



East African Journal of Health and Science

ejhs.eanso.org

Volume 8 Issue 3, 2025

Print ISSN: 2707-3912 | Online ISSN: 2707-3920

Title DOI: <https://doi.org/10.37284/2707-3920>



EAST AFRICAN
NATURE &
SCIENCE
ORGANIZATION

Original Article

Contraceptive Uptake and Its Determinants among Women in West Pokot, Kenya: Implications for Reproductive Health in Marginalised Pastoralist Settings

Samuel Kipunaa Lopar^{1*}, Prof. Mary Kipmerewo, PhD² & Dr. Alex Chebor, PhD¹

¹ Mama Ngina University College, P. O. Box 444-01030, Gatundu, Kenya.

² Masinde Muliro University of Science and Technology, P. O. Box 190-50100, Kakamega, Kenya.

*Author for Correspondence ORCID ID; <https://orcid.org/0000-0003-2636-6660>; Email: loparsmmy@gmail.com

Article DOI: <https://doi.org/10.37284/eajhs.8.3.4125>

Date Published: ABSTRACT

03 December 2025

Keywords:

Contraceptives,
Pastoralist
Community,
West Pokot,
Women Of
Reproductive Age,
Contraceptive
Determinants.

Background: One of the main targets to reach Sustainable Development Goals 3.7 and 5.6 is to promote family planning uptake. However, the uptake in the pastoralist communities has been recorded to be very low compared to the global and national uptake. **Purpose of the study:** To determine contraceptive uptake and assess individual-level factors that influence Family Planning uptake in the pastoral community of West Pokot County, Kenya. **Methodology:** A community-based Cross-sectional descriptive study design was conducted among women of reproductive age. Two sub-counties were selected by a multistage sampling technique. Forty community health units were randomly selected from the sub-counties. Households were randomly selected. A structured questionnaire was used to collect socio-demographic characteristics, contraceptive prevalence rate and the factors influencing family planning uptake. Data was analysed using STATA software version 16.0, and logistic regression methods were employed to investigate the association among the variables. **Results:** 59.2% of the respondents were aged between 14-29 years, a majority (86.3%) were married. 60.7% of the respondents were aware of family planning methods, and 52.9% cited hospital workers as their source of information. The proportion of participants using modern contraceptive methods was 20.4%. Those currently on a method, nearly half (49.2%) were on implant, 41.8% were on injectables, and very few (1.6%) were using IUCD. Strong links were found between obtaining a formal education, working as a herder, being familiar with family planning choices and being aware of at least one long-lasting and reversible contraceptive method, and individuals who accepted family planning (AOR=16.03; 95% CI: 9.14-28.10), (AOR=1.69; 95% CI: 0.83-3.47), (AOR=7.30; 95% CI: 2.83-18.87), (AOR=2.65; 95% CI: 0.97-7.73), with a p-value of less than 0.001. **Conclusions and recommendations:** The contraceptive prevalence rate in the study area was low. Spousal disapproval, fear of side effects and cultural beliefs were identified to be the barriers to Family Planning uptake. Formally educated women were predominantly the users of contraceptives. The awareness level also contributes to a greater use of contraception. The study recommends the

design of programs that involve men in Family Planning decision-making and address cultural and religious misconceptions about contemporary contraception.

APA CITATION

Lopar, S. K., Kipmerewo, M. & Chebor, A. (2025). Contraceptive Uptake and Its Determinants among Women in West Pokot, Kenya: Implications for Reproductive Health in Marginalised Pastoralist Settings. *East African Journal of Health and Science*, 8(3), 257-267. <https://doi.org/10.37284/eajhs.8.3.4125>

CHICAGO CITATION

Lopar, Samuel Kipunaa, Mary Kipmerewo and Alex Chebor. 2025. "Contraceptive Uptake and Its Determinants among Women in West Pokot, Kenya: Implications for Reproductive Health in Marginalised Pastoralist Settings". *East African Journal of Health and Science* 8 (3), 257-267. <https://doi.org/10.37284/eajhs.8.3.4125>

HARVARD CITATION

Lopar, S. K., Kipmerewo, M. & Chebor, A. (2025). "Contraceptive Uptake and Its Determinants among Women in West Pokot, Kenya: Implications for Reproductive Health in Marginalised Pastoralist Settings", *East African Journal of Health and Science*, 8(3), pp. 257-267. doi: 10.37284/eajhs.8.3.4125

IEEE CITATION

S. K., Lopar, M., Kipmerewo & A., Chebor "Contraceptive Uptake and Its Determinants among Women in West Pokot, Kenya: Implications for Reproductive Health in Marginalised Pastoralist Settings", *EAJHS*, vol. 8, no. 3, pp. 257-267, Dec. 2025.

MLA CITATION

Lopar, Samuel Kipunaa, Mary Kipmerewo & Alex Chebor. "Contraceptive Uptake and Its Determinants among Women in West Pokot, Kenya: Implications for Reproductive Health in Marginalised Pastoralist Settings". *East African Journal of Health and Science*, Vol. 8, no. 3, Dec. 2025, pp. 257-267, doi:10.37284/eajhs.8.3.4125.

INTRODUCTION

The World Health Organization (WHO) has identified Family planning (FP) as one of the six essential health interventions needed to achieve safe motherhood by reducing maternal and child mortality (Gul, 2021). Family planning is an intervention that promotes development and enhances the wellbeing of women and the broader population's management from this context. Researchers have shown significant positive linkages between FP and maternal health, child health and survival, as well as socio-economic progress (Ouedraogo et al., 2021).

In 2019, among the 1.1 billion women requiring family planning, 842 million employed contraceptive methods, whereas the remaining 270 million had unmet needs; globally, 75% of women stated satisfaction with family planning, though coverage remains scarce in pastoral communities (Mahuro & Kimani, 2021).

In sub-Saharan African countries (SSA), the fertility rate is relatively high. The primary cause of the high fertility rate within the region is the low level of contraceptive use and a substantial unmet requirement for contraceptives (Noormal et al., 2022). Although contraceptive use has risen in

the region over the past few years, it has the lowest rates of contraceptive prevalence. Globally, about 214 million women of reproductive age (WRA) in developing countries have an unmet need for family planning. One-in-four women in Africa have an unmet need for family planning. Therefore, Sub-Saharan Africa has the highest fertility rate in the world, with the highest unmet need for family planning. The coverage of contraceptives in eastern Africa stands at 40% and is expected to grow to 55% by 2030 (Gichangi et al., 2022).

The situation of family planning uptake and unmet need for family planning in the study presents a very glaring indicator. The contraceptive prevalence rate stands at 23%, reflecting the highest unmet need of family planning in this community (30%) (KNBS, 2022).

Studies have shown that a woman's age, her educational level, her partner's disapproval, her concerns over potential side effects, misconceptions, and her power to make decisions are the factors influencing the use of modern contraceptives (Sulemana et al., 2025). Little is known regarding the factors influencing family planning uptake in pastoral communities.

Consequently, this study aimed to identify the factors affecting the use of contraceptives in hard-to-reach areas.

METHODS AND MATERIALS

Study Design

Cross-sectional descriptive study design, a survey was conducted to determine the current contraceptive uptake and to capture individual-level factors influencing family planning uptake. A structured questionnaire was used to address this objective. The study was conducted between the month of June 2024 to November, 2024.

Study Site

The study was conducted in West Pokot County, one of the 47 County Governments in the Republic of Kenya created under the First Schedule of the Constitution of Kenya 2010. Located in Kenya's North West, the region spans 9169 km² and is anticipated to have a total population of 673757 individuals based on the 2019 census, with a population density of 63 people per square kilometre. The population growth rate stands at 3.1 % (KNBS, 2022). West Pokot County is served by 4 hospitals, 8 health centres, 142 dispensaries and 252 community units. Participants were recruited from West Pokot and Pokot North sub-counties. About 90% of the livelihood system in the Sub Counties is based on nomadic pastoralists who primarily engage in pastoralism practices. The vulnerability of pastoralists to climate extremes with frequent strikes of climate change makes this community move from one place to another with their livestock in search of pasture.

Study Population

The study targeted women of reproductive age (15-49 years) in pastoralist settings in West Pokot County. The Participants were the recipients of family planning services. Women with severe health conditions that affect their ability to provide accurate responses were excluded, together with those who declined.

Sample Size Determination

The study adapted Fleiss's JL formula to get the sample size; this formula was best for comparing two proportions (Ko & Lim, 2021). The sample size determination is indicated below;

$$n = \frac{[(z\alpha/2 + z\beta)^2 \times (p_1(1-p_1) + p_2(1-p_2))]}{(p_1 - p_2)^2}$$

$Z\beta$ = the critical value of the normal distribution at β (for a power 80%, β is 0.2 = 0.84

P_1 = the expected sample proportion of women using family planning methods in the control group = 3.4% = 0.034

P_2 = the expected sample proportions of women using family planning methods in the intervention group at post-test = 10% = 0.1

$$n = \frac{[(1.96 + 0.84)^2 \times 0.034(1 - 0.034) + 0.1(1 - 0.01)]}{(0.034 - 0.1)^2}$$

$$= 222$$

$Z\alpha/2$ = the confidence level of 95% (α is 0.05 = 1.96)

To address non-responses, 30% was added to the minimum sample. Therefore, the total number of respondents for this was 578. Since the ratio is 1:1, then 289 respondents were in the intervention arm, and 289 were in the control arm of the study.

Sampling Procedure

A multistage cluster sampling technique was used. Forty community units and two sub-counties were randomly chosen; simple random sampling was used to pick participants (all women aged 15-49 years in households that met the study's inclusion requirements) for both the intervention and control groups of the study, which were situated far apart to prevent any potential contamination from the intervention and control arms. Health facilities that link to the community units were mapped since these were the facilities that community-based distributors were referring clients to pick up a method.

Data Collection Procedure

The principal researcher worked with eight research assistants, with health-related backgrounds, who were identified from the local community and who understood the local language. The research assistants were trained on the procedures of data collection during the administration of the questionnaires while emphasising how to obtain consent. Study participants were recruited among the community members at the household level. Data was collected from respondents after having explained the purpose of the study, and verbal informed consent was obtained.

Validity and Reliability of the Instrument

Validity of the tool was ensured by pre-testing 10% (58) of the questionnaires in Kipkomo Sub-County. The questions were examined to guarantee clarity, precision, comprehensiveness, and to evaluate their quality. The questions were then modified to ensure validity, and external validity was established by randomly selecting the participants.

The pretest data was analysed using STATA version 16.0. Cronbach's Alpha to test was used to test the reliability of the data collection tool. The results indicated acceptable to excellent internal consistency, with Cronbach's alpha (α) = 89.7, 87.5, 79.5, 69.9, and 65.9 respectively.

Data Management and Analysis

Data was collected using a structured questionnaire. All questionnaires underwent regular verification and validation procedures. Each questionnaire was assigned a code for ease of traceability and accountability. Data entry was done in the Excel sheet after coding, before being

exported to STATA for data analysis. The software used to analyse data for this study was STATA version 16. Multivariate logistic regression was done to determine predictors of family planning uptake. Odds ratios (ORs) with their 95% confidence intervals (CIs) were reported. A P-value of < 0.05 was considered significant.

Ethical Consideration

Ethical approval was obtained from the institutional scientific and ethics review committee (ISERC) of Masinde Muliro University of Science and Technology (MMUST/ISREC/043/2024), and the National Commission for Science, Technology, and Innovation (NACOSTI- 417540).

RESULTS

Socio-Demographic Characteristics

A total of 578 respondents were interviewed, and 342 (59.2%) aged between 14-29 years. A majority (86.3%) of the respondents were married, and only 46 (8%) were single. Christian-protestants were the majority (64.2%). Most respondents, at 75.4%, lacked formal education or had not finished primary school. Only 11.1% of them had a secondary or tertiary education. Similarly, the majority of respondents had occupations as pastoralists or no occupation at all, which accounted for 82.4%. Furthermore, 60.7% of the respondents were aware of family planning methods, with 52.9% citing hospital workers as their information source. Moreover, 44.8% of the study population knew at least three family planning methods, while 36.3% knew at least one long-acting and reversible contraceptive method.

Table 1: Socio-demographic Characteristics

Variables	N=578	Percentage (%)
Age		
14-29	342	59.2
30-49	236	40.8
Mean age and SD	28.5 ±8.85	
Marital status		
Married	499	86.3
Single	46	8.0
Widow	18	3.1
Divorced/separated	15	2.6
Religion		
No religion	29	5.0
Christian- Catholic	100	17.3
Christian- Protestant	371	64.2
Muslim	5	0.9
Others- Specify	73	12.6
Education		
None	236	40.8
Primary- Not completed	200	34.6
Primary- completed	81	14.0
Secondary	43	7.4
college/university	18	3.1
Occupation		
None	169	29.2
Formal employment	15	2.6
farmer(pastoralist)	305	52.8
Business	81	14.0
Others (specify)	8	1.4
FP Awareness		
Yes	351	60.7
No	227	39.3
source of information		
Radio/TV/Newspaper	49	13.7
Hospital workers	212	59.2
Friends	87	24.3
CBD	9	2.5
Church	1	0.3
Know 3 FP methods		
Yes	259	44.8
No	319	55.2
Knows at least 1 LARC		
Yes	210	36.3
No	368	63.7

Contraceptive uptake

The proportion of participants who reported having ever used a family planning method were 24.7%, while a significantly higher 75.3% had never used any method. Those who reported

currently on family planning method were only 20.4%, while the larger majority, 79.6, were not. Among the women who were currently on the FP method, nearly half (49.2% were on implants, 41.8% were on injectables, very few used pills

(7.4%) and (1.6%) were using IUCD. The main reasons given by the 460 respondents who did not use any method included spousal disapproval,

which was mentioned by 40.2%, followed by a fear of perceived side effects at 26.4% and cultural factors at 17.5%.

Table 2: Uptake of Family Planning

Variables	N=578	Percentage (%)
Ever used a family planning method		
Yes	143	24.7
No	435	75.3
Currently on a family planning method		
Yes	118	20.4
No	460	79.6
If currently on FP, which method		
Pills	9	7.4
Injectable	51	41.8
IUCD	2	1.6
Implant	60	49.2
Reason for not using FP		
Spousal disapproval	175	40.2
Fear of perceived side effects	107	24.6
Cultural factors	76	17.5
Religion	27	6.2
Pregnant	50	11.5

Individual-Level Factors Influencing Family Planning Method Uptake

The individual-level factors under consideration (religion, education, and occupation) were significantly associated with FP uptake ($p < 0.05$).

The uptake of FP notably increased with higher education level, where those who had acquired a college/university level of education had the highest uptake of 61.3%.

Table 3: Association between Demographics and Uptake of Family Planning

	FP uptake		p-value
	No N=460	Yes N=118	
Age			0.006
14-29	259 (75.7)	83 (24.3)	
30-49	201 (85.2)	35 (14.8)	
Marital status			0.15
Married	402 (80.6)	97 (19.4)	
Never married	36 (78.3)	10 (21.7)	
Divorced/separated/widowed	22 (66.7)	11 (33.3)	
Religion			0.044
Catholic	73 (73.0)	27 (27.0)	
Protestant	294 (79.2)	77 (20.8)	
Others	93 (86.9)	14 (13.1)	
Education			<0.001
None	405 (92.9)	31 (7.1)	
Formal education	55 (38.7)	87 (61.3)	
Occupation			<0.001
None	150 (88.8)	19 (11.2)	
Farmer	248 (81.3)	57 (18.7)	
Pastoralist	62 (59.6)	42 (40.4)	

Individual-level Factors Associated with Family Planning Uptake

At the multivariable level, there was a significant ($p < 0.05$) association between FP uptake and

education level and occupation. Compared to none, those who were formally employed were 3.8 times more likely to use FP and businessmen and women were 3.8 times more likely to use FP.

Table 4: Individual-level Factors Associated with Uptake of Family Planning

Variables	aOR	95% CI	p-value
Age			
14-29	1.07	0.59 – 1.93	0.820
30-49	Ref		
Marital status			
Married	1.65	0.61 – 4.46	0.322
Never married	Ref		
Divorced/separated/widowed	1.67	0.42 – 6.65	0.468
Religion			
Catholic	1.72	0.69 – 4.34	0.250
Protestant	1.44	0.64 – 3.21	0.375
Others	Ref		
Education			
None	Ref		
Formal education	16.03	9.14 – 28.10	<0.001
Occupation			
None	Ref		
Farmer	1.69	0.83 - 3.47	0.149
Pastoralist	4.10	1.85 – 9.10	0.001

DISCUSSION

Contraceptive Uptake and Method Mix

This study revealed that the uptake of family planning is low among women of reproductive age in the study. Only 20.4% of respondents were currently using a method, while a large majority, 79.6%, were not. A study done in southern Ethiopia in similar settings reported that only 27.4% of women were on contraceptives (Beyene et al., 2024). Similar findings were reported in a study conducted in rural Burundi, where the prevalence rate was at 22.6% (Hakizimana & Odjidja, 2021). Contrary, this finding differs from the Mozambique study, which observed a high contraceptive prevalence rate (Yohannes Roga et al., 2023). The numbers for contraceptive prevalence are significantly lower than national targets and WHO guidelines, highlighting a critical disparity in family planning access and decision-making for women in underserved areas of West Pokot County.

The most commonly used method of contraception was Implants and injectables, while a small number used pills and IUCDs. This finding agrees with a study in Cheke-Pemba District, where respondents reported preferring injectables over other methods (Abeid et al., 2023). Yeboah et al. (2023) reported similar findings in their study. This distribution reveals a clear preference for Implants and injectables in rural settings. This could be because it is convenient and does not necessitate daily adherence, similar to taking medication in pill form. However, the near absence of IUCD use is notable and suggests either a lack of availability, inadequate counselling, or fear and misconceptions surrounding the method.

The study results point to a complex interplay between individual fears, spousal dynamics and socio-cultural values are barriers to family planning uptake. The most commonly cited reason for not using FP was spousal disapproval, reported by 40.2% of respondents. These findings

align with past research carried out in agricultural and countryside areas, where males continue to exert considerable influence over reproductive choices (Abdi et al., 2024; Kraft et al., 2022; Nyakundi et al., 2024) & Alemayehu et al., 2021).

Additionally, the Fear of Perceived Side Effects was mentioned by 24.6% of the respondents as a barrier. More studies have reported similar findings of the fear of side effects as a major barrier to its use (Schrumpp et al., 2020). Ngole & Joho (2025) reported similar findings and indicated that side effects being the main hurdle for contraceptive use. This indicates widespread misinformation on the safety and management of contraceptive side effects. Such misconceptions deter women from using contraceptives in pastoral settings.

This study identified various individual factors, which include age, marital status, religion, education and occupation, that were significantly associated with FP uptake ($p < 0.05$). This research indicates a significant correlation between age and family planning usage, supporting the findings of several studies that highlight age as a key factor in adopting family planning methods (Kassim & Ndumbaro, 2022; Asmamaw et al., 2022 & Okezie, 2022). Additionally, a study by Namwanje discovered that middle-aged women are more likely to utilise family planning methods compared to their elderly counterparts (Namwanje, 2023). Fedha research (2022) also found that women aged 20-39 are more disposed to utilise modern family planning methods than their older counterparts. The findings of this study contradict findings from a study in Pakistan, which revealed that the users of modern family planning methods are older women who have many children compared to non-users. Findings from a study conducted in Ethiopia's Afar region contradict those of Dayib et al. (2023) & Nyakundi et al. (2024), which showed that among pastoralists, younger women were less likely to use contraceptives than older women. Further, a study by the Bangladesh Demographic and Health Survey indicated that women between 30-49 years of age were the highest users of modern

contraceptives and decreased with advanced age (NIPORT and ICF, 2023). Additionally, a study carried out by Chilambwe and others in Zambia revealed that most young women use family planning methods and decrease their use as they get older (Chilambwe Jully Mwansa et al., 2021).

Regarding the Marital status of women, the study showed that it did not significantly affect the uptake of contraception ($p=0.48$). This suggests that marriage has little effect on FP uptake in pastoralist communities. This indicates that there were more factors that influence family planning as opposed to marriage alone. Murry et al. (2021) concur with this discovery. It corroborates with the Kenya Health and Demographic Survey, which found that there is low demand for contraceptives among married women of reproductive age (KNBS, 2022). Unlike the SSA study, research by Kraft et al. (2022) found that most married women use family planning to space their children and avoid unwanted pregnancies. Demissie et al. (2022) also discovered that married women are more likely to use contraceptives than single women.

According to data from KDHS, the use of modern contraceptives is more common among women with higher levels of education than among those with only primary education (KNBS, 2022). Researchers in Wajir and Lamu found that women of childbearing age with secondary education exhibited a higher rate of contraceptive use compared to those with lower educational qualifications (Abdi et al., 2024b). It also conforms to study findings in the Afar region among pastoralist communities, which revealed that education positively influences modern contraceptive usage (Turner, 2021). A study carried out in Qatar discovered that women without a formal education were less likely to utilise contemporary family planning techniques than individuals with a university or college degree, who made up the majority of those using such methods (Barrow, 2020). It contradicts the Kampala study, which showed low uptake of contraceptives among educated women (Ochen & Primus, 2023). Education plays a vital role in raising awareness about contraception and

debunking misconceptions surrounding its use. Further, it informs about the benefits and management of side effects. Factors play a role, such as access to services and geographical location.

Study Strengths and Weaknesses

The study provides baseline prevalence data on family planning uptake in a pastoral community, offering context-specific evidence to guide culturally responsive interventions. A major limitation of this study was that it used a cross-sectional design, which restricts causal inference, and the sensitivity of the topic may have introduced response bias through underreporting of contraceptive use.

CONCLUSION AND RECOMMENDATIONS

The proportion of women using family planning methods were found to be low. Age of the women, education level and women's occupation were significantly associated with FP uptake ($p < 0.05$) in the pastoral settings of West Pokot County. However, marital status was not statistically associated with FP uptake (> 0.05).

Recommendations

- The study recommends deliberate steps to create family planning programs that actively involve men, recognising that reproductive health decisions often affect family planning uptake.
- Additionally, further qualitative research is recommended to examine male perspectives and decision-making dynamics in relation to Family Planning in pastoral settings.

Source of Funding

This study was self-sponsored

Conflict of Interest

There was no known conflict of interest to declare by all authors

Acknowledgment

I would like to acknowledge all the respondents and the West Pokot County Department of Health officers for providing valuable insights that made this study achievable.

REFERENCES

- Abdi, B., Okal, J., Serour, G., Were, V., Temmerman, M., & Gichangi, P. (2024a). Pattern and determinants of contraceptive use among the muslim women in Wajir and Lamu counties in Kenya: a cross-sectional study. *BMC Women's Health*, 24(1). <https://doi.org/10.1186/s12905-024-02892-9>
- Abdi, B., Okal, J., Serour, G., Were, V., Temmerman, M., & Gichangi, P. (2024b). Pattern and determinants of contraceptive use among the muslim women in Wajir and Lamu counties in Kenya: a cross-sectional study. *BMC Women's Health*, 24(1), 1–13. <https://doi.org/10.1186/s12905-024-02892-9>
- Abeid, R. A., Sumari, E. I., Qin, C., Lyimo, A. A., & Luttaay, G. A. (2023). Uptake of modern contraceptive methods among women of reproductive age in Chake District-Pemba Tanzania: a descriptive cross-sectional study. *Contraception and Reproductive Medicine*, 8(1), 1–9. <https://doi.org/10.1186/s40834-023-00234-y>
- Alemayehu, M., Medhanyie, A. A., Reed, E., & Bezabih, A. M. (2021). Use of community-based interventions to promote family planning use among pastoralist women in Ethiopia: cluster randomized controlled trial. *BMC Women's Health*, 21(1). <https://doi.org/10.1186/s12905-021-01434-x>
- Asmamaw, D. B., Eshetu, H. B., & Negash, W. D. (2022). Individual and Community-Level Factors Associated With Intention to Use Contraceptives Among Reproductive Age Women in Sub-Saharan Africa. *International Journal of Public Health*, 67(June), 1–8. <https://doi.org/10.3389/ijph.2022.1604905>

- Barrow, A. (2020). A Survey on Prevalence and Knowledge of Family Planning among Women of Childbearing Age in the Provincial Settings of the Gambia: A Descriptive Cross-Sectional Study. *Advances in Preventive Medicine*, 2020, 1–12. <https://doi.org/10.1155/2020/8862290>
- Beyene, S. A., Garoma, S., & Belachew, T. (2024). Addressing disparity in attitudes and utilization of family planning among married couples in the pastoralist community of Fentale District, Eastern Ethiopia. *PLoS ONE*, 19(9 September), 1–27. <https://doi.org/10.1371/journal.pone.0308633>
- Chilambwe Jully Mwansa, T. C., Mwansa, M., & Zambwe, M. (2021). *Type Of Article: Original Research Article Modern Contraceptive Use Among Women In Zambia: A Descriptive Survey*. 12(1), 187–193.
- Dayib, A., Mahamed, K., & Mahamed, D. A. (2023). *Factors influencing the use of modern contraceptives among Somali women pastoralist and their partners in Garissa, Wajir, and Mandera Counties in Kenya*.
- Demissie, G. D., Akalu, Y., Gelagay, A. A., Alemnew, W., & Yeshaw, Y. (2022). Factors associated with decision-making power of married women to use family planning in sub-Saharan Africa: a multilevel analysis of demographic health surveys. *BMC Public Health*, 22(1), 1–9. <https://doi.org/10.1186/s12889-022-13251-4>
- Fedha, M. L. (2022). *Socio-Demographic Characteristics and Uptake of Family Planning Practices in Kakamega County, Kenya*. 6, 63–71.
- Gichangi, P., Gonsalves, L., Mwaisaka, J., Thiongo, M., Habib, N., Waithaka, M., Tamrat, T., Agwanda, A., Sidha, H., Temmerman, M., & Say, L. (2022). Busting contraception myths and misconceptions among youth in Kwale County, Kenya: Results of a digital health randomised control trial. *BMJ Open*, 12(1), 1–10. <https://doi.org/10.1136/bmjopen-2020-047426>
- Gul, A. X. (2021). Application of the Integrated Behavior Model to Explain and Promote Uptake of Modern Family Planning Methods among Married Women of Reproductive Age in Rural Areas of Punjab, Pakistan: The IRADA Project. *ProQuest Dissertations and Theses, March*, 239. <https://doi.org/10.13140/RG.2.2.36481.53600>
- Hakizimana, S., & Odjidja, E. N. (2021). Beyond knowledge acquisition: factors influencing family planning utilization among women in conservative communities in Rural Burundi. *Reproductive Health*, 18(1), 1–9. <https://doi.org/10.1186/s12978-021-01150-7>
- Kassim, M., & Ndumbaro, F. (2022). Factors affecting family planning literacy among women of childbearing age in the rural Lake zone, Tanzania. *BMC Public Health*, 22(1), 1–11. <https://doi.org/10.1186/s12889-022-13103-1>
- KNBS. (2022). Kenya Health Indicator Survey 2022. *MoH*, 5(3), 248–253.
- Kraft, J. M., Serbanescu, F., Schmitz, M. M., Mwanshemele, Y., Ruiz C., A. G., Maro, G., & Chaote, P. (2022). Factors Associated with Contraceptive Use in Sub-Saharan Africa. *Journal of Women's Health*, 31(3), 447–457. <https://doi.org/10.1089/jwh.2020.8984>
- Mahuro, G., & Kimani, M. (2021). Inequities in unmet need for contraception among married women: Evidence from the PMA2020/ Kenya survey. *Cogent Medicine*, 8(1), 1943125. <https://doi.org/10.1080/2331205x.2021.1943125>
- Murry, L. L., Dabas, S., Thuileiphy, T., Kumari, V., Gudiya, G., & Joshi, P. (2021). Knowledge, Attitude and Utilization of Family Planning Methods among Postpartum Women in a Selected Tertiary Care Facility in India. *Journal of Midwifery and Reproductive Health*, 9(1 2597– 2604. <https://doi.org/10.22038/jmrh.2020.48982.1604>

- Namwanje, R. (2023). Factors Influencing the Uptake of Family Planning Methods Among Females Aged (15-49) At Mariestopes Centre Makerere- Kavule, Kampala District. a Descriptive. *Student's Journal of Health Research Africa*, 4(9).
- Ngole, B. E., & Joho, A. A. (2025). Factors Influencing Modern Family Planning Utilization and Barriers in Women of Reproductive Age in the Iringa Region, Tanzania: A Mixed-Methods Study. *SAGE Open Nursing*, 11. <https://doi.org/10.1177/23779608251313897>
- NIHORT and ICF. (2023). *Bangladesh Demographic Health Survey 2022: Key Indicator Report*. 84.
- Noormal, A. S., Winkler, V., Eshraqi, A. M., Deckert, A., Sadaat, I., & Dambach, P. (2022). Factors influencing the uptake of short-term contraceptives among women in Afghanistan. *Scientific Reports*, 12(1), 1–9. <https://doi.org/10.1038/s41598-022-10535-y>
- Nyakundi, J. B., Yonge, S., Kiiru, S., & Gichangi, P. (2024). Factors influencing contraceptive uptake among women of reproductive age in Kenya. *Gates Open Research*, 8, 32. <https://doi.org/10.12688/gatesopenres.15283.2>
- Ochen, A. M., & Primus, C. C. (2023). Family planning uptake and its associated factors among women of reproductive age in Uganda: An insight from the Uganda Demographic and Health Survey 2016. *PLOS Global Public Health*, 3(12), 1–17. <https://doi.org/10.1371/journal.pgph.0001102>
- Okezie, P. (2022). *Factors Influencing Attitude and Uptake of Family Planning Services among Women of Childbearing Age in Egbedore Local Government Area Osun State*. 14(8), 1–12.
- Ouedraogo, L., Habonimana, D., Nkurunziza, T., Chilanga, A., Hayfa, E., Fatim, T., Kidula, N., Conombo, G., Muriithi, A., & Onyiah, P. (2021). Towards achieving the family planning targets in the African region: a rapid review of task sharing policies. *Reproductive Health*, 18(1), 1–12. <https://doi.org/10.1186/s12978-020-01038-y>
- Schrumpf, L. A., Stephens, M. J., Nsarko, N. E., Akosah, E., Baumgartner, J. N., Ohemeng-Dapaah, S., & Watt, M. H. (2020). Side effect concerns and their impact on women's uptake of modern family planning methods in rural Ghana: A mixed methods study. *BMC Women's Health*, 20(1), 1–8. <https://doi.org/10.1186/s12905-020-0885-0>
- Sulemana, I., Gbeti, C., Dalaba, M., Yidana, A., & Aninanya, G. A. (2025). Determinants of family planning services uptake among women within the reproductive age in the Yendi municipality in Northern Ghana. *BMC Public Health*, 25(1). <https://doi.org/10.1186/s12889-024-21122-3>
- Turner, N. (2021). Influence of Religion and Religiosity on Fertility and Contraceptive Use in Continental Sub-Saharan Africa: A Comprehensive Review. *Osf*, June. <https://doi.org/10.31237/osf.io/sezdq>
- Yeboah, D., Issah, A. N., Kpordoxah, M. R., Akiti, C., & Boah, M. (2023). Prevalence and factors associated with the intention to use contraception among women of reproductive age who are not already using a contraceptive method in Liberia: findings from a secondary analysis of the 2019-2020 Liberia Demographic Health Survey. *BMJ Open*, 13(10), 1–10. <https://doi.org/10.1136/bmjopen-2023-072282>
- Yohannes Roga, E., Gelan Bekele, G., Ejara Moti, B., Negesse Gonfa, D., Tesfaye Yami, A., & Robi Tura, M. (2023). Modern contraceptives utilization and associated factors among married women of reproductive age in Holeta town, central Ethiopia. *Clinical Epidemiology and Global Health*, 20(April 2022), 101242. <https://doi.org/10.1016/j.cegh.2023.101242>