist consultants, medical officers, resident doctors, nurses, counselors, and other staff.

Study design

A retrospective study design was carried out using data from january 2009 to december 2018.

Study population

The study population was made up of patients attending the hiv public health clinic of federal medical centre, asaba, delta state, and those who had not received antiretroviral therapy were excluded from the study.

Inclusion criteria

1. Retroviral disease patients
2. Attending and receiving treatment at federal medical centre, asaba

Exclusion criteria
1. Those patients who are not retroviral disease patients
2. Not receiving treatment at federal medical centre, asaba

Sample size calculation and sampling method

The total population of positive retroviral patients who attended and accessed care from the clinic from january 2009 through to december 2018 and met the inclusion criteria.

Data collection

Data for the survey was collected by the researchers using patients' case files from 2009 through to 2018 and also the computerized data spreadsheet for the department from 2009 through to 2018.

Information was sought for the socio-demographics of age, sex, educational status, marital status, occupation, religion, and adherence status of the respondents. The occupation of the patients in this study, were categorized into business (self-employed), civil servants (employed by government), unemployed (not doing anything to or having to generate income), farming, students, banking, and retired.

Data analysis

The data collated from the case files of the patients was screened for completeness by the researchers, coded, and entered into the ibm statistical product and service solutions (spss) version 20.0 software. Data such as, educational status was presented as percentages while continuous variable that are normal in distribution (such as age) was expressed as mean ± standard deviation. Discrete data was expressed as proportions.

Ethical considerations

Ethical clearance to conduct this research was sought and obtained from the research and ethics committee of the federal medical centre, asaba. Permission was also sought from the head of the department of public health. Written informed consent was obtained from the implementing partners before conducting the research. Confidentiality and privacy of the patients was respected during the study. Health education on the importance of socio-demographics and adherence of hiv patients was carried out when appropriate during the study and at the end of the study.

Study limitation

The study was limited only to the information available in each patient's file and data spreadsheet and was presented accordingly.

Risks: there was no risk associated with this research survey.

Benefits: patients that were found to be ill during the assessment of the spread sheet were referred to appropriate clinics for further consultation and therapy. Health education was also carried out when appropriate during the study and at the end of the study.

Confidentiality: all information obtained in the course of the survey was treated confidentially. The names of the patients were not written out or anywhere. Every information obtained during the research was coded in a file on the personal computer of the principal investigator and pass-worded.

III. Results

Table 1: age group of the patients

Age group (years)	Frequency (1788)	Percent (%)
0 – 17.9	7	0.4
18.0 – 29.9	396	22.1
30.0 – 39.9	726	40.6
40.0 – 49.9	432	24.2
50.0 – 59.9	177	9.9
60.0 – 69.9	41	2.3
> 70	9	0.5

The mean age of patients 37.40 ± 10.12 years

A greater proportion 726 (40.6%) of the patients were in the age group of 30 -39.9 years, followed by patients in the 40.0 – 49.9 years age group with 432 (24.2%).

Table 2: sex of the patients

Sex of patients	Frequency (1788)	Percent (%)
Male	507	28.4
Female	1281	71.6

The female patients were 1281 (71.6%) and males 507 (28.4%).

Table 3: educational status of the patients

Educational status of patients	Frequency (1788)	Percent (%)
None	32	1.8
Primary	182	10.2
Secondary	1214	67.9
Tertiary	360	20.1

One thousand two hundred and fourteen (67.9%) of the patients had a secondary level of education, 360 (20.1%) had tertiary education, 182 (10.2%) had primary education and 32 (1.8%) had no form of education.

Table 4: marital status of the patients

Marital status of patients	Frequency (1788)	Percent (%)
Married	1275	71.3
Single	405	22.7
Widowed	83	4.6
Divorced	17	1.0
Separated	8	0.4

A greater proportion 1275 (71.3%) of the patients were married, 405 (22.7%) of the patients were single, 83 (4.6%) were widowed and 17 (1.0%) were divorced.

Table 5: religion of the patients

Religion of patients	Frequency (1788)	Percent (%)
Christianity	1775	99.3
Islam	13	0.7

Almost all 1775 (99.3%) patients were christians.

Table 6: occupation of patients

Occupation of patients	Frequency (1788)	Percent (%)
Small businesses (self-employed)	1155	64.6
Civil servant (government employed)	361	20.1
Unemployed	164	9.2
Students	55	3.1
Farming	49	2.7
Banking	3	0.2
Retired	1	0.1

More 1155 (64.6%) of the patients were self-employed, 361 (20.1%) were government employed, 164 (9.2%) were unemployed and 55 (3.1%) were students.

Table 7: adherence status of the patients

Adherence state of patients	Frequency (1788)	Percent (%)
Good	1714	95.9
Fair	74	4.1

One thousand seven hundred and fourteen (95.9%) had good adherence status, while 74 (4.1%) had fair adherence status.

Table 8: distribution by age, marital status, occupation, and sex of patients

Variables	Sex of patients	
	Female Freq (%)	male freq (%)
Age (in years)		
0.0-17.99	3 (0.1)	4 (0.2)
18.00-29.99	338 (18.9)	58 (3.3)
30.00-39.99	550 (30.8)	176 (9.8)
40.00-49.99	257 (14.4)	175 (9.8)
50.00-59.99	106 (5.9)	71 (4.0)
60.00-69.99	21 (1.2)	20 (1.1)
>70	6 (0.3)	3 (0.2)

Total	1281(71.6)	507 (28.4)
Marital status		
Married	891(49.8)	384 (21.5)
Single	293 (16.4)	112 (6.3)
Widowed	72 (4.0)	11(0.6)
Divorced	17 (1.0)	0 (0.0)
Separated	8 (0.4)	0 (0.0)
Total	1281 (71.6)	507 (28.4)
Occupation of patients		
Self-employed	834 (46.6)	321 (17.95)
Civil servant	239 (13.4)	122 (6.8)
Unemployed	144 (8.1)	20 (1.1)
Students	31 (1.73)	24 (1.34)
Farming	31 (1.73)	18 (1.0)
Banking	2 (0.11)	1 (0.1)
Retired	0 (0.0)	1 (0.1)
Total	1281 (71.6)	507 (28.4)

More 550 (30.8%) of the total patients who were females were in the age group of 30 39.9 years, also a greater proportion of the singles were females with 293 (16.4%) and more females 834 (46.6%) were self-employed and 114 (8.1%) unemployed.

IV. Discussion

A total of 1,788 eligible patients were part of our study, a greater proportion of the patients were females compared to males. This finding was in keeping with numerous findings from previous studies[3,4,6,7], giving credence to more of the female population being exposed to the hiv infection. Chijioke and akani[9] in their study on the socio-demographic profile of people living with hiv/aids (plwas) in port harcourt, nigeria also lay credence to the fact that females have a higher prevalence of the infection due to higher vulnerability and infections. Supported by the world health organization consolidated guidelines on hiv prevention, diagnosis, treatment, and care for key populations on the higher genital organ surface exposure of the females and the high concentration of hiv in the male semen[14].

To further support our findings of a higher prevalence of the infection among females, were the findings from the study by eric tenkorang, on marriage, widowhood, divorce, and hiv risks among women in sub-saharan africa[6], of women being 8 times more likely to be infected with hiv compared to the males. This could also possibly be due to the early sexual debut of females and the low bargaining sexual power of women, the nigeria demographic and health survey 2018[17] and the multiple indicator cluster survey 2022[18] also support this. Other possible factors could be that more females are exposed to having the infection due to their type of occupation as demonstrated in our study, in which you have more in self-employment, which could be associated with frequent movement from one location to another, in search of big opportunities and possibilities of business expansion.

In the course of this they could be sexually exposed to unprotected sexual activities and multiple partners, as studies have revealed the low use of contraceptives (condoms) by sexually active females compared to males.[17-19] a greater proportion of the females were also divorced, unemployed, and students, these are socio-demographic characteristics that have been shown to further expose females to contracting and getting infected with hiv infection due to upward mobility in search of greener pastures and economic survival. More females having the infection predispose to further spread of the infection, through mother-to-child transmission and risky sexual behaviors, the more reasons why preventive and control measures should be channeled more towards females of reproductive age.

The mean age of our patients was 37.40 ± 10.12 years, in addition to a greater proportion of the patients being in the age group of 30 -39.9 years. This finding was in tandem with findings from other studies in africa and nigeria[9], narhs plus ii 2012 report[19], that hiv/aids was highest in the age group 30.0 – 34.0 years in the urban regions and 30.0 – 39.0 years respectively. These findings are similar to a review in nigeria and national reproductive and health survey 2012 (plus ii)[19], which showed a high prevalence among 35-39 years age group not only are people in this age group sexually active but are also highly mobile. This age group was similar to that found in the ethiopian study but differed in findings from studies in nigeria northern region by ibrahim et al[15] and from south africa[16], which found a high prevalence's among younger age group of 30 years and below.

More than 2/4th of the total patients who were females were in the age group of 30.0 - 39.9 years, this was not surprising as at the time (more than 10 years ago) when this data was documented, this was the age group in which the hiv infection was most burdened. This age group was not only sexually active but also falls within the reproductive age group. Compounded with many sociocultural and economic factors such as poor knowledge of the disease, poor attitude, safe sexual practices, child marriages, wife inheritance, and fear of stigmatization and discrimination, it was no wonder the prevalence of the infection was high among women.

A huge proportion of our patients were married, this was in tandem with findings from another study in ethiopia on the burden of fatigue among adults living with hiv/aids attending antiretroviral therapy in ethiopia[20]. A possible reason for this huge number of married patients in our study could be an ongoing infection and reinfection among couples. Male partners would have been infected by their wives/partners, women in africa tradition are trustworthy, respect their husbands/partners and might not be able to question their fidelity or think about the use of contraceptive measures to prevent sti/hiv preventive measures in the sanctity of their union or marriage.

Another possible negative aspect of this would be the increase in transmission from mother to child of the infection and on the other hand this could have been a plus in the facility. Given that the possibility of couples from same marriages and homes attending and accessing healthcare (haart) services cannot be ruled out. This would have gone a long way in improving knowledge, attitude and practice with regard to the hiv infection and prevention. Thus, reducing the transmission of the infection from mother-to-child, in the long run helps to reduce the incidence of the infection, better quality of life for the patients, and the society at large, and helps with meeting the mdgs and ultimately the sdgs.

Our study also showed that a greater proportion of the singles were females with 293 (16.4%), this could result in indulging in risky sexual behavior such as unprotected sexual activities, unwanted pregnancies, and termination of unwanted pregnancies, which could in turn result in the spread of the infection. The fact that our study showed that almost all the patients were christians was in tandem with findings from other studies carried out in this part of the country, because in the southern part of the country where this study was carried out the religion practiced is christianity.

More than 2/3rd of our study patients had a secondary level of education, this finding was also in keeping with findings from other studies in nigeria, which noted that the bulk of study participants were those with secondary level of education.[7,9] a minimum of secondary education has been shown to impact positively on health knowledge and health-seeking behaviuor. The ndhs 2018[17] reports, that a minimum of a secondary level of education attained by a female member of a family would impact positively on the health of the family.

In addition more than 1/5th of the patients had a tertiary level of education, the combination of these would have impacted positively on the adherence level of these patients. The adherence of these patients was over 95.0%, this is no small feat because good adherence of over 95.0% will surely result in virological suppression and improved immunity. This would possibly decrease the chances of the patients having and coming down with opportunistic infections and this would in the long run reduce hospitalization, hospital stays and out of pockets health spending.

In conclusion, our study found that the socio-demographic characteristics associated with plhiv infection, are more of females infected, mainly among the married and singles, the self-employed and patients with a secondary level of education. We strongly recommend that knowledge of, preventive and control measures of hiv/aids by the government, non-governmental organizations (ngos) and health institutions should be more towards females, while leveraging on the level of education for better adherence to treatment and reduced incidence of the infection.

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References

[1]. Global Hiv & Aids Statistics-2019 Fact Sheet. Https://Www.Unaids.Org/En/Resources/Fact-Sheet Accessed 2020, January 18.
[2]. Hiv/Aids/Who Regional Office For Africa. Https://Www.Afro.Who.Int/Health-Topics/Hivaids Accessed 2020, January 18.
[3]. Shisana O, Rehle T, Simbayi Lc, Zuma K, Jooste S, Zungu N, Et Al. South African National Hiv Prevalence, Incidence And Behavior Survey, 2012. Cape Town: Hsrc Press; 2014.
[4]. Harrison A, Colvin Cj, Kuo C, Swartz A, Lurie M. Sustained High Hiv Incidence In Young Women In Southern Africa: Social, Behavioral, And Structural Factors And Emerging Intervention Approaches. Curr Hiv/Aids Rep. 2015;12(2):207–15.
[5]. Mabaso, M., Makola, L., Naidoo, I. Et Al. Hiv Prevalence In South Africa Through Gender And Racial Lenses: Results From The 2012 Population-Based National Household Survey. Int J Equity Health. 2019;18: 167doi:10.1186/S12939-019-1055-6
[6]. Tenkorang E Y. Marriage, Widowhood, Divorce, And Hiv Risks Among Women In Sub-Saharan Africa, *International Health*. 2014; 6(1): 46-53. Https://Doi.Org/10.1093/Inthealth/Ihu003
[7]. Jinadu My, Aghahowa Ee, Ogunsina Oo, Musa Za. "Current Sociodemographics Of Hiv Infected Adults In Lagos, Nigeria". Acta Scientific Microbiology. 20181(2): 21-23.
[8]. Madise Nj, Ziraba Ak, Inungu J, Et Al. Are Slum Dwellers At Heightened Risk Of Hiv Infection Than Other Urban Residents? Evidence From Population-Based Hiv Prevalence Surveys In Kenya. Health Place. 2012;18(5):1144–1152. Doi:10.1016/J.Healthplace.2012.04.003
[9]. Chijioke-Nwauche I, Akani Y. Sociodemographic Profile Of People Living With Hiv/Aids (Plwas) In Port Harcourt, Nigeria. The Nigerian Health Journal. 2014; 14(3):119-125. Https://Www.Tnhjph.Com/Index.Php/Tnhj/Article/View/169. Accessed 04/01/2022
[10]. Stoebenau K, Heise L, Wamoyi J, Bobrova N. Revisiting The Understanding Of "Transactional Sex" In Sub-Saharan Africa: A Review And Synthesis Of The Literature. Social Science & Medicine. 2016; 168:186-197.
[11]. Unaids. 2019 Press Release.
[12]. Https://Www.Unaids.Org/En/Resources/Presscentre/Pressreleaseandstatementarchive/2019/March/20190314_Nigeria
[13]. Revised National Hiv And Aids Strategic Framework 2019-2021. National Agency For The Control Of Aids.