

Website:www.jriiejournal.com

ISSN 2520-7504 (Online) Vol.6, Iss.1, 2022 (pp. 63 - 71)

Socio-Demographic Characteristics and Uptake of Family Planning Practices in Kakamega County, Kenya

Dr. Mildred Lumayo Fedha

Department of Sociology, Gender and Development Studies

Kisii University, Kenya

Email: lumayomildred@kisiiuniversity.ac.ke /lumayomildred@gmail.com

Abstract: Family planning is very vital especially in the contemporary world which is faced by quite a number of challenges. Over decades, the government of Kenya has put in place numerous plans and guidelines to facilitate the utilisation of family planning services as a step towards reduction of reproduction rates, meeting the unmet family planning needs and impacting on wider societal development priorities. Despite this, little has been achieved in reducing population growth and causing social change. The most affected region is western Kenya that has for a long time reported higher fertility rates than the region's economic growth. This is pegged on the socio- demographic factors that impede inhabitants' participation in the implementation of family planning programmes. This paper investigated the influence of socio-demographic characteristics on uptake of family planning practises in Kakamega County, Kenya. The research targeted three sub-counties; Malava, Lugari and Likuyani with a household population of 17,469 units. The researcher narrowed down to two wards based on population density; one with the highest density and one with the lowest density. Further, 93 public health officers were targeted. A sample of 376 inhabitants and 12 public Health officials were issued questionnaires and interviewed respectively. The results showed that there were more females, married within the age bracket of 26-35 years and with secondary school level of education who used family planning practices. Further majority (61.2%) of the catholic faith respondents had not ustilised any family planning strategy as opposed to Protestants and Muslims.

Key words: Socio-Demographic, Characteristics, Uptake, Family Planning Practises, Kakamega

How to cite this work (APA):

Lumayo, M. F. (2022). Social-demographic characteristics and uptake of family planning practices in Kakamega County, Kenya. *Journal of Research Innovation and Implications in Education*, 6(1), 63 - 71.

1. Introduction

Socio-demographic factors are characteristics of human populations such as age, gender, education level which influence the attitude of individuals towards family planning uptake (Asif & Pervaiz, 2021). Family planning refers to practices that support married couples in attaining particular goals, including the avoidance of unplanned pregnancies, managing intervals in between one pregnancy and another, regulating the period of giving birth relative to the age of the mothers and determination of the number of siblings a household desires to have (Prachi, Ashwini, Pattanshetty, Sagir & Samarasinghe, 2010). It enlightens both males and females the ability to control their own reproduction. Family planning are methods used to promote safer sexual practices, reduce unintended pregnancies and unsafe abortion, and control population (Bhatt *et al.*, 2021).

Unintended pregnancies and illegal abortions are the outcome of an unmet need for family planning. This has serious health and social consequences, and it is frequently the main cause of mother and infant death in low-income nations (Nsubuga, Sekandi, Sempeera & Makumbi, 2016).

The importance of family planning practice by women and men cannot be underrated today. Sub-Sahara Africa faces a myriad of challenges relating to poor pregnancy outcomes, unwanted pregnancies and generally challenges emanating from the high cost of living in households. These challenges can be reduced and even done away with if both women and men together joined in family planning practice. Conventionally, family planning programmes have been focused on females and this is attributed to the fact that it is females who become expectant and thus are faced with the health dangers related to pregnancies and deliveries and therefore, have apparently the highest motivation to avert unplanned pregnancies (Atukunda et al., 2021). Furthermore, females are more expected to be much in contact with the health care system due to their general obligation for family health, particularly for the health and wellbeing of babies and siblings under five years of age. However, involving males in family planning (FP) practices has been shown to directly affect the sexual partner's fertility health selections, behaviours and decision-making process (Soremekun, 2014). Thus, the uptake of family planning practices depends on various socio-demographic factors.

2. Literature Review

Family planning is very vital and especially in the contemporary world which is faced by quite a number of challenges (Mbizvo, & Phillips, 2014). These challenges include poverty, diseases ignorance and high population with the high costs of living which leads to high crime rates, food insecurity, development of slums and poor health conditions for the many children born day and night. The process of reproduction encompasses both men and women and although the array of contraceptives involves strategies, namely vasectomy, condoms and withdrawal that males utilize unswervingly and the Standard Days Method (SDM) that necessitates their involvement, females are still the main targets for family planning (Melanie & Gay, 2017). Family planning (FP) 2020's objective categorically aims at reaching an additional 120 million girls and women with family planning methods (Mutua et al., 2021).

In Sub-Saharan Africa, and specifically in Cameroon, males believe family planning (FP) practices to be the responsibility of women with male's responsibilities being limited to monetary contributions towards the family planning practices adopted by the women (Kelodjouea, 2015). This clarifies the reason as to why male contraceptive strategies are insufficient and unknown to the would-be male users. Even though some men use these contraceptives, most of them still complain of lack of satisfaction with the strategy. Most of the male partners are dissatisfied with not having enough sexual pleasure with the use of condoms. Male partners who refuse to utilize contraception impair women's reproductive autonomy and contribute to Sub-Saharan Africa's high unintended birth rates (SSA). In this region, an estimated 21% of reproductive-age women who want to avoid pregnancy do not use a modern contraceptive method, the highest proportion in the world (Hardee, Croce-Galis, & Gay, 2017), and male partner opposition is frequently identified as a factor driving women's contraceptive nonuse (Apanga & Adam, 2015). Scholars have thus increasingly called for men to be included in efforts to improve contraception use and strengthen reproductive autonomy, especially given that spousal discussion and joint decision-making have been linked to women's ability to initiate and continue using contraception when desired (Fleming *et al.*, 2019).

Men may be opposed to using contraception due to a lack of awareness and concerns about side effects or consequences (Koffi *et al.*, 2018). According to studies, males are also concerned about contraception's perceived ability to boost women's reproductive autonomy while undermining their male-dominated decision making in partnerships and households (Geleta, 2018). This perceived contradiction between contraceptive use and men's capacity to comply to their beliefs of what constitutes an ideal man is consistent with studies that has long emphasized the importance of gender norms in determining health (James-Hawkins *et al.*, 2019).

It is expected that equitable gender rules can absolutely influence the utilisation of vasectomy among men and that nations with high incidences of vasectomy are also more likely to be more gender equitable (Diakite, 2014). In the case of Costa Rica, adult males who held more gender equitable were perceived to pursue undergoing a vasectomy as part of their pursuit for emotional obligation to their spouses and to the comfort of their sexual partners. Additionally, males who underwent vasectomy perceived themselves to being more responsible for prevention of unplanned pregnancies (Pomales, 2013). Furthermore, vasectomies are deemed to have increased in Costa Rica to 76% from the year 2000 to 2003 and another increase to 70% between 2003 and 2006, where low fertility rates were associated with modernity of man. The strategy became so predominant that there was a reported 2-year delay so as to get a vasectomy in a hospital covered with social security in 2009 (Kabagenyi et al., 2014).

Some research have found a link between educational attainment and contraceptive use (Haq, Sakib, & Talukder 2017). It is probable that less educated women are less likely to have higher work objectives and a lack of health awareness, resulting in a lack of incentive to use FP. However, in several other research, education was proven to have no effect on FP consumption. Hossain et al. (2018), for example, found no correlation between overall FP use and education in data from and Bangladesh. According to the findings of Roy et al., (2021), women with a secondary education were more likely to use FP

than women with a bachelor's degree or higher which are similar to this study findings.

The Contraceptive Pervasiveness Rate in Kenya is at 43% which is as yet thought to be low around the world. The contraceptive prevalence rate for instance in Kakamega county is 27% while that of West Pokot County is evaluated to be at a low of 23% (Butto & Mburu, 2015). The current paper therefore investigated the influence of socio-demographic characteristics on uptake of family planning practises among the inhabitants of Kakamega County, Kenya.

Over decades, the government of Kenya has put in place numerous plans and guidelines to facilitate the utilisation of family planning services as a step towards reduction of reproduction rates, meeting the unmet family planning needs and impacting on wider societal development priorities. Despite this, little has been achieved in reducing population growth and causing social change, especially in the rural areas. The most affected region is western Kenya that has for a long time reported higher fertility rates than the region's economic growth. This is pegged on the socio-demographic factors that impede the inhabitant's participation in the implementation of family planning programmes. The programmes have conventionally focused on females as the primary beneficiaries of family planning. The reasons are varied but tend to point to the high compliance levels among women. In traditional societies, males have been considered as silent partners of family planning services and utilization despite the fact that they are equally a part of fertility health, especially in decision making at the family level.

3. Methodology

This study adopted cross-sectional survey design which allows for rapid collection of data from a large sample within the shortest time possible by use of questionnaires, interview schedules and document analysis. In addition, the study adopted convergent mixed methodology. Mixed methodology is the combination of two or more methods in a research project yielding both qualitative and quantitative data (Van Scoy *et al.*, 2021). The study was mixed methods in a single research which allows for pragmatism. The amalgamation of qualitative and quantitative methods in this study neutralizes bias and allows for convergence of results which has an advantage of contribution of both approaches.

The research only targeted three sub-counties; Malava (purely homogenous), Lugari (fairly mixed) and Likuyani (purely cosmopolitan in nature) with a total household population of 17,469 units (Gok, 2019). In each ward, the researcher narrowed down to two wards based on population density; one with the highest population density. In addition, the study further targeted 93 public health officers who are in-charge of family planning Units in the three sub-counties.

The sample size formula for this study is based on Krejcie and Morgan (1970). The formula is given as:

$$n = \frac{X^2 * N * P(1 - P)}{(ME^2 * (N - 1)) + (X^2 * P * (1 - P))}$$

Where:

n=Sample size X^2 =Chi Square for the specified confidence level at 1 degree of freedom= (3.841) from tables N=Population size P=Population proportion (.50 in the table) ME=Desired margin of error (expressed as a proportion=0.05) =3.841x17469x0.5 (1-0.5)/ 0.05x0.05 (17469-1) +3.841x0.5 (1-0.5) = 16,774.60725/44.63025 = 376

Using the formula, 376 households were selected to participate in the study. The sample size as per each ward is presented in Table 1.

| Sub-County | Ward Name | Number of Households | Sample Size |
|------------|----------------|----------------------|-------------|
| Likuyani | Likuyani | 3223 | 69 |
| | Sinoko | 2698 | 58 |
| Malava | Butali/Chegulo | 3584 | 77 |
| | East Kabaras | 2802 | 60 |
| Lugari | Mautuma | 2678 | 58 |
| | Chekalini | 2484 | 54 |
| Total | | 17469 | 376 |

 Table 1: Sample size per Wards in Likuyani Sub-County

The researcher stratified the respondents into the six wards; Likuyani, Sinoko, Butali/Chegulo, East Kabras, Mautuma and Chekalini. In order to ensure that representative samples were derived from each ward, a multi-stage-cum-stratified random sampling technique was used in selecting the household heads for the study. In the study, simple random sampling technique was used to select the first household in each ward followed by systematic random sampling where every 10th household was selected. The household heads present at the time of the study were issued with a questionnaire. This procedure ensured that all the members of the population are given an equal chance of being included in the sample. In selecting health care workers who are in-charge of family planning units, purposive sampling was used since there are six government healthcare centres in the region with 8 personnel manning the family planning units.

According to Kombo and Tromp (2006), social science commonly uses questionnaires, interview schedules, observational forms and standardized test as research instruments. This study used questionnaires to collect data from household heads and interviews to collect data from healthcare workers in-charge of family planning units in the various health centres. This group was considered due to the fact that they fully understand the level at which men are involved in family planning implementation, factors that influence men's participation in family planning implementation the social construction of family planning implementation in Kakamega County. In addition, the researcher checked documents such as family planning record books at the health centres in order to understand specifically levels of men's involvement in family planning. The documents analyzed were used to compute the percentages of men who have used family planning methods from 2013 to 2017.

To determine the reliability of the instruments, questionnaires were pilot tested using 30 household heads from the nearby Lugari Sub-County which shares similar characteristics as the study area. The test-retest method was employed to test the reliability of questionnaires. The first test was administered to the respondents and after two weeks a second test was given to the same respondents. The two tests were analyzed separately and adjustments on areas of weakness were made to the instruments. The Pearson's Product Moment Correlation (r) was used to calculate the reliability coefficient between the first and second scores. A correlation coefficient of (r) 0.75 or more was considered appropriate to ascertain the reliability of the instruments as indicated by Orodho (2009). In this study a correlation coefficient of 0.81 was obtained showing that the instruments were reliable and therefore adopted for use in the study.

Data obtained was analyzed using quantitative and qualitative techniques. The quantitative data from the questionnaires were first subjected to preliminary processing through validation, coding and tabulation in readiness for analysis with the help of the statistical package for social science (SPSS version 20) computer package as a 'toolbox' to analyze data related to objectives. Frequencies, percentages, mean and Standard deviation were used to analyze quantitative data. Qualitative data from interview schedules was transcribed, thematically classified and arranged before they were reported in narrations and quotations.

4. Results and Discussion

In this study, a total of 346 out of 376 respondents duly filled and returned the questionnaires thus giving a return rate of 92.02%. The demographic information that was sought from the respondents was gender, age, marital status level of education and religious affiliations. First, the study participants were requested to specify their gender in the questionnaires provided. The outcome of the analysed information is shown in Figure 1.

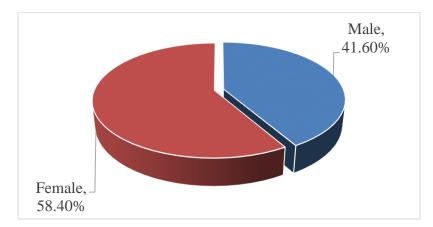


Figure 1: Gender of the Respondents

Figure 1 shows that 202(58.4%) of the respondents were women while 144(41.6%) of the respondents were men. From the responses, it can be shown that majority (58.4%) of study participants were female. This shows that there were more female participants in the study as compared to their male counterparts. This is attributed to the fact that most men view reproductive health as women's affair. This supports earlier research by Hardee, Melanie and Gay (2017), Koffi, *et al.*, (2021) who pointed out that procreation involves both females and males, but family planning programmes have chiefly focused on females. In addition, other researchers including Ngethe (2013), Nsubuga *et al.*, (2016), Fleming *et al.*, James-Hawkins *et al.*, (2019) have all argued that family planning efforts are a female affair where men are not engaged in Practises. From the above, it can therefore be shown that men were not much interested as compared to females leading to a higher proportion of females in the study. On interviewing the public health officers and the in-charges, it was found out that women were the major participants in the utilization of family planning strategies. However, men mostly used condoms as a family planning method.

Further effect of age on uptake of family planning practices was undertaken and the results are presented in Figure 2.

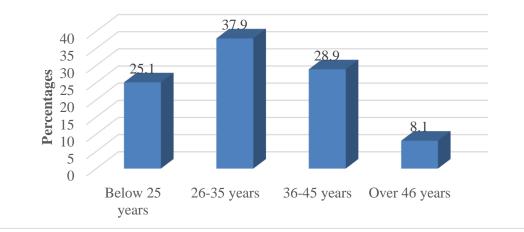


Figure 2: Age Bracket of the Respondents

In terms of age (Figure 2) the study found out that 131(37.9%) respondents were aged 26-35 years, 100(28.9%) respondents were aged 36-45 years and 87(25.1%) respondents were aged below 25 years while 28(8.1%) respondents were aged over 46 years. The study shows that most of the study participants were aged 26-35 years. This in an age bracket where most people are within their most reproductive age. Cross tabulation between age and utilisation of family planning strategies showed that majority of respondents within the age bracket of 26-35 years had used family planning methods. Ovediran et al. as cited in Bhatt et al., (2021) in their study found that age of the respondents, education level, the number of living siblings, receive message from family planning provider were the key factors affecting men's utilization of contraceptive. Similarly, Fajobi et al., (2021) citing the works of Okwor and Olaseha, pointed out that in Nigeria, about 10% of wedded females of reproductive age utilize contraceptives.

Interviews and observation made pointed out that men and women below 40 years mostly used FP planning methods. This supports the findings of Igras *et al.*, (2021) which pointed out that younger population used FP services more as compared to the aged population. The healthcare workers in-charge of family planning units in the various health centres noted that condoms were mostly used by young men to prevent early pregnancies and sexually transmitted diseases including HIV and Aids while young women who are married encouraged their spouses to use condoms during sexual intercourse so as to prevent unwanted pregnancies.

The study participants were further asked to specify their marital standing. The outcomes of the analysed information are given in Figure 3.

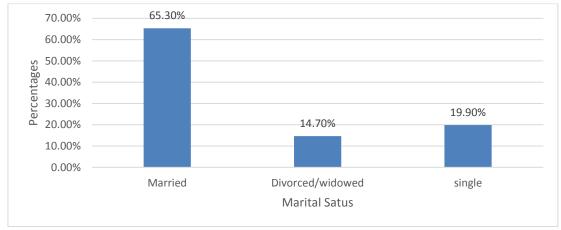


Figure 3: Marital Status of the Respondents

Figure 3 shows that 65.3% of the respondents were married, 19.9% of the respondents were single while 14.7% of the respondents were either divorced or widowed. From the replies, it appeared that majority (65.3%) of the respondents were married. On doing cross tabulation between marital status and use of family planning methods, it emerged that most of those who were using family planning methods were the married people. MacQuarrie, (2014) pointed out that in Tanzania an analysis of DHS data revealed unmet need for family planning to be highest amongst young married women with no children than those with a child. This shows that married women consider using various family planning methods as a way of spacing their children or avoiding unwanted pregnancies. Further, Ngome & Odimegwu as cited in de Vargas et al., (2019) showed that marital status have been identified as important individual

characteristics influencing women's reproductive health behaviors, including the uptake of modern contraception.

Interviews with healthcare workers in-charge of family planning units in the various health centres however pointed out that unmarried people were mostly engaged in family planning. Most of the healthcare in charges noted that mostly this group used FP methods to prevent early pregnancies. This was found to be cognizant with the findings of Ahirwar *et al.*, (2021) who pointed out that access to contraception was of utmost benefit users as they avoided unplanned pregnancies.

Additionally, the study participants were required to specify their highest level of education they had attained. The outcomes of the analysed data are shown in Table 2.

| Education Level | Frequency | Percent |
|---------------------|-----------|---------|
| Non-formal | 65 | 18.8 |
| primary education | 73 | 21.1 |
| secondary education | 173 | 50.0 |
| Certificate/Diploma | 19 | 5.5 |
| University | 16 | 4.6 |
| Total | 346 | 100.0 |

Table 2: Respondents' Education Level

Table 2 shows that 173(50.0%) respondents had secondary school education,73(21.1%) respondents had primary level of education, 65(18.8%) respondents had informal education and 19(5.5%) respondents had certificate/diploma level of education while 16(4.6%) respondents had university level of education. From, the table, it can be shown that majority of the respondents had secondary school level of education. The effectiveness of family planning methods has been considered by researchers to be highly dependent on user characteristics such as education level (Alemayehu, & Abebach, 2014).

It has been observed that females with higher education status were more likely to adopt a family planning method in Ethiopia (Okech, Wawire, & Mburu, 2011). Studies by Hag *et al.*, (2017) demonstrated an association between educational attainment and contraceptive use. However, studies from and Bangladesh by Hossain *et al.*, (2018) showed no associations between overall FP use and education while those by Roy et al., (2021) FP use was higher among women with secondary level education than women with a bachelor's degree or above which is consistent with the current study findings.

On interviewing the healthcare professionals, it emerged that all categories of respondents with various education levels were using various kinds of family planning methods. However, the highly educated respondents sought more specialized family planning methods as compared to the less educated respondents. Furthermore, the study participants were requested to specify their religious affiliations. The results of the analysed information is presented in Figure 4.

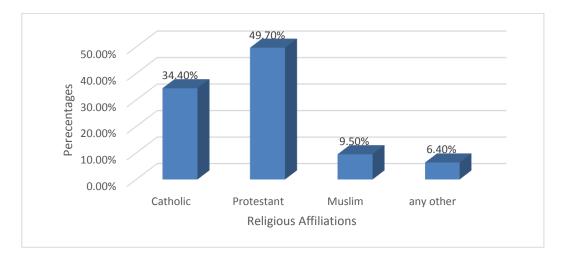


Figure 4: Respondents' Religious Affiliations.

Figure 4 shows that 49.7% of the respondents were Protestants, 34.4% of the respondents were of catholic faith and 9.5% of the respondents were Muslims while 6.4% of the respondents belonged to other faiths. On conducting cross tabulations between religious affiliations and utilization of family planning strategies, it emerged that majority (61.2%) of the catholic faith respondents had not ustilised any family planning strategy as opposed to protestants and Muslims. Based on this, it emerged that respondents of catholic faith were not using family planning methods. A study by Jalang'o, Thuita, Barasa, and Njoroge (2017) in Kenya found out that religious attachment was closely related to the utilization of family planning methods. The study revealed that people affiliated to Seventh Day Adventist church had more likelihood of adopting family planning practices. Females who ascribed to Seventh Day Adventist acknowledged that they were being trained on family planning practices in church to permit them to plan the time of having their siblings. In Kenya, the catholic bishops have been opposing the use of contraceptives and this could be the result of high proportion of non-adoption of family planning methods among Catholics in this study from the study area. In a study by Zelalem et al., (20210 in Ethiopia, religion was significantly associated with

References

Ahirwar, R. K., Kumar, S., Gupta, S., Niranjan, A., Prajapati, K., & Rawal, S. (2021). A study to assess the socio-demographic factor and current modern contraceptive use. In this study followers of Christianity were 1.2 times more likely to be current contraceptive users compared to Muslims (P = 0.000; 95% CI: 1.28,1.55). This finding is consistent with the finding in Nigeria in which contraceptive use was highest among Christian women compared to Muslim women (Obasohan, 2015). Similarly, a study in western Ethiopia found that Muslim women were 65% less likely to utilize modern contraceptives compared to Orthodox Christian women (Tigabu *et al.*, 2018).

5. Conclusions and Recommendations

The study concluded that socio-demographic characteristics including gender, age, education level and religious affiliations influenced the utilization of family planning practices among the inhabitants of Kakamega County. The paper recommends that there is need for tailoring of family planning practices according to age and gender so as to encourage old and young married and single respondents to use them. In addition, there is need for advocacy of use of family planning practices in all religions to ensure effective utilization of these practices amongst all inhabitants.

> knowledge, attitude, and practice of family planning methods in Lohpeeta migrants tribe located in Shivpuri central India. *Journal of Family Medicine and Primary Care*, *10*(3), 1308.

- Alemayehu, S.T., & Abebach, A.W. (2014). Determinants of long-acting contraceptive use among reproductive age women in Ethiopia: evidence from EDHS 2011. *Sci J Pub Health; 3(1):143–9.*
- Apanga, P. A., & Adam, M. A. (2015). Factors influencing the uptake of family planning services in the Talensi District, Ghana. *Pan African Medical Journal*, 20(1).
- Asif, M. F., & Pervaiz, Z. (2021). Correction to: Sociodemographic determinants of unmet need for family planning among married women in Pakistan. *BMC Public Health*, 21(1), 1-2.
- Butto, D & Mburu, S (2015). Factors Associated with Male Involvement in Family Planning in West Pokot County, Kenya. Universal Journal of Public Health, 3(4): 160-168.
- de Vargas Nunes Coll, C., Ewerling, F., Hellwig, F (2018). Contraception in adolescence: the influence of parity and marital status on contraceptive use in 73 low-and middle-income countries. *Reprod Health*, 16, 21.
- Diakite M. (2014). Promoting the acceptance and willingness of men to use FP methods. In: Center for Health and Social Justice, editor. Windows to working with men and boys. Compendium of interventions and research from the 2nd MenEngage global symposium 2014. New Delhi: Men and boys for gender justice; p. 70–1.
- Diamond-Smith, N., Campbell, M & Madan, S (2012). Misinformation and fear of side-effects of family planning. *Culture, Health and Sexuality*, 14, (4) 421–433.
- Fleming, P. J., Barrington, C., Maman, S., Lerebours, L., Donastorg, Y., & Brito, M. O. (2019). Competition and humiliation: How masculine norms shape men's sexual and violent behaviors. *Men and Masculinities*, 22, 197–215.
- Geleta, D. (2018). Femininity, masculinity and family planning decision-making among married men and women in rural Ethiopia: A qualitative study. *Journal of African Studies and Development*, 10, 124–133.
- Haq, I., Sakib, S. & Talukder A. (2017). Sociodemographic Factors on Contraceptive Use among Ever-Married Women of Reproductive Age: Evidence from Three Demographic and Health Surveys in Bangladesh. *Medical sciences* (*Basel, Switzerland; 5*(4). pmid: 29211008.

- Hardee, K., Croce-Galis, M. & Gay, J. (2017). Are men well served by family planning programs? *Reproductive Health 14*, (14), 1-12.
- Hossain, M., Khan, M., Ababneh, F. & Shaw, J. (2018). Identifying factors influencing contraceptive use in Bangladesh: evidence from BDHS 2014 data. *BMC public health*. 18(1). pmid: 29378546.
- Jalang'o, R., Thuita, F., Barasa, O.S & Njoroge, P (2017). Determinants of contraceptive use among postpartum women in a county hospital in rural Kenya. BMC Public Health BMC series – open, inclusive and trusted, 17:604.
- James-Hawkins, L., Salazar, K., Hennink, M. M., Song Ha, V., & Yount, K. M. (2019). Norms of masculinity and the cultural narrative of intimate partner violence among men in Vietnam. *Journal* of Interpersonal Violence, 34, 4421–4442.
- 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. *Reprod. Health.* 11:21.
- Kelodjouea S. (2015). Trends and determinants of unmet need for family planning in Cameroon: the role of socio-cultural context. *Sociology*.5: 39-5.
- Koffi, T. B., Weidert, K., Ouro Bitasse, E., Mensah, M. A.
 E., Emina, J., Mensah, S., & Prata, N. (2018).
 Engaging men in family planning: Perspectives from married men in Lomé, Togo. *Global Health, Science and Practice*, 6, 317–329
- MacQuarrie, K.L.D. (2014). Unmet Need for Family Planning among Young Women: Levels and Trends. DHS Comparative Reports No. 34. Rockville: ICF International.
- Mbizvo, M.T. & Phillips, S. J. (2014). Family planning: Choices and challenges for developing countries. *Best Practice & Research Clinical Obstetrics and Gynecology* 28, 931-943.
- Melanie, R & Gay, T. (2017). Are men well served by family planning programs? *Reproductive Health*; 14:14.
- Obasohan, P., E. (2015). Religion, ethnicity and contraceptive use among reproductive age women in Nigeria. *Int J MCH AIDS*.;3(1):63–73.
- Okech, T. C., Wawire, N. W. & Mburu, T. K. (2011). Contraceptive Use among women of

reproductive Age in Kenya's city slums. Int J Bus Soc Sci, vol. 1, no. 2.

- Pomales, T.O. (2013). Men's narratives of vasectomy: rearticulating masculinity and contraceptive responsibility in San Jose, Costa Rica. *Med Anthropol Q. 2013; 27(1):23–42.*
- Prachi R., Ashwini, K., Pattanshetty, S., Sagir, K. & Samarasinghe, M.C (2010). A study on knowledge, attitude and practice of contraception among college students in Sikkim, India. J *Turkish-German Gynecol Assoc* 11: 78-81.
- Roy, N., Amin, M. B., Maliha, M. J., Sarker, B., Aktarujjaman, M., Hossain, E., & Talukdar, G. (2021). Prevalence and factors associated with family planning during COVID-19 pandemic in Bangladesh: A cross-sectional study. *PloS one*, *16*(9), e0257634.
- Sedekia, N, Nathan, R, Kathryn C., Temu, S., Schellenberg, J & Tanya M. (2014). Delaying first birth: an analysis of household survey data from rural Southern Tanzania. BMC Public Health. 17: 134.
- Soremekun, O (2014). Factors that Influence Male Involvement in Family planning: A Qualitative study of men of reproductive age in Ibadan North East and North-West, Nigeria. *European Journal* of Public Health, 24, (2), 51-79.
- Tigabu, S, Demelew, T, Seid A, Sime, B, & Manyazewal, T. (2018). Socioeconomic and religious differentials in contraceptive uptake in western Ethiopia: a mixed-methods phenomenological study. *BMC Women's Health*;18(1):85.
- Van Scoy, L. J., Green, M. J., Creswell, J., Thiede, E., Wiegand, D., La, I. S., ... & Levi, B. H. (2021). Generating a new outcome variable using mixed methods in a randomized controlled trial: The Caregiver Study: An Advance Care Planning investigation. Journal of Mixed Methods Research, 15(4), 567-586.
- Wentzell, E.A. & Inhorn, M.C. (2014). Reconceiving masculinity and 'men as partners' for ICPD Beyond 2014: insights from a Mexican HPV study. *Global Public Health* 9(6): 691-705.
- WHO (2015). Family Planning/Contraception: WHO, Media centre; [updated May 2015; cited 2015 June 21]. Available from: http://who.int/mediacentre/ factsheets/fs351/en.

Zelalem, D., Worku, A., Alemayehu, T., & Dessie, Y. (2021). Association of Effective Spousal Family Planning Communication with Couples' Modern Contraceptive Use in Harar, Eastern Ethiopia. *Open Access Journal of Contraception*, 12, 45.