



Prevalence And Socio-Demographic Determinants Of Family Planning Among Women Of Reproductive Age In Rivers State

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ABSTRACT

Family planning remains low despite government concerted efforts in making family commodities free in Nigeria. The study investigated the prevalence of family planning and socio-demographic determinants of family planning among women of reproductive age in Rivers State. The study adopted a descriptive research design. The population of the study included all women of reproductive age in Rivers State. Sample for the study was selected using multi-stage sampling procedures. The instrument for data collection was a validated structured questionnaire titled prevalence of and socio-demographic determinants of family planning questionnaire. Data collected was analyzed using percentages and chi-square at 0.05 level of significance. The results of the study showed that family planning prevalence was 70.2%. The findings of the study established age and marital status were significant determinants of prevalence of family planning ($p < 0.05$). On the other hand the result of the study showed that educational qualification was not a significant determinant of prevalence of family planning ($p > 0.05$). It was concluded that family planning prevalence and spousal support were moderate among women of reproductive age in Rivers State. Health workers and Health educators should carry out community based sensitization to make the prevalence optimal

Keywords: determinants, family planning, Rivers State, women

INTRODUCTION

Nigeria is the 10th most populous country in the world and Nigeria's Population is growing geometrically with a population of about 200,000,000 people and a growth rate of 3.4%. The population is likely going to double itself in twenty-seven years. Introduction to family planning is crucial in controlling this ever-growing population. The over growing population is a cause for concern as a result of the prevailing economic situation due to post COVID 19 pandemic and the aftermath of the lock down. The pandemic had had its toil not only on the child birth as it has given rise to increase in pregnancies among the population. Family Planning (FP) is a principal strategy in controlling population growth and promotion of maternal and child health through the adequate spacing of births as well as avoidance of unwanted pregnancy (Gebre 2016). Contextually family planning will interchangeably use with contraceptive use. Family planning enables couples to plan when to have children in such a way that couples could either space in- between pregnancies or limit the number of children, i.e. stop childbearing. This is achievable through the use of contraceptives which invariably help reduce the incidence of unplanned/unwanted pregnancies (Amosu, Moronkola, & Ojediran 2006).

One of the crux of family planning is spacing of child birth. Adequately spaced births allow women to recover from previous pregnancies, and that too short or too long intervals lead to adverse maternal, perinatal, neonatal, and child health outcomes (Conde-Agudelo, Rosas-Bermúdez, Kafury-Goeta,

2006). The World Health Organization (WHO) recommended an interval between the last live birth and the next pregnancy of at least 24 months or a birth interval of 33 months (WHO, 2007).

Despite the fact family planning through the use of contraceptives improves maternal and neonatal outcomes, the contraceptive prevalence rate (CPR) in Nigeria remains embarrassingly low. The Report of The Nigerian Demographic and Health Survey showed that between 1990 and 2018 contraceptive prevalence rate increased 6.0% to 17% in 2018 for all types of contraceptive (National Population Commission, 1991; 2004; 2009; 2014; 2019). While for modern contraceptive use among sexually active married women contraceptive prevalence rate increased from 10% to 12% between 2013 to 2018 (National Population Commission, 2019). Further analysis of the NDHS indicated that use of any modern contraceptive method is higher among currently married women in urban areas (26%) than among in rural areas (10%). Geographical variation is also observed in the pattern of use of contraceptives lowest is Northwest with a prevalence of 6.2%, Northeast 7.8%, Southeast 12.9%, North central 13.8% South-south 15.8% while southwest had 24.3%. In south-south the prevalence rate ranged from 3.3% in Bayelsa to 19.6% in Rivers State. The prevalence rate for Rivers State seems to be higher than national prevalence but still remains low and lower than lower than the sub-Saharan African regional prevalence of 24% (United Nations, Department of Economic and Social Affairs, Population Division, 2015).

To help up scale the national prevalence rate of modern contraceptive to 27% in 2020 the Federal Government of Nigeria through the Federal Ministry developed National Communication Plan (2017-2020) this may be unrealistic with just 2% increase been observed between 2013 and 2018 in the prevalence rate of contraceptive. The prevalence rate observed showed that over 70% of women of reproductive age do not use modern forms of contraception to prevent pregnancy despite the availability of contraceptive

Over the years the government of Nigeria has mad concerted efforts the upscale of family planning. in 2017 family planning commodities was made free to aid better health indices in the country. This gesture was also replicated by the Rivers State government to make family planning commodities free in all public health facilities. However, observation showed that family planning practices are still low as some women still come up with stories unmet needs of spacing and limiting. This happening has therefore instigated the researcher to investigate the socio-determinants of family planning among women of reproductive age in Rivers State, Nigeria.

Research Questions

The following research questions were formulated to guide the study;

- 1) What is the prevalence of family planning practices among women of reproductive age in Rivers State?
- 2) What is the most preferred method of family planning practices among women of reproductive age in Rivers State?
- 3) To what extent is age and Prevalence of family planning practices among women of reproductive age in Rivers State?
- 4) To what extent is educational status and Prevalence of family planning practices among women of reproductive age in Rivers State?
- 5) To what extent is marital status and Prevalence of family planning practices among women of reproductive age in Rivers State?

Hypotheses

The following null hypotheses are to guide the study, and were tested at 0.5 level of significance.

1. There is no significant association between age and family planning practices among women of reproductive age in Rivers State?
2. There is no significant association between educational status and family planning practices among women of reproductive age in Rivers State?
3. There is no significant association between marital status and family planning practices among women of reproductive age in Rivers State?

METHODOLOGY

The research design adopted for the study was descriptive research design that explored family planning practices among women of reproductive age in Rivers State. According to Ogunleye (2011), descriptive research allows the researcher gather information about a characteristic without manipulation. This design is useful as it allowed the researcher to gather information about a subject at the same time. This research design had been successfully utilized by Chaudhary, Dandol, Rai and Rai (2016) on predictors of use of contraception among married women of reproductive age in a rural area of Nepal. Thus it is considered appropriate for the present study.

The population of the study consisted of all women of reproductive age 15-49years in Rivers State with a population of 1,681,343 (National Population Commission, 2006). The sample size for the study consisted of 1,250 women of reproductive age 15years to 49years. The sample size was determined using EPI Info 7 Statistical package using the single proportion for descriptive surveys. Epi info is a statistical software for sample size determination among others developed by Center for Disease Control (CDC) for descriptive cross sectional studies. The software has the following parameters for calculating sample size, 1) Population, 2) expected frequency of the behavior based on previous studies, Confidence Interval and design effect. The researcher inputted into the software to determine the minimum sample size: population size = 1,681,343; 52.6% for family planning practice based on previous study (Mohammed, Woldeyohannes, Fedeke & Megabiaw, 2014), 95% Confidence Interval, and design effect of 2, and arrived at the sample size used for the study. Sample size for the study was selected using multi-stage sampling procedure comprising of stratified sampling technique with non proportionate allocation of sample size, systematic random sampling and simple random sampling techniques.

A structured and validated questionnaire referred to as family planning practices Questionnaire (FPPQ) was used to elicit data from the respondents. The questionnaire consisted two sections (A-B). Section A, elicited information on demographic data of the respondents. Section B elicited information on prevalence of family planning practice and methods of family planning adopted with a reliability co-efficient of 0.73 on prevalence of family planning practices. The Pallant (2011) criterion for interpretation of coefficient was used where reliability value of 0.70 and above was said to be reliable. Thus the instrument was reliable and was used for data collection.

The letter was submitted to the Rivers State Primary Health Care Management Board for their permission to use the primary health care facilities at the various local government areas (LGA). Permission was also sorted for at the LGA headquarters of identified health centres to be used through their supervisory counselor for health. In each of the health centre staff was recruited to administer the questionnaire. Questionnaire distribution and collection lasted for two weeks and the researcher was able to retrieve 1,122 questionnaires out of the 1,250 questionnaires distributed, yielding 89.9% return rate.

The completed copies of the questionnaire were collated, coded and analyzed using the Statistical Product for Service Solution (SPSS) version 23. The results obtained were presented using Descriptive statistics of percentages and frequency distribution to answer research questions and Chi-square analysis to test hypotheses at 0.05 level of significance. Research questions 1-8 were analysed using percentages. The United Nation Population Department (UNDP) (2018) criterion for contraceptive use satisfaction, was used, where a score of 75% and above are considered high, less than or equals to 50% as low while 51% to 74% as moderate prevalence. This was used to interpret results on prevalence of family planning practices. All the stated hypotheses were tested at 0.05 level of significance using chi-square test analysis. Decisions were based on the stated level of significance.

RESULTS

Table 1: Percentage on Prevalence of family planning

Prevalence	Frequency	Percentage	Decision
Prevalence of FPP	788	70.2	Moderate
Types of family methods used			
Condom	251	22.4	
Pills	122	10.9	
Implants	53	4.7	
IUD	66	5.9	
Injectables	74	6.6	
Tubal ligation	29	2.6	
Diaphragm	23	2.0	
Spermicides	87	7.8	
Periodic abstinence	25	2.2	
Coitus interruptus	50	4.5	
Billings method	31	2.8	
Rhythm method	25	2.2	

Table 1 shows the prevalence of family planning practices among women of reproductive age in Rivers State. The result of the study showed that of the 1,122 respondents 70.2% indicated currently practicing family planning while 29.8% were not currently practicing family planning. Hence, the prevalence of family planning practices among women of reproductive age in Rivers State was moderate. The result of the study further showed 22.4% use condom, 10.9% pills, 7.8% spermicides, 6.6% injectables, 5.9% IUD, 2.0% Diaphragm. Thus, the most preferred method of family planning among women of reproductive age in Rivers State was use of condom.

Research Question 2: *What are the sources of information on family planning among women of reproductive age in Rivers State?*

Table 2: Percentage distribution on sources of information on family planning

Sources	Frequency	Percentage
Book and Pamphlets	151	13.5
Church/mosque	307	27.6
Family members	124	11.1
Friends/colleagues	160	14.3
Hospital/health centres	241	21.6
Radio/television	200	17.9
Social media	228	20.4

Table 2 shows the percentage distribution of respondents' sources of information on family planning. The findings of the study showed that 27.6% of the respondents sources of information on family planning was, church/mosques, 21.6% hospitals and health centres, 20.4% social media, 17.9% radio/television while 11.1% from family member. Thus, the most prevalence source of information on family planning is the Church/Mosque.

Research Question 3: *What is the extent of family planning practices prevalence among women of Reproductive age in Rivers State based on age?*

Table 3: Cross-tabulation on prevalence of family planning practice based on age

Age	Prevalence of family planning practice		Total	Decision
	No	Yes		
15-19years	71(83.45%)	14(16.5%)	85(100.0%)	Low
20-24years	103(59.2%)	71(40.8%)	174(100.0%)	Low
25-29years	41(48.8%)	43(51.2%)	84(100.0%)	Moderate
30-34years	33(12.9%)	222(87.1%)	255(100.0%)	High
≥35years	85(16.3%)	435(83.7%)	520(100.0%)	High

Table 3 shows cross-tabulation on prevalence of family planning practices based on age among women of reproductive age in Rivers State. The findings of the study showed that among respondents' age 30-34years and ≥35years family planning practice was high with 87.1% and 83.7% family planning practice prevalence rates respectively. But family planning practice prevalence was low among respondents aged 15-19years, 20-24years and 25-29years with prevalence rates of 16.5%, 40.8% and 51.2% respectively. The results showed that the lower the age of respondents the lower the prevalence of family planning practices. Worthy of note also is that after 34years family planning prevalence rate decreased.

Research Question 4: *What is the extent of family planning practices prevalence among women of Reproductive age in Rivers State based on educational qualification?*

Table 4: Cross-tabulation on prevalence of family planning practice based on educational qualification

Educational qualification	Prevalence of family planning practice		Total	Decision
	No	Yes		
No formal education	19(21.8%)	68(78.2%)	87(100.0%)	High
Primary education	19(33.3%)	36(66.7%)	54(100.0%)	Moderate
Secondary education	115(31.0%)	256(69.0%)	371(100.0%)	Moderate
Tertiary education	182(29.8%)	428(70.2%)	610(100.0%)	Moderate

Table 4 shows cross-tabulation on prevalence of family planning practices based on educational qualification among women of reproductive age in Rivers State. The result of the study showed family planning prevalence rate was high among respondents with no formal education (78.2%) but was moderate among respondents with primary, secondary and tertiary education.

Research Question 5: *What is the extent of family planning practices prevalence among women of Reproductive age in Rivers State based on marital status?*

Table 5: Cross-tabulation on prevalence of family planning practice based on marital status

Marital status	Prevalence of family planning practice		Total	Decision
	No	Yes		
Single	213(64.0%)	120(36.0%)	333(100.0%)	Low
Married	94(14.6%)	552(85.4%)	646(100.0%)	High
Divorced	19(17.6%)	89(82.4%)	108(100.0%)	High
Separated	8(22.9%)	27(77.1%)	35(100.0%)	High

Table 5 shows cross-tabulation on prevalence of family planning practices based on marital status among women of reproductive age in Rivers State. The result of the study showed a family planning practice prevalence rate of 85.4% among respondents who are married, 82.4% prevalence rate among divorced respondents and 36.0% among respondents who are single. Thus, the result showed that prevalence of family planning practice among single respondents was low

Hypothesis 1: There is no significant association between age and prevalence of family planning practices among women of reproductive age in Rivers State.

Table 6: Chi-square analysis on prevalence of family planning practices based on age

Age	Prevalence of family planning practice		Total	χ^2	df	p-value	Decision
	No	Yes					
15-19years	71(83.45%)	14(16.5%)	85(100.0%)	283.39	4	0.00	Rejected
20-24years	103(59.2%)	71(40.8%)	174(100.0%)				
25-29years	41(48.8%)	43(51.2%)	84(100.0%)				
30-34years	33(12.9%)	222(87.1%)	255(100.0%)				
≥35years	85(16.3%)	435(83.7%)	520(100.0%)				

P<0.05

Table 6 displayed chi-square analysis result on prevalence of family planning practices based on age. The result indicated a significant ($\chi^2 = 283.39$, $df=4$, $p < 0.05$) association on prevalence of family planning practices based on age. The null hypothesis which states that there is no significant association between age and the prevalence of family planning practices was thus rejected.

Hypothesis 2: There is no significant association between educational qualification and prevalence of family planning practices among women of reproductive age in Rivers State.

Table 7: Chi-square analysis on prevalence of family planning based on educational qualification

Educational qualification	Prevalence of family planning practice		Total	χ^2	df	p-value	Decision
	No	Yes					
No formal education	19(21.8%)	68(78.2%)	87(100.0%)	3.21	3	0.36	Not rejected
Primary education	19(33.3%)	36(66.7%)	54(100.0%)				
Secondary education	115(31.0%)	256(69.0%)	371(100.0%)				
Tertiary education	182(29.8%)	428(70.2%)	610(100.0%)				

$p > 0.05$, Not significant

Table 7 displays chi-square analysis result on prevalence of family planning based on educational qualifications. The result indicated a non-significant ($\chi^2 = 3.21$, $df=3$, $p > 0.05$) association on prevalence of family planning practices based on educational qualification. The null hypothesis which states that there is no significant association between educational qualification and the prevalence of family planning practices was thus not rejected.

Hypothesis 3: There is no significant association between marital status and prevalence of family planning practices among women of reproductive age in Rivers State.

Table 8: Chi-square analysis on prevalence of family planning based on marital status

Marital status	Prevalence of family planning practice		Total	χ^2	df	p-value	Decision
	No	Yes					
single	213(64.0%)	120(36.0%)	333(100.0%)	266.26	3	0.00	Rejected
married	94(14.6%)	552(85.4%)	646(100.0%)				
divorced	19(17.6%)	89(82.4%)	108(100.0%)				
separated	8(22.9%)	27(77.1%)	35(100.0%)				

P<0.05

Table 8 displays chi-square analysis result on prevalence of family planning based on marital status. The results demonstrated a significant ($\chi^2 = 266.26$, $df=3$, $p<0.05$) association on prevalence of family planning practices based on marital status. The null hypothesis which states that there is no significant association between marital status and the prevalence of family planning practices was thus rejected.

DISCUSSION

Table 1 showed that Prevalence of family planning practice was 70.2% among women of reproductive age which is moderate. This is very surprising comparing to the national prevalence of family planning use which is low. The plausible reason for this high prevalence rate may be associated with the free distribution of family planning commodities at the government owned family planning clinics and primary health care centres in Rivers State and the increased sensitization of the need for family planning in the State. The findings of the study is comparable to the findings of Nansseu, Nchinda, Katte, Nchagnouot and Nguetsa (2015) in the Mbouda health district Cameroon where 65.3% prevalence was recorded. Also the finding of the study is lower than the findings of Tekelab, Melka and Wirtu (2015) in western Ethiopia which recorded prevalence of 71.9%.

However, the findings of the study is at variance with the findings of Asakitikpi and Simbi (2015) in South Africa; Achana, Bawah, Jackson, Welaga, Awine, Asuo-Mante, Oduro, Awoonor-Williams and Philips (2015) in the Upper East region of Ghana; Alemayehu, Lemma, Abrha, Adama, Fisseha, Yebyo, Gebeye, Negash, Yousef, Fantu, Gebregzabher and Medhanyie (2016) afar region eastern Ethiopia. The difference in the result could be attributed to the time of study. for instance in the COVID 19 and Post COVID 19 era and with lockdown and its attendant economic hardship many families are more likely to go for prevention of pregnancy than getting pregnant which in turn could tell on the welfare of the family. The findings of the study is commendable but then, health workers and Health educators should not relent but intensify action in making the prevalence optimal.

Table 1 further showed that Condom was the most preferred method of family planning (22.4%). This is expected as condom could prevent both pregnancy and sexually transmitted infections. This finding of the study could be attributed to intensified sensitization during the HIV/AIDS campaigns in the state and the use of condom for its dual function. It also be due to the fact that in most patriarchal society men dictate what happened in the family as well as the reproductive performance of their spouse. The findings of the study is in keeping with the findings of Bankole, Ahmed, Neema, Quedraogo and Konyan (2007), Imaledo, Peter-Kio and Arulogun (2013), Peter-Kio and Dokiboeria (2015) and NPC, (2019) where the most preferred family planning commodity is condom.

However, the finding of the study is at variance with the findings of Briggs and Peter-Kio (2011) where oral contraceptive pills was the most preferred family planning method. The difference in the study could be linked to the setting, as in the previous setting was limited to single clinic which was specifically for family planning clinic while the current study encompassed several clinic that are spread across the three senatorial district of the state. The result of the study in Table 3 showed that Family planning practice was lowest among respondents who age 15-19years (16.0%). This is expected and could be attributed to the fact that this population are risk takers and are more likely to say that pregnancy may not occur at first intercourse. However, it is expected that respondents who are sexually active within this age group have increased risk of total fertility rate. This implies that this strata of people, if not, adequately taken care of, as they start engaging in sexual intercourse are likely to increase the already high fertility rate of the country giving rise to population explosion, food insecurity, high economic dependent rate and high maternal mortality rate and calls for urgent action from relevant authorities in sexual and reproductive health including the government through their ministries. The findings of the study is similar to the findings of Tekelab, Melka and Wirtu (2015) in Ethiopia, Rutaremwa, Kabagenyi, Wandera, Jhamba, Akiror and Nviri (2015) in Uganda, Pandey and Singh (2015) in India, Prata, Bell, Fraser, Carvalho, Neves and Nieta-Andrade (2017) in Angola where respondent greater age 20 are more likely to use family planning compared to respondents age 15-19years. The similarities could be attributed to the fact that most family planning programmes are hospital based and in the obstetrics and gynecology department of the health facilities basically attending to women who are pregnant, delivered or for fertility problems.

The findings of the study in Table 4 showed that Family planning practice was highest among respondents who had no formal education (78.2%). This is disturbing as education is usually seen as

precursor to adopt preventive method such as family planning practice. Though, the finding could possibly be attributed to the increased number of primary health care facilities at the grassroot by the State Government in Rivers. Also, the findings of the study could be attributed to the free family planning commodities distributed at these health facilities. However the findings of this study is at variance with the findings of Tekelab, Melka and Wirtu (2015) in Ethiopia, Rutaremwa, Kabagenyi, Wandera, Jhamba, Akiror and Nviri (2015) in Uganda, Alemayehu, Lemma, Abrha, Adama, Fisseha, Yebyo, Gebeye, Negash, Yousef, Fantu, Gebregzabher and Medhanyie (2016) in eastern Ethiopia, Wuni, Turpin and Dassah (2017) in urban Ghana and Belda, Haile, Melku and Tololu (2017). The variance in the study result could be attributed to regional differences in health budget.

The findings of the study in Table 5 showed that Family planning practice was lowest among respondents who are single (36.0%). This result is as expected since single women in non-stable relationship are less likely to plan for sexual intercourse and thus use family planning method. Also, in the communities where data was collected pregnancy out of wed-luck is not much of a sensitive issue, so single women who are pregnant are usually not discriminated against, this might explain for their none use of family planning method. The findings of this study is similar to the finding of Orach, Otim, Aporomon, Amone, Okello, Odongkara and Komakech (2017) in Uganda where singles are less likely to use contraceptive compared to those married.

CONCLUSION

Based on the findings of the study, it was shown that family planning practice among women of reproductive age in Rivers State was moderate. Spousal support in family planning was high. There was a significant association between family planning practices and age, religion, spousal support, and marital status. Conclusively, there is need for continuous sensitization of communities and training of service providers that would help utilization optimal which in turn could help bring about a sustainable nation.

1. Health workers and Health educators should carry out community based sensitization to make the prevalence optimal
2. Public Health educators/Health care providers should partner with religious bodies on how to mainstream family planning and religious teaching to pass on accurate information to the religious communities and the society at large.
3. Health workers/Professionals, family planning providers with other services should be rendered in the health facilities across the nation.
4. Communication specialist should re-design and evaluate existing IEC material for behavior change communication by targeting males as wells as women as partners in development.
5. Ministries of education should evaluate curriculum and include sexuality education more especially family planning in the curriculum from the junior secondary school level
6. Family planning service providers should include single mothers as part of their target population during community sensitization

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