



Sociodemographic Study of HIV Positive Pregnant and HIV Positive Non Pregnant Women on "ART" in a Tertiary Hospital in Port Harcourt, Nigeria

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ABSTRACT

The influence of sociodemographic factors in the occurrence of HIV infection in Women is the focus of this paper. A hospital based cross-sectional study was conducted, involving HIV positive pregnant and non-pregnant women receiving care at the Rivers State University Teaching Hospital. The socio-demographic data was obtained using a structured questionnaire. Data were analyzed statistically on IBM SPSS Version25. The results revealed that women who were into various forms

of business made up 37% of the subjects of study, while those who were employed were next at 25.8%. Women who were between 31 and 35 years of age formed the bulk of those who were HIV positive at 25.9% and those who were married were more commonly HIV positive at 70.9%. The findings of the study showed that married women that are inconsistently into various forms of businesses, not well educated, between 31-35 years were more infected with HIV

Keywords: HIV Pregnant women, HIV non-pregnant women, Occupation, Age, Education, Sociodemographic factors.

INTRODUCTION

In 2020, there were about 37.7 million people throughout the world with HIV and of these, more than half (53%) were women and girls. In sub-Saharan Africa, women and girls accounted for 63% of all new HIV infections in 2020 [1].

Antiretroviral therapy (ART) which is a cocktail of antiretroviral drugs has long been used to sustain and improve the health conditions of people living with Human Immunodeficiency Virus (HIV). Antiretroviral drug toxicity has reported to cut across a broad spectrum, including renal toxicity, mitochondrial and metabolic effects, gastrointestinal systems, weight gain, cardiovascular effects, hypersensitivity, skin reactions, insomnia, and neuropsychiatric manifestations [2].

The vulnerability of women to HIV infection because of biological susceptibility and social profile has been reported [3]. It has also been reported that the biological, social and behavioral factors are contributory factors towards the increased rate of HIV infection in young women [4].

This study comparatively assessed the occurrence and distribution of HIV in HIV positive pregnant and non-pregnant women on TLE-ART receiving care at Rivers State University Teaching Hospital, Port Harcourt, Nigeria.

MATERIAL AND METHODS

Study site

The study was conducted at the Rivers State University Teaching Hospital formerly known as Braithwaite Memorial Specialist Hospital (abbreviated as BMSH), a government owned hospital, named after Eldred Curwen Braithwaite, a British doctor and a pioneer of surgery, located in Old GRA, Rivers State.

Ethical consideration and informed consent

The ethical approval for this research was obtained from the Rivers State University Teaching Hospital ethics committee with REC No: RSUTH/REC/2020023.

Sample size determination

The study participants comprised of a total of 330 subjects aged 15-60 years out of which 83 were HIV positive pregnant and 82 HIV positive non-pregnant, also 84 pregnant females and 81 non pregnant HIV negative subjects were regarded as control groups. They were apparently healthy individuals recruited among staff and patients.

The sample size for this study was determined [5,6] thus:

$$N = Z^2 \frac{P(I-P)}{e^2}$$

Where P=Proportion/Prevalance

e = error margin/precision = 0.05

Z = constant (1.96)

Exclusion Criteria

Individuals with AIDS or any other chronic disease condition such as Patients with a prior diagnosis of diabetes mellitus, hypertension, acute or chronic kidney disease, taking nephrotoxic drugs, pregnant women and patients with hepatitis B, C were excluded from the study.

Inclusion Criteria

The HIV subjects on HAART are subjects who have been on TLE HAART regimens corresponding with the Nigerian National guidelines for HAART for a minimum of six months

Administration of Questionnaires

Data on the participants' socio-demographic characteristics and medical history were collected using a structured questionnaire. Demographic data included sex, age, residence, level of education, alcohol consumption, marital and employment status.

Data Management and Statistical Analysis

Codes were assigned to each participant so as to observe strict confidentiality. The results were entered in a secured log book. The questionnaires and logbooks were treated with strict confidentiality. Data was analyzed with the statistical package for social sciences (SPSS) version 25, comprising ANOVA and Post hoc test was applied for comparison among the groups

RESULTS

Socio-demographic distribution of subjects

The subjects (24.8%) were HIV positive and non-pregnant, 25.2% were HIV positive and pregnant. The subjects of student were involved in various occupations that spanned from Business, Civil servants, farming, pastors, students trading, unemployed and others. Those women who had a business made up 37% of pregnant women with HIV while those who were employed were next at 25.8%. the pastors had the least percentage of HIV infection (0.3%). 42.8% of the subjects had only secondary school education, which made up the highest percentage, while others which included informal education had the least percentage (0.9%). The most percentage, 70.9% of the subject population were married while 1.5%, which was the least had undefined relationships. Women who were between 31 and 35 years of age formed the bulk of those who were HIV positive at 25.9% and those who were married were more commonly HIV positive at 70.9%.

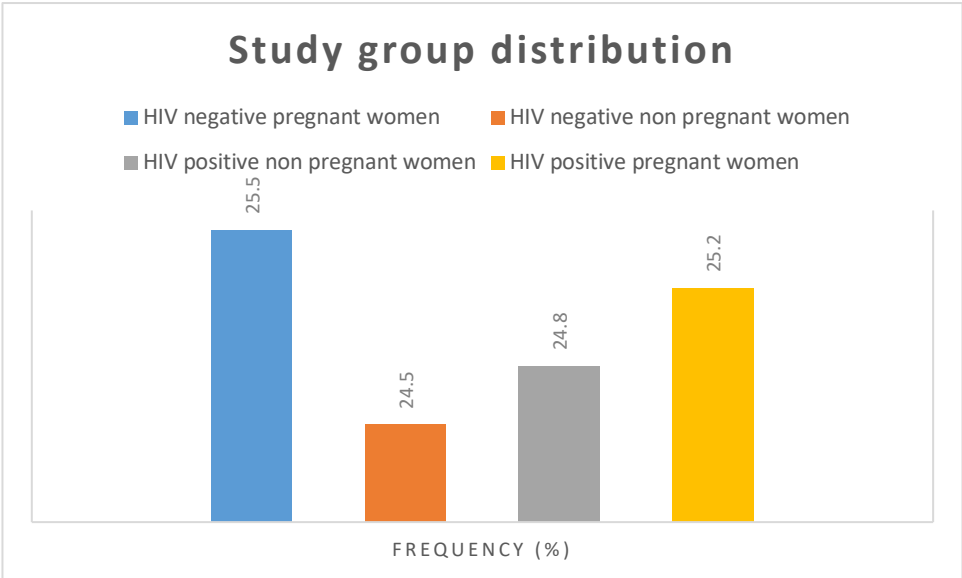


Figure 1: Distribution of study group

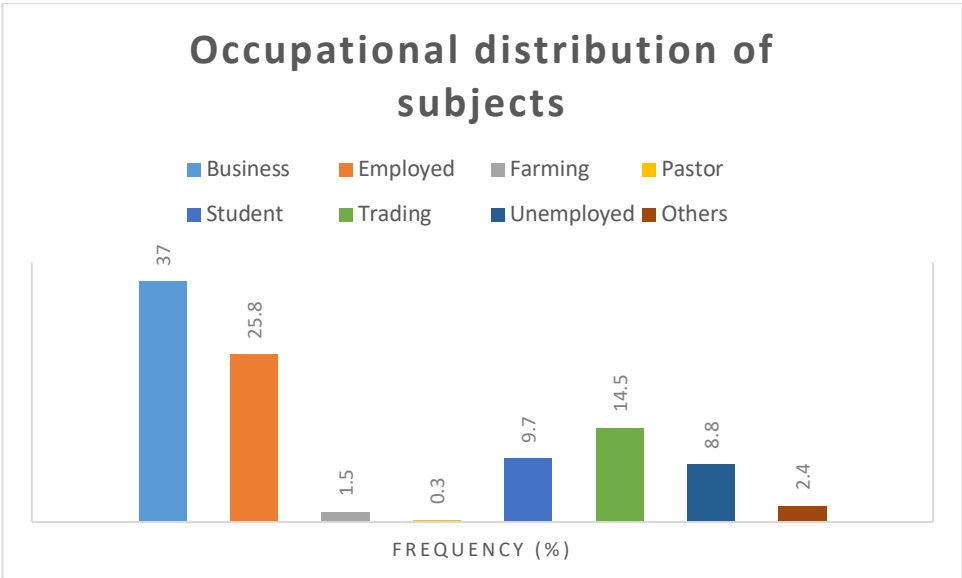


Figure 2: Occupation distribution of Subjects

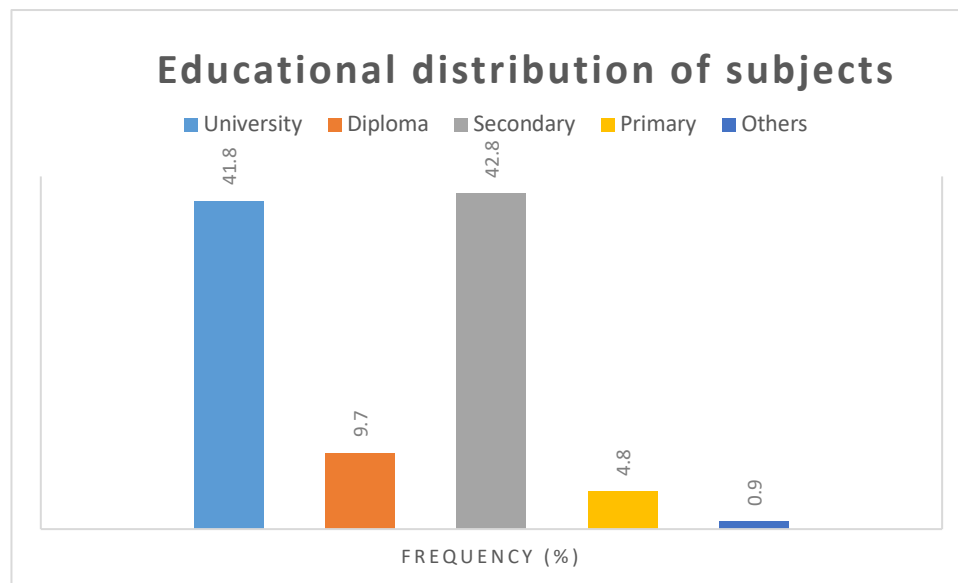


Figure 3: Education distribution of Subjects

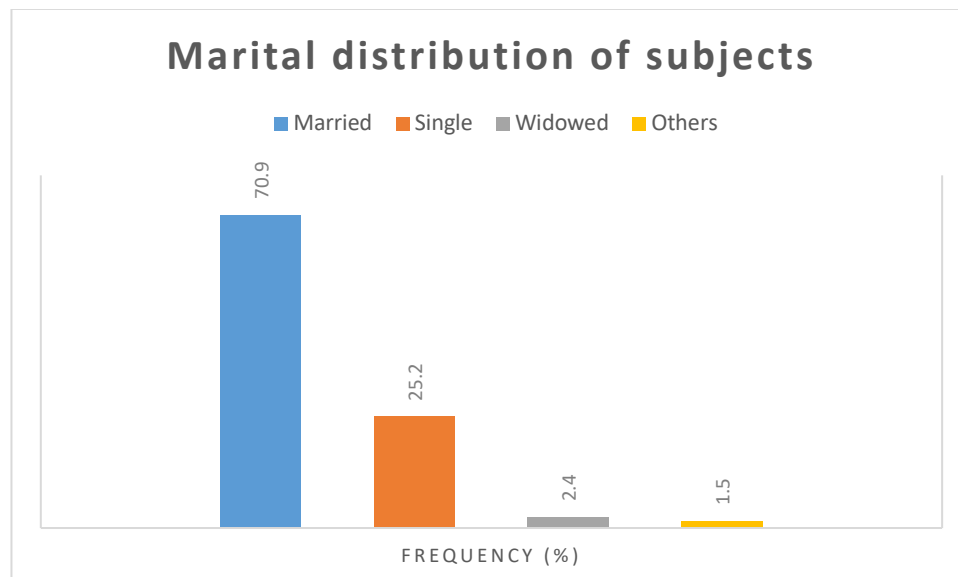


Figure 4: Marital distribution of Subjects

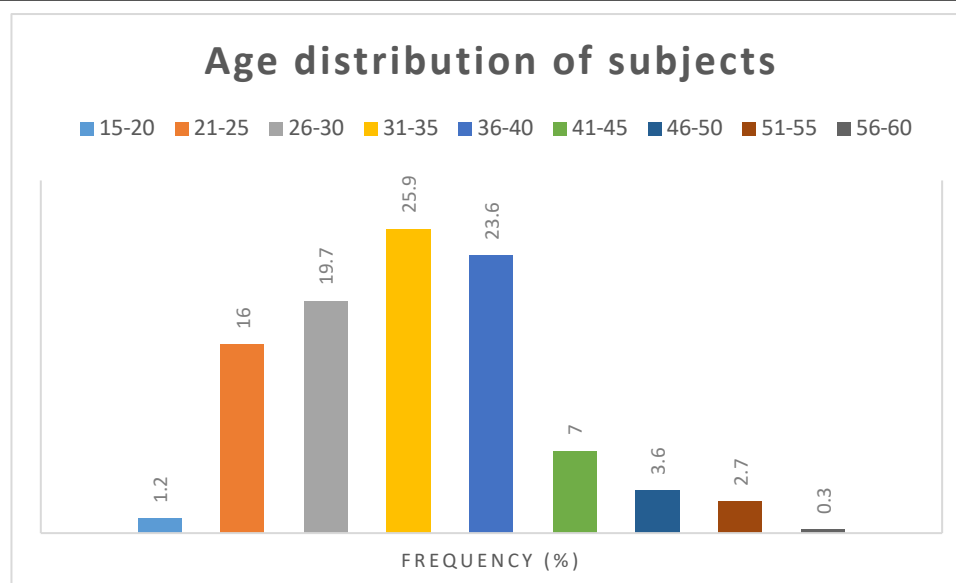


Figure 5: Age distribution of subjects

DISCUSSION

A review of HIV in pregnancy by WHO stated that lack of education and lack of employment are factors which contribute to women being infected with HIV as they become drawn to be commercial sex workers [7]. However, our study showed that women who are employed (25.8%) and women engaged in business (37%) were more infected with HIV than the other categories of women. Inconsistency in business predisposes women to illicit sexual activities thereby exposing them to contacting terminal diseases such as HIV/AIDS, STI etc. [8]. Women in Various businesses had the greatest percentage of HIV infection (37%). Women with Secondary school education as their highest level of education only had the greatest % of HIV infection (42.8%). This could be attributed to illiteracy on HIV/AIDS, hence a need on more awareness programs on HIV/AIDS. The University graduate women had the next high value (41.8%).

Women within the ages of 31-35 are said to be at their prime and very active stage and tends to explore their world. They had the highest rate of HIV infection (25.9%). This most times exposes them to unplanned sexual activities which may result to HIV/AIDS [8, 9]. However, the married women made up 70.9% of the HIV positive group, this calls for a great concern. This can be attributed to the involvement of their husbands in illicit extra-marital sex [10, 11, 12]. This suggests that this group of women may be more sexually active or may be exposed due to the nature of their jobs.

CONCLUSION

The results of the study showed that women in the higher socioeconomic class were more infected with HIV than those in lower classes and also suggests that women between ages 31 and 35 are more infected with HIV

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