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Statistical Analysis of HIV/AIDS Awareness of Mothers: Ante-Natal Clinic of Braithwaite Memorial Specialist Hospital (BMH)

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Abstract: This study was conducted to analyse the HIV/AIDS awareness levels of mothers in Rivers state using mothers attending the Ante-natal clinic of the Braithwaite Memorial (BMH specialist) Hospital, Port Harcourt in Rivers State and the influence of their social demographic variables. This Descriptive cross sectional study was carried out among 344 Pregnant Mothers attending BMH Ante-natal clinic from June 2, 2015 to July 29, 2015. Simple random sampling method was applied to collect data which were analysed with simple percentage calculations and the chi-square test using SPSS.Higher percentage of the respondents were within the active reproductive age-group of 26-35 (57%), most of them are married and living with their husband (84.3%), also 58.7% of them have attained tertiary educational level and are predominantly Christians (94.3%), 35% of them are self- employed and mostly reside in urban area (96%), finally 52% of them have at least a child. The chi-square X^2 test result indicated that majority of the respondent have a high level of awareness on HIV/AIDS (96%). The result further showed that there were significant association between the Marital status, Educational level, Parity and the Respondents' Level of awareness of HIV/AIDS, whereas, there were no significant association between Age, Religion inclination, Occupation , Residence and the Respondents' HIV/AIDS level of awareness.

1.0 INTRODUCTION

The First case of HIV/AIDS was reported in 1981 in the U.S.A, but its causative agent Human Immunodeficiency Virus (HIV) was first described in 1983 by Prof. *Montagnier* of the Pasteur Institute in Paris. The disease has ever since evolved into a global Epidemic with devastating Public health and Economic consequences, as described by *Quinn* (1996) and *Gottlieb* (2001).

World Health Organization (WHO) in 2012 estimated that HIV/AIDS has claimed the lives of more than 25million people and infected another 40million worldwide with 70% in the Sub-Saharan Africa and of which 3.4millions are Nigerians. Thus leaving 15million orphans, a group uniquely susceptible to infection because of their social plight. United Nations and Acquired Immune Deficiency Syndrome (UNAIDS) in 2005 indicated that the global epidemic continues to outpace efforts to contain it, signifying a worldwide catastrophe.

Nigeria recorded its first case in Calabar, Cross Rivers State in 1986 and has also shown highest prevalence in urban areas, the North central zones, Benue state and among the 30-34 years age group. According to National Agency for the Control of AIDS (NACA) fact sheet as at 2011, Its prevalence has declined among the Youth age group 15-24 from 6percent in 2001 to 4.3percent in 2005, 4.2percent in 2008 and 4.1percent in 2010.

Also In 2011, NACA announced that more than 80percent of HIV transmission in Nigeria is through heterosexual sex. The drivers of the epidemic in Nigeria include high illiteracy; high rate of sexually transmitted infections in vulnerable groups, poverty, Low condom use and General lack of perceived personal risk.

Prevention of Mother to Child Transmission (PMTCT) in 2015 revealed that Vertical or Mother to child transmission of HIV accounts for 10percent of its mode of transmission and accounts for 90percent of Paediatric HIV/AIDS cases, and that without an intervention, approximately 20-45percent infants born to HIV positive Mothers acquire the infection during pregnancy, delivery or breastfeeding.

NACA fact sheet (2011) showed that PMTCT Programs and Interventions commenced in Nigeria in 2001 with the establishment of over 640 sites in

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Nigeria, in order to reduce the incidence of HIV transmission from mother to child by 2015 which is in line with the Millennium Development Goal (MDG) Braithwaite Memorial Hospital (BMH) is a Government owned hospital situated in the heart of Port Harcourt of Rivers state and delivers tertiary Health care services to its neighbouring communities.

According to *Ibinabo* (2009), BMH fulfils the Government of Nigeria generally accepted standards with respect to Prevention of Mother to child transmission by offering Pre-and Post-HIV test counselling for pregnant women, counselling HIV-positive women on infant feeding practices, and providing prophylactic Highly Active Anti-retroviral Therapy (HAART) to HIV positive women during pregnancy and delivery, by giving Zidovudine/Nevirapine syrups to the Neonates and Family Planning.

Nigeria in its global partnership with other International communities along side with Non-Governmental Organizations have stepped up strategies geared towards the prevention and control of the scourge in our communities over the years which include the PMTCT. Multiple factors have been identified which contribute to the amplification of HIV infections in Nigeria these include high illiteracy, high rate of sexually transmitted infections among vulnerable groups, inconsistent use of condoms etc.

In view of the above, this study seeks to analyse the HIV/AIDS Awareness of mothers and how their social demographic variables influence their awareness with particular reference to Braithwaite Memorial Specialist Hospital (BMH), Port Harcourt, Rivers State.

Section two and three gives brief history of the hospital and method of data collection respectively. Methodology, analyses and summaries are presented in section four, five, and six respectively, whereas section seven is the conclusion.

2 BRIEF HISTORY OF THE HOSPITAL

This study is confined to Braithwaite Memorial (Specialist) Hospital, Port Harcourt in Rivers State of Nigeria. Braithwaite Memorial (Specialist) Hospital is a Rivers State government owned hospital under the management of the Rivers State Hospitals Management Board and located at #5 Harley Street, Forces Avenue, Old GRA, Port Harcourt in Rivers State.

It is a tertiary health institution with over 250 beds and renders health care services in Paediatrics, Internal Medicine, Surgery and Obstetrics/Gynaecology to the catchment areas. In the Obstetrics unit, it further renders prenatal services, Antenatal services, Post-natal services, PMTCT, Family Planning etc.

3 POPULATION OF THE STUDY AND METHOD OF DATA COLLECTION

The population of the study comprises of the Cross Section of pregnant mothers attending the Ante-natal clinic of BMH between the periods of June 2, 2015 to July 29, 2015. The mothers are aged 15 to 46years and have attained various levels of Educational qualification with different religious inclination and reside within Port Harcourt and its environs.

The Ante-natal register showed that a total of 3,368 registered in the Ante-natal clinic. Since the researcher could not interview the entire attendees of the various Ante-natal clinics in the hospital, the researcher used the simple random sampling technique to select the population for this study. The researcher with the assistance of few midwives administered the questionnaires only to mothers of second contact to the Ante-natal clinic, who were available at the period under review. Personal interview sessions were also held to explain and simplify the sections in the questionnaires which were not clear to them. First timer Ante-natal mothers were excluded from this study.

The researcher was able to reach 350 respondents since it was not possible to interview the entire population. Out of the 350 questionnaires that were administered, 347 were returned, and 3 out of the returned 347 were condemned by the researcher because they were not properly filled, hence a total of 344 questionnaires only were used as sample size for the study.

However, the data were from primary sources. Questionnaire was the main research instrument and it was divided into two sections. Section A was designed to provide information on personal data of the respondents, while section B consist of itemized questions aimed at eliciting appropriate responses from the respondents and arranged on a Likert Scale, with respect to level of awareness.

Question one to seven cover social demographic variables; while question eight to seventeen cover level of awareness. The likert scale categorized the level of awareness into three such as Low, Moderate and High.

4 METHODOLOGY

This chapter presents the procedures adopted in the study and they include the research method, population of the study, methods of data collection, analysis and interpretation.

4.1 RESEARCH METHODOLOGY

The study adopted a descriptive statistics such as, pie chart, bar chart and data collected were analysed using simple percentage and the research hypothesis were tested using CHI-SQUARE (X^2) analysis on SPSS.

4.2 TEST STATISTIC

The test statistic is:

$$\chi^2 = \sum_{i=1}^{k} \frac{(O_i - E_i)^2}{E_i} \approx \chi^2_{(\alpha,(r-1),(c-1))}$$

5 DATA ANALYSES

The socio demographic characters used here are Age, Marital status, level of education, Religion, occupation, Residence and Parity.

5.1 ANALYSIS ONE: LEVEL OF AWARENESS

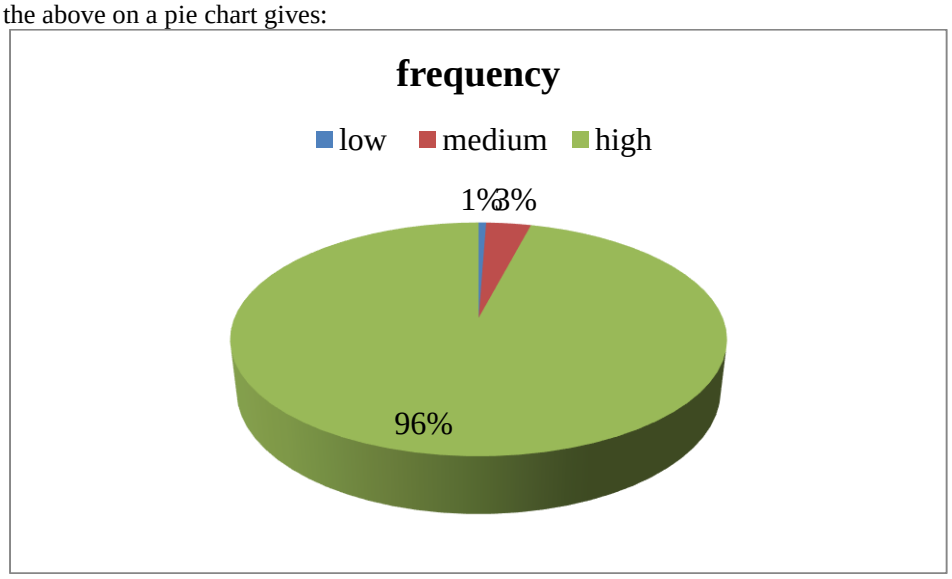
The table 6.1 below shows the level of awareness of HIV/AIDS among pregnant mothers attending BMH Ante-natal clinic using LIKERT SCALE and their respective percentage

Table 5.1: LEVEL OF AWARENESS

LEVEL OF AWARENESS	FREQUENCY	PERCENTAGE
LOW	2	0.58%
MODERATE	12	3.48%
HIGH	330	95.93%
TOTAL	344	100%

From the harvested data as shown in table 5.1 above, 95.93% of the respondents have a high level of awareness, 3.48% of the respondents are moderately aware, whereas 0.58% of the respondents have low level of awareness of HIV/ AIDS.

Representing the above on a pie chart gives:



The above frequency is also represented in a bar graph below:

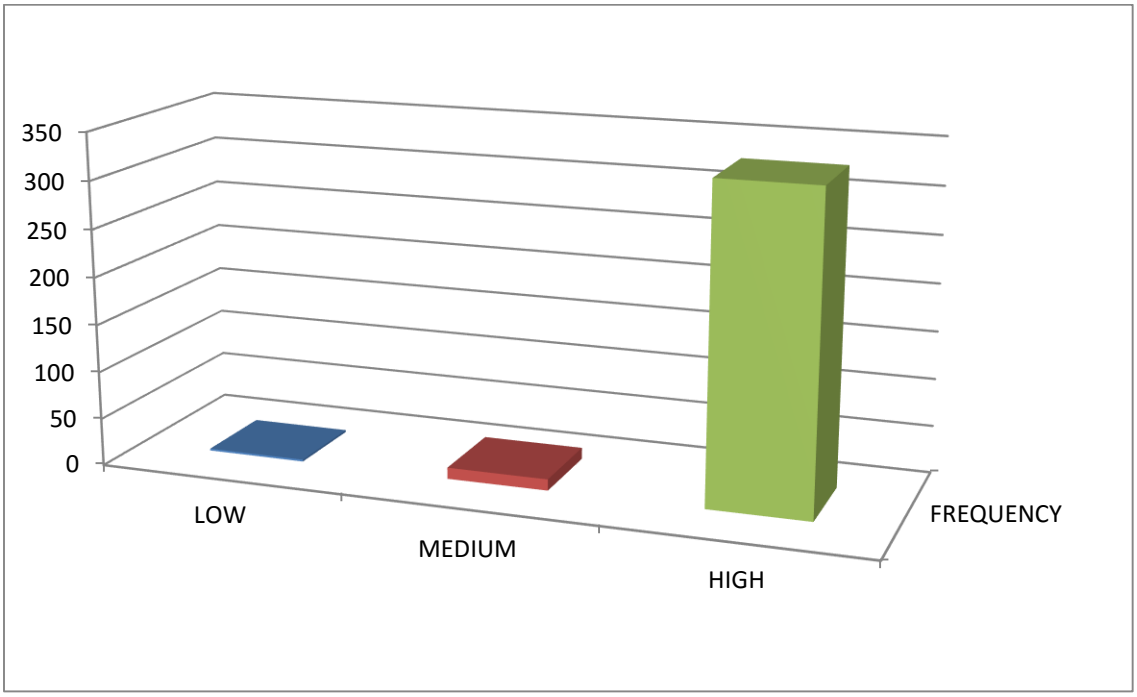


Fig 1: Bar graph of the level of awareness

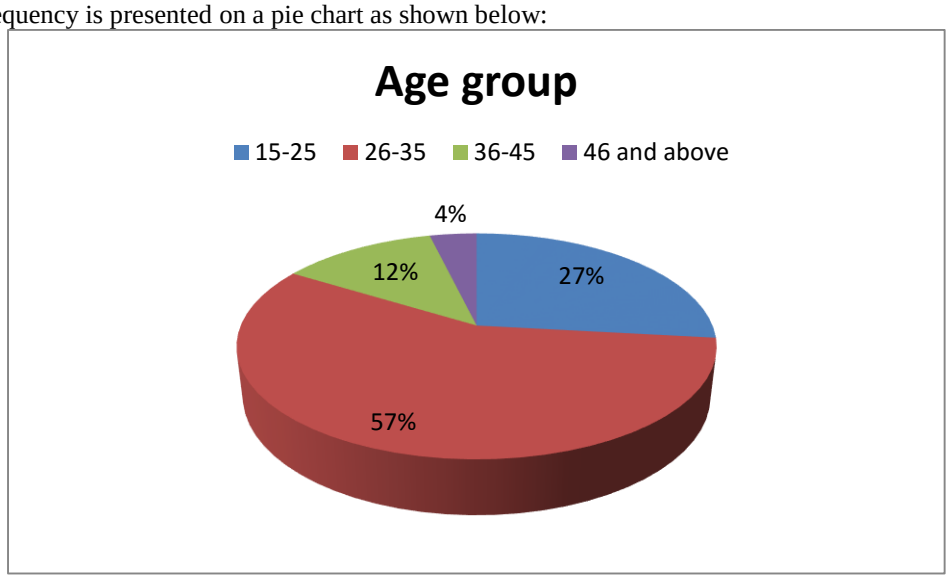
5.2 DISTRIBUTION OF THE SOCIAL DEMOGRAPHIC VARIABLES AND PERCENTAGE OF RESPONDENTS

Table 5.2 DISTRIBUTION OF RESPONDENTS AGE

	FREQUENCY	PERCENTAGE
15-25	92	26.7%
26-35	196	57,0%
36-45	43	13.0
46 and above	13	4.3

From table 5.2 above, 57% of the respondents belong to 26-35 age-group, 26.7% of the respondents fell within the age-group of 15-25, 43respondents making 13% belong to the 36-45 age-group, whereas 13 out of the total respondents fell into the age-group of 46 and above age-group.

The above frequency is presented on a pie chart as shown below:



Representing the above on a bar chart gives:

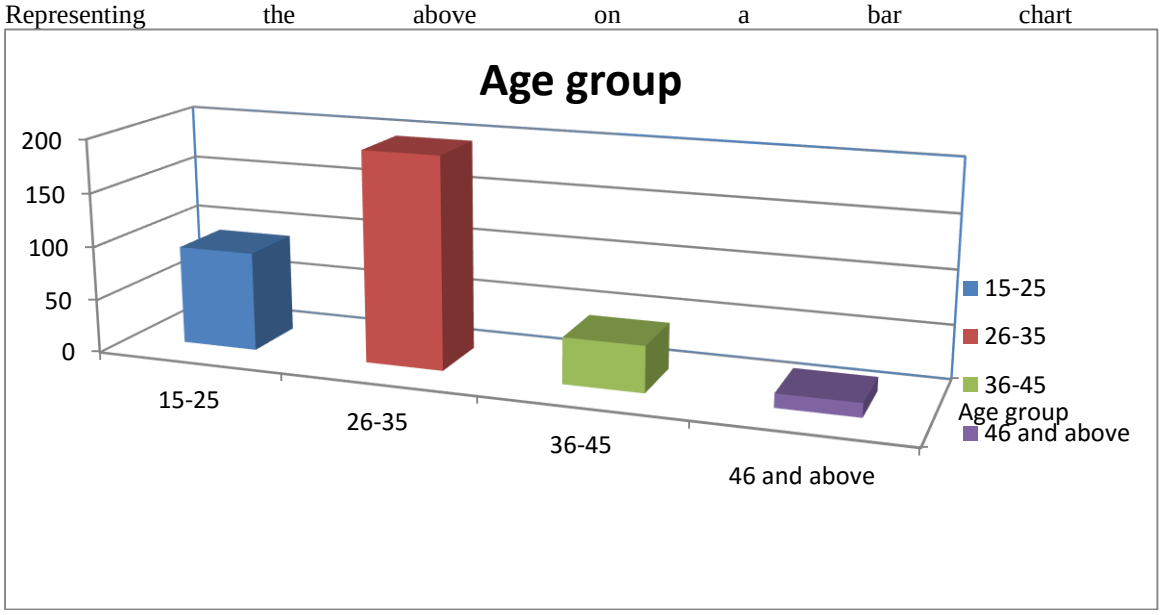


Fig 2: bar graph of distribution of respondents' Age

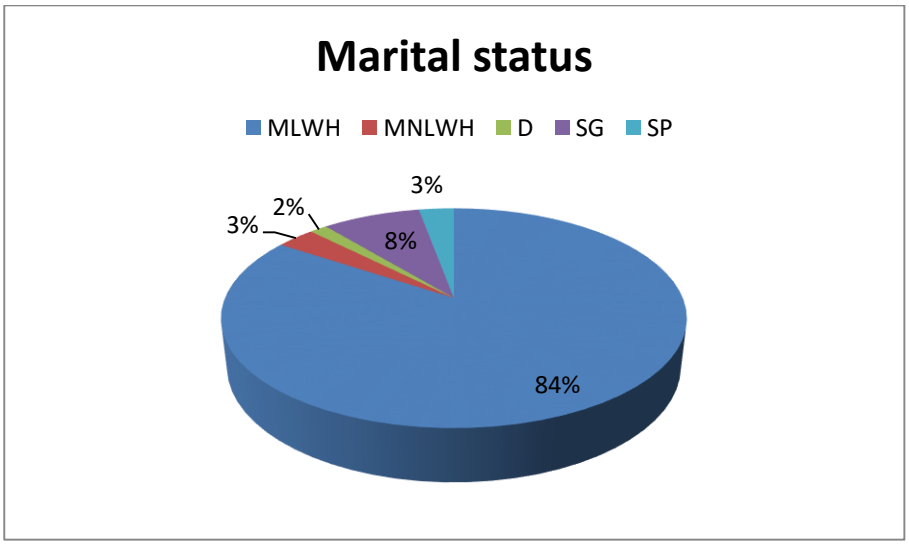
5.3 DISTRIBUTION OF RESPONDENTS BY MARITAL STATUS

Table 5.3 MARITAL STATUS

MARITAL STATUS	FREQUENCY	PERCENTAGE
Married Living with Husband (MLWH)	290	84.3%
Married not Living with Husband (MNLWH)	11	3.1%
Divorced (D)	5	1.5%
Single (SG)	28	8.1%
Separated (SP)	10	3%
Total	344	

Table 5.3 above shows that 84.3% of the respondents are married women that are living with their husbands, followed by 8.1% of the respondents representing single mother, whereas, married women that are not living with their husbands, make up 3.1% of the respondents followed very closely by women that are separated from their husbands which are 3% and 5 women out of the 344 respondents are divorced and gave 1.5%

Representing the above on a pie chart gives:



The bar chart of the above table gives:

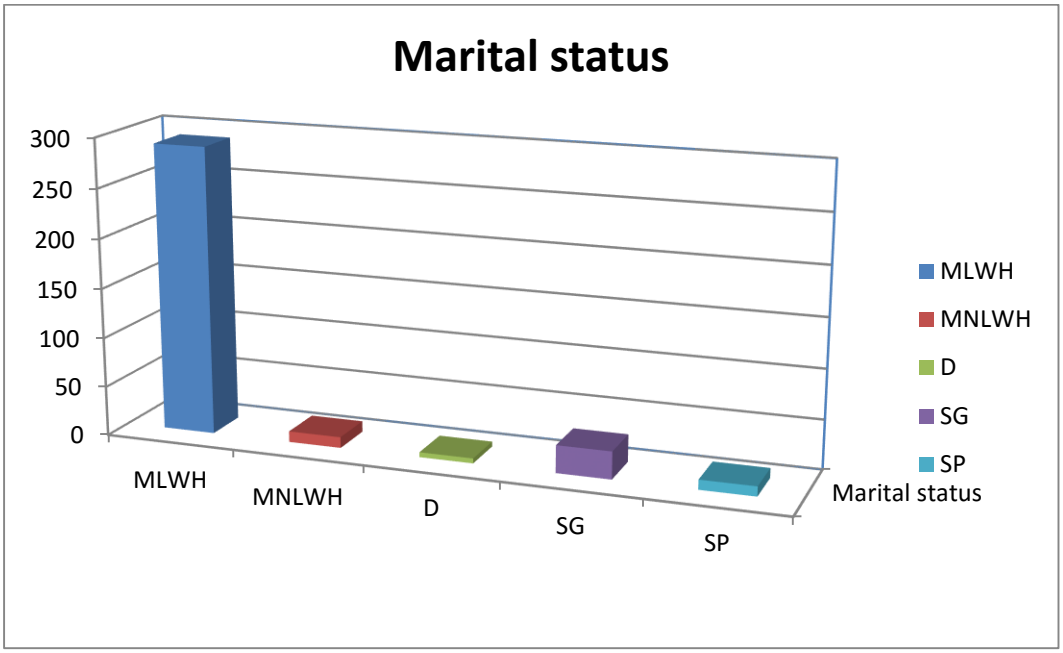


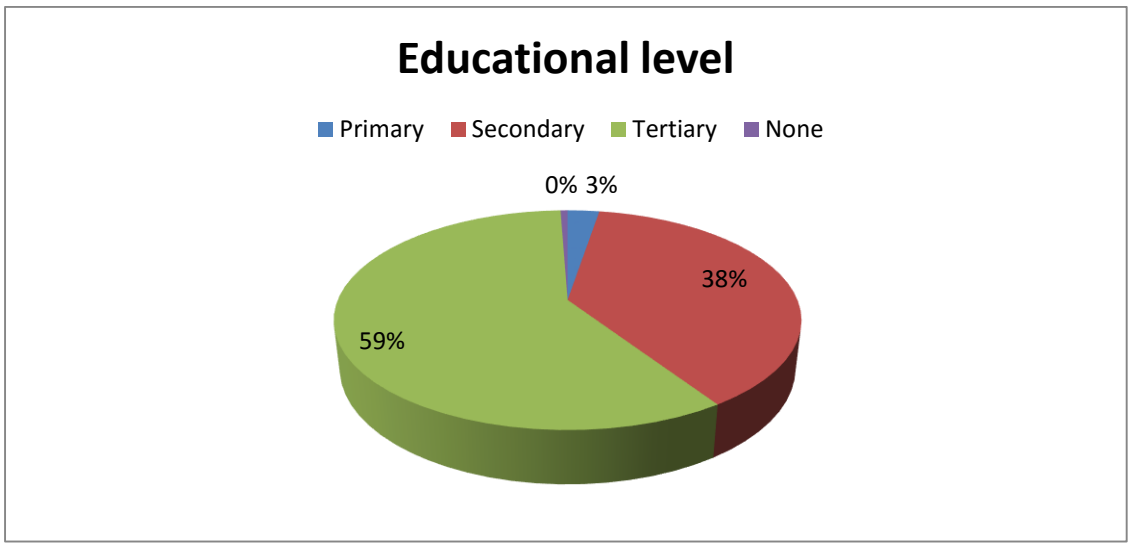
Fig 3: distribution of respondent Marital Status

5.4 DISTRIBUTION OF RESPONDENTS BY LEVEL OF EDUCATION

Table 5.4: EDUCATIONAL LEVEL OF RESPODENTS

EDUCATIONAL LEVEL	FREQUENCY	PRCENTAGE
Primary (P)	9	2.6%
Secondary (S)	131	38%
Tertiary (T)	202	58.7%
None (N)	2	.6%
Total	344	

Table 5.4 above shows that, pregnant mothers that have attained education up to tertiary level are 58% (i.e.202 out of 344), whereas, 38% of the respondents have secondary education. Also 9 out of the 344 pregnant women have primary education whereas 2 pregnant women out of the total respondents do not have any form of education (0.6%)
The pie chart of the above frequency gives:



Presenting the above on a bar chart gives:

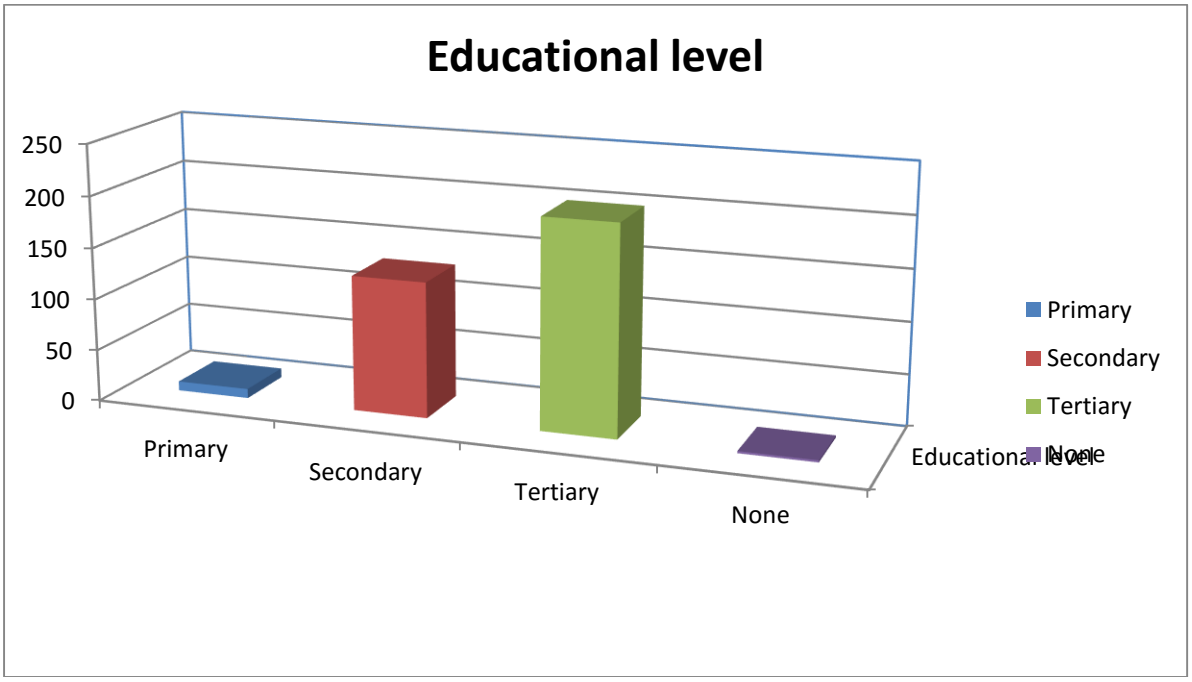


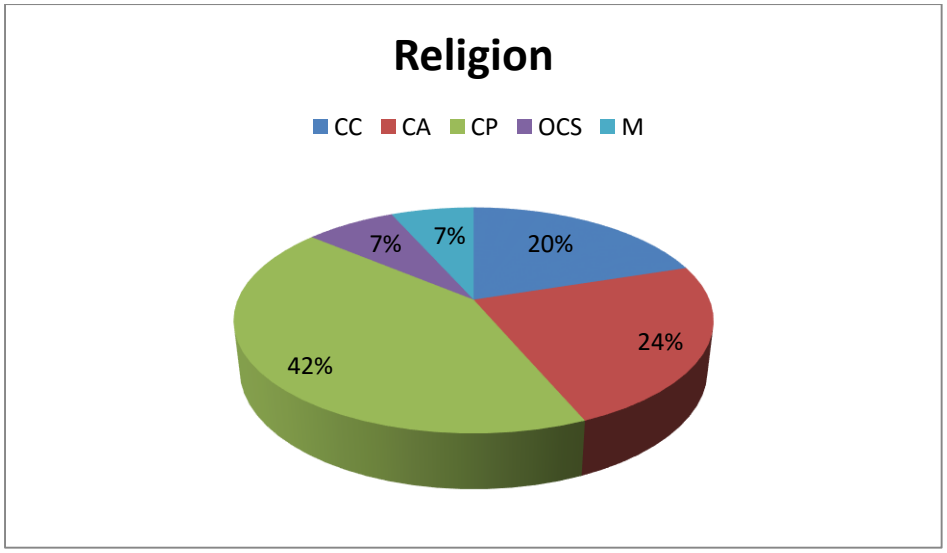
Fig 4: bar-graph of the respondents' Level of Education

5.5 DISTRIBUTION OF RESPODENTS BY RELIGION

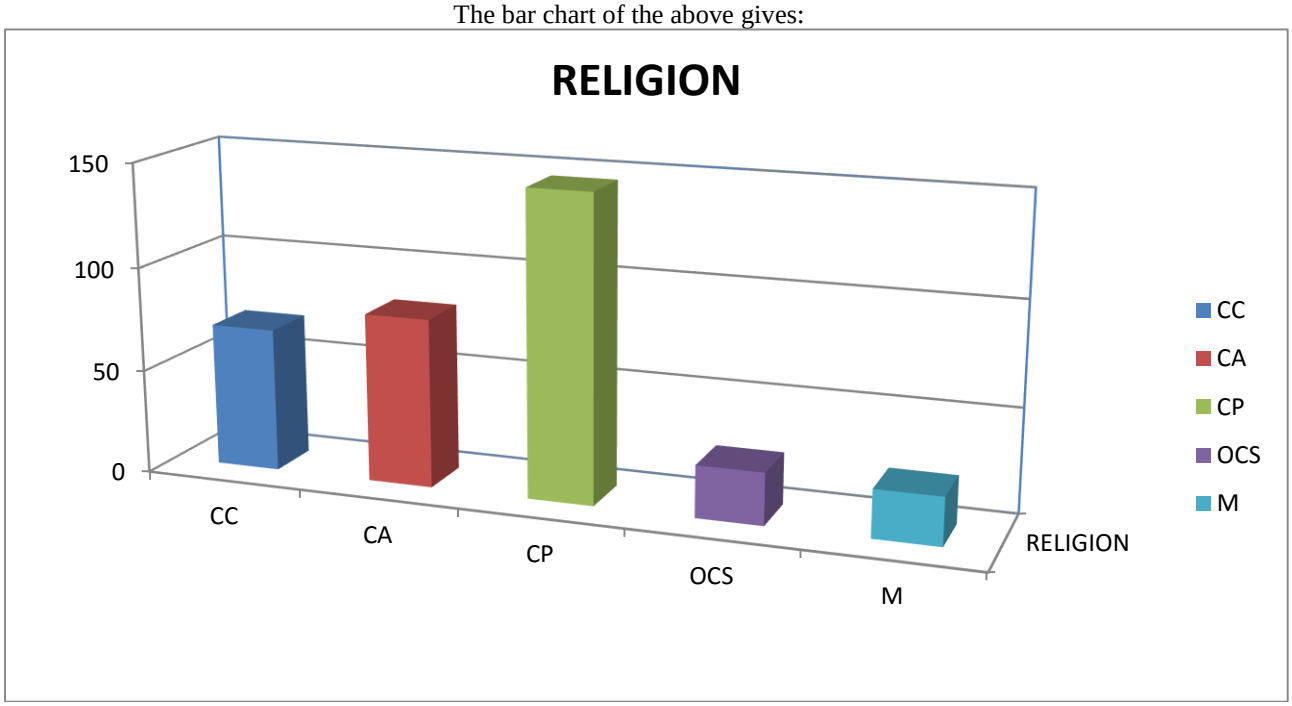
Table 5.5: RELIGIOUS INCLINATION OF RESPONDENTS

RELIGION	FREQUENCY	PERCENTAGE
Christian catholic (CC)	69	20%
Christian Anglican (CA)	81	24%
Christian Pentecostal (CP)	146	42%
Other Christian Sect (OCS)	25	7.3%
Muslims (M)	23	6.7%
Total	344	

From table 5.5 above, 6.7%(23 out of 344) of the respondents are Muslims, (25 out the 344) respondents make up 7.3% belong to Other Christian Sect given to 7.3% 20% of the pregnant mothers are Catholics and 81(24%) of the respondents are Anglicans, finally, 42% (146 out of 344) attend Pentecostal church.
The pie chart of the above frequency gives:



The bar chart of the above gives:



ig 5: bar graph of the respondents' distribution of Religion

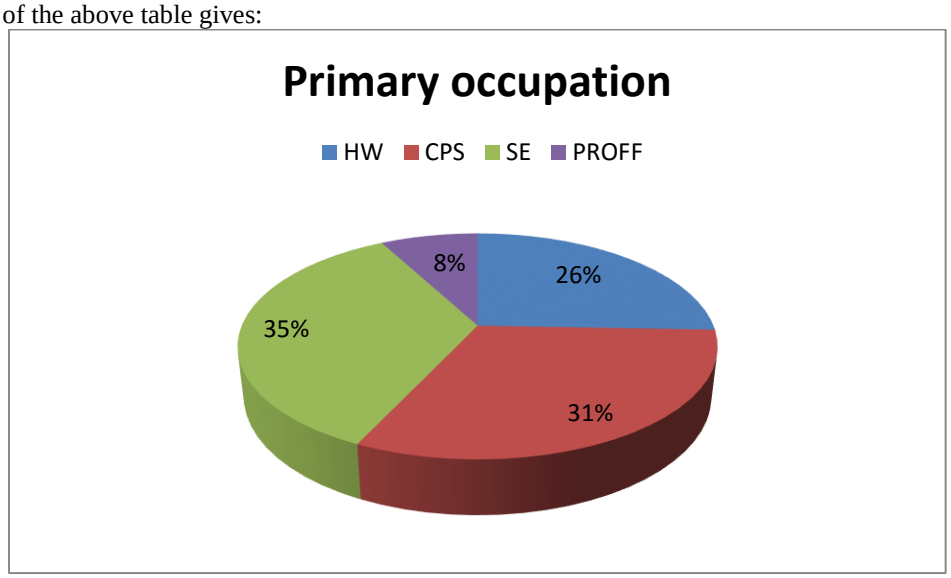
5.6 DISTRIBUTION OF RESPONDENTS BY OCCUPATION

Table 5.6: DISTRIBUTION OF RESPONDENTS OCCUPATION

PRIMARY OCCUPATION	FREQUENCY	PERCENTAGE
House wife (HW)	88	26%
Civil/Public Servant (CPS)	108	31%
Self- Employed (SE)	121	35%
Professional (PROFF)	27	8%
Total	344	

Table 5.6 shows that, 35% (121 out of 344) of the respondents are self-employed, 108 out of 344 (31%) of the pregnant women are Civil or Public Servants, 88 out of the 344(26%) represents housewives, and 8%(27 out of 344) are professionals like doctors, engineers etc.

The pie chart of the above table gives:



The above frequency is also represented in a bar graph below:

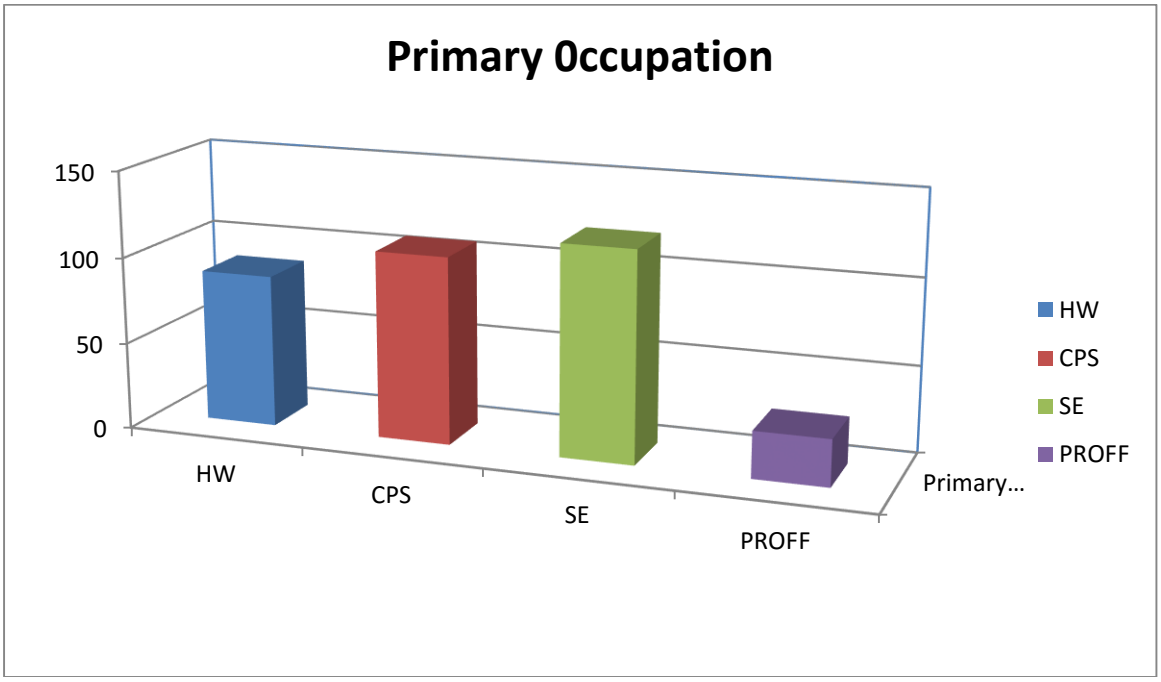


Fig 6: bar graph of the respondents' Occupation

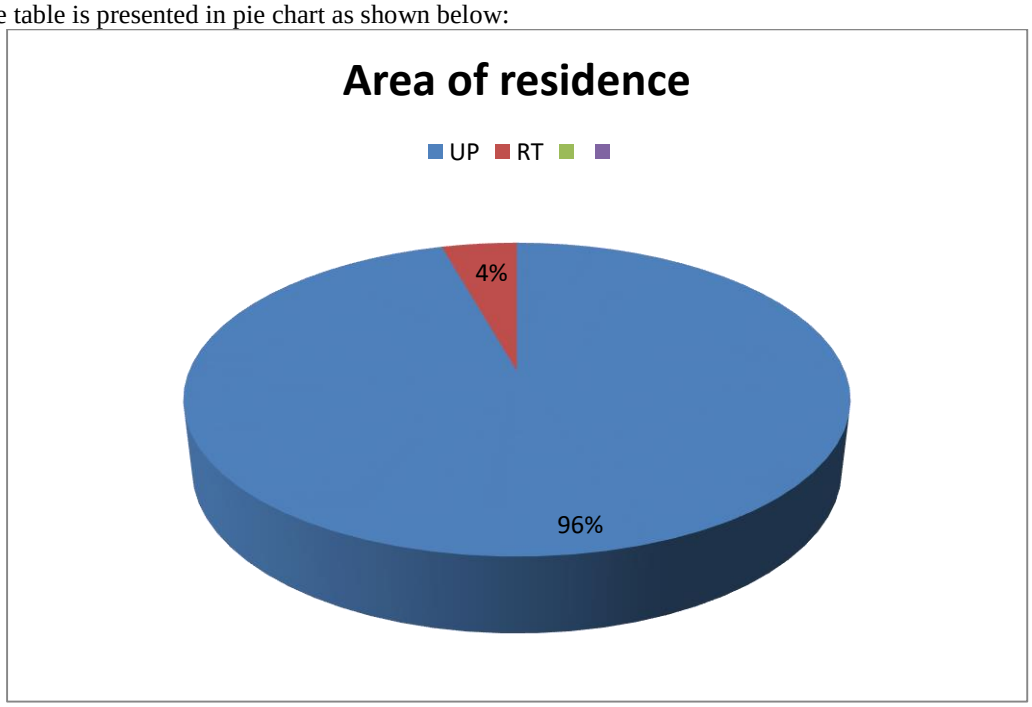
5.7 DISTRIBUTION OF RESPONDENTS BY LOCATION

Table 5.7: LOCATION OF RESPONDENTS

AREA	FREQUENCY	PERCENTAGE
Urban Port Harcourt (UP)	329	96%
Rural Town (RT)	15	4%
Total	344	

The above table 5.7 shows that 4% (15 out of 344) of the respondents live in Rural area, whereas, 329 out of 344 (95%) of the pregnant women live in Urban area.

The above table is presented in pie chart as shown below:



The above is also represented in a bar chart which gives:

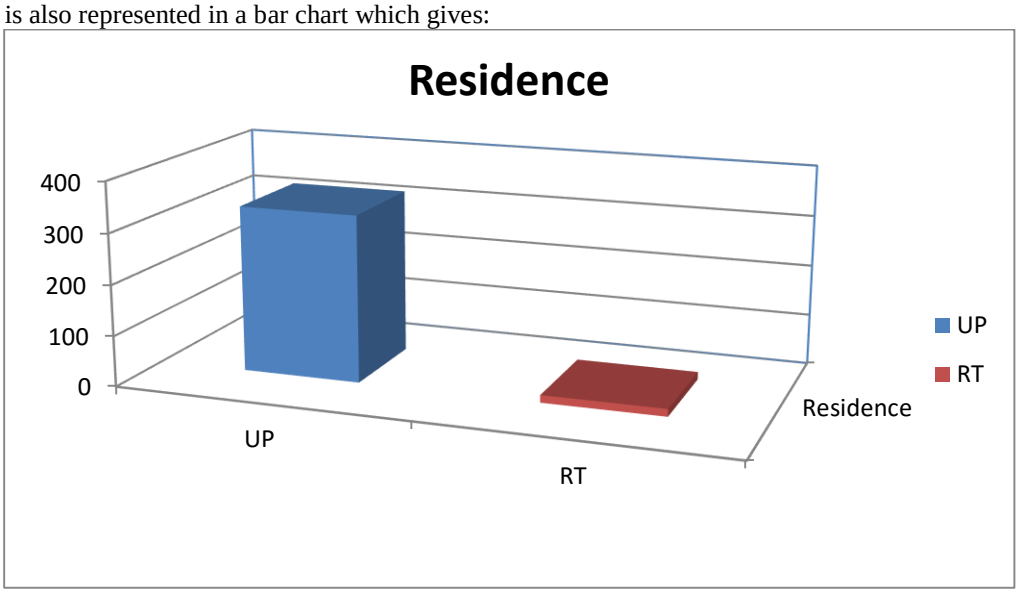


Fig 7: bar chart of respondents' Residence

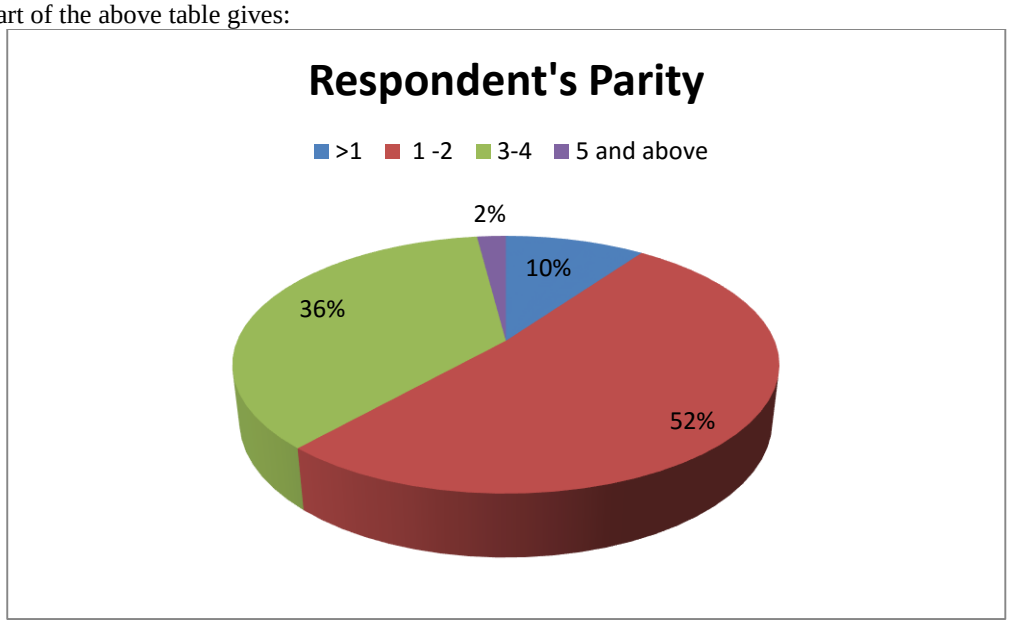
5.8 DISTRIBUTION OF RESPONDENTS BY PARITY

Table 5.8 RESPONDENTS PARITY

NUMBER OF CHILDREN	FREQUENCY	PERCENTAGE
<1	34	10%
1-2	178	52%
3-4	125	36%
5 and above	7	2%
Total	344	

7 out of 344 (2%) of the pregnant mothers have at least five children as shown in table, 10% (34 out of 344) of the respondents do not have children yet. 36% (125 out of 344) of the respondents have between three or four children, whereas 178 out of 344(52%) have one or two children.

The pie chart of the above table gives:



The above is also represented in a bar chart as shown below:

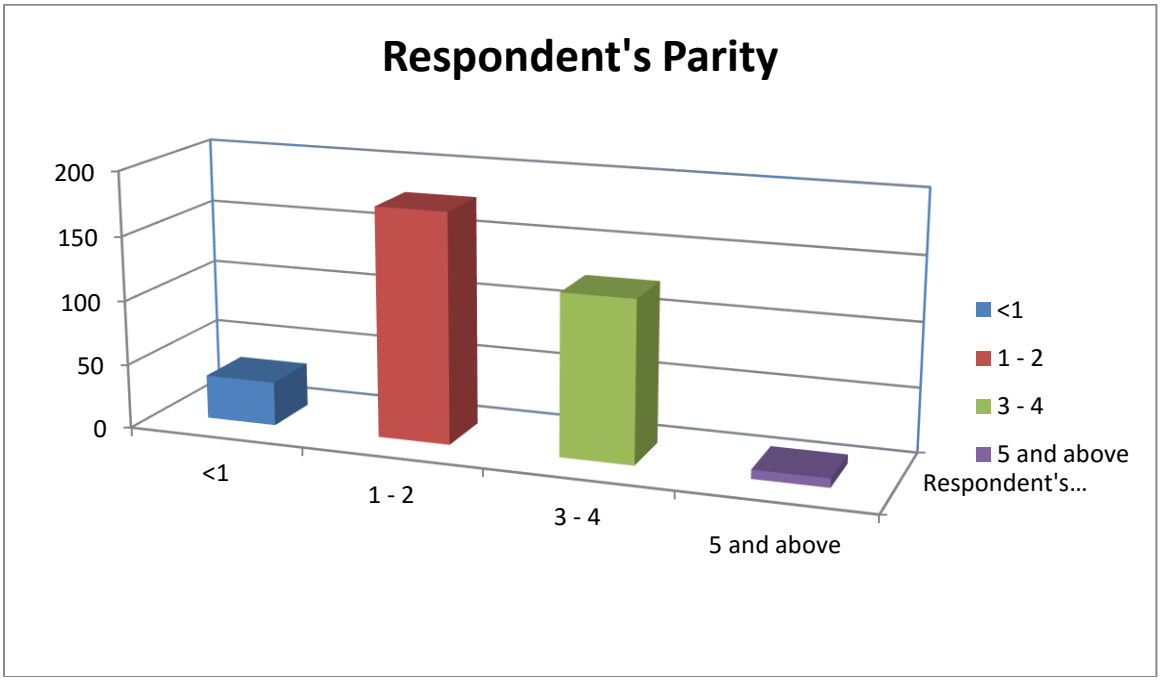


Fig 8: distribution of respondents Parity

5.9 TEST OF HYPOTHESIS FOR LEVEL OF AWARENESS AND THEIR SOCIAL DEMOGRAPHIC VARIABLES

(H_0): There is no association between the level of awareness and their social demographic variables.
(H_1): There is association between the level of awareness and their social demographic variables.

DECISION RULE: Reject the Null Hypothesis (H_o) if P-value is less than $\alpha = 0.05$ (95% level of significance) or reject H_o if $X^2_{cal} > X^2_{(r-1)(c-1)}$ and accept if otherwise.

5.9.1 ANALYSIS TWO: INFLUENCE OF SOCIAL DEMOGRAPHIC VARIABLES ON LEVEL OF AWARENESS

TEST 1: AGE & LEVEL OF AWARENESS

Table 5.9a: TEST ON AGE AND LEVEL OF AWARENESS

	LEVEL OF AWARENESS			
AGE-GROUP	LOW	MODERATE	HIGH	Row Totals
15 – 25	$O_i(1),E_i[0.53]$	$O_i(1), E_i[3.21]$	$O_i(90)$ $E_i[88.28]$	92
26 – 35	$O_i(1)E_i[1.14]$	$O_i(6)$ $E_i[6.84]$	$O_i(189)$ $E_i[188.02]$	196
36 – 45	$O_i(0)E_i[0.25]$	$O_i(3)$ $E_i[1.50]$	$O_i(40)$ $E_i[41.25]$	43
46 and above	$O_i(0)E_i[0.08]$	$O_i(2)$ $E_i[0.45]$	$O_i(11)$ $E_i[12.47]$	13
Column Total	2	12	330	344

Table 5.9b: X^2 RESULT ON AGE AND LEVEL OF AWARENESS(spss output)

Chi-square (X^2) value	Degree of freedom (df)	P-value
9.3954	6	0.152529

Test concerning Age and Level of awareness

Hypothesis

H_o: Age has no influence on Awareness vs H_1: Age has influence on Awareness
From the table 5.9b above, X^2 calculated at 2df = 9.3952, whereas P-value = 0.152529.
Decision Rule: Reject H_o if P-value <0.05.
Therefore, since P-value calculated (0.152529) > alpha level, we accept H_o and conclude that age does not influences level of awareness.

TEST 2: MARITAL STATUS AND LEVEL OF AWARENESS

Table 3.10a: X^2 TEST ON MARITAL STATUS AND LEVEL OF AWARENESS

	LEVEL OF AWARENESS			
MARITAL STATUS	LOW	MODERATE	HIGH	Row Total
Married and Living With Husband	$O_i(0)E_i[1.69]$	$O_i(5)$, $E_i[10.12]$	$O_i(285)E_i[278.20]$	290
Married and not Living With Husband	$O_i(0)E_i[0.06]$	$O_i(2)$ $E_i[0.38]$	$O_i(9)E_i[10.55]$	11
Divorced	$O_i(1)E_i(0.03)$	$O_i(2)$ $E_i[0.17]$	$O_i(2)E_i[4.80]$	5
Single	$O_i(1)E_i[0.16]$	$O_i(2)$ $E_i[0.98]$	$O_i(25)$ $E_i[26.86]$	28
Separated	$O_i(0)E_i[0.06]$	$O_i(1)$ $E_i[0.35]$	$O_i(9)E_i[9.59]$	10
Column Total	2	12	330	344

Table 5.10b: X^2 RESULT ON MARITAL STATUS AND LEVEL OF AWARENESS

Chi-square (X^2) value	Degree of freedom (df)	P-value
71.5243	8	0.00001

Test concerning marital status and level of awareness

Hypothesis

H_0: Marital status has no influence on Awareness vs H_1: Marital status has influences on Awareness

From table 3.9b above, X^2 calculated at 8df = 71.5243, and P-vale =0.00001

Decision Rule: Reject H_o if P-value < 0.05

Since P-value (0.00001) < alpha = 0.05, we reject H_0 and conclude that marital status influence HIV/AIDS level of awareness.

TEST 3: EDUCATION AND LEVEL OF WARENESS

Table 5.11a: X^2 TEST ON EDUCATION AND LEVEL OF AWEARNESS

	LEVEL OF AWARENESS			
EDU. LEVEL	LOW	MODERATE	HIGH	Row Total
Primary	$O_i(0)$ $E_i[0.05]$	$O_i(1)E_i[0.31]$	$O_i(8)$ $E_i[8.63]$	9
Secondary	$O_i(1)$ $E_i[0.76]$	$O_i(6)$ $E_i[4.57]$	$O_i(124)E_i[125.67]$	131
Tertiary	$O_i(1)$ $E_i[1.17]$	$O_i(3)$ $E_i[7.05]$	$O_i(198)$ $E_i[193.78]$	202
None	$O_i(0)$ $E_i[0.01]$	$O_i(2)E_i[0.07]$	$O_i(0)$ $E_i[1.92]$	2
Column Total	2	12	330	344

Table 3.11b: X^2 RESULT ON EDUCATION AND LEVEL OF AWARENESS

Chi-square (X^2) value	Degree of freedom (df)	P-value
59.9173	8	0.00001

Test concerning Education and Level of Awareness

Hypothesis

H_0: Education has no influence on Awareness vs H_1: Education has influence on Awareness

From table 3.10b above, the calculated X^2 at 8df = 59.9173 and P-value = 0.00001.

Decision Rule: Reject H_o if P-value < 0.05

Since the result show that P-value (0.0001) < alpha = 0.05, we reject H_0 and conclude that education has influence on the level of awareness of HIV/AIDS

TEST 4: RELIGION AND LEVEL OF AWARENESS

Table 5.12a: X^2 TEST ON RELIGION AND LEVEL OF AWARENESS

	LEVEL OF AWARENESS			
RELIGION	LOW	MODERATE	HIGH	Row Total
Christian Catholic	$O_i(0)$ $E_i[0.04]$	$O_i(3)$ $E_i[2.41]$	$O_i(66)$ $E_i[68.19]$	69

Christian Anglican	$O_i(1)$ $E_i[0.47]$	$O_i(3)$ $E_i[2.83]$	$O_i(77)$ $E_i[77.70]$	81
Christian Pentecostal	$O_i(1)E_i[0.85]$	$O_i(5)$ $E_i[5.09]$	$O_i(141)$ $E_i[140.06]$	146
Other Christian sect.	$O_i(0)$ $E_i[0.15]$	$O_i(1)$ $E_i[0.87]$	$O_i(24)$ $E_i[23.98]$	25
Muslims	$O_i(0)E_i[0.13]$	$O_i(1)$ $E_i[0.80]$	$O_i(22)$ $E_i[22.08]$	23
Column Total	2	12	330	344

Table 5.12b: X^2 RESULT ON RELIGION AND LEVEL OF AWARENESS

Chi-square (X^2) value	Degree of freedom (df)	P-value
1.7739	8	0.987176

Test concerning Religion and Level of Awareness

Hypothesis

H_0: Religion has no influence on awareness vs H_1: religion has influence on Awareness

From table 3.11b as shown above, the calculated X^2 at 8df = 1.7739 and P-value = 0.987176

Therefore, since P-value (0.987176) > alpha = 0.05, accept H_0 and conclude that religion has nothing to with HIV/AIDS level of awareness.

TEST 5: OCCUPATION AND LEVEL OF AWARENESS

Table 5.13a: X^2 TEST ON OCCUPATION AND LEVEL OF AWARENESS

	LEVEL OF AWARENESS			
OCCUPATION	LOW	MODERATE	HIGH	Row Total
House Wives	$O_i(1)E_i[0.51]$	$O_i(2)E_i[3,07]$	$O_i(85)_i[84.42]$	88
Civil/Public Servants	$O_i(0)E_i[0.63]$	$O_i(2)E_i[3.77]$	$O_i(106)E_i[103.60]$	108
Self Employed	$O_i(1)E_i[0.70]$	$O_i(7)E_i[4.33]$	$O_i(113)E_i[116.08]$	121
Professionals	$O_i(0)E_i[0.16]$	$O_i(1)E_i(0.95)$	$O_i(26)E_i[25.90]$	27
Column Total	2	12	330	344

Table 5.13b: X^2 RESULT ON OCCUPATION AND LEVEL OF AWARENESS

Chi-square (X^2) value	Degree of freedom (df)	P-value
4.5526	6	0.602335

Test concerning Occupation and Level of Awareness

Hypothesis

H_0: Occupation does not influence awareness level vs H_1: Occupation has influence on awareness level

From table 3.12b above, X^2 calculated at 6df = 4.5526 and P-value = 0.602335.

Decision Rule: reject H_o if P-value < 0.05

Since the result shows that P-value (0.602335) > alpha = 0.05, it implies that occupation does not have influence on the level of awareness of HIV/AIDS, therefore we accept H_o.

TEST 6: LOCATION AND LEVEL OF AWARENESS

Table 3.14a: X^2 TEST ON LOCATON AND LEVEL OF AWARENESS

	LEVEL OF AWARENESS			
AREA	LOW	MODERATE	HIGH	Row Total
Urban Town	$O_i(2)$ $E_i[1.91]$	$O_i(11)$ $E_i[11,48]$	$O_i(316)$ $E_i[315.18]$	329
Rural Town	$O_i(0)$ $E_i[0.09]$	$O_i(1)$ $E_i[0.52]$	$O_i(14)$ $E_i[14.30]$	15
Column Total	2	12	330	344

Table 5.14b: X2 RESULT ON RESIDENCE AND LEVEL OF AWARENESS

Chi-square (X2) value	Degree of freedom (df)	P-value
0.5564	2	0.757152

Test concerning Residence and level of Awareness

Hypothesis

H_0: Environment has no influence on Awareness level vs H_1: Environment has influence on Awareness level

From table 3.13b above, the X^2 calculated at 2df = 0.5564 and P-value = 0.757152.
Decision Rule: Reject H_o if P-value < 0.05
The result shows that P-value (0.757152) > alpha = 0.05, therefore we accept the Null Hypothesis (H_o) and conclude that residence does not influence HIV/AIDS level of awareness.

TEST 7: PARITY AND LEVEL OF AWRENESS

Table 5.15a: X^2 TEST ON PARITY AND LEVEL OF AWARENESS

	LEVEL OF AWARENESS			
N0.OF CHILDREN	LOW	MODERATE	HIGH	Row Total
<1	O_i(1) E_i[0.20]	O_i(2) E_i[1.19]	O_i(31) E_i[32.62]	34
1-2	O_i(1) E_i[1.03]	O_i(3) E_i[0.21]	O_i(174)E_i[170.76]	178
3-4	O_i(0) E_i[0.73]	O_i(4) E_i[4.36]	O_i(121)E_i[119.91]	125
5 and above	O_i(0) E_i[0.04]	O_i(3)E_i[0.24]	O_i(4)E_i[6.72]	7
Column Total	2	12	330	344

Table 5.15b: X^2 RESULT OF PARITY ON LEVEL OF AWARENESS

Chi-square (X^2) value	Degree of freedom	P-value
38. 623	6	0.00001

Test concerning Parity and Level of Awareness

Hypothesis

H_0: Parity has no influence on awareness vs H_1: Parity has influence on awareness
From table 3.13b above, X^2 calculated at 6df = 38.623 and P-value = 0.00001.
Decision Rule: Reject H_o if P-value <0.05
Since P-value (0.00001) < alpha = 0.05, we reject H_o and conclude that Parity influences the level of awareness of HIV/AIDS

6.0 SUMMARY

The study utilized 98.3% of the questionnaires that were administered to the respondents. From table 3.1, it is seen that 95.93% of the respondents have high level of awareness, 3.48% of them are moderately aware, whereas 0.58% of the total respondents have low level of HIV/AIDS awareness.

It was also observed that 57% of the respondents fell within the active reproductive age group 26-35 as shown in table 3.2, also 84% of the respondent as shown in table 3.3 are living with their husbands. Table 5.4 shows that 59% of them attained tertiary level of education, table 5.5 shows that 93.3% of the respondents are predominantly Christians. 121 out of the 344 respondent as shown in table 5.6 are self-employed. Most of the respondents precisely 96% live in urban area as stated in table 3.7, whereas it observed in table 5.8 that 52% of the respondent have at least 1 child.

The study showed that majority of the respondents have high level of awareness on HIV/AIDS, a total of 330(96%) out of 344 were found to be very aware of HIV/AIDS.

However, regarding the influence of socio-demographic variables on level of awareness, this study could not establish any evidence of the influence of Age, Religion, Occupation, and Residence on the respondents' level of HIV/AIDS awareness as shown in table 3.8a&b, table 5.12a&b, table 5.13a&b, and table 5.114a&b respectively.

On the other hand, the study established evidence of the influence of Marital status, Education and Parity on the respondents' level of HIV/AIDS awareness as shown in table 5.10a&b, table 5.11a&b, and table 5.12a&b respectively.

7 CONCLUSION

The awareness level of HIV/AIDS is high among pregnant women in Port Harcourt, Rivers State. Important observations made in this study are that Marital status, Educational level and Parity have an influence on the respondents' level of awareness of the disease, whereas, Age, Religious inclination, Occupation and Residence have no influence on the respondent's level of awareness.

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APPENDIX A: 2012 ESTIMATES

	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012
People living with HIV	30.0 million [27.2-33.1 million]	31.0 million [28.2-34.1 million]	31.7 million [28.9-34.8 million]	32.2 million [29.4-35.3 million]	32.5 million [29.7-35.6 million]	32.8 million [30.1-36.0 million]	33.2 million [30.4-36.3 million]	33.5 million [30.7-36.7 million]	34.0 million [31.1-37.1 million]	34.4 million [31.5-37.7 million]	34.9 million [31.9-38.3 million]	35.3 million [32.2-38.8 million]
New HIV Infections (Total)	3.4 million [3.1-3.7 million]	3.3 million [3.0-3.6 million]	3.1 million [2.9-3.5 million]	3.0 million [2.7-3.3 million]	2.9 million [2.6-3.2 million]	2.8 million [2.5-3.2 million]	2.7 million [2.4-3.1 million]	2.6 million [2.3-3.0 million]	2.6 million [2.2-3.0 million]	2.5 million [2.2-2.9 million]	2.5 million [2.1-2.9 million]	2.3 million [1.9-2.7 million]
New HIV infections (adults)	2.8 million [2.6-3.1 million]	2.7 million [2.5-3.0 million]	2.6 million [2.3-2.9 million]	2.4 million [2.2-2.7 million]	2.3 million [2.1-2.6 million]	2.3 million [2.0-2.6 million]	2.2 million [2.0-2.5 million]	2.2 million [1.9-2.5 million]	2.2 million [1.9-2.5 million]	2.2 million [1.9-2.5 million]	2.2 million [1.8-2.5 million]	2.0 million [1.7-2.4 million]
New infections (children)	550 000 [500 000–620 000]	560 000 [510 000–630 000]	560 000 [520 000–630 000]	550 000 [510 000–620 000]	540 000 [490 000–610 000]	520 000 [470 000–580 000]	480 000 [440 000–550 000]	450 000 [410 000–520 000]	400 000 [360 000–470 000]	360 000 [330 000–420 000]	310 000 [280 000–370 000]	260 000 [230 000–320 000]
AIDS-related deaths	1.9 million [1.7-2.2 million]	2.1 million [1.9-2.4 million]	2.2 million [2.0-2.5 million]	2.3 million [2.1-2.6 million]	2.3 million [2.1-2.6 million]	2.3 million [2.0-2.6 million]	2.2 million [1.9-2.5 million]	2.1 million [1.8-2.4 million]	2.0 million [1.7-2.3 million]	1.9 million [1.7-2.2 million]	1.8 million [1.6–2.1 million]	1.6 million [1.4-1.9 million]
People accessing treatment					1.3 million	2.0 million	2.9 million	4.1 million	5.3 million	6.6 million	8.1 million	9.7 million
Resources		US$ 3.8 billion	US$ 4.6 billion	US$ 5.7 billion	US$ 7.4 billion	US$ 8.8 billion	US$ 10.5 billion	US$ 14.6 billion	US$ 15.5 billion	US$ 15.6 billion	US$ 17.1 billion	US$ 18.9 billion

Source: http://www.unaids.org/en/resources/campaigns/globalreport2013/factsheet/

APPENDIX 2:2012 GLOBAL AND REGIONAL STATISTICS

Region	People living with HIV 2012		New HIV infections 2012		AIDS-related deaths 2012 (total)
	total	children	total	children	
Sub-Saharan Africa	**25.0 million** [23.5 million–26.6 million]	**2.9 million** [2.7 million – 3.3 million]	**1.6 million** [1.4 million – 1.8 million]	**230 000** [200 000-280 000]	**1.2 million** [1.1 million-1.3 million]
South and South-East Asia	**3.9 million** [2.9 million-5.2 million]	**200 000** [170 000-270 000]	**270 000** [160 000-440 000]	**21 000** [16 000-32 000]	**220 000** [150 000 – 310 000]
East Asia	**880 000** [650 000-1.2 million]	**8 200** [5 800-11 000]	**81 000** [34 000-160 000]	**1 500** [<1 000-3 300]	**41 000** [25 000-64 000]
Latin America	**1.5 million** [1.2 million-1.9 million]	**40 000** [32 000-52 000]	**86 000** [57 000-150 000]	**2 100** [<1 000-4 600]	**52 000** [35 000-75 000]
Western and Central Europe	**860 000** [800 000-930 000	**1 600** [<1 300-2 000]	**29 000** [25 000-35 000	**<200** [<100-<200]	**7 600** [6 900-8 300]
North America	**1.3 million** [980 000-1.9 million]	**4 500** [4 000-5 800]	**48 000** [15 000-100 000]	**<200** [<200-<500]	**20 000** [16 000-27 000]
Eastern Europe and Central Asia	**1.3 million** 1.0 million-1.7 million	**19 000** [16 000-24 000]	**130 000** [89 000-190 000]	**<1 000** [<500-1 200]	**91 000** [66 000-120 000]
Caribbean	**250 000** [220 000-280 000]	**16 000** [14 000-19 000]	**12 000** [9 400-14 000]	<500 [<500-<1 000]	**11 000** [9 400-14 000]
Middle East and North Africa	**260 000** [200 000-380 000]	**20 000** [14 000-31 000]	**32 000** [22 000-47 000]	**3 000** [2 000-4 600]	**17 000** [12 000-26 000]
Oceania	**51 000** [43 000-59 000]	**3 100** [2 400-4 100]	**2 100** [1 500-2 700]	**<500** [<200-<500]	**1 200** [<1 000-1 800]
Global	**35.3 million** [32.2 million-38.8 million]	**3.3 million** [3.0 million-3.7 million]	**2.3 million** [1.9 million-2.7 million]	**260 000** [230 000-320 000]	**1.6 million** [1.4 million-1.9 million]

Source: http://www.unaids.org/en/resources/campaigns/globalreport2013/factsheet/