Doi: 10.31578/jebs.v5i2.204

Perceived Influence of Family Planning Education on Maternal Health among Reproductive-Aged Women in Ijebu Zone of Ogun State Nigeria

Saidat Bola Adegbite *
Emmanuel Akinyemi Adenuga **

Abstract

The health of women during pregnancy, childbirth and the postpartum period is maternal health. This study examined the influence of family planning and maternal health education on reproductive-aged women's health in ljebu zone of Ogun state, Nigeria. The population of the study includes all reproductive-aged women who have accessed and used family planning and maternal health care services in ljebu zone of Ogun State. This study was a descriptive survey. The instrument used was self-structured. Four health centres were randomly selected for the study, while 300 participants were purposively selected for the study. Chi-square (X2) was the main statistical tool used for the analysis. All hypotheses formulated were rejected at 0.05 alpha level of significance. The findings of this study show that the influence of family planning and maternal health care /education on reproductive-aged women's health in ljebu zone of Ogun state include lengthening the interval between pregnancies, reduce the number of high-risk pregnancies, promotes efficiency and cost-effectiveness of health services, and improve women's lives and satisfaction with health services. Based on the findings of this study, it is therefore concluded that family planning and maternal health education will influence maternal mortality as well as promote maternal health and child care among married people in ljebu zone of Ogun state if integrated. It is therefore recommended that maternal health education services should be carried out in the public through the media by both governmental and non-governmental organizations. Maternal healthcare and family planning should be integrated in the health centres.

Keywords: Education in family planning, **f**amily planning, maternal health, maternal health education, reproductive-aged women, reproductive-aged women's health

Introduction

Maternal health care is regarded as a vital and integral component of primary health care aiming at promoting the responsible parenthood, controlling population and improving people's standards of living. One of the major problems facing developing countries arises from uncontrolled increase in their population. Consequently, the world population has been rising steadily reaching above 7.4 billion with more than 71 percent living in developing countries.

Nigeria, as the seventh most populous country in Africa with estimated population of above 188,874,566 is further projected to reach 206,803,986 by the year 2020 (Woldometer, 2016). There are estimated 35 million of women of reproductive age in the country with annual growth rate of 2.7 % which is attributed to high total fertility rate of 5.5 children per woman. The

^{*} Federal College of Education Abeokuta, Ogun State, Nigeria

^{**} Human Kinetics and Health Education Department, Faculty of education, Olabisi Onabanjo University, Ago iwoye, Ogun State, Nigeria Corresponding Email: akinyemi.adenuga@oouagoiwoye.edu.ng



infant mortality rate of 71.5 percent per 1000 live births and maternal mortality of 814 per 100,000 live birth and 121 per 1000 adolescent aged 15-19 years (National Demographic and Health Survey [NDHS], 2018; Index Mundi, 2019).

Maternal mortality is one of the major challenges to health system in the world and Sub-Saharan Africa, especially Nigeria. In order to encourage the international community to address this challenge, maternal mortality reduction was included as one of Millennium Development Goal (MDG) 5. The target of MDG5 is to reduce maternal mortality ratio (MMR) to less than 70% per 100,000 live births by 2030 but current MMR is 814 per 100,000 live births (Richardson, Goldschmidt, Leech & Williford, 2011; Santrock, 2013; Toure et al., 2013; UNICEF. 2013; WHO and UNICEF, 2010).

Nigeria MMR rate increased from 470 maternal deaths 814 per 100,000 maternal deaths for every 100,000 live birth. The maternal mortality goes beyond the mother's death as they also obstruct the development of family, slow down economic growth and lead to global productivity losses (Stuebe & Schwarz, 2010). Government organized media programmes to sensitize the general public on the danger and problem inherent in giving birth to more children than one can adequately and conveniently cater for (Chibuzor, 2014). Later, population policy was introduced by former President Ibrahim Gbadomosi Babangida in 1988, entitled National Policy on Population for Development, Unity progress and Self Reliance. An increased understanding of both national population dynamics, especially high fertility and rapid population growth, and a lack lustre development effort underlay the policy. The stated goals of the policy were to improve the standards of living, quality of life and achieve lower population growth rate that are compatible with the attainment of social and economic goals and even distribution of population between the urban and rural areas. Family Planning Services shall be made available to all people voluntarily wishing to use them. Then the government introduced maximum number of four children index to control the population (Santrock, 2013; Toure et al., 2013; UNICEF. 2013; WHO and UNICEF, 2010).

In regards to current situation surrounding maternal mortality in Nigeria, there is a need to improve on family planning education among reproductive-aged women in order to promote and strengthen the health status of women. Family planning is a continuous healthcare which includes planning responsible parenthood, controlling population and improving the standards of living. The World Bank (2009) estimates that 74% of maternal death could be averted if all women had access to interventions that address complication of pregnancy and child birth, especially emergency obstetric care. Similarly, the studies that focused on maternal morbidity and mortality in developing countries repeatedly recommend the need for maternal care, availability of trained personnel to attend to women during labour and delivery, and low-cost effective delivery.

According to World Health Organisation (2010), family planning is a way of regulating the occurrence of child birth in order to promote the well-being of the family and that of the society in general. Family planning can also be referred to as the use of various methods of fertility control that will help individuals (men and women) to have the number of children they desire and when they want them in order to ensure the well-being of children and parents.

The method includes modern family planning methods (safe period) and lactational amenorrhea billing method and basal body temperature chart (Smoley & Robinson, 2012). Hormonal implants and hormonal injectable while the non-hormonal family planning methods are Intrauterine Contraceptive Device (Copper T), male condoms, female condoms, diaphragm bilateral tube ligation, vasectomy, spermicides and cervical caps (Kufre & Sunday, 2014).

According to Kufre and Sunday (2014), married women sought family planning more than adolescents. However, the need to improve accessibility and availability of family planning to adolescents is especially important, because they are the ones who get in contact with unwanted pregnancies and procure unsafe abortions. Olugbenga-Bello, et al. (2011), review that utilization and acceptance of modern contraceptive methods are crucial in controlling population growth, preventing 2.3 million unplanned



birth, 22 million abortion, 1.4 million infant death, 142,000 pregnancy-related death and 505,000 children losing their mother due to pregnancy-related death.

There are a lot of factors affecting family planning services and education, which include: religion or affliction with their indoctrination, low level of education, lack of employment with high dependency, high cost of devise, poor decision making about the benefits, possible side effects of the method and the frequency of the services, demystifying myths and secondary in the friendly service, lack of male support making the application of services and education very low (Awingura Apanga & Ayamba Adam, 2015; Disu & Kofoworola, 2012). Likewise, the attitude of the community toward family planning services and education is the most important determinant factor in order to improve the utilization of the service (Moronkola, Ojediran & Amosu, 2006). Family planning is hailed as one of the great public health achievements of the last century and yet over 200 million women worldwide who want to use contraceptive do not have access to them (United Nations Population Fund, 2016).

Education improves health, while health improves learning potential. Education and health complement, enhance and support each other; together, they serve as the foundation for a better world (Maternal Health Task Force, 2017). To be able to read, write and calculate has been acknowledged as a human right. However, more than 100 million children are still deprived of access to primary education and fewer than half of all children worldwide participate in early childhood programmes. When family planning services are easy to obtain, more women choose and are able to have fewer children. Integrated services save women's time, enabling them to be more active in the labor force, improve household income, and invest more in their own, as well as their children's, health, education, and well-being. Integrating family planning services into maternal health services can be an effective strategy for reducing unmet needs, especially in situations where maternity care is a woman's primary contact with the health care system (Nigro, 2011; Piper, 2011). Antenatal care provides an opportunity for postpartum family planning education, allowing women to establish healthy birth spacing practices. This strategy also benefits women by increasing their participation in the workforce, which in turn raises household income and allows women to invest in themselves and their families (Nodine & Hastings-Tolsma, 2012; Paintner, Williams, & Burd, 2012; Richardson et al., 2011).

Hypotheses

- 1. The interval between pregnancies will not be perceived as a significant influence of family planning and maternal health education.
- 2. Reduction in the number of high-risk pregnancies will not be perceived as a significant influence of family planning and maternal health education.
- 3. Health services efficiency and cost-effectiveness will not be perceived as a significant influence of family planning and maternal health education.
- 4. Improvement of women's lives and satisfaction with health services will not be perceived as a significant influence of family planning and maternal health education.

Methodology

The study adopted a descriptive survey research method. The population of the study includes all reproductive-aged women who have accessed and used family planning and maternal health care services in ljebu zone of Ogun State. The simple random sampling technique was used to select four health centres used for this study, while 300 participants were purposively selected

for the study. A self-structured instrument entitled Family Planning Education Maternal Health Influence Questionnaire (FaPEMHIQ) was used to gather information for the study. The instrument was validated using Cronbach alpha and the reliability of 0.85 was obtained. The instrument was personally administered on young adults in college by the researchers in the selected towns. The data collected was analyzed using descriptive statistics and *Chi-square* (X²) at 0.05 alpha level *of significance*.

Results/Discussion

Hypothesis 1: The interval between pregnancies will not be perceived as a significant influence of family planning and maternal health education.

Table 1: Chi-square (X2) Analysis of interval between pregnancies and family planning and maternal health

Response	Observed	Expected	N	Df	Chi-square (X²)
Strongly Agreed	108	60	300	4	124.133
Agreed	98	60			
Undecided	60	60			
Disagreed	16	60			
Strongly Disagreed	18	60			

Table value = 8.25 at 5% level of Significance

The table 1 shows that calculated Chi-square $(X^2) = 124.133$ is greater than Chi-square (X^2) critic = 8.25 at 5% level of significance, therefore, the hypothesis that the interval between pregnancies will not be perceived as a significant influence of family planning and maternal health education is rejected; this implies that the interval between pregnancies is perceived as an influence of family planning and maternal health education.

This is in support of Abbot and Winzer-Sehran, (2012) findings that intergration of family planning service and maternal health care/education increases the intervals between pregnancies. Antonopoulos (2011) also states that the interval between the pregnancies permits the womb to be fully prepared for the next pregnancy. Besides, Bennett, Bagot, and Arya (2012) state that the healing of the womb due to increase in the pregnancies interval minimizes future delivery crisis. They all underline how important is to provide family planning service and maternal healthcare / education.

Hypothesis 2: Reduction in the number of high-risk pregnancies will not be perceived as a significant influence of family planning and maternal health education.

Table 2: Chi-square (X2) Analysis of pregnancies risk reduction, family planning and maternal health

Response	Observed	Expected	N	Df	Chi-square (X²)
Strongly Agreed	78	60	300	4	34.267
Agreed	76	60			



Undecided	44	60
Disagreed	74	60
Strongly Disagreed	28	60

Table 2 shows that calculated Chi-square (X^2) = 34.267 is greater than Chi-square (X^2) critic = 8.25 at 5% level of significance, therefore, the hypothesis that reduction in the number of high-risk pregnancies will not be perceived as a significant influence of family planning and maternal health education is rejected. This implies that reduction in the number of high-risk pregnancies is perceived as an influence of family planning and maternal health education. This conclusion is supported by Blandthorn, Forster, and Love (2011) results that family planning service complementing maternal health care reduced the number of high-risk pregnancy among reproductive-aged women. Cheng (2011), Crijns (2012), as well as Izugbara and Ngilangwa (2010) state that reduction in high-risk pregnancy reduces maternal mortality. Jaddoe and Steegers (2011) also state that reduction in high-risk pregnancy leads to reduction of pregnancy related death.

Hypothesis 3: Health services efficiency and cost-effective will not be perceived as a significant influence of family planning and maternal health education.

Table 3: Chi-square (X²) Analysis Health services efficiency and cost-effectiveness

Response	Observed	Expected	N	Df	Chi- square (X²)
Strongly Agreed	108	60	300	4	124.133
Agreed	98	60			
Undecided	60	60			
Disagreed	16	60			
Strongly Disagreed	18	60			

Table 3 shows that calculated Chi-square (X^2) = 124.133 is greater than Chi-square (X^2) critic = 8.25 at 5% level of significance, therefore, the hypothesis that health services efficiency and cost-effectiveness will not be perceived as a significant influence of family planning and maternal health education is rejected; this implies that health services efficiency and cost-effectiveness is perceived as an influence of family planning and maternal health education. This is in support of Koren and Nordeng, (2012) stating that integration of family planning service and maternal healthcare / education enhances reproductive health service efficiency. Li, Chen, Li and Xu, (2011) also mention that the integration of family planning service and maternal healthcare / education makes health service to be cost effective.



Hypothesis 4: Improvement of women's lives and satisfaction with health services will not be perceived as a significant influence of family planning and maternal health education.

Table 4: Chi-square (X²) analysis of improvement of women's lives and satisfaction with health services

Response	Observed	Expected	N	Df	Chi-square (X²)
Strongly Agreed	78	60	300	4	34.267
Agreed	76	60			
Undecided	44	60			
Disagreed	74	60			
Strongly Disagreed	28	60			

Table 2 shows that calculated Chi-square (X²) = 34.267 is greater than Chi-square (X²) critic = 8.25 at 5% level of significance, therefore, the hypothesis that improvement of women's lives and satisfaction with health services will not be perceived as a significant influence of family planning and maternal health education is rejected. This implies that improvement of women's lives and satisfaction with health services is perceived as an influence of family planning and maternal health education. This is in line with Marret (2010) and Maternal Health Task Force (2017) conclusions that integration of family planning service and maternal healthcare / education enhances reproductive health service satisfaction among reproductive-aged women. Nigro (2011), Nodine and Hastings-Tolsma (2012), as well as Paintner, Williams and Burd (2012) also indicate that integration of family planning service and maternal healthcare / education improves reproductive-aged women's life because it permits their body to regain its strength before the next pregnancy and this averts labour-related crises.

Conclusion

Based on the findings of this study, it is therefore concluded that the integration of family planning and maternal health education prevent maternal mortality as well as promoting maternal health and childcare among married people in Ijelu zone of Ogun State. The general perception, therefore, is that in the study location, both family planning and maternal health education influenced maternal health and child health care among the reproductive-aged women who have accessed and used both services in the study zone.

Recommendations

Thus, based on the outcomes of the study, it is recommended that:



- 1. Maternal health education services should be carried out in the public through the media by both governmental and non-governmental organizations.
- 2. Government should form Task Force from national to local level to promote and coordinate the integration of family planning and maternal healthcare as well as to ensure that both services are giving pari-passu.
- 3. Government should establish women-friendly centres that would provide the integration of services and education while women of reproductive age should be encouraged to access the services.
- 4. Improvement of the knowledge and skills of those working with women of reproductive age should able to tackle their situation based on their skill care utilization behaviour.
- 5. The integration of maternal health care and family planning should be included in medical and nursing programmes.
- 6. Specific departments for the integration in different health service outlets at all levels of healthcare service and education should be established.



References

- Abbott, L.C. & Winzer-Sehran, U.H. (2012). Smoking during pregnancy: Lessons learned from epidemiological studies and experimental studies using animals. *Critical Reviews in Toxicology*, 42 (4): 279–303. DOI: 10.3109/10408444.2012.658506
- Antonopoulos, C. (2011). Maternal smoking during pregnancy and childhood lymphoma: A meta-analysis. International Journal of Cancer, 129. 2694–2703. DOI:10.1002/ijc.25929
- Awingura Apanga, P. & Ayamba Adam, M. (2015). Factors influencing the uptake of family planning services in the Talensi District, Ghana. The Pan African Medical Journal, 20 (10). DOI: 10.11604/pamj.2015.20.10.5301
- Bennett, S.A., Bagot, C.N., & Arya, R. (2012). Pregnancy loss and thrombophilia: The elusive link". *British Journal of Hematology*, 157 (5), 529-42. DOI:10.1111/j.1365-2141.2012.09112
- Blandthorn, J., Forster, D.A., & Love, V. (2011). Neonatal and maternal outcomes following maternal use of buprenophine or methadone during pregnancy: Findings of a retrospective audit. *Women and Birth*, 24, 32–39. DOI: 10.1016/j.wombi.2010.07.001
- Cheng, D. (2011). Alcohol consumption during pregnancy: Prevalence and provider assessment. *Obstetrics and Gynecology*, 117 (2, Pt. 2), 212–217. DOI:10.1097/aog.0b013e3182078569
- Crijns, H.J., (2012). Prescriptive contraceptive use among isotretinoin users in the Netherlands in comparison with non-users: A drug utilization study. *Pharmacoepidemiology and Drug Safety*, 21: 1060–1066.
- Disu, Y.O. & Kofoworola, A.O. (2012). A study on utilisation of family planning services among the women of reproductive age group in Badagry local government area of Lagos state, Nigeria. 13th World Congress on Public Health World Health Organization.

 Retrieved April 18, 2020 from https://www.researchgate.net/publication/268102984_A_Study_on_Utilisation_of_Family_Planning_Services_Among_the_Women_of_Reproductive_Age_Group_in_Badagry_Local_Government_Area_of_Lagos_State_Nigeria
- Index Mundi. (2019). Nigeria. Country profile. Retrieved April 18, 2020 from https://www.indexmundi.com/nigeria/
- Izugbara, C, & Ngilangwa, D. (2010). Women, poverty and adverse maternal outcomes in Nairobi, Kenya. *BMC Women's Health,* 10, article 33 (2010). DOI: 10.1186/1472-6874-10-33.
- Jaddoe, V.W.V. & Steegers, E.A.P. (2011). Individual accumulation of heterogeneous risks explains perinatal inequalities within deprived neighbourhoods. *European Journal of Epidemiology*, 26 (2): 165–180. DOI:10.1007/s10654-010-9542-5.
- Koren, G. & Nordeng, H. (2012). Antidepressant use during pregnancy: The benefit-risk ratio. *American Journal of Obstetrics and Gynecology*, 207 (3), 157-163.
- Kufre, A.U. & Sunday, O.U. (2014). Family planning practice in Nigeria: Findings from family physicians. Retrieved April 18, 2020 from https://www.semanticscholar.org/paper/Family-Planning-Practice-in-Nigeria%3A-Findings-From-Umoh-Udo/d4f6e1c468aa900979a4410fcd14243f796ae052
- Li, J.M., Chen, Y.R., Li, X.T., & Xu, W.C. (2011). Screening of Herpes simplex virus 2 infection among pregnant women in China. *Journal of Dermatology*, 38, 120-124.
- Marret, S., Marchand, L., Kaminski, M., Larroque, B. et al. (2010). Prenatal low-dose aspirin and low-dose aspirin and neurobehavioral outcomes of children born very preterm. *Pediatrics*, 125 (1), e29-e34. DOI: 10.1542/peds.2009-0994

- Maternal Health Task Force (2017). Family Planning and Maternal Health. Boston, MA: Harvard T.H. Chan, School of Public Health.
- Moronkola, O.A., Ojediran, M.M. & Amosu, A.A. (2006). Reproductive health knowledge, beliefs and determinants of contraceptives use among women attending family planning clinics in Ibadan, Nigeria. *African Health Sciences*, 6(3):155-159.
- National Demographic and Health Survey (NDHS). (2018). Nigeria. 2018 Demographic and Health Survey. Retrieved April 18, 2020 from https://dhsprogram.com/pubs/pdf/SR264/SR264.pdf
- Nigro, G. (2011). Role of the infections in recurrent spontaneous abortion. *Journal of Maternal-Fetal and Neonatal Medicine*, 24, 983-989.
- Nodine, P.M. & Hastings-Tolsma, M. (2012). Maternal obesity: Improving pregnancy outcomes. .MCN *American Journal of Maternal Child Nursing*, 37, 110–115. doi:10.1097/nmc.0b013e3182430296.
- Olugbenga-Bello, A.I., Abodunrin O.L, & Adeomi, A.A. (2011). Contraceptive practices among women in rural communities in South-Western Nigeria. *Global Journal of Medical Research*, 11, 2. Retrieved April, 18, 2020 from https://globaljournals.org/GJMR_Volume11/1-Contraceptive-Practices-Among-Women-in-Rural.pdf
- Paintner, A.; Williams, A.D., & Burd, L. (2012). Fetal Alcohol Spectrum Disorders Implications for Child Neurology, Part 2: Diagnosis and Management. *Journal of Child Neurology*, 27 (3), 355–362. DOI:10.1177/0883073811428377.
- Piper, B.J. (2011). Abnormalities in parentally rated executive function in metamphetamine / polysubstance exposed children. *Pharmacology, Biochemistry, and Behavior*, 98, 432-439.
- Richardson, G.A., Goldschmidt, L., Leech, S., &Williford, J. (2011). Prenatal cocaine exposure: Effects on mother- and teacher-rated behavior problems and growth in school-aged children. *Neurotoxicology and Teratology*, 33, 69-77.
- Santrock, J.W. (2013). Life-Span Development (14th edition). New York, NY: McGraw Hill.
- Smoley, B.A. & Robinson, C.M. (2012). Natural family planning. American Family Physician, 86 (10), 924-928.
- Stuebe, A.M. & Schwarz, E.G. (2010). The risks and benefits of infant feeding practices for women and their children. *Journal of Perinatology*, 30 (3), 155–162. DOI:10.1038/jp.2009.107
- Toure, K., Sankore, R., Kuruvilla, S. *et al.* Positioning women's and children's health in African union policy-making: a policy analysis. *Global Health,* 8, article 3. https://doi.org/10.1186/1744-8603-8-3
- UNICEF. (2013). The State of the World's Children 2013. Geneva: UNICEF.
- United Nations Population Fund. (2016). UNFPA's support for the New Partnership for Africa's Development (NEPAD). Retrieved April 18, 2020 from https://www.un.org/en/africa/osaa/pdf/unsystemfolder/2016/unfpa2016.pdf
- Woldometer. (2016).Countries of the world. Retrieved April 18, 2020 from https://www.worldometers.info/geography/countries-of-the-world/
- World Bank. (2009). Reducing maternal mortality. Retrieved April 18, 2020 from http://siteresources.worldbank.org/INTPRH/Resources/ImprovingMaternalHealth.pdf
- World Health Organization and UNICEF (2010). Countdown to 2015 Decade Report (2000–2010): Taking Stock of Maternal, Newborn and Child Survival" (PDF). Geneva: WHO and UNICEF.