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Prevalence of Human Immunodeficiency Virus (HIV) among antenatal clients who used federal medical centre Umuahia 2009-2013

Amah HC.[1], Ozims S.J.[2], Eberendu I.F.[3], Agu G.C.[3], Ihekaire D.E.[3], Obioma-Elemba J.E.[3], Obasi C.C[2]., Uchegbu U.[4], Amah C.C.[1], Ibanga I.E[5]., Nwosu D.C.[1], and Nwogu O.[2]

[1]Department of Medical Laboratory Science, Faculty of Health Sciences, Imo, Imo State University, Owerri, Nigeria.
[2]Department of Public Health, Faculty of Health Sciences, Imo State University, Owerri, Nigeria.
[3]Department of Optometry, Faculty of Health Science, Imo, Imo State University, Owerri, Nigeria.
[4]Department of Medical Microbiology, Federal Medical Centre, Owerri, Nigeria.
[5]Department of Chemical Pathology, Federal School of Medical Laboratory Science, Jos, Nigeria

Abstract

This study was carried out to determine the prevalence of Human Immune Deficiency Virus (HIV) among antenatal clients. Who used Federal Medical Centre Umuahia from 2009-2013. to direct the study, five research questions were used and five hypotheses were tested. Related literatures were reviewed and summarized. The descriptive survey research design was used for the study. The area of the study was Federal Medical Centre (FMC) Umuahia in Abia State and the target population considered all the antenatal clients (between the year 200-2013) of Federal Medical Centre Umuahia with four thousand four hundred and seventy antenatal client while the sample size 447 which is about ten (10) percent of the population of the selected clients. A direct interview was used as an instrument for data collection and data collected were analyzed using frequency count percentage for research questions and inferential statistics of Chi Square (x^2) was used in testing the null hypotheses. The prevalence of Human Immune Deficiency Virus (HIV) among antenatal Clients who used Federal Medical Centre Umuahia from 2009-2013 was four thousand, four hundred and seventy. The highest prevalence was in 2010. The lowest prevalence was in 2009. Type II HIV revealed a higher prevalence than type II. Prevalence of HIV was influenced by age and parity status significant difference in the prevalence of Human Immune deficiency virus (HIV) among antenatal clients of various ages, various level of education, parity status, HIV by type. The researcher made recommendations such as all institutions should study their own HIV prevalence rate to raise a consciousness of practice of universal precautions and also to serve as bases for further studies. Voluntary HIV counseling and testing is to be preferred to routine testing to prevent stigmatization and discrimination of positive clients through seminar and education of clients.

Keywords: Prevalence, Human Immunodeficiency Virus, Antenatal clients, Federal Medical Centre Umuahia

Introduction

The history of HIV and AIDS is a short one as recently as the 1970's, no one was aware of this deadly illness. Since then the global HIV/AIDS epidemic has become one of the greatest threats to human health and development (www.avert.org/global-hiv-aids-epide). There is now conclusive evidence that HIV originated in Africa. A ten-year study completed in 2003 revealed a strain of simian immunodeficiency virus (SIV) in a number of chimpanzee colonies in south-east Cameroon that was a viral ancestor of the HIV-1 that causes AIDS in humans. A complete computer model of the evolution of HIV-1 has suggested that the first transfer of (SIV) to humans occurred around 1980's with HIV-2 transferring from monkeys found in Guinea- Bissau at the same point in the 1940's(UNAID, 2009). Experts studying the spread of the Epidemic in 1959 opined that stored blood samples from an American malaria research project carried out in Congo proved one of such examples of early HIV infection. However, the acceleration spread .was due to a combination of wide spread labour migration, high ratio of men in the urban populations, low status of women, lack of circumcision and prevalence of sexually transmitted infections. It is thought that sex workers played a large part in tie accelerated transmission rate in the world for example 85 percent sea wovers were infected with HIV in 1986 (healthlahd.time.com).

It is observed that West Africans had generally high levels of infection of lot" HIV- 1 and HIV-2. In time past, 'the devastating epidemic was thought to be an infective agent probably a virus very little was known about transmission and public anxiety was high. There were numerous misconceptions with people thinking that you can get HIV through an apple an orange or an injection or anything or a fat' perform do not have HIV can be transmitted through looking at a person (UNAIDS 2010).

Additionally, confusion with other diseases such as malaria led to over estimation of the transmissibility of HIV and added to fears surrounding the wir-5. Fear quickly bred, stigma towards those infected with HIV stigma was often related to the association of HIV with prostitution, promiscuity, and high-risk, life styles (UNAID 2010).

In the early days, when it first came, it was a disease for prostitutes because not much was known about HIV/AIDS in the mid - 1980's. People were not often aware that they were infected with HIV until they have progressed to the final stages of the disease when death was often imminent. This fact coupled with lack of any effective prevention therapies or treatment, meant that there was an involuntary reaction to be tested for the virus. With a few notable exceptions, the previous situation of HIV/AI*DS* where characterized by insufficient responds to AIDS in Africa.

As there was no or cure for HIV infection or AIDS in time past, government strategies had to focus on prevention. Preventions efforts often include encouraging people to revise their sexual behavior by abstaining from sex delaying in first sex, being faithful to one faithful-partner or using condoms consistently and correctly (UNAID 2009).

In 1983, Uganda AIDS control programme formulated a five-year plan with e Assistance of the World Health Organization (WHO). The plan was later ace a model for Africa and recovered more than €20millon donors funding. The main principle for the campaign was openness and frankness. Other African nations did not respond to the HIV/AIDS epidemic so positive, also the world health organization was slow to respond to the HIV/AIDS epidemic in Africa as it contended that Aids was not primary health care concern in the region. Realizing quickly the accuracy of this statement made the world health organization programmed for fight against AIDS to be swiftly put into action and aimed to raise $1.5 billion a year by the end of the decade to help prevention and education effort with priority to Africa. However, in 1996, the effective combination thereby crown as HAART.

It became available for those living with HIV In rich countries. The new drugs were so effective that AIDS death rate reduced in developed Gentries by 84% over the next four years. Another medical advancement was discovered in 1994, that the antiretroviral drugs Zidovudine (AZT) could reduce mother to child transmission by two thirds, (UNAID, 2010).

In recent years, considerable energy and money have been spent trying to ac-eve universal access to treatment for HIV. This provides universal access (15 million people on treatment) by 2015, as agreed in 2010 (www.avert.org/universal.access.hiv).

Nevertheless, with the effort made so far in combating with HIV/AIDS. There is still hope for the hopeless the result of the study released in 2012 involving 14 French living with HIV are over indicator that a functional care for -:v may be possible. The people involved are known as the "viscouticorory" started taking antiviral as soon after they became infected. After three years of indication they stop taking antiretrovirai (ARVS) which should result in the HIV infections resurging. However, they stop taking medication, and got remain with low level of virus in their system for an average of seven years.

More, recently the potential benefit of a function has been seen in two newly, born babies. In March 2013, researches announced a Mississippi baby born with HIV that was given high dose of three antiviral drugs shortly after delivery appeared to be functionally cured to years on.

Similarly, in March, 2014 it was reported that a nine months baby born in California with HIV may have been functionally cured as a result of antiviral (din; treatment, that doctor administered just four hours after birth. However, much more researches are needed to established such method as or universally variable life long cure (www.avertorg/curve-aids.htm).

Prior to the fight against Human Immune Deficiency Virus (HIV) the cassation agent of Acquired Immune Deficiency Syndrome (AIDS). Pregnant women are universally the most common sentinel population for HIV. In 2012, over 35million people worldwide are living with HIV and almost half of these people were women in their reproductive years (UNAIDS, 2012).

Human Immune Deficiency Virus (HIV) infection among antenatal clients become one of the commonest medical problems in pregnancy (John Stone, 2009). Most women and children infected with HIV are in developing countries (UNAIDS 2012). This has a lot of implications for our obstetric practice. Obstetrics practice in area of high prevalence must therefore:

(a) enable women to be tested and to use these results to manage them.
(b) utilize appropriate measures to reduce the rate of mother to child transmission which account for 90% of infection in children (UNAIDS,2012).
(c) train and educate staff on universal precautions to prevent nosocromial transmission of (HIV) prevalence in antenatal clients, routine HIV screening has been recommended (Stone 2010).

In Nigeria, it is estimated that 220, 000 children are living with HIV and 90% are from mother-to-child transmission (MTCT). The preventions of mother-to-child transmission(MCTT) has helped to reduce mother-to-child transmission (MTCT), of HIV from as high as 30%-45% to less than 20% due to the single body antibody test.

However, in the absence of reliable data antenatally, HIV surveillance has been used to monitor the HIV epidemic. Currently, routine data from prevention of mother to child transmission (PMTCT) are increasingly. The overall antenatal surveillance data shows that the HIV among antenatal attendees had decline from 12.4% in 2003 to 5.5% in 2009 (www.biomedcentral.com). Notwithstanding the level of prevalence among HIV antenatal mothers, the challenge tends to be poor antenatal testing among pregnant women including absence of pre-natal care as well as fear of stigma and inadequate counseling experiences (bulleting of 3 Health Organization, (WHO 2010).

Aim of the Study

The main purpose of the study was to determine the prevalence of Human Immune Deficiency Virus (HIV) among antenatal clients who used Federal Medical Centre Umuahia from 2009-2013.

Materials and Methods

Research Design

The research design that was used for this study was the descriptive survey research design.

Area of the Study

The area of the study was Federal Medical Centre Umuahia in Abia State.

Population of Study

The population of the study comprises all pregnant women that came for antenatal care in federal medical centre Umuahia with an estimated population of four thousand four hundred and seventy (4,470) antenatal clients.

Sample and Sampling Techniques

There was no sample and sampling techniques, this was suggested by.

Instrument for Data Collection

The instrument that was used for data collection was self developed Data Collection Schedule Form (DCSF)

Method of Data Collection

In order to gain access into the hospitals for the use of screening test records, the researcher, reported first to all the heads of department of medical services with a letter of introduction before being allowed to obtain the required information from the record books of HIV/AIDS clients from 2009-2012.

Method of Data Analysis

The data were arranged and analyzed using descriptive statistics of frequency counts, percentage, and inferential statistics of chi-square. The formular that was used for the chi-square analysis was.

$x_2 \_ \sum(O_I - eI)^2$

A —

Where 0 = Observed frequency

E = Expected

The level of significance of the test will be at 0.05 reactions to be performed for some duration is order to meet self requites by using by valid methods and related methods and related set of operations and action.

Results

TABLE 1: Prevalence of HIV among antenatal clients who used FMG Umuahia from 2009-2013

YEAR	HIV	%
2009	180	31%
2010	1047	23%
2011	837	19%
2012	751	17%
2013	455	10%
Total	**4470**	**100%**

The table above reveals that from 2009 to 2013, there is prevalence of 4470 cases of HIV/AIDS among antenatal clients who used FMC Umuahia from 2009-2013. The table show that HIV/AIDS prevalence fluctuates. Isalso shows that HIV/AIDS prevalence of 1380 cases of 2009 decline in2010 1047. The prevalence declined by 8% and 9% from 2011 to 2013respectively.

TABLE 2: Prevalence of HIV/AIDS by types among antenatal clients who used FMC Umuahia from 2009-2013.

YEAR	TYPE1	TYPE 2	TOTAL	%
2009	780(17.6%)	600(13.44%)	1380	31%
2010	564 (12.6%)	483 (10.4%)	1047	23%
2011	570 (13.1%)	267(5.9%)	837	19%
2012	405 (9.0%)	346 (8.0%)	751	17%
2013	240 (5.4%)	215 (4.2%)	455	10%
TOTAL	2559 (57.7%)	1911 (42.3%)	4470	100%

(The figure in parentheses are the percentages).

TABLE 2: Presents the prevalence of HIV among antenatal clients who used -FMC Umuahia from 20.09-2013. From the table prevalence of HIV among antenatal clients is dominated by type 1, which has a relative proportion of 57.7% against type 2 which has a predominant proportion of 42.3%. However type 1 decline from 2009 to 2010 by 5% and rise by 0.5% in' 2011 before it gradually falls. Type 2 however declines between 2009 to 2011 and rise between 2011 to 2012 and declines in 2013.

TABLE 3: Prevalence of HIV among antenatal clients who used FMC Umuahia from 2009- 2013 by age.

AGE	**YEAR 2009**	**YEAR 2010**	**YEAR 2011**	**YEAR 2012**	**YEAR 2013**	**TOTAL**	**%**
Less	**223(5.0%)**	**170(3.8%)**	**120(2.7%)**	**118(2.6%)**	**104(2.3%)**	**735**	**16.4%**
than 20yrs							
20-29 yrs	601(13.4%)	435(9.8%)	268(6.0%)	259(5.8%)	82(1.8%)	1645	36.8%
30-39 yrs	330(7.40%)	242(5.4%)	273(6.2%)	234(5.2%)	149(3.3%)	1228	27.5%
40 yrs	226 (5.1%)	200(4.5%)	176(3.9%)	140(3.1%)	120(2.7%)	862	19.3%
TOTAL	1380(31%)	1047(23%)	837(19%)	751(17%)	455(10%)	4470	100%

TABLES 4: Presents data on the prevalence of HIV among antenatal clients who used FMC Umuahia from 2009-2013 by age. The result of the study reveals that the antenatal clients with age limits 20-29 presented the highest prevalence of all cases 1645(36.8%) followed by the women whose age falls between 30-39 years recorded a decline with 16.4% and 19.3% respectively.

TABLE 4: Prevalence of HIV among antenatal clients who used FMC Umuahia from 2009-2013 by parity status.

PARITY STATUS	2009	2010	2011	2012	2013	TOTAL	%
Primigravidas (0-1)	264(5.9%)	331(7.4%)	410(9.2%)	200(4.5%)	230(5.1%)	•1435	32.1%
Multigravidas (1-4)	637(14.3%)	494(11.1%)	223(4.9%)	394(8.8%)	110(2.5%)	1858	41.6%
Grand-Multigravidas 5 and above)	479(10.7%)	222(5.0%)	204(4.6%)	157(3.5%)	115(2.6%)	1177	26.3%
TOTAL	1380 (31%)	1047(23%)	837(19%)	751 (17%)	455(10%)	4470	100%

TABLE 4: Reveals frequency distribution of the prevalence of HIV among Antenatal clients who used FMC Umuahia from 2009-2013 by parity status. From the table multigrividas recorded 1858 (41.6%(cases of all the HIV prevalence followed by the primigravidas with 1435 (32.1%) prevalence rate but the Grand Multigravidas shows a decline with 1177 (26.3%) in their prevalence rate. Thus in the table the multigravidas tend to record the highest in their prevalence.

TABLE 5: Prevalence of HIV among antenatal clients who used FMC Umuahia from 2009-2013 by occupation.

Occupation	2009	2010	2011	2012	2013	Total	%
Teachers	63(1.4%)	90(2.0%)	123(2.8%)	104(2.3%)	72(1.6%)	452	10.1°,
Public servants	127(2.8%)	89(1.9%)	135(3.0%)	121(2.7%)	35(0.8%)	507	11.3°,
Business women	436(9.8%)	380(8.5%)	124(2.8%)	100(2.2%)	65(1.5%)	1105	24.7°,
Students	95(2.1%)	72(1.6%)	125(2.8%)	105(2.3%)	129(2.9%)	526	11.8°,
Unemployed	425(9.5%)	237(5.3%)	152(3.4%)	130(2.9%)	13(0.3%)	957	21.4°
Self employed	134(2.9%)	72(1.6%)	83(1.9%)	90(2.0%)	59(1.3%)	438	9.8%
Farmers	100(2.25%)	107(2.4%)	95(2.1%)	101(2.3%)	82(1.8%)	485	10.9°
TOTAL	1380(31%) j	1047(23%)	837(19%)	751(17%)	455(10%)	4470	100°/c

TABLE 5: Presents the prevalence of HIV among antenatal clients who used FMC Umuahia from 2009-2013. From the table it shows' that the group with the highest prevalence of HIV antenatal clients is the antenatal clients who are business women 1105 (24.7%) followed by students with 526 (11.8%) public servant 507 (11.3%) while those in teaching accounts for 569 (12.6%). Followed by farmers with 485 (10.9%). Teachers with 412 (10.1%) and lastly self employed that accounts for 438 (9.8%).

Discussion

The study generated a collection of information regarding the prevalence of HIV among antenatal clients who used Federal Medical Centre Umuahia from 2009-2013. The findings "were discussed in with the objectives and research questions formulated for the study ' evaluated with regards to their implications for increasing awareness on prevalence of HIV among antenatal clients.

Prevalence of one thousand and forty-seven (1047) HIV cases was identified among antenatal women at FMC. K was recorded that HIV/AID3 was highest in 2010 but was lowest in 2009. WHO (1991) report on the drop in the proportion of people that contract are infected with HIV these days. This might be as a result in improvement in Medicine and. Medical facilities. Proper adherence to the preventive measures and control done by Government Sanitary Medical Practices adopted in Mod.nrn days.

The second objectives are ascertaining the prevalence HIV/AIDS by types, From the study, the researcher discovered that type 1 type of HIV client's amount to (57.7%) while type 2 of HIV is 1911. (423%), Hence type 1 HIV revealed higher prevalence than type research xl that die prevalence of HIV 1 might be due to nearness to the country originator Cameroon which is found in South East of Nigeria. border.

This was in line with the observation of identity *(2003)* which stated that the various geographical areas in the State are adversely affected by the effects of the deadly disease. This suggests that country will loose her –workforce because men and women between this age brackets are mostly affected and ails age bracket are working population of any Country.

The table reveals that muitigravidas recorded 1858 (41.6%) cases -.11 me HIV prevalence followed by the primigravidas with 1435 (32.1%) his IPcans that the Antenatal clients between the 3-4 parity Status are mostly infected.

Table (v) exposes the fact that the occupation with the highest prevalence of HIV antenatal clients are business women (24,7%) followed by unemployed 957(21.4%), students1.8%). From the result of the study, finding proves that business women use sex strategy to sell. It is in line -with what we see in banking for today where marketers market both company product and their product. Unemployed also use sex to make living, this includes -dents in Higher Learning Institution. No wonder their proportion is greater than .half of me entire *7* occupation taken in this research.

Conclusion

HIV/AlDS occurred among antenatal women of Umuahia and many respondents were affected with HIV/AIDs within 2009-2013. Antenatal women of 20-29 age limits were affected mostly. Most women affected in term of occupation is business women. Women in the multigridas parity status are mostly affected. Type 1 type of HIV/AIDs is most common in client in FMC Umuahia.

References

UNAID (2009).
healthlahd.time.com (1986).
UNAIDS (2010).
UNAID (2010)
www.avert.org/universal.access.hiv (2010).
www.avertorg/curve-aids.htm (2013).
UNAIDS (2012).
www.biomedcentral.com (2009).
WHO (2010).
WHO (1991).

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