

Improving Access to Family Planning Services in Rorya District, Tanzania: Qualitative Findings from A Pilot Study

Gail C. Webber^{1*}, Bwire M. Chirangi², Nyamusi J. Magatti²

¹Bruyere Research Institute, University of Ottawa, Canada

²Shirati KMT Hospital, Shirati, Rorya, Mara, Tanzania

***Corresponding author:**

Dr. Gail Webber

Lancaster Medical Clinic

2450 Lancaster Road No. 11 & 12

Ottawa, ON

Canada

K1S 0N7

Email: gail.webber@uottawa.ca

OPEN ACCESS JOURNAL

Abstract

Background

Access to modern family planning methods is essential for African women to avoid repeated pregnancies, and the subsequent risk of maternal mortality, particularly in rural contexts. This study addressed the gap in access to family planning services for women living in a rural district of northern Tanzania.

Objectives

In this pilot study, we trained community health workers to educate couples, distribute condoms and oral contraceptives, and refer women and men for more advanced methods of family planning. The purpose of this study was to explore the views of community members, nurses, and policymakers to this project to improve access to modern family planning methods, to understand the barriers and solutions for accessing family planning services in this rural context.

Methods

Twenty focus group discussions were held separately with women, men, community health workers, nurses and policymakers (total 173 participants) from across the district. The focus group transcripts were subjected to a thematic analysis by the first author through repeated readings focusing on the barriers and solutions to accessing family planning services in Rorya District.

Results

The barriers to family planning access were most commonly negative male attitudes towards women using family planning methods. The community held myths regarding methods, institutional barriers impeding access and specific family planning method challenges were also problematic. Solutions focused on community health education, provider training, reliable supply of family planning methods in the community, and free access to these methods.

Conclusion

The community members, nurses and policymakers interviewed about this project agree that community health workers can successfully provide family planning education and basic methods to community members, and refer couples for more advanced methods. Challenges remain to ensure the supply of contraceptive methods is sustainable, and that male partners are engaged and supportive. The four pillars of a successful program in family planning are community-based health education, training of nurses in advanced methods, consistent supply of family planning methods and provision of free supplies to the population.

Key Words: *Family planning, Community Health Worker, Tanzania, Access to contraception.*

Introduction

Access to family planning services is the cornerstone of women's health globally. Without control of their fertility, women are at risk of experiencing multiple pregnancies within a short period, putting themselves and their infants at risk of illness and death from complications of childbirth. While in some areas of Africa, access to family planning services is improving (1), there remains a large gap between need and availability for many populations. The World Health Organization estimates 214 million women in the developing world desire contraception; however, they do not have access to a modern method (2). About fifty per cent of the total pregnancies for 15 to 19-year-old women in Africa are a result of the gap in the provision of modern family planning (3). In Mara Region, Tanzania, where Rorya District is located, there has been an improvement in family planning use from 2010 to 2015, however, only 29% of currently married women are using modern contraceptive methods. The unmet need for contraception in this region is 35%, more than three times that of more southern regions within the country (4). Despite the national government's commitment to improving access to family planning and maternal health services, priority setting at the district level does not consistently address this need (5).

To improve access to family planning, in many regions, community health workers have successfully been tasked with providing oral contraceptives and educating the population about more advanced methods (6). Community health workers are lay health workers who support the health system by encouraging women to access reproductive health care and to have their children vaccinated, amongst other potential roles. Most work as volunteers and have basic training provided by the government. To improve access to modern family planning methods in a rural setting where health care providers are already overworked, the World Health Organization has supported task-sharing with lay health providers. These lay providers can be responsible for health education and provision of oral contraception and condoms (7). The local government in Mara region has acknowledged the need for addressing cultural norms, improving the supply, and having providers with the required competencies to improve access to family planning (8). This study aimed to determine the views of community members, nurses and policymakers on a pilot project where community health workers were tasked with educating the population about family planning, providing oral contraceptives and condoms, and referring couples for more advanced methods. We used a socio-ecologic framework lens (9) to assess the barriers and solutions to access of family planning services for rural women. By this we mean that women's context within her

OPEN ACCESS JOURNAL

family and her community were considered to understand both the limitations and facilitators to access services, as clearly access to family planning is complicated by multiple, sometimes competing, factors.

Methods

In 2018, we undertook a pilot study to improve access to family planning services for couples throughout Rorya District, Mara Region in Northern Tanzania. Rorya District has a population of about 265,000, scattered throughout 89 villages. The residents rely on fishing and agriculture to support themselves. Family planning services are normally accessed through visits with health care providers at local dispensaries; however, there are limitations in access due to the requirement to travel to the health facility and pay for the services. To address the gaps in family planning access, we worked with community health workers (CHWs) as they are a trusted and available resources within the villages who are familiar with the local context. CHWs were chosen from each of the eighty-nine villages in the district by community leaders. These lay workers were provided with a smartphone and airtime, and were trained to use a mobile phone application to educate couples about family planning options. The mobile application was produced and supported by D-Tree International, following the Family Planning guidelines of Tanzania, as had been used elsewhere in Tanzania (10). The m-health application helped the CHWs determine which method of family planning was most appropriate for the couple by prompting the CHW to ask a series of questions about the couple's current status and their desires for present or future child-bearing. The CHWs were also provided with condoms and birth control pills to distribute to interested couples. Women were referred by the CHWs to health facilities for other methods of contraception such as intrauterine devices (IUDs), implants, and Depo-Provera injections. Nurses working in local dispensaries and health centres were trained on how to administer implants and intrauterine devices. All of the contraceptive methods were provided free of charge and permanent sterilization (tubal ligations and vasectomies) were subsidized through family planning days at Shirati Hospital. Data was collected through the CHWs' m-health applications as well as focus group discussions with women, men, CHWs, nurses and policymakers. This report focuses on the barriers and solutions for access to family planning services for this population as discussed by participants in the focus groups.

The focus group discussions were held in a local health facility (Table 1) and were conducted by trained research assistants who had training in nursing and were fluent in

OPEN ACCESS JOURNAL

Kiswahili. Focus group discussions were held in all four geographic divisions of Rorya District. We chose a purposive sample of participants (women, men, community health workers, nurses and policymakers from the four divisions who had experience in the project). Focus group discussions with women, men, community health workers, nurses and policymakers were held separately, in order to give all participants, the freedom to speak (women in rural Tanzania often will not express their opinions freely in the presence of men). The participants were asked to read (or had read to them) a consent form, which they then signed if they agreed to participate. The focus group discussions were held in Kiswahili, recorded, and then transcribed and translated into English. The transcripts were subjected to a thematic analysis by the first author (GW) using Nvivo Version 12 software, and the socio-ecologic model (9) as a lens. Common themes were extracted through multiple readings of the transcripts. Themes focusing on the barriers and solutions to family planning access were extracted. All authors approved the final analysis. Representative quotations of the participants were chosen to illustrate the themes across the different types of participants. This was done to ensure trustworthiness of the results. A conceptual framework was developed using the socio-ecologic lens and the common themes, which emerged from the focus groups to illustrate the barriers to family planning access and the possible solutions.

Ethical Approval

Ethical approval for this study was obtained from the National Health Research Ethics Committee of the National Institute of Medical Research in Dar es Salaam Tanzania and the Ottawa Hospital Science Network Research Ethics Board in Canada (protocol number 20170461-01H). Each participant was provided with a consent form describing the research to read (or have read to him or her) and to sign. Participants were informed that we would keep their identity anonymous in all reports about the research. They were also asked to keep the discussions within the focus group confidential. All quotations included in the paper are anonymous and do not provide any details which would allow identification of the research participants. The de-identified data will be stored in a secure location for 10 years as per the Canadian ethics requirements.

Results

Twenty focus group discussions were held with the participants. The types of participants and location of the focus group discussions are documented in Table 1 below. The community members (women, men, and community health workers) came from villages near

OPEN ACCESS JOURNAL

these health centres, while the nurses worked at the health facilities. The policy maker participants were members of the Rorya District Health Management Team who worked in the area of reproductive health.

The themes arising from the focus group discussions were barriers to family planning access and possible solutions to these barriers. Barriers included attitudes of family and community members, myths about side effects, institutional barriers to access (such as geographic distance, costs, inadequate provider services and church and state guidance), and barriers related to specific family planning methods. The proposed solutions were made to address many of these barriers.

Table 1: Focus Group Participants and Location

Participants	Number of Focus Groups	Total Number of Participants	Location of Focus Groups
Women	5	50	Kinesi Health Centre Kowak Hospital Masonga Dispensary Shirati Hospital Tatwe Dispensary
Men	5	42	Kinesi Health Centre Kowak Hospital Masonga Dispensary Shirati Hospital Tatwe Dispensary
Community Health Workers	4	38	Kinesi Health Centre Masonga Dispensary Shirati Hospital Tatwe Dispensary
Nurses	5	37	Kinesi Dispensary Kowak Hospital Nyarombo Health Centre Shirati Hospital Utegi Heath Centre
Policymakers	1	6	Shirati Hospital

Barriers to Family Planning Access

The focus group participants defined a number of barriers to family planning access. The most prominent amongst these barriers were family and community members' attitudes. When questioned what was the most significant barrier to accessing family planning the most common response from the women, men, nurses, and CHWs was that it was the men. The male community member quoted here noted that the male partners did not want to hear about family planning; trying to educate them could be futile:

"Men are the main barriers to family planning." (Man, Kinesi FG).

Indeed, as this woman noted, culturally, children are highly valued for their contributions to the family, hence asking men to limit their family size is understandably fraught with challenges.

"The barriers which we get are from our families. Luo men don't agree with the concept of family planning. According to the customs and beliefs of Luo tribe, the source of income of poor people are children. So many men don't like family planning." (Woman, Masonga FG)

With such cultural barriers, and male-dominated decision making, women have to practice their control of their fertility in secret. Women must hide their pills and keep their arms covered to avoid having their implants seen by their husbands. Unmarried women also maintained secrecy about their family planning use from male family members; students did not want their fathers to be aware of their sexual activity. Current government school policies in Tanzania preventing pregnant youth from completing their schooling has fuelled the push to achieve effective contraception for these young women. Implants were particularly desirable as they were effective for the time period needed to complete secondary education. Another key family member who was reported to act as a barrier to family planning by the focus group participants were mothers-in-law. In Tanzanian households, the mother of the male partner has a prominent role in decision-making.

Community-held beliefs about the potential side effects of the family planning methods were also a barrier to use. These myths were held by significant numbers of women, and were reported by the nurses and community health workers. They included fear of cancer, infertility and decreased libido:

"Some are thinking that if you use family planning methods you won't give birth again."

(Nurse, Utegi FG)

OPEN ACCESS JOURNAL

Institutional barriers presented a number of challenges to couples, in particular geographic distance, costs, and inadequate provider services. Many of the villages are located at a distance from the health facilities. Most people lacked easy access, as they had no options for transportation beyond walking.

“... the health facilities where they are getting family planning services are very far, because they walk a long distance, and some lose hope though they want family planning, but they don't go due to far distance.” (Man, Kowak FG)

While the project subsidized the family planning supplies, prior to the project, costs were often an issue for women. Lack of funds limited women's ability to obtain and continue with their family planning method if they could not easily obtain it from the health facility, due to lack of supply or co-payment demands of some non-governmental suppliers.

*“Sometimes when you have a problem, and you go to the clinic for help or to change the family planning method. But they ask you for some money and you don't have any.”
(Woman, Kinesi FG)*

Finally, the quality of care provided at the health care facility was not always ideal. There were a limited number of nurses working in the rural dispensaries and health centres, despite the large population they were serving, and few were trained in advanced family planning methods. Hence the time to receive services was too long for some to wait, and they left without any family planning options.

“Sometimes when there is a problem and you want to change methods, you go to the facility and you will be told to wait for long time, until you give up.” (Woman, Kinesi FG)

In addition to health care institutional barriers of distance, cost and limited health care provider services, both the church and the government challenged access to family planning services. Conservative religious beliefs restrict women's access to contraceptives. Of course, this is not unique to Tanzania, but is a very real issue in this rural part of the country.

“Some religious groups don't accept family planning practice. They say God said let's have birth and let the world be full of people.” (CHW, Shirati FG)

Political viewpoints can also act as a barrier to women's access to family planning. During the project, a senior political leader encouraged couples to have large families to help with

OPEN ACCESS JOURNAL

food production. His views were widely publicized and were repeated by several focus group participants:

“The [political leader] said to cultivate much in order to alleviate hunger, and not to practice family planning.” (CHW, Shirati FG)

Family Planning Method Barriers

In this study, the community health workers registered 8,320 people for a method of family planning. Table 2 documents the frequency which different methods were chosen. The long acting method of implants was the most popular, followed by the depo provera injections. Permanent methods (sterilization and vasectomy), condoms, oral contraception and IUDs were significantly less popular.

Table 2: Choice of Family Planning Methods

Method Choice	Number of People	Percentage of Total
Implants	3,795	45.6
Depo provera	3,203	38.5
Intrauterine Devices (IUDs)	534	6.4
Oral Contraception	229	2.8
Condoms	213	2.6
Tubal Ligation	207	2.5
Natural Methods (Rhythm)	133	1.6
Vasectomy	6	0.01
Total Registered	8,320	100

The method of contraception was a barrier in itself for some of these couples. Noticeably absent from the focus group discussion was the method of vasectomy. Men rarely chose this option, and did not discuss it at all in the focus groups, despite the fact that the project offered subsidized vasectomies. Tubal ligations were chosen more often, but some community members associated this method with the desire for women to have sexual relationships outside of marriage:

OPEN ACCESS JOURNAL

“The main barrier for family planning is lack of education to the community, also the bad belief that if a woman has a permanent method (tubal-ligation), she will be a prostitute.”

(CHW, Shirati FG)

Similarly, for some people condoms were also stigmatized as they associated their use with extra-marital affairs. While this attitude was not universal, there was a segment of the population for whom it was prevalent. Men were willing to use the condom only *“when they were out of their homes”* (Woman, Masonga FG). Fortunately, condoms were more popular with some of the youth, where sexually transmitted infection prevention was a real concern. Oral contraception had its own challenges. Not only was it inconvenient to have to take a pill every day, it was also difficult to hide this from male partners. Missed pills are likely to result in unplanned pregnancies.

While IUDs were slightly more popular than condoms and pills, there were still many women who declined this long acting method. The IUD had the major disadvantage of requiring a gynecologic examination and uncomfortable insertion procedure. For many women, this was not acceptable as they were very shy to be examined. Women also worried that the IUD would be felt by their male partner or be pushed further inside their body by him.

“Women are not comfortable with IUD according to the part of body where it is inserted. Others don’t know exactly where the IUD is inserted, they just know that it was inserted in the private part, that is why they are few women who use it. Another belief is that men claim when a woman has an IUD during sexual intercourse they feel pain.” (Nurse, Utegi FG)

Depo Provera injections were the second most popular method, chosen by over one third of those who registered for family planning through the project. This method was particularly valued by the women as it could be used secretly. The main disadvantage was that it required a visit to the health care provider every three months to receive the injection. The most popular method chosen by over forty-five percent of the women, was the long-acting implant. This method was popular for its convenience, requiring only one visit to the health facility for insertion. It was also not obvious for male partners to see, as it was placed on the inner arm of women and could thus be used secretly.

“Myself, I like the implant, because it will stay a long time, but if I use injection, every time I will be going to get injection again. So it is better for me to use the implant which can stay for five years without getting pregnant.” (Woman, Kowak FG)

Solutions to Improving Family Planning Access

The solutions to improving access to modern contraception methods were evident to the focus group participants. The foundation to success was seen as a strong emphasis on health education for all. Recognition that this needed to be done at the community level and include men was paramount. Community health workers were seen as the key players in health education, and they had a significant impact on the community. Many participants noted that community members were much more aware and interested in modern family planning because of the project. The knowledge base about family planning in the community improved because the community health workers spoke with men and women about its importance.

In addition to health education, training for the nurses in how to administer the advanced methods at the rural dispensaries and consistent supply of methods at the health facilities and in the community were seen as other keys to success. The nurses were happy that they had the supplies and the training to provide a variety of methods of family planning, including the long-acting methods such as implants and IUDs.

Finally, cost was an insurmountable barrier for rural Tanzanian couples. Ensuring access to a variety of free supplies improved uptake of modern family planning methods for this rural population.

“It is now easy because services are provided freely. But in past time was difficult to get family planning services, especially when you don’t have money to pay.”

(Woman, Shirati FG).

It is on these four pillars of community health education, provider training, reliable supply in the community, and free access, that a successful and accessible modern family planning program can be built. Figure 1 illustrates a conceptual framework of the barriers to family planning services and the solutions to address these barriers.

SOLUTIONS TO IMPROVING FAMILY PLANNING ACCESS

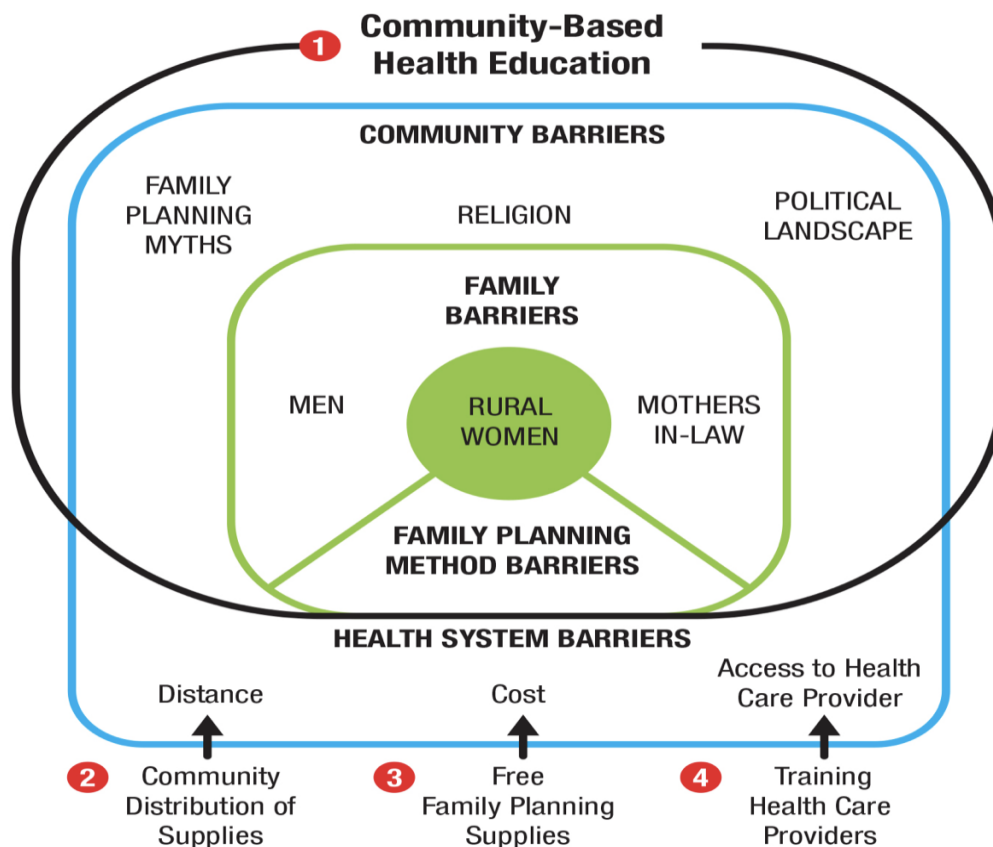


Figure 1: Conceptual Framework of the Barriers and Solutions to Family Planning Access

Discussion

This pilot study has several strengths and some limitations. A major strength was that the research team had an established positive working relationship with the District Medical Office and the local health care providers, as we were simultaneously conducting a trial to improve access to maternity care services in the same district. We thus had significant support from both the policymakers and the nurses. Another strength was the free provision of family planning supplies and subsidization of permanent sterilization for those who chose this method. The main limitations of the study were the instability of the network impacting the transmission of m-health data, and the challenges supervising the CHWs who were spread over a wide distance, some quite far from the research team base.

OPEN ACCESS JOURNAL

In this study, male partners and other family and community members were barriers to access for family planning services, as were myths about contraceptive methods. Gender norms, challenges in couple communication and false beliefs about modern family planning methods have been recognized as barriers to family planning by other researchers in Tanzania (11-13). Religious barriers have also been noted, particularly the inability to get access to modern family planning methods at private Catholic institutions where natural family planning methods are emphasized (14). Availability of family planning supplies alone is insufficient to increase uptake. Researchers in rural Burundi note that engaged health care providers, public education and community distribution are key components required for successful uptake of family planning (15).

Arguably one of the most significant interventions to improve access to family planning for rural African women is the inclusion of men during health education. In a study in the west African country of Togo, men desired to have input into the decision about family planning, and were open to learning more, particularly from community health workers, current users, and trusted men (16). In their review of male participation in family planning in 18 studies from 8 Sub-Saharan African countries, Nkwonta and Messias determined that including men in reproductive health programming resulted in increased use of family planning services, a reduction in high risk behaviours, and improved communication between the partners (17). Authors of a study in the Democratic Republic of Congo noted that uptake of IUD use increased from essentially nil to thirty percent and this was facilitated by reliable supplies, good provider training, and multiple communication strategies, including those that target men (18).

Our study participants welcomed the introduction of CHWs to provide family planning services, in contrast to a study of women in Western Kenya where only a third of the respondents showed high approval for CHWs (19). In fact, CHWs have been providing access to family planning in Africa since the 1980's, and Scott and colleagues' review including 19 African studies demonstrates their effectiveness at increasing access to family planning services in multiple contexts (6). More recent research has confirmed the importance of community-based workers to help couples access contraception in Ethiopia (20) and Niger (21). A rapid program review conducted in five sub-Saharan countries confirmed that task sharing family planning distribution (including with community health workers) improved uptake of family planning methods, particularly injectable and long-acting methods and reduced the unmet need for contraception (22).

OPEN ACCESS JOURNAL

Conclusions and Recommendations

Community-based solutions to family planning are particularly important during a global pandemic such as we are currently experiencing, when fear of contagion may limit access to health facilities. The four pillars of a successful program in family planning are community-based health education, training of nurses in advanced methods, consistent supply of family planning methods and provision of free supplies to the population. Access to modern contraceptive methods is a human right. It is time that women and men in rural Africa have control over their own fertility. Community-based programs are a feasible way to improve access to family planning services for even the most rural populations.

Acknowledgements

We would like to acknowledge the District Medical Office of Rorya, Regional Medical Office of Mara, the community health workers and nurses who committed their time to this project, and the women and men who participated. Thank you also to D-Tree International, who provided and supported the m-health mobile phone application. We also thank Shirati KMT Hospital and Tanzania National Institute Medical Research for their support. This work was carried out with the aid of a grant from the Innovating for Maternal and Child Health in Africa initiative - a partnership of Global Affairs Canada (GAC), the Canadian Institutes of Health Research (CIHR) and Canada's International Development Research Centre (IDRC).

Authors' Contributions

BC and GW wrote the proposal and applied for the funding for the research. BC and GW oversaw the research while NM was directly involved in data collection and supervising the research team. GW wrote the first draft of the paper and BC and NM approved the final draft.

Conflict of Interest

All three authors declare they have no conflict of interest with this research.

References

1. Ahmed S, Choi Y, Rimon JG et al. **Trends in contraceptive prevalence rates in sub-Saharan Africa since the 2012 London Summit on Family Planning: results from repeated cross-sectional surveys.** *Lancet Glob Health* 2019; 7: e904–11. [http://dx.doi.org/10.1016/S2214-109X\(19\)30200-1](http://dx.doi.org/10.1016/S2214-109X(19)30200-1)
2. World Health Organization, **Contraception/Family Planning Fact Sheet 2018** as accessed at <https://www.who.int/en/news-room/fact-sheets/detail/family-planning-contraception> on April 22, 2020.
3. Bellizzi, S, Pichierri G, Menchini L et al. **The impact of underuse of modern methods of contraception among adolescents with unintended pregnancies in 12 low- and middle-income countries.** *Journal of Global Health* 2019; 9 (2). doi: 10.7189/jogh.09.020429
4. Ministry of Health, Community Development, Gender, Elderly and Children Dar es Salaam, Ministry of Health Zanzibar, National Bureau of Statistics Dar es Salaam, Office of Chief Government Statistician Zanzibar, ICF Rockville, Maryland USA, **Tanzania Demographic and Health Survey and Malaria Indicator Survey 2015-2016: Final Report, December 2016.**
5. Chitama D, Baltussen R, Ketting E et al. **From papers to practices: district level priority setting processes and criteria for family planning, maternal, newborn and child health interventions in Tanzania.** *BMC Women's Health* 2011; 11:46.
6. Scott VK, Gottschalk LB, Wright KQ et al. **Community Health Workers' Provision of Family Planning Services in Low- and Middle-Income Countries: A Systematic Review of Effectiveness.** *Studies in Family Planning* 2015; 46(3): 241–261.
7. World Health Organization Department of Reproductive Health and Research et al. **Family Planning: A Global Handbook for Providers (2018 update).** Baltimore and Geneva: CCP and WHO, 2018.
8. Regional Commissioner's Office, Regional Health Department, **Mara Region's Strategic Plan for Reproductive, Maternal, Newborn, Under-Five and Adolescent Health 2019-2024, June 2019.**
9. Bronfenbrenner, U. (1979) **The Ecology of Human Development: Experiments by Nature and Design.** Harvard University Press, Cambridge, MA.
10. Braun R, Lasway C, Agarwal S et al. **An evaluation of a family planning mobile job aid for community health workers in Tanzania.** *Contraception* 2016; 94 (1): 27-33. [doi.org/10.1016/j.contraception.2016.03.016](http://dx.doi.org/10.1016/j.contraception.2016.03.016)

OPEN ACCESS JOURNAL

11. Schuler SR, Rottach E, Mukiri P. **Gender norms and family planning decision-making in Tanzania: a qualitative study.** Journal of Public Health in Africa 2011; 2:e25. 10.4081/jphia.2011.e25
12. Moshia I, Ruben R, Kakoko D. **Family planning decisions, perceptions and gender dynamics among couples in Mwanza, Tanzania: a qualitative study.** BMC Public Health 2013, 13:523. [http:// www.biomedcentral.com/1471-2458/13/523](http://www.biomedcentral.com/1471-2458/13/523)
13. Rusibamayila A, Phillips J, Kalollela A et al. **Factors Influencing Pregnancy Intentions and Contraceptive Use: An Exploration of the ‘Unmet Need for Family Planning’ in Tanzania.** Culture, Health & Sexuality 2017; 19 (1): 1–16.
14. Kakoko DC, Getting E, Kamazima SR et al. **Provision of Family Planning Services in Tanzania: A Comparative Analysis of Public and Private Facilities.** Afr J Reprod Health 2012; 16(4):140-148.
15. Ndayizigiye M, Smith Fawzi MC, Thompson Lively C et al. **Understanding low uptake of contraceptives in resource-limited settings: a mixed-methods study in rural Burundi.** BMC Health Services Research 2017; 17:209. 10.1186/s12913-017-2144-0
16. Koffi TB, Weidert K, Ouro Bitasse E et al. **Engaging men in family planning: perspectives from married men in Lomé, Togo.** Glob Health Sci Pract. 2018;6(2):317-329. <https://doi.org/10.9745/GHSP-D-17-00471>
17. Nkonta CA, Messias DKH. **Male Participation in Reproductive Health Interventions in Sub-Saharan Africa: A Scoping Review.** International Perspectives on Sexual and Reproductive Health, 2019, 45:71–85. <https://doi.org/10.1363/45e8119>
18. Castle S, Schroffel H, Mvuzolo JJN et al. **Successful programmatic approaches to facilitating IUD uptake: CARE’s experience in DRC.** BMC Women’s Health 2019; 19:104. <https://doi.org/10.1186/s12905-019-0793-3>.
19. Juma PA, Mutombo N, Mukiira C. **Women’s attitudes towards receiving family planning services from community health workers in rural Western Kenya.** African Health Sciences 2015; 15 (1): 161-170. <http://dx.doi.org/10.4314/ahs.v15i1.22>
20. Sedlander E, Bingenheimer JB, Edberg MC et al. **Understanding modern contraception uptake in one Ethiopian community: a case study.** Reproductive Health 2018; 15:111. <https://doi.org/10.1186/s12978-018-0550-3>
21. Brooks M, Johns N, Quinn AK et al. **Can community health workers increase modern contraceptive use among young married women? A cross-sectional study in rural Niger.** Reproductive Health 2019; 16:38. <https://doi.org/10.1186/s12978-019-0701-1>

OPEN ACCESS JOURNAL

22. Ouedraogo L, Habonimana D, Nkurunziz T et al. **Towards achieving the family planning targets in the African region: a rapid review of task sharing policies.** Reproductive Health 2021; 18:22. <https://doi.org/10.1186/212978-020-01038-y>