

Open Access



Journal of Women Health Care and Reproductive Medicine

JWRM@scientificeminence.com

Family Planning Services: Will Male Involvement Scale Up Uptake?

Onyeka Chukwudalu Ekwebene^{1*}, Chidera Gabriel Edeh², Precious Chidozie Azubuike³, Nnamani Chioma Phyllis⁴, Chibuike Anthony Obi⁵, Somtochukwu Daniel Abazu⁶ and Chioma Favour Ekwebene⁷

¹Nnamdi Azikiwe University Teaching Hospital, Nnewi, Anambra State, Nigeria

²Faculty of Medicine, Nnamdi Azikiwe University, Awka, Nnewi Campus

³Department of International Health, Institute of Global Health, Heidelberg, Germany

⁴Department of Family Medicine, Nnamdi Azikiwe University Teaching Hospital, Nnewi, Anambra State, Nigeria

⁵Tathleeth General Hospital, Tathleeth, Bisha, Asir Region Kingdom of Saudi Arabia

⁶kuro Specialist Hospital, Yenagoa, Bayelsa State, Nigeria.

⁷College of Nursing, Diocesean Hospital, Amichi, Anambra State, Nigeria

* Corresponding Author

Onyeka Chukwudalu Ekwebene, Nnamdi Azikiwe University Teaching Hospital, Nnewi, Anambra State, Nigeria, Tel: +2348065185645, E-mail: chukwudaluonyeka@gmail.com

Citation

Onyeka Chukwudalu Ekwebene (2022) Family Planning Services: Will Male Involvement Scale Up Uptake?. . J Women Health Care Reprod Med 2: 1-10

Publication Dates

Received date: January 26, 2022 Accepted date: February 26, 2022 Published date: February 28, 2022

Abstract

Introduction: Reproductive health and Family Planning (FP) services are a huge global concern especially in African countries where fertility rates are high. Many studies have acknowledged the critical role of men in increasing access to and utilisation of maternal health services

Methodology: It is an analytical cross-sectional study consisting of all consenting married men till the calculated sample size is achieved. Convenience sampling method was adopted. A self-administered semi structured questionnaire was developed and used to extract information from married men. A sample of about 15 questionnaires was pilot tested for the validity and reliability amongst the participants. SPSS version 23 was used for data entry and analysis. Approval was obtained from the research and ethics committee of the Nnamdi Azikiwe University Teaching Hospital.

Result: Findings from this study revealed that a birth spacing of 1-2 years among respondents was predominant (36.7%) and the desired number of children was between 3-4 and 1-2, with 68.3% and 20%, respectively. this study found out that most male respondents (86.7%) approve that their spouses use of family planning. The major reasons indicated by these men include that family planning is beneficial for birth spacing and avoiding unintended pregnancies.

Conclusion: The involvement of men in maternal health programs, globally, has been associated with positive reproductive health outcomes, such as increased contraceptive use and improved maternal health outcomes.

Keywords: family planning; reproductive health; condom,; utilization

Background of the Study

Reproductive health and Family Planning (FP) services are a huge global concern especially in African countries where fertility rates are high. Many studies have acknowledged the critical role of men in increasing access to and utilisation of maternal health services [1] [2]. Male involvement in Reproductive Health services utilization comprises the numerous ways men accept and provide support to their partners' reproductive needs, choices and rights including using contraception. It is particularly relevant in male-dominant cultures where men already have an all-encompassing involvement in decisions pertaining to family and society [3]. In African settings where patriarchy is deeply entrenched, the influence of men in maternal health is even more pronounced. Men in these settings being the breadwinner of the family system control household resources and often make critical decisions that affect maternal health including the choice of health services [4][5].

Most Family Planning/Contraceptive studies conducted so far have been from the female perspective and focused on women who attend clinics to capture their Family Planning/Contraceptive experience. This reflects the female dominated view that is often captured in Family Planning/Contraceptive studies and results in the silence of the male voice [6][7].

Family Planning/Contraceptive uses have been found to be influenced by numerous factors including interpersonal relationships [8]. Among the various Inter-personal relationships including family, community members, religious leaders, healthcare providers and intimate partners [9][10], the most significant in Family Planning/Contraceptive use is the intimate male partner relationship and the role of gender dynamics [11] [12]. The role that the male partner play in Family Planning/ Contraceptive use is intricate, and ranges from macro-level sociocultural, economic, political and gendered factors, to more micro everyday-level factors^{8,10,13}.It is well documented that men's general knowledge and attitudes towards family size, spacing between children, and contraceptive methods affect women's family planning preferences and opinions [14][15][16]. Many scholars have proposed that the inability to engage men in family planning is hindering progress to increased uptake of contraception [17] [18] [19].

A review of existing studies of male involvement in family planning in sub-Saharan Africa found that one of the reasons for poor male involvement in family planning were cultural barriers, such as embarrassment with visiting family planning service delivery points [16]. Other reasons for poor male involvement in family planning include male partners having negative personal beliefs about Family Planning/Contraceptive; limited access to Family Planning/Contraceptive information; misconceptions and myths; perceived adverse effects including decreased sexual pleasure; poor economic status; religious influences; limited male contraceptive choice; suspicion of female partner infidelity; and male preference for larger families [10]. Furthermore, negative interactions with healthcare providers and poor communication between men and their female partner were other important factors that influence male involvement in Family Planning/Contraceptive use [20].

The involvement of men in maternal health programs, globally, has been associated with positive reproductive health outcomes, such as increased contraceptive use [21] [22] and improved maternal health outcomes [23]. Studies have shown that good communication between couples positively impact Family Planning/Contraceptive use and can reduce the risk of misconceptions [11], which results in joint-decision making about Family Planning/Contraceptive use, leading to improved adherence [22]. Supportive male partner attitudes and positive views of Family Planning services play an important role in promoting Family Planning/Contraceptive use [11]. It has also been reported that men exposed to Family Planning/ Contraceptive educational programmes were four times more likely to support Family Planning/Contraceptive use [24]. The findings will also help in public health education so as to promote a better contraceptive use outcome. The aim of this study is therefore, to determine how male involvement will help to scale up contraceptive usage in South- Eastern Nigeria, to describe the socio-demographic/ Socio-economic factors (Age, Marital Status, Religion, Educational Level/ Occupation) of the respondents, to determine the reproductive characteristics of the married men, to know the extent of men's approval of spousal use of family planning methods and to determine men's role in reproductive health decision making.

Methodology

Study design: It is an analytical cross-sectional study.

Study population: This consists of all consenting married men till the calculated sample size is achieved.

Sampling and sample size: Convenience sampling method was adopted. For sample size calculation, the following assumptions was made based on previous studies: prevalence of

50%, 5% margin of error, and 95% confidence level, non-response rate of about 20%. Using Fisher's formula, $N = \frac{z^2 pq}{d^2}$ where N equals to sample size, Z is the standard normal deviate and for 95% confidence level and the value is 1.96, p is the proportion of male participant, q is equal to 1-p which is 50%, d is the degree of precision or margin of error, = 5%

$$N = \frac{1.96^2.5 \times .5}{.05^2}$$
 approximately 96, assuming 20% non-respondent, the final sample size = $\frac{1}{1-.20}$ = 120.

Study instrument and data collection: A self-administered semi structured questionnaire was developed and used to extract information from married men. A sample of about 15 questionnaires was pilot tested for the validity and reliability amongst the participants. Also, any other problem noticed in the questionnaires was addressed. Internal consistency of the questionnaire was assessed using Cronbach's alpha; values between 0.8 to 0.9 was accepted as normal. The questionnaire includes data on demography: age, level of education and occupation; the occupation and the level of education of the

spouse were also included where possible. The questionnaire was self-administered for the literate client. The non-literate client was assisted by the research assistants assigned.

Plan for statistical analysis: SPSS version 23 was used for data entry and analysis. Mean and standard deviations was used for the presentation of normally distributed data and median and interquartile range for data not normally distributed. Inferential statistics using Fisher's exact test, unpaired t-test, Pearson and Spearman correlation was used where applicable.

Ethical consideration: Approval was obtained from the research and ethics committee of the Nnamdi Azikiwe University Teaching Hospital before commencement of the study with ethical approval number NAUTH/CS/66/VOL.15/VER.3/298/2021/325. Informed consent was also sought and obtained from all participants. Confidentiality was maintained throughout and beyond the study.

Results

Variable	Frequency	Percentage
Ages (Years)		
<31	32	26.7
31-40	56	46.7
41-50	22	18.3
51-60	6	5.0
>=60	4	3.3
Religion		
Christianity	112	93.3
Muslim	4	3.3
Traditional Religion	4	3.3
Ethnicity		
Igbo	104	86.7
Yoruba	10	8.3
Others	6	5.0
Educational Status		
No Formal Education	4	3.3
Primary Education	4	3.3
Secondary Education	10	8.3
Tertiary Education	102	85.0
Occupation		
Employed	76	63.3
Self-employed	38	31.7

Unemployed	6	5.0
Income/Month (Thousand)		
<50	24	20.0
50-99	22	18.3
100-149	12	10.0
150-199	32	26.7
>=200	30	25.0

This table showed age group 31-40(46.7%) as the highest respondents; Christians responded more (93.3%) and most of the respondents are employed (63.3%)

Table 1: showing the Socio-demographic information of the respondents

Variable	Frequency	Percentage
Current living children		
0	44	36.7
1-2	38	31.7
3-4	28	23.3
>=5	10	8.3
Birth Spacing (Years)		
1-2	80	66.7
3-4	26	21.7
No Response	14	11.7
Desired Number of children		
1-2	24	20.0
3-4	82	68.3
>=5	14	11.7
Ever heard about Family Planning?		
Yes	116	96.7
No	4	3.3
If Yes, List Family Planning Methods		
Condom Use	104	86.7
Oral Contraceptive pills (OCPs)	72	60.0
Male Sterilization	50	41.7
Female Sterilization	52	43.3
Natural Methods	70	58.3
Implants	68	56.7
Intrauterine Contraceptive devices (IUCD)	60	50.0
Withdrawal Method	76	63.3
Are you currently using Family Planning Method?		
Yes	56	46.7
No	64	53.3
If Yes, what is your purpose for using Family Planning Method?		
Birth Spacing	32	26.7
Limiting Birth	38	31.7
Others	6	5.0
What are the benefits of Family Planning?		
To prevent pregnancy	106	88.3

To prevent Sexually Transmitted Infection (STI)	12	10.0
To space children	98	81.7
What are your sources of information about Family Planning?		
Radio/Television	52	43.3
Friends/peers	52	43.3
Churches	30	25.0
Newspapers	26	21.7
Health Professionals	84	70.0
Partners/Wife	32	26.7
Ever heard of sterilization?		
Yes	76	63.3
No	44	36.7
If Yes, Source of Information?		
Radio/Television	20	16.7
Friends/peers	30	25.0
Churches	8	6.7
Health Professionals	58	48.3
Partners/Wife	10	8.3

This table revealed that a birth spacing of 1-2 years among respondents was predominant (36.7%) and the desired number of children was between 3-4 and 1-2, with 68.3% and 20%, respectively. Health Professionals (48.3%) are the highest source of information to the respondent. Condom (86.7%) is the highest used family planning method

Table 2: showing the reproductive characteristics of the respondents

Variable	Frequency	Percentage
Do you approve your spouse using Family Planning Methods?		
Yes	104	86.7
No	16	13.3
If yes, what are your reason(s) for approving spousal use of family		
planning?		
Space birth	88	73.3
Achieve desired family size	68	56.7
Avoid unwanted pregnancy	66	55.0
Promote child health	34	28.3
Improve quality of child care	54	45.0
Marital bliss	26	21.7
If No, what are your reason(s) for disapproving spousal use of Family		
Planning?		
Against my religion faith	8	6.7
Fear of sexual promiscuity	0	0.0
Poor health facility	0	0.0
Side effects	6	5.0
Misconceptions	0	0.0
Reason Unstated	2	1.7

This table shows that most male respondents (86.7%) approve that their spouses use of family planning. The major reasons indicated by these men include that family planning is beneficial for birth spacing and avoiding unintended pregnancies

Table 3: Showing the Respondents' Approval of Spousal Use of Family Planning Methods

Statement	Agree No.(%)	Disagree No.(%)	No Response No.(%)
Men should decide the family size	60(50.0)	40(33.3)	20(16.7)
Men should decide on the adoption of family planning	62(51.7)	44(36.7)	14(11.7)
Men should decide which family planning method to use	36(30.0)	70(58.3)	14(11.7)
Men should decide what to do when unwanted pregnancy occurs	46(38.3)	52(43.3)	22(18.3)
Family planning reduces confidence between husband and wife	18(15.0)	94(78.3)	8(6.7)
Men share the responsibility of family planning	96(80.0)	20(16.7)	4(3.3)

This table shows the opinion of men, as regards family planning and men's role therein, half of the respondents (50%) agree that men should decide on the family size and the adoption of family planning. However, 78.3% of the respondents disagreed that family planning reduces confidence between spouses

Table 4: Showing Opinion of the Respondents concerning Men's Role in Reproductive Health Decision Making

Discussion

Findings from this study revealed that a birth spacing of 1-2 years among respondents was predominant (36.7%) and the desired number of children was between 3-4 and 1-2, with 68.3% and 20%, respectively. This finding is surprising as over 96% of the respondents have heard about family planning, and could identify at least, a method of family planning, hence, a birth spacing of 1-2 years being predominant may constitute an area to be researched into. This is further corroborated by the prevalence of contraceptive use by the survey sample, which was 46.7%, even though there is a 96.7% awareness of contraceptives. Previous studies have implicated low awareness of family planning to be associated with low uptake and prevalence of same. This is not the case in this present study. High awareness of family planning, poor perception towards the same, and lack of proper spousal communication have been noted as effective measures to improve the involvement of males in family planning [27][34]. Findings from this section are comparable to a study by Wondim et al (2020) [35] which revealed that although male respondents were very aware of family planning methods, there was a 12.5% prevalence of contraceptive uptake in the study region. Similar studies conducted in various parts of sub-Saharan African have reported a contrast between knowledge of family planning methods and uptake of same, where males although knowledgeable have low uptake of family planning, nonetheless [25][35][36] same findings have been made in Ethiopia [36] and in Mexico [30].

Furthermore, this study found out that most male respondents (86.7%) approve that their spouses use of family planning. The major reasons indicated by these men include that family planning is beneficial for birth spacing and avoiding unintended pregnancies. This finding may not be unconnected to the high knowledge of family planning already recorded among men in the study, in addition to the high level of education of the respondents. Most of the respondents had tertiary level education, and education empowers individuals to make informed health choices for themselves and people around them, with literacy level affecting the awareness of and access to health information by men and women [37]. Hence, having higher levels of education as a man has contributed to the higher knowledge of family planning, its benefits, and approval of same for spouses. Evidence exists that among the social determinants of health, education has been a predominant construct as various studies, especially in the developing countries have noted the educational status of individuals as an important predictor of access to and utilization of health services, including family planning [37]. Spousal support and approval have been indicated as a major construct in improving contraceptive uptake across various settings. Evidence abounds in the literature that shows that spousal support and approval led to a 72.5% increase in the uptake of family planning [31]. In Northern Ethiopia, 60% of men supported and approved the use of contraceptives by their wives [35]. Although a contributory factor could be that the high prevalence of spousal support and approval could be because of some co-supporting conditions where for instance, the wives may be pregnant or sick and there is a counsel by a physician for family planning [31]. Certain studies however argue the extent of support which men give their spouses, concerning family planning, for instance, Falade-Fatila and Adebayo (2020) argues that 65.1% of their respondents revealed that they accompany their wives to the family planning clinics but are not necessarily involved in or are part of the family planning process [32].

On the opinion of men, as regards family planning and men's role therein, half of the respondents (50%) agree that men should decide on the family size and the adoption of family planning. However, 78.3% of the respondents disagreed that family planning reduces confidence between spouses. The conversation on the adoption and approval of family planning, especially in developing countries has been ongoing as issues around power balance, decision making and acceptance of methods have been thematic areas in focus. Studies have reported the need for effective communication among couples, especially on issues that require joint decision making, such as family planning, where communication and discussion remain paramount [33][35]. Involving males in family planning will be an issue that addressing it will mean engaging the spouse to realize the potential challenges and then, raise their interests and participation in practice. Hence, various researchers are dedicated to appraising male involvement in family planning by reviewing feedbacks and responses by spouses[26][29].

It is not news that Nigeria has had its fair share of the setback in family planning uptake, owing to the place of men in making decisions. The socio cultural perspective of Nigeria has placed men as family leads and in most cases, sole decision-makers [28]. Hence, the decision and desire of men provide consent or refusal for their spouses to take up and engage in family planning services

Conclusion

The involvement of men in maternal health programs, globally, has been associated with positive reproductive health outcomes, such as increased contraceptive use and improved maternal health outcomes.

Acknowledgments

The authors wishes to acknowledge all the respondents who made this study possible.

Conflict Of Interest

The authors declared that there is no conflict of interest.

References

- 1. United Nations. Report of the Fourth World Conference on Women. Beijing, 4–15 September 1995 [Internet]. United Nations, New York; 1996. Report No.: A/CONF:177/20/Rev.1. Available: http://www.un.org/womenwatch/daw/beijing/pdf/Beijing%20full%20report%20E.pdf
- 2. UNFPA. ICPD and Human Rights: 20 years of advancing reproductive rights through UN treaty bodies and legal reform [Internet]. Jun 2013 [cited 20 Oct 2013]. Available: http://www.unfpa.org/webdav/site/global/shared/documents/publications/2013/icpd_and_human_rights_20_years.pdf
- 3.Green CP, Cohen SI, Belhadj-El Ghouayel H: Male Involvement in Reproductive Health, Including Family Planning and Sexual Health. New York, USA: UNFPA, Technical report 28; 1995:104
- 4. Kwambai TK, Dellicour S, Desai M, Ameh CA, Person B, Achieng F, et al. Perspectives of men on antenatal and delivery care service utilisation in rural western Kenya: a qualitative study. BMC Pregnancy Childbirth. 2013;13: 134. doi:10.1186/1471-2393-13-134.
- 5. Ngom P, Debpuur C, Akweongo P, Adongo P, Binka FN. Gate-keeping and Women's health seeking behaviour in Navrongo, northern Ghana. Afr J Reprod Health Rev Afr Santé Reprod. 2003;7:17–26. doi:10.2307/3583341.
- 6. Varga CA. The forgotten fifty per cent: a review of sexual and reproductive health research and programs focused on boys and young men in sub-Saharan Africa. Afr J Reprod Health. 2001:175–95.
- 7. Kabagenyi A, Jennings L, Reid A, Nalwadda G, Ntozi J, Atuyambe L. Barriers to male involvement in contraceptive uptake and reproductive health services: a qualitative study of men and women's perceptions in two rural districts in Uganda. Reprod Health. 2014;11(1):21.
- 8. Cleland J, Harbison S, Shah IH. Unmet need for contraception: issues and challenges. Stud Fam Plan. 2014;45(2):105–22.
- 9. Maharaj P. Stalling contraception? Perspectives and experiences of sexually active women and men. Agenda. 2012;26 (2):100–10
- 10. Dudgeon MR, Inhorn MC. Men's influences on women's

- reproductive health: medical anthropological perspectives. Soc Sci Med. 2004;59(7):1379–95.
- 11. Maharaj P. Male attitudes to family planning in the era of HIV/AIDS: evidence from KwaZulu-Natal, South Africa. J South Afr Stud. 2001;27(2): 245–57.
- 12. Varga CA. The forgotten fifty per cent: a review of sexual and reproductive health research and programs focused on boys and young men in sub-Saharan Africa. Afr J Reprod Health. 2001:175–95.
- 13. Helzner JF. Men's involvement in family planning. Reproductive healthmatters. 1996;4(7):146–54.
- 14. Oyediran KA, Ishola GP, Feyisetan BJ. Factors affecting evermarried men's contraceptive knowledge and use in Nigeria. J Biosoc Sci. 2002;34(4):497–510.
- 15. Mbizvo MT, Adamchak DJ. Family planning knowledge, attitudes, and practices of men in Zimbabwe. Stud Fam Plann. 1991;22 (1):31–38.
- 16. Vouking MZ, Evina CD, Tadenfok CN. Male involvement in family planning decision making in sub-Saharan Africa: what the evidence suggests. Pan Afr Med J. 2014;19:349.
- 17. Greene ME, Biddlecom AE. Absent and problematic men: demographic accounts of male reproductive roles. Popul Dev Rev.2000;26(1):81–115.
- 18. Nte AR, Odu N, Enyindah CE. Male involvement in family planning: women's perception. Niger J Clin Pract. 2009;12(3):306–310.
- 19. Withers M, Dworkin SL, Zakaras JM, et al. Women now wear trousers: men's perceptions of family planning in the context of changinggender relations in western Kenya. Cult Health Sex. 2015;17 (9):1132–1146.
- 20. Ochako R, Temmerman M, Mbondo M, Askew I. Determinants of modern contraceptive use among sexually active men in Kenya. Reprod Health. 2017;14(1):56.
- 21. Bawah AA. Spousal communication and family planning behavior in Navrongo: a longitudinal assessment. Stud Fam Plan. 2002;33:185–94. doi:10. 1111/j.1728-4465.2002.00185.x

- 22. Terefe A, Larson CP. Modern contraception use in Ethiopia: does involving husbands make a difference? Am J Public Health. 1993;83:1567–71. Available: http://www.ncbi.nlm.nih.gov/pmc/articles/PMC1694882/
- 23. Yargawa J, Leonardi-Bee J. Male involvement and maternal health outcomes: systematic review and meta-analysis. J Epidemiol Community Health. 2015; jech-2014-204784. doi:10.1136/jech-2014-204784
- 24. Okigbo CC, Speizer IS, Corroon M, Gueye A. Exposure to family planning messages and modern contraceptive use among men in urban Kenya, Nigeria, and Senegal: a cross-sectional study. Reprod Health. 2015;12(1):63.
- 25. Abubakar, B. G., Oche, O. M., Isah, B. A., Ango, J. T., Raji, I. A. &Ezenwoko, A. Z. (2021). Factors infleuncing male involvement in family planning in Sokoto metropolis, Nigeria.International Archives of Medical & Health Research, 2(1), 1-8. https://doi.org/10.33515/iamhr/2021.004/01
- 26. Akamike, I. C., Madubueze, U. C., Okedo-Alex, I. N., Anyigor, C. J., Azuogu, B. N., Umeokonkwo, C. D. &Mbachu, C. O. (2020). Perception, pattern of use, partner support and determinants of uptake of family planning methods among women in rural communities in Southeast Nigeria.Contraception and Reproductive Medicine, 5, 14. https://doi.org/10.1186/s40834-020-00120-x
- 27. Ayobami, I. O. &Oyelowe, O. (2020).Factors Influencing Male Involvement in the Uptake of Family Planning in Abeokuta South Local Government of Ogun State, Nigeria. Texila International Journal of Public Health, 8(3). https://doi.org/10.21522/TIJPH.2013.08.03.Art011
- 28. Blackstone, S. R. &Iwelunmor, J. (2017). Determinants of contraceptive use among Nigeria couples: evidence from the 2013 demographic and health survey. Contraception and Reproductive Medicine, 2(9). https://doi.org/10.1186/s408834-017-0037-6
- 29. Chekole, M. K., Kahsay, Z. H., Medhanyie, A. A., Gebreslassie, M. A., Bezabh, A. M. (2019). Husbands' involvement in family planning use and its associated factors in pastoralist communities of Afar, Ethiopia.Reproductive Health, 16, 33.https://doi.org/10.1186/s12978-019-0697-6
- 30. Dansereau, E., Schaefer, A., Hernandez, B., Nelson, J.,

- Palmisano, E., Rios-Zertuche, D., Woldeab, A., Zuniga, M. P., Iriarte, E M., Mokdad, A. H. & El Bcheraoui, C. (2017). Perceptions of and barriers to family planning services in the poorest regions of Chiapas, Mexico: a qualitative study of men, women and adolescents. Reproductive Health, 14, 29. https://doi.org.1186/s12978-017-0392-4
- 31. Ezeanolue, E. E., Iwelunmor, J., Asaolu, I. et al. (2015). Impact of male partner's awareness and support for contraceptives on female intent to use contraceptives in southeast Nigeria. BMC Public Health, 15, 879.https://doi.org/10.1186/s12889-015-2216-1
- 32. Falade-Fatila, O. & Adebayo, A. M. (2020). Male partner's involvement in pregnancy-related care among married men in Ibadan, Nigeria. ReproductiveHealth, 17, 14.https://doi.org/10/1186/s12978-020-0850-2
- 33. Kabagenyi, A., Jennings, L., Reid, A., Nalwadda, G., Ntozi, J., &Atuyambe, L. (2014). Barriers to male involvement in contraceptive uptake and reproductive health services: a qualitative study of men and women's perceptions in two rural districts in Uganda. Reproductive Health, 11(1), 21.https://doi.org/10.1186/1742-4755-11-21.
- 34. Nmadu, A. G., Joshua, I. A., Omole, V. N., Usman, N. O., Igboanusi, C. J. &Gobir, A. A. (2019). Male involvement in family planning in Northern Nigeria: A review of literature. Journal of Medicine in the Tropics, 21(1), 6-9. https://doi.org/10.4103/jomt.jomt_29_18
- 35. Wondim, G., Degu, G., Teka, Y. &Diress, G. (2020). Male involvement in family planning utilization and associated factors in Womberma District, Northern Ethiopia: community-based cross-sectional study. Open Access Journal of Contraception, 11, 197-207. https://doi.org/10.2147/OAJC.S287159
- 36. Vouking, M. Z., Evina, C. D. &Tandenfok, C. N. (2014). Male involvement in family planning decision making in sub-Saharan Africa: what evidence suggests. Pan African Medical Journal, 19, 349. https://doi.org/10.11604/pamj.2014.19.349.5090
- 37. Zimmerman, E. & Woolf, S.H. (2014). Understanding the Relationship Between Education and Health. NAM Perspect, 4(6).