Faculty of Natural and Applied Sciences Journal of Mathematics and Science Education
Print ISSN: 2814-0885 e-ISSN: 2814-0931
www.fnasjournals.com
Volume 3; Issue 1; November 2021; Page No. 11-18

MALE INVOLVEMENT IN FAMILY PLANNING AND SPOUSAL CONTRACEPTIVE USE IN KALABARI COMMUNITIES

Peter-Kio, O.B.
Department of Human Kinetics, Health and Safety Education. Ignatius Ajuru University of Education, Port Harcourt, NIGERIA

Corresponding author(email): opirite.peter-kio@iaue.edu.ng

Abstract
This study investigated male involvement in family planning and spousal contraceptive use in Kalabari. Thirteen research questions and 8 hypotheses guided the study. A descriptive correlational research design was adopted for the study. The population of the study consisted of all males aged 15 to 69 years in Rivers State. A sample size of 600 men was selected using a multi-stage sampling procedure. The instrument for data collection titled' Male Involvement in Family Planning and Spousal Contraceptive Use Questionnaire (MIFPSCUQ) adapted from three inventories was used". The reliability coefficient of the instrument ranged from 0.765 to 0.867. Percentage and Pearson contingency correlation coefficient were used to answer research questions. Binary logistic regression was used to test hypotheses at a 0.05 level of significance. The findings of the study showed the prevalence of spousal contraceptive use rate of 54.5%. The findings of the study also indicated that Males were less involved in family planning (44.7%).In addition, the findings of the study showed a positive moderate relationship between male involvement and spousal contraceptive use (C=.320; $p<0.05$). It was concluded that male involvement in family planning is a significant predictor of spousal contraceptive use in Rivers State. The study recommended among others Health Education practitioners should include male involvement in family planning as part of the family planning intervention programmes to increase spousal contraceptive uptake.

Key words: Male involvement, family planning, spousal, contraceptive use, Rivers State

Introduction

Nigeria is Africa's giant and the most populous country in Sub-Saharan Africa. In 2018, the country's population was predicted to be at 198 million people (National Population Commission, 2018). Nigeria's Total Fertility Rate (TFR) is 5.5 percent, with a 2.54 percent growth rate (National Agency for the Control of AIDS, 2015). In the next 27 years, this population will almost certainly double. The government of Nigeria formulated the National Policy on Population in 1988, which was later updated in 2004 due to the high population growth rate and TFR. The current growth rate's doubling effect, combined with the current economic condition, has numerous consequences for reproductive health in particular, as well as the health of the Nigerian population in general

Reproductive health is essential for a happy and healthy life. Reproductive health and issues are not just a concern for women; they require the attention of the entire family and society as a whole (Berhane, 2006). Before the 1994 International Conference on Population Development (ICPD), family planning programs and services had historically centred on women, to increase the contraceptive prevalence and lower fertility as well as maternal mortality and morbidity. The ICPD in 1994 and the Beijing Women's Conference in 1995 proposed a shift in family planning policy from a focus on women to a focus on spouses and men. Men become potential partners in advocating for excellent reproductive health rather than bystanders, impediments, or enemies when they are involved (Greene, et al, 2006).

Male engagement refers to all organizational initiatives addressed at men as a distinct category to enhance the acceptance and prevalence of contraceptive use in the family by both sexes. Second, increasing the number of men who encourage and support their partners and peers to use contraceptives, as well as their attitude toward family planning. Third, increasing the number of men who encourage and support their partners and peers to use contraceptives (Green & Chens, 2003; Bayray, 2012; Shisoka & Litali, 2015). Male involvement in family planning, according to Mburu and Adams (2011), encompasses all efforts aimed at ensuring active participation. Male involvement in family planning also entails shared responsibility between couples in family planning

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topics, to allow for collaborative contraceptive decision-making. Male engagement in family planning has two sides, with men providing adequate assistance in times of need and choices.

On the one hand, men's family planning knowledge, attitudes toward contraceptive usage, and communication with partners, and on the other hand, men's family planning knowledge, attitudes, and communication with partners in reproductive health and fertility control (Clark, et al, 2008). Male engagement in family planning can be thought of as a continuum extending from sufficient emotional, financial, and physical support to family planning, all of which influence spousal contraceptive use.

Male involvement has been demonstrated to predict contraceptive use in studies. For example, Haile and Enqueselassie (2006) found that men who are more involved in their communities are more likely to use contraceptives than men who are less involved. Male engagement in family planning is measured by spouse approval and communication. The use of contraception is predicted by spouse approval of family planning, according to Abraham et al (2010). Thus, according to Abraham et al., respondents who agreed with family planning were 16.6 times more likely to use contraceptives than those who did not approve of family planning. Kassa, et al. (2014) found that spouse approval affects the likelihood of using contraceptives as much as any other factor. Spousal support has been shown to predict contraceptive use as an indicator of male involvement in family planning. According to a study by Mekonnen and Worku (2011), women who have a supportive relationship are more likely to use contraception than women who do not have a supportive partner. Partners' support was substantially connected with contraceptive use, according to Ezeanolue et al (2015).

In Nigeria as in other parts of Africa, the family unit is primarily patrilineal. The male partners make major decisions including those that can stop women from the uptake of contraceptives and other reproductive health issues because the men typically control the family wealth and are known as the head of the household (Frank and McNicoll in Gita, 2007, Ogunjuyigbe, et al (2009). Bankole and Singh (1998) stressed that failure to incorporate men in family planning can have serious implications. Even when women are educated and motivated to use contraceptives as some researchers found, male opposition was cited as reasons for not using contraceptives. Pieces of evidence have shown that reproductive health programmes are more likely to be effective for women when men are involved (Mistisk, et al, 2003).

In Rivers State, males are the head of households. Men as heads of households make decisions that can impact on the lives of the members of the household including decisions such as the uptake of spousal contraceptive use. Thus are expected to be knowledgeable if their partners use family planning commodities to prevent, limit or space childbirth. It was observed that despite government efforts to enhance contraceptive use there exist some discrepancies in the utilization of contraceptives especially the low contraceptive prevalence rate nationally. Low contraceptive use had its attendant problems such as a high rate of maternal mortality and morbidity, and population growth leading to the non-sustainable population in a country. Low contraceptive use especially during this COVID 19 era with high rates of unemployment, high cost of the commodity could deepen food insecurity of the state and pressure on the headship of the family. Based on this premise, this study was designed to focus on the male involvement in family planning and spousal contraceptive use in Rivers State.

Objectives of the study

The objectives of the study were to determine:

1. Prevalence of spousal contraceptive use among males in Rivers State.
2. Extent of male involvement in family planning in Rivers State
3. Extent of male involvement in family planning and spousal contraceptive use in Rivers State

Research Questions

The following research questions guided the study

1. What is the prevalence of spousal contraceptive use in Rivers State?
2. What is the extent of male involvement in family planning in Rivers State?
3. What is the relationship between male involvement in family planning and spousal contraceptive use in Rivers State?

Hypothesis

The following hypothesis was formulated to guide the study and was tested at 0.05 level of significance

Ho_1: There is no significant relationship between male involvement in family planning and spousal contraceptive use in Rivers State

Materials and Methods

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The study used a descriptive correlational research approach to look into male engagement in family planning and spousal contraceptive use. The goal of descriptive correlational research is to figure out what kinds of natural relationships exist between two or more variables and in what ways. This study design is ideal as it allows the researcher to gather, describe, and evaluate a large amount of data (Bryman, 2012). The study's design was suitable since it described the respondents' features in their natural condition as it related to male engagement in family planning and spousal contraceptive use. In addition, several other researchers had used the design successfully in related studies in a variety of settings. For instance, Kamal et al, (2013) conducted a study on determinants of male involvement in family planning and reproductive health in Bangladesh, Kassa et al (2014) conducted a study on the level of males.

The population of the study consisted of all adult males aged 18 years and above in the three local government areas that make up the Kalabari Kingdom. With a population of ninety-two thousand, twenty-two (92022) males. The sample size for the study consisted of 600 men aged 15years to 69years. The sample size was determined using EPI Info 7 Statistical package using the single proportion for descriptive surveys. The software has the following parameters for calculating sample size, 1) Population, 2) expected frequency of the behaviour based on previous studies, Confidence Interval and design effect. The following figures were inputted into the software to determine the minimum sample size: population size = 2,239,399; 25% for the proportion of men involved in family planning based on previous study (Peter-Kio & Inainko, 2014), 95% Confidence Interval, and design effect of 2. To arrive at 576 which was rounded up to 600 accommodating for attritions.

A two-stage sampling procedure was adopted for the study comprising of clustered sampling technique, systematic sampling techniques, and simple random sampling techniques.. The first stage involved the selection of three (3) LGAs in the Rivers West senatorial zones using systematic random sampling technique and balloting with replacement. The LGAs selected included: Asari-Toru, Akuku-Toru and Degema Local Government Areas. The second stage involved simple random sampling technique with balloting without replacement to select 3 communities each from the three (3) LGAs and 200 samples from each of the communities.

The data was collected from respondents using a structured questionnaire titled "Male Involvement in Family Planning and Spousal Contraceptive Use Questionnaire (MIFPSCUQ)" with three sections and a reliability coefficient of 0.82 and 0.87 for male involvement in family planning and spousal contraceptive use, respectively. The study's instrument is divided into three sections: Section A included demographic variables such as age, marital status, marriage pattern, men's and spouse's educational qualifications, and parity; Section B focused on male involvement in family planning and included six questions such as whether they had ever discussed family planning with their spouse or friends, the pattern of discussion, and accompanying their spouse to family planning clinics. Section C included questions about the usage of spousal contraceptives.

The study employed the services of six research assistants in the distribution and collection of the instrument for data collection, two for each of the local government areas. The research assistants were instructed on the modality of data collection and the spot editing of the instrument for completeness. Data collection for each of the Local Government Areas lasted for one month. On the whole, the data collection procedure lasted for 3 months. Of the 600 hundred copies of questionnair0es distributed 582 copies were returned. This yielded a return rate of 97.0%.

Data collected were entered and recorded in the Statistical Package for Social Science (SPSS) software version 23. Data were analyzed using percentages, Pearson Contingency Coefficient “C” and binary logistic regression. Prevalence of spousal contraceptive use was assessed using questions such as is your spouse currently using contraceptives? The United Nation Population Department (UNDP) (2018) criterion for contraceptive use satisfaction was used, where a score of 75% and above was considered high, less than or equal to 50% as low while 51% to74% as moderate. The extent of male involvement in family planning was assessed using 6 questions. The questions are, have you ever informed others to use family planning? Have you opposed your friends or others from using family planning? have you informed your partner/spouse to use family planning? have you accompanied your spouse/partner to get a family planning method? and have you opposed the use of family planning of your wife or partner?. Kassa, et al., (2014) criterion for the level of male involvement was adopted thus a score <4 was considered less involvement while a score of 4 and above was considered more involved.

Pallant (2011) interpretation of the “C” value was employed. In the interpretation, values’ ranging from .10-.29 was considered to have a low relationship, .30-.49 moderate relationship, .50-.99high relationship and 1.0

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perfect relationship. Positive (+) and Negative (-) are the directions of the relationship. Binary logistic regression was used to test the hypothesis at 0.05 significant level.

Results

Table 1: Prevalence of spousal contraceptive use

Prevalence of Spousal Contraceptive use	**Frequency** F	**Percentage** %
Spouse currently using contraceptives		
Yes	317	54.5
No	265	45.5
Contraceptive method currently used by spouse		
Coitus interruptus	55	17.3
Condom	144	45.3
Diaphragm	27	8.5
Oral contraceptives	45	14.2
Postinor	37	11.6
Others	10	3.1

Table 1 showed the percentage distribution of the prevalence of spousal contraceptive use. The result revealed that the majority (54.5%) of the spouses are currently using the contraceptive. Out of which 45.3% are currently using condoms, 14.2% oral contraceptives, 11.6% Positron. Therefore, the prevalence of spousal contraceptive use is 54.5% (Table 1 detail) which is considered moderate.

Table 2: Percentage distribution on extent of male involvement in family planning

Extent of involvement	**Frequency F**	**Percentage %**	**Decision**
Informed others to use family planning	346	59.5	**MI**
Support friends using family planning	139	23.9	**LI**
Informed partner to use family planning	306	52.7	**MI**
Supported partner to use family planning	302	52.2	**MI**
Accompanied partner to get family planning method	195	33.5	**LI**
Approved partners use of family planning	270	46.5	**LI**
Grand percentage		**44.7**	**LI**

MI=More Involved LI=Less Involved

Table 2 indicated the extent of male involvement in family planning. The result of the study showed that 59.5% of the respondents informed others to use family planning, 52.7% informed partners to use family, 52.2% supported partners to use family planning. Overall, 44.7% of the study respondents are less involved. In conclusion, the result showed that males in Rivers State are less involved in family planning.

Table 3: Pearson Contingency Coefficient on Relationship between Male Involvement in Family Planning and Contraceptive Use

Male involvement in family planning	**Spousal contraceptive use** Yes	No	**Total**	**C**	**Decision**
Less involved	135(40.8%)	196(59.2)	331 (100.0)	.32	MR

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More involved	183(72.9%)	68 (27.1)	331(100.0)
Total	264(45.4)	318(54.6)	582(100.0)

MR= Moderate Relationship

The result in Table 3 showed the relationship between male involvement in family planning and spousal contraceptive use. The result revealed a positive moderate (C = 0.32) relationship between male involvement in family planning and spousal contraceptive use. This indicated that as male involvement in family planning increases spouse contraceptive use will increase/improve.

Table 4: Logistic Regression on Relationship between Male Involvement in Family Planning and Spousal Contraceptive Use

	B	S.E	Wald	df	P-value	Exp(B) Odds Ratio(OR)	95% C.I for Exp(B) Lower	Upper
Less involved	Ref							
More involved	1.36	.18	56.53	1	.00	3.90	2.74	5.56

χ^2= 60.99; p< 0.05

The association between male involvement in family planning and spousal contraceptive use was investigated using binary logistic regression. On bivariate analysis, the study found a significant link between male engagement in family planning and spousal contraceptive use (2(df=1, N=582)=60.99, p0.00). The model as a whole explained 9.9% of the variance in spousal contraceptive use (Cox &Snell R square) and 13.3% (Nagelkerke R square). Males who are more involved in family planning are 3.90 times (OR=3.90, 95 percent C.I: 2.74-5.56) more likely to report spousal contraceptive use than those who are less involved, according to the findings. Thus, the null hypothesis that there is no significant association between male engagement in family planning and spousal contraceptive use is rejected.

Discussion

The prevalence of spousal contraceptive use was 54.5 percent, according to the study's findings (Table 1). The result of the study implies that the prevalence of spousal contraceptive use was moderate. This study's findings are consistent with those of Mustafa et al (2008), Muema (2016), and Khan et al (2018), who found that women used contraception in 53 percent, 54.7 percent, and 54 percent of the time, respectively.

Although, the finding of this study is lower than the finding of Nansseu, et al. (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, et al (2015) in western Ethiopia which recorded a prevalence of 71.9%. The disparity between the current study's findings and those of earlier research can be traced to the study's population. The current study predicated spousal contraceptive use on males' reports on whether or not their spouses utilize contraception. The prior studies' study populations, on the other hand, were all female. Men's power is significant in African settings, particularly in patrilineal societies, and their opinions are generally valued. Women in such situations are likely to withhold information from their partners for fear of rejection or being labelled as promiscuous

This study's findings on spousal contraceptive use prevalence were not ideal, considering the prevailing economic situation in this COVID 19 era. This could result in a rise in population that isn't sustainable. Non-optimal contraceptive use could lead to an increase in undesired and unexpected pregnancies in the future, as well as an increase in unsafe abortion, which could lead to an increase in maternal morbidity and mortality. Second, given Nigeria's current economic state, improper contraceptive use could lead to household food insecurity. Although Rivers state has a higher rate of spousal contraceptive use than the national average of 16 percent. This is quite positive and gives promise for future contraceptive behaviour, which could be attributed to the State government's increased media presence on family planning and free distribution of family planning supplies.

The results in Table 2 showed that the majority (56.9%) of the study respondents were less involved in family planning. Low male involvement in family planning may be related to a cultural belief that family planning is a woman's right and that women should know when the household does not require additional mouths to feed. Another explanation for limited male involvement in family planning could be the fear that their spouses will

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become promiscuous, undermining male authority over the woman, as well as a lack of time for family planning activities

The finding of the study is comparable to the findings of Uduma (2013) where the majority of the study sample were less involved in family planning. Similarly, the finding of the study is in line with the findings of Walle and Alamrew (2014) in Bahir Dar city where the majority of the sampled population were less involved in family planning. The finding of the study collaborate the findings of Joshi (2015) where the findings also showed that the majority of the study sampled population were less involved in family planning. Also, In a southwestern Nigeria study conducted by Adelekan, et al (2014) the findings showed that 95.2% of the men were less involved in family planning.

The finding of the study varied from the findings of Kamal, et al (2013) on determinants of male involvement in family planning and reproductive health in Bangladesh where a higher proportion of the study population was involved in family planning.

The finding of the study also revealed a significant relationship between male involvement in family planning spousal contraceptive use. This is expected as more women in traditional African society depend on their male partners for livelihood. Thus, the more support from male partners the more likely will the female adopt the uptake of contraceptives. This finding is in keeping with the finding of Muema (2016) in Kenya where there was a significant relationship between spousal approval and contraceptive use. The finding of the study is also similar to the finding of Kama, et al, (2016) in rural Northern Nigeria where partner support is significantly related to contraceptive use.

The finding of the study negates the finding of Peter-Kio and Inainkon (2014) in Degema Local Government Area of Rivers State where the finding showed a non -significant relationship between spousal approval and contraceptive use. The difference noted in the study could be attributable to the difference in the time of the study and the population of the study.

Conclusion

Based on the findings of the study, it was shown that there was a significant relationship between male involvement in family planning and spousal contraceptive use among males in Rivers State. Although males were less involved and spousal contraceptive use was sub-optimal. Moderate contraceptive use, particularly in the COVID 19 era, is a matter of concern, especially given the rising unemployment rate and high expense of living. To reduce the country's high total fertility and the number of hospitalizations due to maternal morbidity to reduce the pressure on hospitalizations due to COVID 19, the government at all levels must intensify media campaigns on contraceptive use and continue to promote male involvement in family planning

Recommendations

Based on the findings of the study the following recommendations were postulated.

1. The Ministry of Health should implement coordinated contraceptive use prevention efforts. Integrating health promotion with the free distribution of family planning commodities in communities, for example.

2. Providers of family planning services in various health facilities should encourage male participation to improve spousal contraceptive use. In addition, curriculum makers should incorporate male involvement in family planning as a topic for family planning intervention programs.

3. In collaboration with Information, Education, and Communication (IEC) specialists, Nollywood film producers and short play writers should develop scripts, act dramas, and short plays about male involvement in family planning and the necessity for family planning. 1. The Ministry of Health should implement coordinated contraceptive use prevention efforts. Integrating health promotion with the free distribution of family planning commodities in communities, for example

References

Abraham, W., Adamu, A. ,& Derese, D. (2010). The involvement of men in family planning: an application of Trans theoretical model in Wolaita Soddo Town in South Ethiopia. *Asian Journal of Medical Sciences*, 2(2), 44-50.

Adelekan, A., Omoregie, P., & Edoni, E. (2014). Male involvement in family planning: challenges and way forward. *International Journal of Population Research*. http://dx.doi.org/10.1155/2014/416457

Bankole, A., & Singh, S. (1998). Couples' Fertility and Contraceptive Decision-Making in Developing Countries: Hearing the Man's Voice. *International Family Planning Perspectives, 24(*1), 15-24.

Bayray, A. (2012). Assessment of male involvement in family planning use among men in south eastern zone of Tigray, Ethiopia. *Scholarly Journal of Medicine, 2*(2), 1-10 http:// www.scholarly-journals.com/SJM.

Belda, S.S., Haile, M.T., Melku, A.T., & Tololu, A.K. (2017), Modern contraceptive utilization and associated factor among married pastoralist women in Bale Eco-region Bale zone, South East Ethiopia. *Bio Med Central Health Services Research,* 17:194n DOI 10.1186/s12913-017-2115-5.

Berhane, Y. (2006). Male involvement in reproductive health. *Ethiopian Journal Health Development,20*(3), 135-136.

Bifato, B. (2016). Assessment of male involvement in family planning use in Loko Abaya District, Southern Ethiopia: cross-sectional study. *Global Journal of Human-Social sciences: H Interdisciplinary*, 16(4) Online ISSN: 2249-460x & Print ISSN: 0975-587X.

Bryman, A. (2012). *Social research methods*. New York. Oxford University press.

Clark, J., Yount, K.M.,& Roger, R. (2008). Men's involvement in family planning in rural Bangladesh. *Journal of Biosocial Science, 2008(40)*, 815–840.

Ezeanolue, E.E., Iwelunmor, J., Asaolu, I., Obiefume, M.C., Ezeanolue, C.O., Osuji,A., Ogidi, A.G., Hunt, A.T., Patel, D., Yang, W., & Ehiri, J.E.(2015). Impact of male partners awareness and support for contraceptives on female intent to use contraceptives in southeast Nigeria. *Bio Med CentralPublic Health*, 15, 879 DOI 10.1186/s12889-015-2216-1.

Frank, O., &McNicoll, G. in Gita, G.N. (2007). Spousal communication and family planning behavior in Northern Cape, South Africa. Thesis in the Department of Statistics, Faculty of Natural Sciences. University of the Western Cape

Green, P.C. & Chens, J. (2003). *Male Involvement in Reproductive Health*. CPD UNFPA. Paper 27. http://www.cpd.org.bd/pub_ attach/unfpa27.pdf.

Greene, M.E., Mehta, M., Pulerwitz. J., Wulf, D., Bankole, A., & Susheela, S. (2006) *Involving men in reproductive health: Contribution to development. to the report of the public choices, private decisions: sexual and reproductive health and the millennium development goals Background paper.* Millennium project.

Haile, A., & Enqueselassie, F. (2006). Influence of women's autonomy on couples contraception use in Jimma town, Ethiopia. *Ethiopian Journal of Health and Development*, 20(3), 145-151. Joshi, I.R. (2015) Male participation in family planning. Human Behaviour Perspective. Journall of Nepal Health Research Counc, 13(31),185-195

Joshi, I.R. (2015) Male participation in family planning. Human Behaviour Perspective. Journall of Nepal Health Research Counc, 13(31),185-195

Kamal, M.M., Islam, S., Alam, M.A., & Hassan, A.B.M.E. (2013). Determinants of male involvement in family planning and reproductive health in Bangladesh. *American Journal of Human Ecology*, 2(2), 83-93 DOI: 10.11634/216796221302332.

Kana, M.A., Tagurum, Y.O., Hassan, Z.I., Afolanranmi, T.O., Ogbeyi, G.O., Difa, J.A., Amede, P., and Chirdan, O.O. (2016). Prevalence and determinants of contraceptive use in rural Northeastern Nigeria: Results of a mixed qualitative and quantitative assessment. *Annals of Nigerian Medicine,* 10:3-10

Kassa, M., Abajobir, A.A., & Gedefew, M. (2014). Level of male involvement and associated actors in family planning services utilization among married men in Debremarkos town, Northwest Ethiopia. *BMC International Health and Human Rights*, 14, 33 http://www.biomedcentral.com/1472-698X/14/33.

Mburu, P.T., & Adams, D. (2011). Health communication: Lesson from family planning and Reproductive Health Series, 23. Data from the National Survey of Family Growth, 25, 1-160.

Medhanyie, A.A., Desta, A., Alemayehu, M., Gebrehiwot, T., Abraha, T.A., Abrha, A., &Godefay, H. (2017). Factors associated with contraceptive use in Tigray, North Ethiopia. *Reproductive Health*, 14, 27 DOI 10.1186/s12978-017-0281-x.

Mekonnen, W., &Worku, A. (2011). Determinants of low family planning and high unmet need in Butajira district, South Central Ethiopia. *Reproductive Health*, 8:37 http://www.reproductive-health-journal.com/content/8/1/37

Mistik, S., Nacar, M., Mazicioglu, M., & Cetinkaya, F.(2003). Married men's opinions and involvement regarding family planning in rural area. *Contraception, 63, 133-137.*

Muema, F.K. (2016). Predictors of family planning services uptake among women of reproductive age in Moyale sub-county, Kenya. Thesis Submitted In Partial Fulfilment for the award of the Degree of Master of Public Health (Monitoring and Evaluation) In the School of Public Health of Kenyatta University.

Mustafa, R., Afreen, U., & Hashmi, H.A. (2008). Contraceptive Knowledge, attitude and practice among rural women. Journal of the College of Physicians and Surgeons-Pakistan, 18(9), 542-545

Nansseus, J.R.N., Nchinda, E.C., Katte, J., Nchagnout, F.M & Nguetsa, G.D. (2015). Assessing the knowledge, attitude and Practice of family planning among women living in Mbouda, Health district, Cameroon. *Reproductive Health,* 12:92DOI10.1186/512978-015-0885-9.

National Agency for the Control of AIDS (2015). Global AIDS Response Country Progress Report Nigeria. Federal Republic of Nigeria, Abuja.

National Population Commission (2018). *Data for national planning and development*. National Population Commission. Abuja

Ogunjuyigbe, P.O., Ojofeitimi, E.O., & Liasu, A. (2009). Spousal communication, changes in partner attitude and contraceptive use among the Yorubas of Southwest Nigeria. *Indian Journal of Community Medicine*, 34(2):112-116 DOI:10.4103/0970-0218.51232.

Osungbade, K.O., Akinyemi, O.O., & Ojediran, T.D. (2014). Commercial drivers participation in the use of family planning services in Ibadan, Southwest Nigeria. *British Journal of Medicine and Medical Research, 4*(10), 3698-3719.

Pallant, J. (2011).*Survival Manual: A step by step guide to data analysis*. Allen and Unwin. Australia

Peter-Kio, O.B., & Inainkon, G.E. (2014). Spousal approval: A non-predictor to contraceptive use among women in Degema Local Government Area. *Africa, Social and Educational Journal,* 3(3), 25-29.

Shisoka, J., &Litali, G. (2015). Male involvement in family planning services for population development. *Journal of Emerging Trends in Economics and Management Sciences*, 6(7), 237-243.

Tekelab, T., Melka, A.S., &Wirtu, D. (2015). Predictors of modern contraceptive methods use among married women of reproductive age groups in western Ethiopia: a community based cross sectional study. *BioMedCentral Women's Health*, 15:52DOI 10.1186/s12905-015-0208-z.

Tilahum, T. (2014). Marital dynamics in family planning: the role of couple interaction in Jimma zone, southwest Ethiopia. Doctoral thesis submitted to the faculty of Medicine and health Sciences, Gent University.

Tolassa, Y. (2004). *The role of men in family planning in a rural community of western Ethiopia.* Thesis submitted to the School of Graduate Studies, Addis Ababa University in partial fulfillment of the requirement for the degree of Masters of Public Health.

Uduma, B.I. (2013). *Extent and socio-demographic determinants of male involvement in family planning practices in Ohafia Local Government Area, Abia State*. Masters Thesis submitted to the Department of Health and Physical Education, University of Nigeria, Nsukka.

UNDP (2018). *World Contraceptive use methodology. .http://*www.un.org.dataset, 2018

Walle, Y., & Alamrew, Z, (2014). The current states of male involvement in family planning and factors correlated with among male factory workers in Bahir Dar City. *American Journal of Public Health Research*, 2(5), 188-197.