INFLUENCE OF WOMEN EMPOWERMENT STRATEGY ON USE OF MODERN CONTRACEPTIVE AMONG WOMEN IN KILOLO DISTRICT, IRINGA

Alfred Mwanjali (BA)

Master of Science in Project Management,
Monitoring and Evaluation in Health.
Muhimbili University of Health and Allied Sciences
October, 2021

Muhimbili University of Health and Allied Sciences

School of Public Health and Social Sciences

INFLUENCE OF WOMEN EMPOWERMENT STRATEGY ON USE OF MODERN CONTRACEPTIVE AMONG WOMEN IN KILOLO DISTRICT, IRINGA

By

Alfred Mwanjali (BA)

A Dissertation Submitted in a (Partial Fulfillment of the Requirements) for the Degree of Master of Science in Project Management, Monitoring and Evaluation in Health of the

Muhimbili University of Health and Allied Sciences
October, 2021

CERTIFICATION

The undersigned certify that, they have read and hereby recommend for acceptance for a dissertation entitled: **"Assessment of *Women Economic Empowerment Strategy on use of Modern Family Planning Methods among women in Kilolo district, Iringa*"** in a partial fulfilment of the requirements for Master of Science in project management, monitoring and evaluation in health of Muhimbili University of Health and Allied Sciences.

…….

Prof. P. G. M. Mujinja, BA (Hons), CIH, MPH, MA (Econ).PhD

(Supervisor)

……..

Date

DECLARATION AND COPYRIGHT

I, **Alfred Mwanjali**, declare that this **dissertation** is my own original work and that it has not been submitted for a similar degree in any other University.

Signature ---------- Date ----------

ACKNOWLEDGEMENT

Various people have contributed tirelessly to make this work possible, and I am sincerely appreciating their support that has made me to have memorable learning experience.

First and foremost, I would like to thank my supervisor Prof Phare Mujinja for his sustained support and helpful feedback from the research proposal development, data processing and finalization of the study. I am also thankful to my colleagues of PMMEH class of 2017-2019 who offered their support throughout my study.

My special thanks and appreciation goes to the Technical advisor at USAID Boresha Afya Program Southern Zone Dr Daud Mashafi, Data Analysit and impact evaluation specialist Mr Mustafa and all staff members of the Deloitte consulting limited.

Furthermore, I would like to thank my research assistants Joel Mwanga, Hellen Sally and Castory David who worked tirelessly and honestly in the field regardless of the difficult environment. I also thank Mr. Damian Mwigane who helped during data analysis.

My heartfelt thanks go to my father Asumwisye Mwanjali and my mother Eddah Mwangosi for their encouragement, spiritual, moral and financial support enabled me to complete my study.

DEDICATION

The dedication of this dissertation goes to my beloved parents Mr and Mrs Asumwisye Mwanjali for their encouragement and prayers throughout my studies. Their love is highly appreciated. I feel proud to have them. **May God bless you always.**

ABSTRACT

Tanzania is among of the African countries with high fertility rate and a huge unmet need for family planning. Contraceptive prevalence (% of women ages 15-49) in Tanzania was reported at 38.4% in 2016, Women who are not empowered are likely not to use any modern family planning methods as compared to women who are empowered; women empowerment has been recognized as important to their access to reproductive health services, including contraceptives. To reduce the low uptake of modern contraceptive the Government of Tanzania embarked on USAID Boresha Afya Southern Zone Program in addressing women empowerment to reduce morbidity and mortality by contraceptive use interventions with strategies of asset ownership and family planning knowledge.

Broad Objective: To assess the influence of women empowerment strategy on use of modern contraceptive in Kilolo district.

Methodology: A cross-sectional descriptive retrospective design in evaluation was carried out among 356 women who had reached the age of 18- 52 years at the time of conducting the research. Quantitative data was collected from the household level through multistage sampling procedure. Descriptive statistics and Logistic regression model were used to associate the dependent and the independent variable.

Results: A proportion of women who were using modern contraceptive before intervention were around 55 percent while after the intervention proportion increased to around 95 percent. Findings further revealed that women empowerment was associated positively with the use of modern family planning. In addition age, parity, farming occupation and marital status had positive significant effect on the use of modern contraceptive.

Conclusion and Recommendations: Women empowerment strategies have influences the use of modern contraceptive among women in Kilolo district. Therefore, Sexual and reproductive health programmes aiming to increase uptake of modern contraceptives in this population of reproductive age should be empower women so as to promote the use of modern contraceptive.

TABLE OF CONTENTS

LIST OF TABLES

LIST OF FIGURES

LIST OF ABBREVIATIONS

CSO	Civil Society Organization
DHIS	District Health Information System
FP	Family Planning
LAM	Lactational Amenorrhea Method
MDH	Management and Development for Health
MUHAS	Muhimbili University of Health and Allied Sciences
PI	Principle Investigator
RAs	Research Assistants
SDGs	Sustainable Development Goals
TDHS	Tanzania Demographic Health Survey
USAID	United States Agency for International Development

OPERATIONAL DEFINITIONS

Contraceptive prevalence rate	Is the percentage of women who are practicing, or whose sexual partners are practicing any form of contraception. It is usually measured for married women ages 15-49 only
Economic empowerment	Is the ability to make and act on decisions that involves the control over and allocation of financial resources
Strategy	Is a long-term plan of action to achieve a certain goal. A strategy is expressed through the program business case, program management plan, program vision, program mission, and the program goals and objectives.
Unmet need for family planning	Is defined as the percentage of married or in-union women of reproductive age who want to stop or postpone childbearing but who report that they are not using any method of contraception to prevent pregnancy.
Women's empowerment	Is a process by which those who have been denied the ability to make a strategic life choices acquire such ability.

CHAPTER ONE

1.0 INTRODUCTION

1.1 Background

The growing use of modern family planning methods has resulted in not only, improvements in health-related outcomes such as reduced maternal mortality and infant mortality, but also improvements in schooling and economic outcomes; especially for girls and women. As the world insists in having children by choice and not by chance through the use of modern family planning methods and treating infertility. In 2015, 64 per cent of married or in-union women of reproductive age worldwide were using some form of contraception. However, contraceptive use was much lower in the least developed countries (40%) and was particularly low in Africa (33%). Among the other major geographic areas, contraceptive use was much higher, ranging from 59 per cent in Oceania to 75 per cent in Northern America. Within these major areas there are large differences by region and across countries (1–3).

For modern family planning methods, globally in 2015, about 57 per cent of married or in-union women of reproductive age used any type of modern method of family planning, constituting 90 per cent of contraceptive users. When users of traditional methods are counted as having an unmet need for family planning, 18 per cent of married or in-union women worldwide are estimated to have had an unmet need for modern methods in 2015(2). Contraceptive prevalence (% of women ages 15-49) in Tanzania was reported at 38.4% in 2016, Contraceptive prevalence rate is the percentage of women who are practicing, or whose sexual partners are practicing, any form of contraception. It is usually measured for married women ages 15-49 only. There is a supportive policy framework for the provision of family planning services in Tanzania; national policies emphasize scaling up and strengthening contraceptive use as a priority. With fewer births each year, a country's working-age population grows larger in relation to the young dependent population (4).

Supportive policy framework in Tanzania are aligning with 2030 Agenda for Sustainable Development makes the realization of sexual and reproductive health and rights a specific target for every individual and couple, no matter where or how they live, or how much they earn. This includes dismantling all the barriers whether economic, social or institutional, that inhibit free and informed choice.

Family planning is an important strategy in the fight against poverty and contributes to the social and economic development of countries, when women and girls can make informed choices and plan their reproductive health they are better able to get a quality education, find decent work, and make free and informed decisions in all spheres of life.

Therefore, in addressing the challenge of low utilization of modern family planning methods, the Government of Tanzania in collaboration with development partners embarked on the implementation of USAID Boresha Afya Southern Zone Program to empower women in improving use of family planning methods. Boresha Afya is a five years (1 October 2016 - 30 September 2021) program undertaken in Tanzania and supported through the USAID (United States Agency for International Development). Deloitte Consulting Limited implements the program in 43 councils including Kilolo in Iringa region with its technical partners Family Health International (FHI360), Engender Health and Management and Development for Health (MDH). The core vision of USAID Boresha Afya - Southern Zone is to create a dynamic, integrated platform for delivery of health services that emphasizes intensified coordination and collaboration between the Government of Tanzania, health facilities and communities, towards improving use of modern family planning methods through employment of asset ownership and family planning advocacy strategies through formal and non-formal education and trainings through empowering rural women on viable business options for rural economies, highlighting the income-generating potential across agricultural and other rural chains and facilitating access to information, skills and opportunities to ensure successful business start-ups and sustained employment.

no formative evaluation has been conducted to assess the intervention strategies and little is known about the influence of assets ownership and family planning advocacy on the use of modern family planning methods. This study therefore, aimed to assess the influence of women empowerment strategy on use of modern family planning in Kilolo district.

1.2 Problem Statement

Low use of contraceptives has been identified as one of the challenge facing women of reproductive age in Tanzania (5). In Tanzania, women of reproductive age (15-49) are currently using method of family planning whereby 32% use modern method and 6% use a traditional method (5). Therefore, in appreciating the linkages between Sustainable Development Goals (SDGs) and women and girls to fulfill promising results towards attaining SDG goal number 17 by 2030, Tanzania government in collaboration with development partners has been implementing USAID Boresha Afya - Southern Zone program to improve the uptake of modern contraceptives among women of reproductive age 15-49 in Kilolo district.

The program has been implemented using both advocacy on family planning and ownership of assets strategies from the year 2016 to 2019. Both strategies have been used to empower women of reproductive age to improve the uptake of modern family planning methods in Kilolo district, Iringa region. However, no evaluation has been conducted to asses' strategies in improving the uptake of modern family planning methods among women of reproductive age. Therefore, this evaluation study assessed the contribution of women empowerment strategy on use of modern family planning in Kilolo district.

1.3 Rationale of the Study

The findings of this evaluation provide information on the relevance of advocacy and ownership of assets for increasing the uptake of modern family planning methods. The results from this study are very useful for USAID Boresha Afya southern zone program implementer on redesigning and improving implementation process. Additionally, the findings add knowledge on the influence of the intervention to individual behavior on the use of modern family planning methods. Also, the study increases the evaluation knowledge to other scholars to conduct research by observing the research gap that has already been identified.

1.4 Research Questions

1.4.1 Main Research Question

What is the influence of women empowerment strategy on use of modern family planning methods among women in Kilolo district?

1.4.2 Specific Research Questions

1. What is the proportion of women who use modern family planning methods on the intervention area in Kilolo district?
2. What is the relationship between women empowerment strategy and use of modern family planning methods in Kilolo district?
3. What are the social economic-cultural factors associated with the use of modern family planning methods in Kilolo district?

1.5 Research Objectives

1.5.1 Main Research Objective

To assess the influence of women empowerment strategy on use of modern family planning methods in Kilolo district.

1.5.2 Specific Research Objectives

1. To determine the proportion of women who use modern family planning methods in Kilolo district.
2. To determine the relationship between women empowerment strategy and use of modern family planning methods in Kilolo district.
3. To determine social economic and cultural factors associated with use of modern family planning methods among women in Kilolo district.

1.6 Conceptual Framework

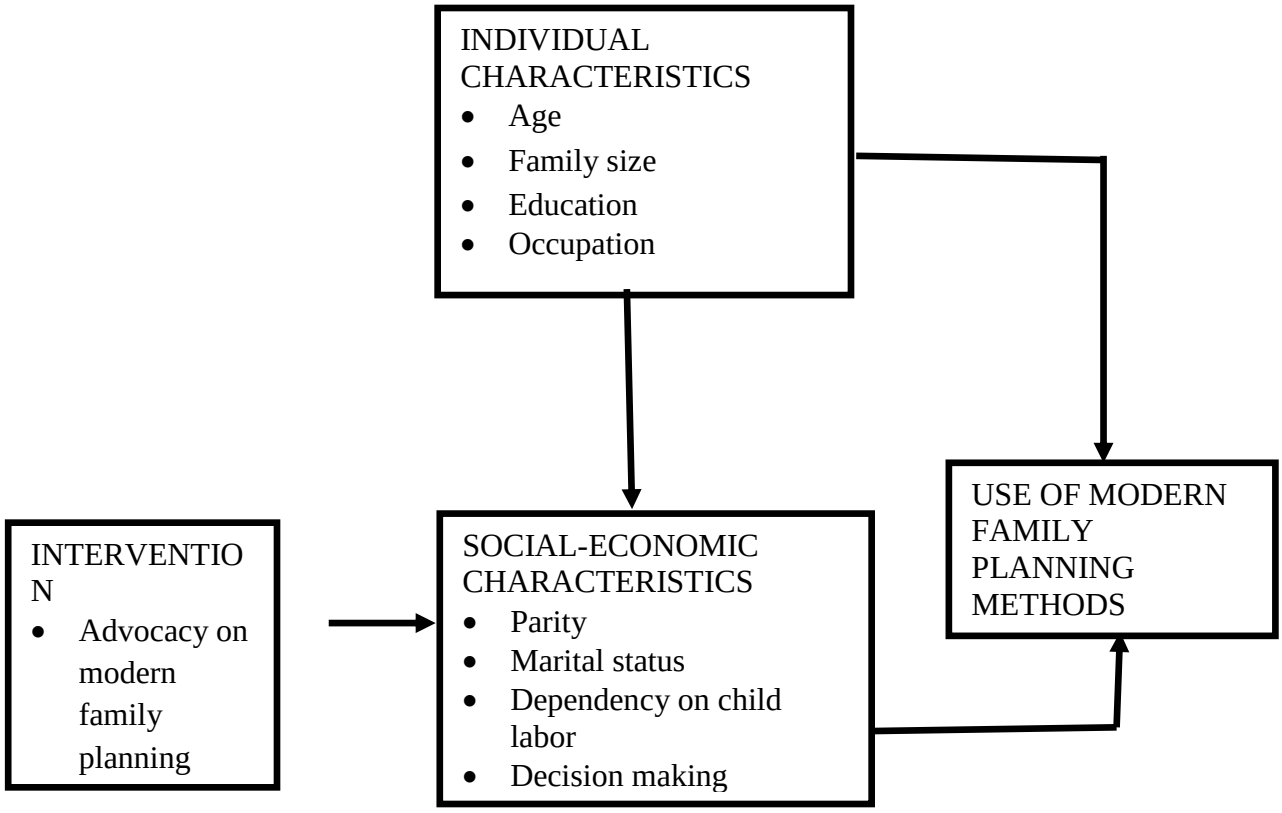

Figure 1: A conceptual framework (Researcher's own construct)

The framework presented in Figure 1, shows interventions for improving use of modern family planning methods including empowering women by helping them in owning assets and advocating the knowledge of modern family planning methods. However, a framework accommodates a set of independent variables that were thought of influencing use of modern family planning methods among women of reproductive age. The independent variables incorporated in this framework include individual characteristics (age, family size, education and occupation) and socio-economic cultural (parity, marital status, dependency on child labor and decision making). All these independent variables were conceived of having direct effect on use of modern family planning methods which is the dependent variable. Therefore

CHAPTER TWO

2.0 LITERATURE REVIEW

2.1 Introduction

Poverty is a critical element hindering socio-economic development among the developing Countries. Tanzania being among the developing countries is said to be among 10 poorest countries in the world, the situation is even worse in rural areas where more than 75% of Tanzanians live (6) . Although both men and women are more vulnerable to poverty, it has been revealed through number of studies that the situation is worse for the case of women if compared to men. Women have limited access to income, resources, education health care and nutrition. It has been revealed that about seventy (70%) of women in the world are poor (7,8). Development of the people at household's levels and community levels depends on many factors and most of them involve the ownership of assets and income generating activities. Women who are more empowered would be more likely to use modern family planning methods compared to women who are not empowered, also empowered women may be more likely to involve their husband in family planning.

Community structures should not neglect a woman as a key driver for development at all levels. This implies that every woman in a community should have the rights to ownership of assets and control over income generating activities. Through empowerment, it is possible to make changes in those structures (political, cultural and economic) which create disparities that directly or indirectly affect women. To empower a woman means, making a woman realize her production and other social roles potential in the society (9).

Family planning allows people to attain their desired number of children and determine the spacing of pregnancies. It is achieved through use of contraceptive methods and the treatment of infertility (10). A large and growing body of literature explores the social and economic benefits of women's ability to use reliable contraception to plan whether and when to have children (11). Compared to other interventions, investments in family planning have been shown to be highly cost effective. It is inexpensive and the return investment is high. Family

planning interventions have some effects in reduction of poverty by providing health and human rights benefits (11)**.** Therefore, through practicing family planning methods a woman will be healthy and have enough time to engage in income generating activities.

Soft loans from village banks have changed the lives of many women in the globe, hence through loans women can have the ability to afford and grow more nutritious and diversified food, pay for school fees, and reinvest and improve their businesses. National and global evidence clearly shows that there are direct correlations between female empowerment and achievement of human development goals. Investing in women's and girls' empowerment is a women's rights issue and should be a central goal of all development activities. With this knowledge and commitment to gender equality, women's economic empowerment has become an important development goal in itself to improve women's quality of life and that of their households(12). However, it has been reported that there is low use of contraceptives among women of reproductive age in Tanzania (5).

2.2 Proportion of women using different methods of modern family planning

Modern methods of contraception are defined to include female and male sterilization, oral hormonal pills, the intra-uterine device (IUD), male and female condoms, Injectables, the implant (including Norplant), vaginal barrier methods and emergency contraception (2). In almost all regions of the world, contraceptives are used by the majority of women in the reproductive age range (15-49 years) who are married or in union. Worldwide in 2017, about 63 per cent of women were using some form of contraception. Contraceptive use was above 70 per cent in Europe, Latin America and the Caribbean, and Northern America, while being below 25 per cent in Middle and Western Africa. Modern contraceptive methods account for most of the contraceptive use worldwide. Globally in 2017, about 58 per cent of married or in-union women of reproductive age were using a modern method of family planning, comprising 92 per cent of all contraceptive users (2).

It has been reported in 2015-16 Tanzania Demographic and Health Survey, the use of modern methods of family planning by married women increased with economic status. While 35% of married women in the wealthiest households use a modern method, only 20% of married women in the poorest households do. Modern method use is also higher in urban areas (35%) than in rural areas (31%). Use of modern methods is highest in Lindi (52%) and lowest in Kusini Pemba (7%). Use of traditional methods is highest in Dar es Salaam (18%) compared to other regions(5). There has been an overall increase in contraceptive use in Tanzania, but the Ministry of Health and Social Welfare's 2015-2020 strategic plan states that reproductive health services such as family planning are not performing as hoped in Tanzania, despite the continued investment (13). Therefore, Boresha afya southern zone program since 2016 have subjected interventions on modern family planning methods to women of reproductive age so as to minimize the gap.

2.3 Women empowerment strategy on use of modern family planning methods

To attain the goal of gender equality aligning with Sustainable development goals, women of reproductive age particularly those who are found in rural areas have to be provided with entrepreneurship training, saving training and soft loans for doing entrepreneurs as a means of empowering them economically and build the habits to saving and credit, establish and expand their projects and raise the living standards of their families. Also to provide soft loans to women with low income so as to enable them to start small scale income generating venture, to create empowerment opportunities among women especially those in the informal sector, to encourage women to save their income in order to increase their capital so as to invest in other business interventions, and to be a collateral fund as it has been insisted by the 3rd Millennium Development Goal (14) – gender equality and women's empowerment (15).

The Tanzania Demographic Survey and Malaria Indicator Survey conducted in 2015-2016 revealed low ownership of assets to women in Tanzania (own a home and land). In the survey results, it was reported that about 38% of women and 41% of men owned a home alone or jointly. Similarly, about 34% of women and 37% of men own land alone or jointly (5).

Majority of the indigenous entrepreneurs operate in the small business sector because women are disempowering. Women in rural Tanzania have diverse and distinct work at both community and household levels particularly the home production activities and non-paying productive work. Thus, women attend to household chores, children and elders if any, and care for the sick. This renders women unable to attend their businesses or participate in community development activities or projects. Family planning methods interventions are more effective to those areas where women have occupation/ employed.

2.3.1 Advocacy strategy on use of modern family planning methods

As more women use modern family planning methods, then, family planning information and services expand to meet demand. Therefore, unmet need for family planning begins to decline. The study conducted in Kathmandu on Knowledge and utilization of family planning methods among people living with HIV found that, advocacy on family planning methods such as heard of family planning methods information influence the use of modern family planning methods among women (16). So far it has been reported from Tanzania Demographic and Health Survey that, nearly one in four young married women ages 15 to 19 have a desire to use contraception but are not using any method because there are no information highlights for family planning needs to youth.

A study conducted by Johns Hopkins University and Bill & Melinda Gates Foundation showed that regional and national diversity of Sub-Saharan Africa in terms of its government commitment to family planning and strength of health systems to provide high-quality information, counseling and services is appreciable. Countries in the eastern, western and southern parts of the continent differ internally by language, religion and ethnicity and historically have had varying degrees of sustained exposure to western concept that can have a modernizing influence. The structural and sociocultural heterogeneity in subcontinent of 48 nations may have constrained the kind of socio-cultural diffusion of fertility regulation ideas and practices that has been observed in European countries (17).

In 2012, Tanzania pledged to increase the availability of modern contraception methods at all levels of its health system. With a promise to increase its allocation for family planning commodities from 14 billion to 17 billion by 2020. The Country is strengthening outreach services, engaging policy, and challenging traditional norms and family sizes. Recognizing that a healthier population leads to a more prospering nation, the Government of Tanzania committed to increase the availability of modern contraceptive methods at all levels of the health system from 40% to 70% by 2020.

2.3.2 Ownership of assets strategy on use of modern family planning methods

It has been revealed in most of the literatures that women's low status and disempowerment is highly associated with poor health outcomes. A study conducted in Nepal found that women's empowerment and spousal violence appear to have important implications for the health of women and their children (18). A study conducted in Nigeria on Measuring women empowerment as a variable in international development found that women who were empowered in terms of economic, social, and political dimensions had improved reproductive health outcomes; empowered women had fewer children and used different methods of reproductive health (19). In Ethiopia it has been found that the net effect of women's autonomy on their health seeking behavior showed that women's autonomy was significantly positively associated with their use of maternal health services, even after adjusting for other individual and household variables (20). So far a study conducted in rural Senegal found that the effectiveness of family planning programs can increase if targeted to areas where female employment is increasing or to female employees directly because of higher livelihood to reach women with low-fertility preferences. The same author found that changes in fertility preferences not necessarily result from cultural evolution but can also be driven by sudden and individual changes in economic opportunities (21).

A study conducted in Eritrea found that socio demographic factors such as employment and economic status affect women‘s reproductive preferences directly, and also indirectly by increasing women‘s autonomy, which in turn influences reproductive preferences (22). The authors from the similarly study insisted that there was a causal pathway of women’s empowerment and reproductive health outcomes which were bidirectional.

A study conducted in Karachi, Pakistan found that, the long-term goals of improving women's economic status are important for increasing contraceptive prevalence in Pakistan. At the same time, policymakers should initiate short-term interventions, such as engaging religious leaders in family planning programs, encouraging the outreach efforts of community health care workers and targeting mothers-in-law with family planning messages, as these are likely be effective in increasing women's contraceptive use (23).

Most of the literature reviewed indicated that women’s empowerment was associated with improved health outcomes. Through assents ownership and advocacy in the use of modern family planning to women of reproductive age seems to play a big role to practice the use of modern family planning and that is one of the aspect the study intends to find out.

2.4 Social economic and cultural factors in influencing use of modern family planning

Previous studies in social-economic and cultural factors have shown that age, education, parity, family size, occupation, marital status, dependency on child labor and decision making have influence in modern family planning practices. This can be explained as follows;

Age

A study conducted in Afghanistan on the factors influencing contraceptive use among women, revealed that there was low use of modern family planning methods among women aged less than 20 years (24). This was due to the fact that most of women at this age group were newly married and having interest in having children and their culture encouraged newly married couples to have children on first year of their married. The author further reported that there was an increase of modern family planning use among women at the age of 20 to 44 years.

The reported reason was that the majority reached their desired number of children and chose to avoid pregnancy by using modern family planning methods. It was also observed that there was a reduction of modern family planning use among women of the age group (45-49 years) (24). This was attributed to the use of the traditional methods and sexually inactive at the older age (24). A study conducted in western Ethiopia found that women whose age category was 25-34 years were more likely to utilize modern family planning methods than other age groups (25). A study conducted in Angola assessing factors associated with current modern contraceptive use among youth and adult women, reported that women aged 25-49 years were more likely to use modern family planning methods than women aged 15-24 years (26).

Marital status

A study conducted in rural and urban southern Ethiopia on married women decision's making power on use of modern contraceptive reveled that marital status is an important intermediate fertility variable (27). The author noted a higher proportion of contraception among married women compared to the unmarried ones. The study on determinants use of contraceptive among married women found that contraceptive use in Tanzania was higher among married women aged above 20 years (28). The Tanzania Demographic and Health Survey 2010 also reported higher contraceptive use among married women giving reason that their efforts were supported by their husbands (5). In Luanda Angola, husband support was further shown to be a prerequisite for modern contraception among married women and that female sterilization was legalized on condition that women obtain permission from their husbands (29).

Family size

From a study conducted in Bangladesh, it was found that women from the households with 4 or more members had higher prevalence in modern family planning methods use than women from households with fewer than 4 members (30)**.**

Parity

A study conducted in Kenya on the use of modern contraceptive among migrant and non migrant found that there was an increased likelihood to use modern contraceptives for women with 3 - 5 children compared to those with no children. Similarly, women who did not desire to have more children were more likely to use modern contraceptives than those wanting another child (31).There was significant association between parity and timing of resumption of sexual intercourse after child birth (32). From the same study, authors found that women with few children resume sexual intercourse earlier than women who had many children. Regarding education level of spouse. Similar findings were shown to be significant associated with early resumption of sexual intercourse (33), The same author found that women with male partners with a higher educational level resumed sexual intercourse earlier than six weeks postpartum. From the study conducted in Afghanistan it was found that parity influenced modern family planning use among married women. The same author showed that modern family planning was 5.3% among women with 1 birth while rising to 10.0% among women with 2-3 births,14.7% among women with 4-5 births and 18.8% among women with 6 or above births (24).

Occupation

A study on the use of family planning methods and influencing factors among women in Erzurum revealed that modern family planning was more useful to women working outside their houses either as self employed or salary employed (34). The study conducted in Kenya showed that woman who were in high income households and those who engaged in professional work were reported to use modern family planning methods compared to those in low income households and not working remain at home as house wives (31).

A study in Nepal showed the association of occupation with proportion of modern family planning methods use among women which was higher to those worked in agriculture compared to not working women. Similarly, modern family planning methods use was higher among women whose husband had worked as a professional/technical/managerial and clerical and followed by skilled manual(35).from a study conducted in Bangladesh it was found that, employed women used modern family planning methods more compared to unemployed women (30).

Education

It was found that there was a positive association between the level of education and number of pregnancies. Women with higher education level tend to be in need of modern family planning methods (34).In a study conducted in Ethiopia education was found to influence the use of modern family planning methods (36). According to the author it was found that educational effects are fully mediated by attitudes, knowledge and access to health services (36). The same author found that in Ethiopia, women who attend school for seven or more years are five times more likely to use modern family planning methods than those who attend for shorter periods. A study conducted in Western Ethiopia found that those women who had secondary school education and above were more likely to use modern family planning methods compared to those who had primary school education and below (25).

Decision making

Occupation and decision making were also among the significant factor influencing the use of modern family planning (37). The author further argued that women without problem in decision making at home were 4 times more likely to use modern family planning compared to those with problem in decision making at home (37). Similarly in Ethiopia, it was found that women with power in decision making were associated with the use of modern family planning (27). The mentioned reason behind was due to the fact that women without problem in decision making had self efficacy for being responsible of their health, hence took decision regarding modern family planning usage. The author further reported that it could be attributed

to their spouses being supportive in decision making process regarding use of modern family planning methods (27). It has been found that women who made joint decision about fertility issues with their husband were 3.7 times more likely to use modern family planning compared to those who did not make joint decision (25).

Dependency on child labor

The findings from a study on barriers to modern contraceptive use in rural areas in DRC revealed that the majority of couples who did use family planning methods did so to space the births of their children for financial or health reasons while still expressing their desire for a large family (38). The author reveled that it was believed not all of one's children will survive to adulthood; that-having many offspring would increase the odds that at least one would become successful. This is to say children were believed to be a gift from God; and that large families were important part of 'African' culture. Influence exerted from extended family members and peers had a strong effect on family size, with women feeling pressured to live up to the expectations of their husband's family and prove their worth (38)

All the argument above concerning factors influencing the use of modern family planning to women of reproductive age bear meaning according to context. Despite having differences in influencing factors and varying geographical locations, the current study will shed light into the dynamics of the same and the risk involved in not using modern family planning for reproductive age in Tanzania.

CHAPTER THREE

3.0 METHODOLOGY

3.1 Study site

This study was conducted in Kilolo District located in Iringa region. Iringa region has three districts namely Iringa, Mufindi and Kilolo. Kilolo district was randomly selected because USAID Boresha afya programme southern zone was implemented in all of the three districts fund in Iringa region.The district is located in southern highlands of Tanzania, bordered to the north and east by the Morogoro Region, to the south by Mufindi District and to the west by the Iringa Rural District. Kilolo district has a total number of 100,244 male and 104,837 female with 45,337 households an average of 4.5 households (6).

3.2 Evaluation Study design.

A cross-sectional descriptive retrospective evaluation design was used in implementing the study. Retrospective evaluation design in an evaluation design, which data for the beginning and at the time of evaluation are collected at one time. Using this design participants were asked to report their current practices before and after experiencing the intervention.

3.3 Study population

The study population was all women of reproductive age (15 - 49 years) involved in the program in intervention in Kilolo district.

3.4 Target Population

Target population was women who were 15-49 by the year of 2016 when the program started. The study included women who were of age 18-52 years old in intervention area in the time of study at Kilolo district.

3.5 Sample size

The minimum sample size was determined by using quantitative sample estimation equation from as formulae below:

$n= Z^2 P (1-P)/ \varepsilon^2$

Whereas;

n = Estimated Sample Size

Z = Confidence level (Z=1.96 for 95%).

P = prevalence of women using modern contraceptive in Tanzania (i.e 32%)

ε = Margin of error 5% (0.05)

Thus, n = 3.842 x 0.218/0.0025.

n=335

Additional of 10% of non-respondent = 34 Respondents

The total sample size estimated was 369 participants

3.6 Sample Selection Procedures

A multistage sampling technique was used to select the sample from the study population. Sample was drawn from three levels in the district. The stages were as follows:

First stage

At the district level, the list of all wards was obtained. Simple random sampling was used to select 2 wards out of all 25 wards present in the district. The selected wards were Nyalumbu and Ilula.

Second stage

In each ward selected, the list of all villages was obtained where at nyalumbu the list of 8 wards was obtained and at Ilula ward the list of 5 wards was obtained, and then two villages were systematically selected from each ward. The selected villages for Nyalumbu ward were Ikuvala and Ilula sokoni while those from Ilula ward were Ilula mtua and Masukanzi villages.

Third stage

At village level stratified sampling was used to select households representing each village where out of four villages then from each village Households were selected from north to south, and then interviews were done to all women in the households who were 18-52 years old.

$$Stratifiedrandomsampling = \frac{Totalsamplesize}{Entirepopulation} \times Population\ of\ subgroups$$

Where; total sample size= 369
Entire population= 3769

Then the number of households from each village were; Ilula sokoni 920, Ikuvala 880, Ilula mtua 769, and Masukanzi 1200

3.7 Inclusion Criteria

The study included all women of reproductive age who were of the age 18-52 who were present since the program started in 2016 in the intervention area in Kilolo district.

3.8 Exclusion Criteria

The study excluded all women of reproductive age who were found to be sick, deaf and having mental disorder during the study.

3.9 Variables

Table 1: List of Variables

	Variables	**Measurement**	**Scale**
Dependent variable	Use of modern family planning method (before 2016)	Nominal	0 = Use, 1 = Do not use
	Use of modern family planning methods (after 2016)	Nominal	0 = Use, 1 = Do not use
Independent variables	Education	Nominal	0 = Illiterate, 1 = Primary 2=Secondary, 3=College
	Age	Number	Number of years after birth
	Household number	Number	Number of people
	Occupation	Nominal	0=Non-salaried employment i.e. Farming and Business/Trade, 1=Salaried employment
	Marital Status	Nominal	0=Married, 1=Single
	Parity	Number	The number of times that she has given birth
	Dependency on child labour	Ratio	Number of children
	Decision making	Nominal	1=Yes, 0=No
	Women empowerment variable	Index (nominal)	1 = empowered, 0 = not empowered

Women empowerment variable

An index scale from ten variables emanated from assets ownership and advocacy was used as a measure of women empowerment as per appendix 1. Specifically, variables for asset ownership includes ownership of land, livestock, crops, kiosk and improved houses while those of advocacy includes heard information about modern family planning methods at government hospital, government health center, family planning clinic, outreach and health field worker. These variables equal one if the statement was "yes'' and zero if it was "no''. The possible minimum and maximum index scores were 0 and 10 respectively. An aggregate measure of empowerment was obtained by summing scores per each binary variable. According to ten identified indicators of women empowerment, two levels of empowerment were considered in the index scale whereby 1=Empowered (6-10), 2=Not empowered (0- 5).

3.10 Data collection instrument

A research assistant administered questionnaire with open and closed ended questions used in the collection of information on the uptake of modern family planning methods.

3.11. Pretesting of the tool

Prior to data collection, the questionnaire was pre tested in Ihimbo ward to check if the questions were well understood, with proper logic and sequence to generate meaningful information? Restructuring, modification and amendments of the questions were done where necessary before producing final data collection tool.

3.12 Validation of tools

The research tools were pre-tested at the nearby ward to ensure the validity and reliability of the tool and find out if the questions would be understood and rightly answered to provide the required information. Pretesting of the tool also helped to identify if tool was accepted by the study population. Data collection tools were translated from English to Kiswahili which was the version used to interview the respondents.

3.13 Data Collection Management

All research assistants were trained and familiarized with the evaluation objectives and data collection tool. On each day, after data collection, the Principal researcher reviewed the collected data to check ambiguities and necessary adjustments were made at the end of the day of data collection, research team had a debriefing meeting to share how the exercise went in a day, challenges and possible ways to overcome them.

3.14 Data Collection Procedures

The study objectives were explained to the study participants and thereafter were asked consent prior to enrollment into the study. Participants who consented and accepted to be interviewed were given a consent form to sign, and were given a copy of the consent for future reference and communication with the Principal investigator in case they might need an extra clarification. Interviews were done outside the households where the participant live (in open space in the household yard) the interview lasted on average for 40 minutes.

3.15 Analysis Plan

Quantitative data were collected and checked for correctness, coded and improved before entered in SPSS. After entry, the data were checked again for accuracy, and any anomalies that were found were corrected. Then the data were analyzed by computing descriptive statistics to describe socio-demographic characteristics and proportional of women of reproductive age 15-49 who use modern family planning methods. Chi square was used to determine the relationship between women empowerment strategy and use of modern family planning methods. Moreover, inferential analysis was done using binary logistic regression to determine social, economic-cultural factors associated with use of the modern family planning methods. The statistical model and the variables that were used are presented below.

The binary logistic regression model was specified as follows:

Logit (pi) = log (pi/1-pi) = b0 + b1x1 + b2x2 + … +bkxk

Whereby:

Logit (pi) = ln (odds (event), that is the natural log of the odds of an event (use of modern family planning methods) occurring

pi = prob (event), that is the probability that the event will occur

1-pi = prob (non-event), that is the probability that the event will not occur

b_0 = constant of the equation

b_1 to b_k= Coefficients of the independent (predictor, response) variables

K = number of independent variables

K_1 to X_i = independent variables entered in the model, which were:

X_1 = Age
X_2 = Education
X_3 = Parity
X_4 = Family size
X_5 = Occupation
X_6 = Marital status
X_7 = Dependency on child labor
X_8 = Decision making

3.16 Ethical Issues

Ethical clearance was requested from Muhimbili University of Health and Allied Sciences - Research Ethics Review Committee. Apart from that a letter seeking permission to conduct the research was sent to the Regional Administrative Secretary of Iringa region. Participants were given written informed consent form to make informed decision to participate in the study. The consent provided information on the purpose of the study and the method to be used for data collection from participant. Participants were told they were free to stop at any stage of data collection and had the right to refuse or withdraw from participating in the study.

CHAPTER FOUR

4.0 RESULTS

4.1 Introduction

This chapter presents details related to the study results. It covers aspects such as socio-demographic characteristics of the respondents, the proportion of women who used modern family planning methods, the relationship between use of modern family planning methods and socio-demographic characteristics; strategy used to empower women of reproductive age; the factors influencing use of modern family planning methods.

4.2 Socio-demographic characteristics of the respondents

A total of 356 women of reproductive age from four villages (Ikuvala, Ilula sokoni, Ilula mtua, and Masukanzi) within Kilolo district were interviewed for this study. Table 2 presents the socio demographic characteristics of the respondents. All participants were females.

Findings from Table 2 reveal that 36 (10.1%) had no formal education, 190 (53.4%) had primary education, 119 (33.4%) had secondary education and 11 (3.1%) had attained college education. Findings further reveal that majority of the respondents 245 (68.2%) were married and 111 (31.2%) were single/never married. With regard to the main occupational status, the findings show that majority 250 (70.2%) were farmers, 76 (21.3%) were traders, 18 (5.1%) were livestock keepers, 8 (2.2%) were causal laborers and 4 (1.1%) were salaried employed.

The participants also reported on the number of children owned by them. Respondents reported that 132 (37.1%) had one to two children, 181 (12.1%) had three to five children and 42 (12.1%) had six or more children. With regards to household size, about 157 (44.1%) had a household size less or equal to 5 people and 199 (55.9%) had households size of more or equal to 6 people.

Table 2: Socio-demographic characteristic of respondents

Variable	Frequency (n=356)	percent (%)
Age Group	**Frequency (n)**	**Percent (%)**
16 - 24	113	31.7
25-33	121	34.0
34-42	84	23.6
43-51	38	10.7
Education level		
No education	36	10.1
Primary education	190	53.4
Secondary education	119	33.4
College or higher level	11	3.1
Marital status		
Single	111	31.2
Married	245	68.8
Parity		
0-2	132	37.1
3-5	181	50.8
6+	43	12.1
Main Occupation		
Farming	250	70.2
Trading	76	21.3
Livestock keeping	18	5.1
Causal laborer	8	2.2
Salary employed	4	1.1
Households size		
Less or equal to 5	157	44.1
More or equal to 6	199	55.9

Source: Author-study data (2020)

4.3 The use of modern family planning methods among respondents before and after intervention

The proportion of women who used modern family planning methods before and after the intervention was calculated based on five perspectives; the use of modern family planning based on marital status; the use of modern family planning based on age; the use of modern family planning based on education; the use of modern family planning based occupation as presented in Table 4 to 7. This section aimed at displaying the variation on the use of modern family planning methods among women in relation to age; education level and marital status. Table 3 presents the use of modern family planning methods before and after intervention.

Table 3: Respondents use of modern family planning before and after intervention

Variable	Before Frequency (n=356)	Percent	After Frequency (n=356)	Percent	p-value
Female sterilization	2	1.02	0	0	
Implants	47	23.98	105	31.07	0.660
IUD	46	23.47	117	34.62	0.774
Injectables	9	4.59	36	10.65	0.413
Pills	46	23.47	48	14.20	0.609
Male condoms	46	23.47	32	9.47	0.179
Total	196	100	338	100	

Source: Author-study data (2020)

The findings in Table 3 reveal that about 196 respondents used modern family planning methods before the intervention while 338 respondents used modern family planning methods after the intervention. Furthermore, the most used modern family planning methods before the intervention were Implants 47 (24.0%), IUD 46 (23.5%), pills 46 (23.5%), male condoms 46 (23.5%), Injectables 9 (4.6%) and female sterilizer 2 (1.0%). On the other hand, the most used

modern family planning methods after the intervention were IUD 117 (34.6%), Implants 105 (31.1%), Pills 48 (14.2%), Injectables 36 (10.7%) and male condoms 32 (9.5%). The results indicate an increase in modern family planning methods among women of reproductive age in Kilolo district after the 2016 intervention. However, the difference was not statistically significantly different before and after the intervention ($p>0.05$).

4.3.1 Ever used modern family planning by marital status

Results of this study show that the use of modern family planning methods by gender before and after intervention is more prevalent among the married women table 4. These findings show that among those were reported to, had used modern family planning methods before intervention. The most used modern family planning method was Injectables (100%) followed by implants (70%), IUD (70%), Pill (70%) and Condom (70%). On the other side findings reveal that after the intervention, the most used modern family planning method were implants (99%) and the pills(50%) had least preference among users. This finding implies that after the intervention implants was the most preferred modern family planning method while pill was the least preferred family planning method.

Table 4: Ever used modern family planning methods before and after intervention by marital status.

Intervention		Before 2016				After 2016			
		Single	Married	Divorced/ separated	Widowed	Single	Married	Divorced/ separated	Widowed
Implants	No	66 (21.3%)	212 (68.6%)	15 (4.9%)	16 (5.2%)	79 (27.5%)	177 (61.7%)	15 (5.2%)	16 (5.6%)
	Yes	14 (29.8%)	33 (70.2%)	0 (0.0%)	0 (0.0%)	1 (1.4%)	68 (98.6%)	0 (0.0%)	0 (0.0%)
	Total	80 (22.4%)	245 (68.8%)	15 (4.2%)	16 (4.5%)	80 (22.5%)	245 (68.8%)	15 (4.2%)	16 (4.5%)
IUD	No	65 (21.3%)	213 (68.7%)	15 (4.8%)	16 (5.2%)	66 (26.0%)	165 (65.0%)	7 (2.8%)	16 (6.3%)
	Yes	14 (30.4%)	32 (69.6%)	0 (0.0%)	0 (0.0%)	14 (13.7%)	80 (78.4%)	8 (7.8%)	0 (0.0%)
	Total	80 (22.5%)	245 (68.8%)	15 (4.2%)	16 (4.5%)	80 (22.5%)	245 (68.8%)	15 (4.2%)	16 (4.5%)
Injectable	No	80 (22.6%)	243 (68.6%)	15 (4.2%)	16 (4.5%)	59 (22.1%)	179 (67.0%)	15 (5.5%)	14 (5.2%)
	Yes	0 (0.0%)	2 (100.0%)	0 (0.0%)	0 (0.0%)	21 (23.6%)	66 (74.4%)	0 (0.0%)	2 (2.2%)
	Total	80 (22.5%)	245 (68.8%)	15 (4.2%)	16 (4.5%)	80 (22.5%)	245 (68.8%)	15 (4.2%)	16 (4.5%)
Pill	No	66 (21.3%)	213 (68.7%)	15 (4.8%)	16 (5.2%)	54 (17.9%)	218 (71.9%)	15 (5.0%)	16 (5.3%)
	Yes	14 (30.4%)	32 (69.6%)	0 (0.0%)	0 (0.0%)	26 (49.1%)	27 (50.9%)	0 (0.0%)	0 (0.0%)
	Total	80 (22.6%)	245 (68.8%)	15 (4.2%)	16 (4.5%)	80 (22.5%)	245 (68.8%)	15 (4.2%)	16 (4.5%)
Condom	No	66 (21.0%)	213 (68.7%)	15 (4.8%)	16 (5.2%)	71 (28.7%)	159 (64.4%)	15 (6.1%)	2 (0.8%)
	Yes	14 (30.4%)	32 (69.6%)	0 (0.0%)	0 (0.0%)	9 (8.3%)	86 (78.9%)	0 (0.0%)	14 (12.8%)
	Total	80 (22.5%)	245 (68.8%)	15 (4.5%)	16 (4.5%)	80 (22.5%)	245 (68.8%)	15 (4.2%)	16 (4.5%)

Source: Source: Author-study data (2020)

4.3.2 Ever used modern family planning methods by age

Table 4.4 reveals that the use of modern family planning methods was more prevalent among women aged between 16 to 24 years and 25 to 33 years. It further shows that the use of injectables family planning before intervention was higher among women aged from 25 to 33 years (100%), followed by women aged 16 to 24 years (0%) and 34 to 42 years (0%). Furthermore, findings show that the use of injectable family planning after the intervention was higher among women aged 16 to 24 years (13.5%) and 25 to 33 years (16.9%) followed by 43 to 51 years (25.8) and 34 to 42 years (43.8%).

The use of condoms was higher and more common among women aged between 25 to 33 years before and after the intervention. The results further show that the use of condom before intervention was more common among women aged 25 to 33 years (39.1%), followed by those aged 16 to 24 years (26.1%) and those aged 34 and 42 years (19.6%). Also, the use of condoms after the intervention was also more common to the women aged between 25 to 33 years (32.1%), followed by those aged 34 to 42 years (36.7%) and those aged 16 to 24 years (13.8%).

Table 5: Ever used modern family planning methods before and after intervention by age

Intervention		Before 2016 (n=356)				After 2016 (n=356)			
		16 - 24 years	**25-33 years**	**34-42 years**	**43-51 years**	**16 - 24 years**	**25-33 years**	**34-42 years**	**43-51 years**
Implant	No	101 (32.7%)	102 (33.0%)	75 (24.3%)	31 (10.0%)	80 (27.9%)	88 (30.7%)	81 (28.2%)	38 (13.2%)
	Yes	12 (25.5%)	19 (40.4%)	9 (19.1%)	7 (14.9%)	33 (47.8%)	33 (47.8%)	3 (4.3%)	0 (0.0%)
	Total	113 (31.7%)	121 (34.0%)	84 (23.6%)	38 (10.7%)	113 (31.7%)	121 (34.0%)	84 (23.6%)	38 (10.7%)
IUD	No	101 (32.6%)	103 (33.2%)	75 (24.2%)	31 (10.0%)	89 (35.0%)	88 (34.6%)	55 (21.7%)	22 (8.7%)
	Yes	12 (26.1%)	18 (39.1%)	9 (19.6%)	7 (15.2%)	24 (23.5%)	33 (32.4%)	29 (28.4%)	16 (15.7%)
	Total	113 (31.7%)	121 (34.0%)	84 (23.6%)	38 (10.7%)	113 (31.7%)	121 (34.0%)	84 (23.6%)	38 (10.7%)
Injectables	No	113 (31.9%)	119 (33.6%)	84 (23.7%)	38 (10.7%)	101 (37.8%)	106 (39.7%)	45 (16.9%)	15 (5.6%)
	Yes	0 (0.0%)	2 (100.0%)	0 (0.0%)	0 (0.0%)	12 (13.5%)	15 (16.9%)	39 (43.8%)	23 (25.8%)
	Total	113 (31.7%)	121 (34.0%)	84 (23.6%)	38 (10.7%)	113 (31.7%)	121 (34.0%)	84 (23.6%)	38 (10.7%)
Pill	No	101 (32.6%)	103 (33.2%)	75 (24.2%)	31 (10.0%)	82 (27.1%)	108 (35.6%)	81 (26.7%)	32 (10.6%)
	Yes	12 (26.1%)	18 (39.1%)	9 (19.6%)	7 (15.2%)	31 (58.5%)	13 (24.5%)	3 (5.7%)	6 (11.3%)
	Total	113 (31.7%)	121 (34.0%)	84 (23.6%)	38 (10.7%)	113 (31.7%)	121 (34.0%)	84 (23.6%)	38 (10.7%)
condom	No	101 (32.6%)	103 (33.2%)	75 (24.2%)	31 (10.0%)	98 (39.7%)	86 (34.8%)	44 (17.8%)	19 (7.7%)
	Yes	12 (26.1%)	18 (39.1%)	9 (19.6%)	7 (15.2%)	15 (13.8%)	35 (32.1%)	40 (36.7%)	19 (17.4%)
	Total	113 (31.7%)	121 (34.0%)	84 (23.6%)	38 (10.7%)	113 (31.7%)	121 (34.0%)	84 (23.6%)	38 (10.7%)

Source: Author-study data (2020)

4.3.3 Use of modern family planning methods by education level.

Table 6 reveals that the use of modern family planning method before and after intervention was more common to the educated women compared to the non-educated women. The table shows that the use of injectables before intervention was more common among women with secondary education (40.5%) while it was less common among women with no education (0%) and primary education (0%). It is further observed that the use of implant after the intervention was more common among women with primary education (40.4%), followed by those with secondary education (30.3%) while those with no education the use of implants declined (29.3%).

The use condom before and after intervention was more common among women with primary education. The findings show that before intervention use of male condom was more common among women with primary education (43.5%), followed with those with secondary education level (39.1%) and those with no education (17.4%). The pattern for the use of the male condom after the intervention is similar before the intervention whereby it is more common among the women with primary education level (47.7%), followed with those with secondary education level (41.2%) and those with no education (11.1%).

Table 6: Ever used modern family planning methods before and after intervention by education.

Intervention		Before 2016 (n=356)			After 2016 (n=356)		
		No education	Primary education	Secondary and above	No education	Primary education	Secondary and above
Implant	No	28 (9.1%)	170 (55.0%)	111 (35.90)	35 (12.2%)	158 (55.1%)	94 (35.8%)
	Yes	8 (17.0%)	20 (42.6%)	19 (40.5%)	1 (1.4%)	32 (46.4%)	36 (52.1%)
	Total	36 (10.1%)	190 (53.4%)	130 (36.5%)	36 (10.1%)	190 (53.4%)	130 (36.5%)
IUD	No	28 (9.0%)	170 (54.8%)	112 (36.1%)	32 (12.6%)	128 (50.4%)	94 (37.0%)
	Yes	8 (17.4%)	20 (43.5%)	18 (39.2%)	4 (3.9%)	62 (60.8%)	36 (35.3%)
	Total	36 (10.1%)	190 (53.4%)	130 (36.5%)	36 (10.1%)	190 (53.4%)	130 (36.5)
Injectables	No	36 (10.2%)	190 (53.7%)	128 (36.6%)	10 (3.7%)	154 (57.7%)	103 (38.6%)
	Yes	0 (0.0%)	0 (0.0%)	2 (100.0%)	26 (29.2%)	36 (40.4%)	27 (30.3%)
	Total	36 (10.1%)	190 (53.4%)	130 (36.5%)	36 (10.1%)	190 (53.4%)	130 (36.5%)
Pill	No	28 (9.0%)	170 (54.8%)	112 (36.1%)	29 (9.6%)	165 (54.5%)	109 (36.0%)
	Yes	8 (17.4%)	20 (43.5%)	19 (39.1%)	7 (13.2%)	25 (47.2%)	21 (38.8%)
	Total	36 (10.1%)	190 (53.4%)	130 (36.4%)	36 (10.1%)	190 (53.4%)	130 (36.5%)
Male condom	No	28 (9.0%)	170 (54.8%)	111 (36.1%)	24 (9.7%)	138 (55.9%)	85 (34.4%)
	Yes	8 (17.4%)	20 (43.5%)	18 (39.1%)	12 (11.1%)	52 (47.7%)	45 (41.2%)
	Total	36 (10.1%)	190 (53.4%)	130 (36.5%)	36 (10.1%)	190 (53.4%)	130 (36.1%)

Source: Source: Author-study data (2020)

4.3.4 Use of modern family planning methods by occupation

The use of modern family planning method was observed to be higher among farmers compared to other main occupation such as livestock keeping, trading and employed. Findings from table 7 show that the use of injectables before intervention was more common among livestock keepers (50%) and employed (50%). It was further observed that the use of injectables after the intervention was more common among farmers (78.7%), followed by traders (19.1%) and employed (2.2%).

The use of condom before intervention was found to be more common among farmers (60.9%) and less common among employed (2.2) while after intervention it was more common among farmers (58.7%) and less common among employed (1.8%). The findings show that the use of modern family planning methods by occupation was more common among farmers both before and after intervention. Findings also indicate that intervention had increased the use of modern family planning among the farmers.

Table 7: Ever used of modern family planning methods before and after intervention based on occupation.

Intervention		Before 2016 (n=356)				After 2016 (n=356)			
		Farming	Trading	Livestock keeping	Employed	Farming	Trading	Livestock keeping	Employed
Implants	No	222 (71.8%)	63 (20.4%)	13 (4.2%)	11 (3.6%)	202 (70.4%)	68 (23.7%)	5 (1.7%)	12 (4.2%)
	Yes	28 (59.6%)	13 (27.7%)	5 (10.6%)	1 (2.1%)	48 (69.6%)	8 (11.6%)	13 (18.8%)	0 (0.0%)
	Total	250 (70.2%)	76 (21.3%)	18 (5.1%)	12 (3.3%)	250 (70.2%)	76 (21.3%)	18 (5.1%)	14 (3.3%)
IUD	No	222 (71.6%)	63 (20.3%)	14 (4.5%)	11 (3.6%)	170 (66.9%)	55 (21%)	18 (7.1%)	11 (4.3%)
	Yes	28 (60.9%)	13 (28.3%)	4 (8.7%)	1 (2.2%)	80 (78.4%)	21 (20.6%)	0 (0.0%)	1 (1.0%)
	Total	250 (70.2%)	76 (21.3%)	18 (5.1%)	12 (3.3%)	250 (70.2%)	76 (21.3%)	18 (5.1%)	12 (3.3%)
Injectables	No	250 (70.6%)	76 (21.5%)	17 (4.8%)	11 (10.3%)	180 (67.4%)	59 (22.1%)	18 (6.7%)	10 (3.7%)
	Yes	0 (0.0%)	0 (0.0%)	1 (50.0%)	1 (50.0%)	70 (78.7%)	17 (19.1%)	0 (0.0%)	2 (2.2%)
	Total	250 (70.2%)	76 (21.3%)	18 (5.1%)	12 (3.3%)	250 (70.2%)	76 (21.3%)	18 (5.1%)	12 (3.3%)
Pill	No	222 (71.6%)	63 (20.3%)	14 (4.5%)	11 (3.6%)	213 (70.3%)	62 (20.5%)	18 (5.9%)	12 (3.3%)
	Yes	28 (60.9%)	13 (28.3%)	4 (8.7%)	1 (2.2%)	37 (69.8%)	14 (26.4%)	0 (0.0%)	2 (3.8%)
	Total	250 (70.2%)	76 (21.3%)	18 (5.1%)	12 (3.3%)	250 (70.2%)	76 (21.3%)	18 (5.1%)	12 (3.3%)
Male condom	No	222 (71.6%)	63 (20.3%)	14 (4.5%)	11 (3.6%)	186 (75.3%)	46 (18.6%)	5 (2.0%)	10 (11.2%)
	Yes	28 (60.9%)	13 (28.3%)	4 (8.7%)	1 (2.2%)	64 (58.7%)	30 (27.5%)	13 (11.9%)	2 (1.8%)
	Total	250 (70.2%)	76 (21.3%)	18 (5.1%)	12 (3.3%)	250 (70.2%)	76 (21.3%)	18 (5.1%)	12 (3.3%)

Source: Author-study data (2020)

4.4 The relationship between women empowerment strategy and use of modern family planning methods.

The relationship between women empowerment strategy and use of modern family planning method was studied based on two perspectives namely assent ownership strategy and advocacy on the use of modern family planning methods.

4.4.1 Asset Ownership

The study also analyzed asset ownership among the study population. Table 8 presents the asset ownership originated from the Boresha Afya project.

Table 8 shows that most of the respondents in the study owned land as their major asset (84.9%), followed by crops (66.6%), and livestock (49.5%). Other assets owned include small business (22.6%), kiosk (14.8%) and improved business (14.8%).

Table 8: Asset Ownership Strategy

Type of asset	Boresha afya	Frequency	Percent
Land	No	46	15.1%
	Yes	259	84.9%
	Total	305	100.0%
Livestock	No	154	50.5%
	Yes	151	49.5%
	Total	305	100.0%
Crops	No	102	33.4%
	Yes	203	66.6%
	Total	305	100.0%
Kiosk	No	260	85.2%
	Yes	45	14.8%
	Total	305	100.0%
Improved house	No	260	85.2%
	Yes	45	14.8%
	Total	305	100.0%
Business	No	236	77.4%
	Yes	69	22.6%
	Total	305	100.0%

Source: Author-study data (2020)

4.4.2 Family Planning Advocacy

Table 9 reveals the strategies employed by the project to convince women to join family planning methods the approach was used to provide information and awareness of the modern family planning methods from various sources. The table show that around 71.9% of the women of reproductive age obtain information on the use of modern family planning methods from the field workers (VHT), followed by around 49.7% who obtain information from the government health centers. Addition sources of information were reported play a minor role on this as follows; government hospital (7%), family planning clinic (3.1%), outreach public sector (0.8%), pharmacy (5.9%), field worker (4.2%), relative (4.8%) and other sources (12.1%).

Table 9: Family Planning Advocacy approaches among respondents in the intervention area

Source of information		Frequency	Percent
Government hospital	No	331	93.0
	Yes	25	7.0
	Total	356	100.0
Government health center	No	179	50.3
	Yes	177	49.7
	Total	356	100.0
Family planning clinic	No	345	96.9
	Yes	11	3.1
	Total	356	100.0
Outreach (public sector)	No	353	99.2
	Yes	3	0.8
	Total	356	100.0
Field worker (VHT)	No	100	28.1
	Yes	256	71.9
	Total	356	100.0
Pharmacy	No	335	94.1
	Yes	21	5.9
	Total	356	100.0
Field worker	No	341	95.8
	Yes	15	4.2
	Total	356	100.0
Relative	No	339	95.2
	Yes	17	4.8
	Total	356	100.0
Other	No	313	87.9
	Yes	43	12.1
	Total	356	100.0

Source: Author-study data (2020)

4.4.3 Use of Modern Family Planning and Women empowerment

Women empowerment was explored to find out its association with the use of modern family planning methods among the women of reproductive age. Table 10 presents the use of modern family planning and women empowerment.

Table 10: Use of Modern Family Planning Methods and Women Empowerment

		Use of family planning		
Women empowerment		**No**	**Yes**	**Total**
Not empowered	(n)	43	21	63
	%	68.25	33.33	100
Empowered	(n)	10	282	292
	%	3.42	96.58	100
Total	(n)	53	303	356
		14.89	85.11	100

Source: Author-study data (2020)

Furthermore, table 10 shows that around 85% of all women surveyed are using family planning methods and about 82% are empowered. Furthermore the table shows that around 96% of the respondents were empowered to use modern family planning methods. Additionally about 33% of the non-empowered women were reported to had used modern family planning methods.

4.5 Selected factors associated with use of modern family planning methods

This section presents selected factors associated with the use of the modern family planning methods among the women of the reproductive age in the intervention area. Logistic regression approach is used to analyze the association of the independent variables to the dependent variable. The dependent variable is the use of modern family planning methods while independent variables include; age, education level, family size, occupation, marital status, dependency on the child labor, parity and decision making. Table 11 presents the logistic regression results.

Table 11 Factors associated with the use of modern family planning methods

	B	S.E.	Wald	df	Sig.	Exp(B)
Age	0.034	0.265	14.941	1	0.000*	2.789
Education	0.249	0.224	1.230	1	0.267	1.283
Parity	0.415	0.523	5.533	1	0.019*	0.292
Family size	-0.040	0.162	0.025	1	0.874	0.975
Occupation	0.392	0.166	5.592	1	0.018*	0.676
Marital status	0.113	0.252	16.143	1	0.000*	0.363
Dependency on child labor	0.553	0.760	0.529	1	0.467	1.739
Decision making	0.275	0.508	0.293	1	0.588	1.316
Constant	2.609	1.302	4.017	1	0.045	13.584

Model Summary: Cox and Snell R^2= 0.727, Nagelkerke R^2= 0.788, Model fitting information Chi-square 45.573 ($p < 0.001$), Test of Parallel Lines -2 Log Likelihood = 315.648 ($p < 0.001$)

Table 11 shows that the Wald statistic value of Marital status (X_6) that is 16.143 was the highest and statistically significant at 0.05% level (p=0.000). Age (X_1) was the second predictor of the dependent variable with a Wald statistic of 14.941, which was also statistically significant at 0.05% level (p =0.000). Occupation (X_5) was the third predictor of the dependent variable with a Wald statistic of 5.592, which was also statistically significant at 5% level (p =0.018). The last predictor of the dependent variable was Parity (X_3) was the fourth one with a Wald statistic of 5.533, which was also statistically significant at 5% level (p =0.019).

Age is found to have a positive significant effect on the use of modern family planning methods. Finding shows with an increase in the age of a reproductive woman by 1 year there is increase in probability for using the modern family planning methods by 3 percent. This indicates that women of reproductive age when are getting older they have higher odds of using the modern family methods.

It is further observed that parity has positive significant effect on the use of modern family planning methods in Kilolo district. Finding shows that an increase in number of births increases the probability for using the modern family planning methods by the women of reproductive age by 41 percent. This indicates that higher number of births influences the use of modern family planning methods.

Findings further reveal that occupation has a positive significant effect on the use of modern family planning methods in Kilolo district. It is observed that women of reproductive age with salaried employment occupation have high probability of using the modern family planning methods by 39 percent in comparison to women with no salaried employment. This means that salaried employed women of reproductive age use modern family planning methods more compared to non-salaried employed women.

Marital status on the other hand is observed to have a positive significant effect on the use of modern family planning methods in Kilolo district. Finding shows that when women of reproductive age in Kilolo district are married, probability for using modern family planning methods increases by 11 percent compared to those women who are not married. This indicates that when one is married the awareness and merits of using modern family planning methods increases hence promote the use of modern family planning.

CHAPTER FIVE

5.0 DISCUSSION

5.1 Promotion and use of modern family planning methods

The study finding revealed that there was higher use of modern family planning methods among women of reproductive age after intervention compared to before the intervention. The implementation of the intervention related to family planning has made a contribution and majority of women accepted the use of methods of family planning. The difference could also be attributed by the intervention in that; it has promoted use of modern family planning methods among the residents of Kilolo district. Moreover, change could also be attributed to the public health initiatives made through radio, television, news papers or means of social networks, WhatsApp network, facebook, instagram, interaction with relatives and friends. This could probably be due to the fact that the targeted audience had already been exposed to the knowledge regarding the various methods of family planning and their relative advantages, when attending maternal and child health services at dispensaries. The finding is in line with the study conducted by Johns Hopkins University and Bill and Melinda Gates Foundation that there was an increase in access to family planning education as the government invested in sexual reproductive health intervention (17). However, the finding is against with that of the study conducted in Nigeria aimed at unraveling the barriers to the use of modern contraceptives among women of reproductive in Ise-Ekiti community, Ekiti State, Southwest Nigeria. The study reported that despite the huge resources committed to family planning programs by stakeholders in intervention, yet contraceptive use has been very low (39).

5.2 Asset Ownership and Family Planning Advocacy

In assessing the influence of women empowerment on use of modern family planning methods, the findings revealed that there was an increase in use of modern family planning methods among respondents after intervention. The probably reason for this could be that when women are empowered, they are in better position to use the modern family planning methods. The findings are in line with the study conducted in Nigeria which found that women

who were empowered in terms of economic, social, and political dimensions had improved reproductive health outcomes; empowered women had fewer children and used different methods of reproductive health (19). The finding is also in line with results from a multilevel analysis of crossectional surveys of 32 countries on women empowerment as an enabling factor of contraceptive use in sub-Saharan Africa which reported. The study reported an increase in contraceptive use and by better extension maternal health care services utilization achieved by enhancing women's empowerment (40).

5.3 Factors associated with the use of Family Planning Methods

Findings show that parity has positive significant influence on the use of modern family planning methods in Kilolo district. The findings indicate that females with more children are likely to use family planning methods in comparison to females with fewer children. This may be attributed to the fact that the use of family planning is preferred in order to control the family size. Finding was similar to that reported in the study on the use of modern contraceptive among migrant and non-migrant conducted in Kenya where it was found that there was an increased likelihood to use modern contraceptives for women with more children compared to those with no children (33). It was also reported that there was a significant association between parity and timing of resumption of sexual intercourse after child birth (32). From the same study, authors reported that women with few children resumed sexual intercourse earlier than women who had many children. Similar finding was reported from the study conducted in Afghanistan where it was found that parity influenced modern family planning use among married women. The study reported that modern family planning increased with an increase in births (24).

Age is observed to have a positive significant effect on the use of modern family planning methods. It is observed that women who are older have higher probability of using modern family planning methods in comparison to the young ones. This may be attributed to the fact that older females have more exposure and have more awareness on family planning. The finding is in line with that reported in the study conducted in Afghanistan on the factors

influencing contraceptive use among women, where it was reported that there was low use of modern family planning methods among younger women compared to old ones (24). The probable reason for this could be most of women at young age were newly married and having interest in having children. It was further reported that there was an increase of modern family planning use among women as they were getting old to the age of 44 years. The probable reason behind this was that the majority reached their desired number of children and chose to avoid pregnancy by using modern family planning methods (26). The study conducted in Angola assessing factors associated with current modern contraceptive use among youth and adult women, reported similar finding that older women were more likely to use modern family planning methods than younger ones (26).

Marital status is observed to have a positive significant effect on the use of modern family planning methods. Findings revealed that the use of family planning methods is likely to increase among the married women in comparison to non-married. Same finding was reported in the study on Married women's decision making power on modern contraceptive use conducted in rural and urban southern Ethiopia which reported that there was a higher proportion of contraception among married women compared to the unmarried ones (29). Similar finding was reported in Tanzania where use of contraceptive among married women was higher among married women (28). Similarly, The Tanzania Demographic and Health Survey 2010 reported higher contraceptive use among married women giving reason that their efforts were supported by their husbands (5). Finding was in line with that reported in Luanda Angola where Married women were found to use modern contraceptives compared to unmarried one mentioning husband support as the prerequisite for the use (29).

5.4 Limitation of the study

Recall bias

Efforts were made to minimize most limitation of the study. One form of limitation was recall bias since the collection of quality primary data largely depended on the respondent's ability to recall and respond to past events. It was expected that some women might have failed to give some responses due to failure to recall; in this case, therefore they were guided on short recall period of the past. However, all these were pre-determined prior to data collection and were taken into consideration in the analysis.

CHAPTER SIX

6.0 CONCLUSION AND RECOMMENDATIONS

6.1 Conclusion

There was higher use of modern contraceptive among women of reproductive age after intervention compared to before the intervention. The implementation of Boresha Afya intervention is likely to influence and promote the use of modern contraceptive among women in Kilolo district.

There was an increased use of modern contraceptive among empowered women. The use of modern contraceptive was likely influenced by the implementation of women empowerment strategy including asset ownership and advocacy.

Age, parity, occupation and marital status had positive and significant effect on the use of modern contraceptive among the residents living in Kilolo district.

6.2 Recommendations

Based on the study findings, the following recommendations are given to promote use of modern contraceptive among women of reproductive age. The recommendations are divided into program and research level.

1. Another study should be done to evaluate the use of short and long modern contraceptive among women of reproductive age among women in Kilolo district to assess whether the organizational goal of reducing low uptake of modern contraceptive among women of reproductive age.
2. The program should continue to focus in women empowerment as the best strategy for enabling women to use modern contraceptive. This is because, empowered women who use modern contraceptive are likely to have good reproductive health.

REFERENCES

1. United Nations, Department of Economic and Social Affairs PD. World Family Planning 2017 - Highlights (ST/ESA/SER.A/414). 2017;1–43.

2. United Nations. Department of Economic and Social Affairs, Population Division. Trends in Contraceptive Use Worldwide 2015 (ST/ESA/SER.A/349) [Internet]. United Nations. 2015. Available from: http://www.un.org/en/development/desa/population/publications/pdf/family/trendsContraceptiveUse2015Report.pdf

3. America N. The End of the Fertility Transition. Popul Dev Rev. 2002;28(SEPTEMBER):419–43.

4. Fact Sheet : Family Planning. 2018;

5. TDHS-MIS 2015/16. Tanzania 2015-16. 2015;

6. NBST. Tanzania population and housing census. Natl Bur Stat Minist Financ Dar es Salaam [Internet]. 2012;244. Available from: http://www.tzdpg.or.tz/fileadmin/documents/dpg_internal/dpg_working_groups_clusters/cluster_2/water/WSDP/Background_information/2012_Census_General_Report.pdf

7. (Renaissance Minerals). Annual Report 2012. Min Co. 2012;63.

8. Maldives Monetary Authority. Strategic Plan. 2018; Available from: http://www.mma.gov.mv/strategicplan/

9. Nations U. United Nations Report of the Fourth World Conference on Women. World. 1995. 4–15 p.

10. Inhorn MC, Patrizio P. Infertility around the globe: New thinking on gender, reproductive technologies and global movements in the 21st century. Hum Reprod Update. 2014;21(4):411–26.

11. Guttmacher. Public Costs from Unintended Pregnancies and the Role of Public Insurance Programs in Paying for Pregnancy-Related Care: National and State Estimates for 2010 | Guttmacher Institute. 2015;(October). Available from: https://www.guttmacher.org/report/public-costs-unintended-pregnancies-and-role-public-insurance-programs-paying-pregnancy

12. Waller M-K. Empowering womEn through savings groups: A study from the Wellness and Agriculture for Life Advancement (WALA) Program. Cathol Reli Serv [Internet]. 2014;(July):127. Available from: http://www.crsprogramquality.org/storage/agriculture/Empowering_women_through_savings_groups.pdf

13. Republic U. The United Republic of Tanzania One Health Strategic Plan. 2020;

14. Concern Worldwide, The Hunger Project. Investing in Nutrition to Achieve Sustainable Development. 2015;(July):5–6. Available from: http://www.unscn.org/files/Publications/Briefs_on_Nutrition/Final_Nutrition and_the_SDGs.pdf

15. Labour S, Indicators M. Gender Equality and Women ' s. 2011;(September):1–6.

16. Pokharel R, Bhattarai G, Shrestha N, Onta S. Knowledge and utilization of family planning methods among people living with HIV in Kathmandu , Nepal. 2018;3:1–12.

17. Foundation MG. HHS Public Access. 2017;43:166–91.

18. Survey H. Women's Empowerment and Spousal Violence in Relation to Health Outcomes in Nepal. 2013;(March).

19. Malhotra A. Measuring Women ’ s Empowerment as a Variable in International Development. 2002;

20. Woldemicael G, Tenkorang EY. Women ’ s Autonomy and Maternal Health-Seeking Behavior in Ethiopia. 2010;988–98.

21. Broeck G Van Den, Maertens M. Female Employment Reduces Fertility in Rural Senegal. 2015;1–15.

22. Woldemicael G. of Biosocial Science : WOMEN ’ S AUTONOMY AND REPRODUCTIVE PREFERENCES IN ERITREA WOMEN ’ S AUTONOMY AND REPRODUCTIVE PREFERENCES IN ERITREA. 2015;(October 2008):161–81.

23. Fikree BFF, Khan A, Kadir MM, Sajan F, Rahbar MH. What Influences Contraceptive Use Among Young Women In Urban Squatter Settlements of Karachi, Pakistan? 1997;

24. Osmani AK, Reyer JA, Osmani AR, Hamajima N. Factors influencing contraceptive use among women in Afghanistan : secondary analysis of Afghanistan Health Survey 2012. 2015;551–61.

25. Tekelab T, Melka AS, Wirtu D. Predictors of modern contraceptive methods use among married women of reproductive age groups in Western Ethiopia : a community based cross-sectional study. BMC Womens Health [Internet]. 2015;1–8. Available from: http://dx.doi.org/10.1186/s12905-015-0208-z

26. Bell S, Weidert K, Nieto-andrade B, Carvalho A. Varying family planning strategies across age categories : differences in factors associated with current modern contraceptive use among youth and adult women in Luanda , Angola. 2016;1–9.

27. Bogale B, Wondafrash M, Tilahun T, Girma E. Married women ’ s decision making power on modern contraceptive use in urban and rural southern Ethiopia. 2015;5–11.

28. Anasel M. Determinants of contraceptive use among married women in Tanzania : Policy Determinants of contraceptive use among married women in Tanzania : Policy implication. 2015;(March).

29. Prata N, Bell S, Fraser A, Carvalho A, Neves I. Partner Support for Family Planning and Modern Contraceptive Use in Luanda , Angola. 2017;21(June):35–48.

30. Hossain MB, Khan MHR. Identifying factors influencing contraceptive use in Bangladesh : evidence from BDHS 2014 data. 2018;1–14.

31. Ochako R, Askew I, Okal J, Oucho J, Temmerman M. Modern contraceptive use among migrant and non-migrant women in Kenya. Reprod Health [Internet]. 2016;1–8. Available from: http://dx.doi.org/10.1186/s12978-016-0183-3

32. Rowland M, Foxcroft CL, Hopman CWM, Patel MAR. Breastfeeding and sexuality immediately post partum immédiatement après l ' accouchement. 2005;5.

33. Osinde MO, Kaye DK, Kakaire O. In fl uence of HIV infection on women ' s resumption of sexual intercourse and use of contraception in the postpartum period in rural Uganda. Int J Gynecol Obstet [Internet]. 2011;116(2):171–2. Available from: http://dx.doi.org/10.1016/j.ijgo.2011.09.018

34. Yerli EB, Aras A. Use of Family Planning Methods and Influencing Factors Among Women in Erzurum. 2018;5027–34.

35. Id RB, Pokhrel KN, Gabrielle N, Amatya A. Long acting reversible contraception use and associated factors among married women of reproductive age in Nepal. 2019;1–13.

36. Gordon C. Women ' s Education and Modern Contraceptive Use in Ethiopia. 2011;3(1):1–23.

37. Access O. Factors influencing use of modern contraception among married women in Ho West district, Ghana: descriptive cross-sectional study. 2019;8688:1–11.

38. Muanda MF, Ndongo GP, Messina LJ, Jane T. Barriers to modern contraceptive use in rural areas in DRC. Cult Health Sex [Internet]. 2017;1058:1–13. Available from: http://dx.doi.org/10.1080/13691058.2017.1286690

39. Article O, Hameed W, Siddiqui J, Ishaque M, Hussain S, Gul X, et al. WHAT INFLUENCES FAMILY PLANNING IN RURAL PAKISTAN : FRANCHISED SERVICE. 2018;(1):100–6.

APPENDICES

Appendix 1: Questionnaire

A questionnaire for assessing women economic empowerment strategy on the use of modern family planning methods among women of reproductive age in Kilolo district, Iringa-Tanzania

DATA COLLECTION TOOL

Name of the Ward…… Village Name …….

Name of interviewer……

Date……

Questionnaire number ……

Please, put check (√) in the answer responded which indicate the correct response to each question; and give the answer to the space provided in last column for the questions which need the direct answer for example, age (write the year of birth).

NO	QUESTIONS	RESPONSE	CODES	SKIP
1	How old are you?		…….	
2	What is the level of your education?	a) No education…….. b) Primary education…….. c) Secondary education……. d) College or higher level…….	1 2 3 4	
3	How many children do you have?			If no child skip to qn 6
4	Among those children is there any who were born after 2016?	Yes..... No.....	1 0	
5	How many			

	children are under five?			
6	What is your main occupation?	a) Farming…….. b) Trading …… c) Livestock keeping ……... d) Causal laborer …….. e) Salary employed……. f) Others Specify……	1 2 3 4 5 6	
7	What is the main source of your income?	a) Farming …….. b) Trading …… c) Livestock keeping ……... d) Causal laborer …….. e) Employed……. f) Others Specify……	1 2 3 4 5 6	
8	How does your main occupation contributed to your income?	a) Low b) Medium c) Higher	1 2 3	
9	Marital status	a) Single ……. b) Married ……. c) Divorced/separated…….. d) Widowed…….	1 2 3 4	
10	Do you use any modern family planning?	Yes..... No.....	1 0	
11	Are you aware of any modern family planning methods?	Yes..... No.....	1 0	
12	Do you know any program that offers modern family planning methods services in this area in your community?	Yes..... No.....	1 0	

13	Which methods did you use before 2016?	A) Female Sterilization..... B) Implant..... C) IUD..... D) Injectables..... E) Pill..... F) Male Condom..... G) No response.....	Yes 1 1 1 1 1 1 -99	No 0 0 0 0 0 0
14	Had you ever attended any training concerning use modern family planning methods before 2016?	Yes..... No.....	1 0	If no skip to qn 16
15	Did you start using family planning after attending that training?	Yes..... No.....	1 0	
16	Have you ever attended any training concerning modern family planning methods after 2016?	Yes..... No.....	1 0	If no skip to qn 18
17	Did you start using family planning after attending that training?	Yes..... No.....	1 0	
18	Which modern family planning methods were you using after	A) Female Sterilization..... B) Implant..... C) IUD..... D) Injectables..... E) Pill.....	Yes 1 1 1 1 1	No 0 0 0 0 0

	2016?	F) Condoms..... G) No response.....	1 -99	0
19	Currently which modern family planning methods are you using?	A) Female Sterilization..... B) Implant..... C) IUD..... D) Injectables..... E) Pill..... F) Emergency Contraception…….. G) Condoms..... H) No response.....	Yes 1 1 1 1 1 1 1 -99	No 0 0 0 0 0 0 0 0 0
20	Have you ever stoped using modern family planning methods after 2016?	Yes..... No.....	1 0	If no skip to qn 24
21	When did you stop?			
22	When did you start using again?			
23	What was the reason for you to stop?	a) Pregnant b) Side effects c) Decision d) others	1 2 3 4	
24	Do you think that Boresha afya programme has helped you to use modern family planning?	Yes..... No.....	1 0	
25	Was there any other program that influenced	Yes..... No.....	1 0	If no skip to qn 28

	you to own any assets before 2016?			
26	Which assets did you own as a result of that program?	a) Land…….. b) Livestock…….. c) Crops……. d) Kiosk……. e) Improved house……. f) Business……. g) Others……. h) No assets owned…….	1 2 3 4 5 6 7 8	
27	Are those assets influencing you on the use of modern family planning?	a) Strongly agree…… b) Agree……. c) Neutral…… d) Disagree……. e) Strongly disagree……	5 4 3 2 1	
28	Is there any program in your community influencing you to own assets since 2016?	Yes..... No.....	1 0	If no skip to qn 32
29	Can you name one?	a) Boresha afya b) Sauti c) Tulonge afya d) Kizazi kipya e) Lishe endelevu	1 2 3 4 5	
30	Which assets do you own since 2016 up to now as results of that program?	a) Land…….. b) Livestock…….. c) Crops……. d) Kiosk……. e) Improved house……. f) Business……. g) Others…….. h) No assets owned…….	1 2 3 4 5 6 7 8	

31	Are those assets influencing you to use modern family planning?	a) Strongly agree…… b) Agree……. c) Neutral…… d) Disagree……. e) Strongly disagree……	5 4 3 2 1	
32	Where did you obtain information on modern family planning methods before 2016?	**PUBLIC SECTOR:** A) Government hospital …… B) Government health center. …… C) Family planning clinic... ……..... D) Outreach (public sector)..…...…… E) Fieldworker/VHT ……...….. **PRIVATE MEDICAL SECTOR:** F) Private hospital/clinic..……...……. G) Pharmacy……...……..…….. H) Private doctor..…….…….…… I) Outreach (private sector)…...…..... J) Fieldworker…. …….. K) Maternity home.. …….……. **OTHER SOURCE:** L) Shop ……...…… M) Church. …….……. N) Friend/Relative..……..... O) Other...……	 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15	
33	Where do you obtain information on modern family planning since 2016 up to recently?	**PUBLIC SECTOR:** A) Government hospital …… B) Government health center. …… C) Family planning clinic... ……..... D) Outreach (public sector)..…...…… E) Fieldworker/VHT ……...… **PRIVATE MEDICAL SECTOR:** F) Private hospital/clinic..……...……. G) Pharmacy……...……..…… H) Private doctor..…….…….…… I) Outreach (private sector)…...…..... J) Fieldworker…. …….. K) Maternity home.. …….……. **OTHER SOURCE:** L) Shop …… M) Church. …….……. N) Friend/Relative..……..... O) Other...……	 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15	

34	Do you decide to use modern family planning by yourself?	a) Strongly agree…… b) Agree……. c) Neutral…… d) Disagree……. e) Strongly disagree……	5 4 3 2 1	
35	Is there anybody that influenced you to use modern family planning?	Yes..... No.....	1 0	
36	Do you have to consult any one before deciding to use modern family planning methods?	Yes..... No.....	1 0	If no skip to qn 38
37	Who do you consult?	a) Husband/partner b) Family member c) Friends d) Health care provider e) others	1 2 3 4 5	
38	Is there any taboo of using modern family planning in your community particularly this area?	Yes..... No.....	1 0	
39	Is there any local family planning methods used in your community?	Yes..... No.....	1 0	If no skip to qn 42
40	Are you using them?	Yes..... No.....	1 0	
41	Are you still using those local methods	Yes..... No.....	1 0	

	of family planning up to now?			
42	Are there any cultural issues that hinder you to use any method of family planning?	Yes..... No.....	1 0	If no end the interview
43	If yes, can you name them?			

Kiambatanisho cha II: Dodoso

DODOSO LA KUKUSANYIA TAARIFA

Jina la Kata…… Jina la Kijiji …….

Jina la Mdodosaji …… Tarehe……

Namba ya Dodoso **……**

Tafadhali weka alama (√)kwenye jibu lililojibiwa kuonyesha jibu sahihi kwa swali lililoulizwa, na andika jibu kwenye nafasi iliyoachwa wazi mbela ya jibu mfano miaka (andika mwaka wa kuzaliwa)

NO	QUESTIONS	RESPONSE	CODES	SKIP
1	Una miaka mingapi?			
2	Kiwango chako cha elimu ni kipi?	Sikusoma/hajasoma…….. Elimu ya msingi…….. Elimu ya sekondali……. Chuo…….	1 2 3 4	
3	Una watoto wangapi?			
4	Kazi yako kuu kwa sasa ni ipi?	Mkulima…….……... Mfanyabiashara…….…… Mfugaji …….…….……... Kazi za bila ujuzi …….. Nimeajiriwa……..……. Nyinge,taja…….……	1 2 3 4 5 6	
5	Hari ya ndoa	Sijaolewa ……. Nimeolewa ……. Talaka/tumetengana……..	1 2 3	

		Mjane…….	4	
6	je, unafahamu chochote kuhusiana na njia za kisasa za uzazi wa mpango?	Ndiyo..... Hapana.....	1 0	
7	Je umeshawahi kutumia njia yoyote ya uzazi wa mpango ya kisasa?	Ndiyo..... Hapana.....	1 0	If no skip to qn
8	Zipi kati ya njia za kisasa za uzazi wa mpango umewahi tumia kabla ya mwaka 2016?	 Female Sterilization..... Implant..... IUD..... Injectables..... Pill..... Emergency Contraception…….. Male Condom..... Female Condom..... Diaphragm..... Foam/Jelly..... Std. Days/Cycle beads..... LAM..... Rhythm method..... Withdrawal..... No response.....	Yes 1 1 1 1 1 1 1 1 1 1 1 1 1 1 -99	No 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0

9	Zipi kati ya njia za kisasa za uzazi wa mpango umekuwa ukitumia tangu mwaka 2016?		Yes	No
		Female Sterilization.....	1	0
		Implant.....	1	0
		IUD.....	1	0
		Injectables.....	1	0
		Pill.....	1	0
		Emergency Contraception……..	1	0
		Male Condom.....	1	0
		Female Condom.....	1	0
		Diaphragm.....	1	0
		Foam/Jelly.....	1	0
		Std. Days/Cycle beads.....	1	0
		LAM.....	1	0
		Rhythm method.....	1	0
		No response.....	-99	0
10	Kwa sasahivi ni njia gani ya uzazi wa mpango ya kisasa unatumia?		Yes	No
		Female Sterilization.....	1	0
		Implant.....	1	0
		IUD.....	1	0
		Injectables.....	1	0
		Pill.....	1	0
		Emergency Contraception……..	1	0
		Male Condom.....	1	0
		Female Condom.....	1	0
		Diaphragm.....	1	0
		Foam/Jelly.....	1	0

		Std. Days/Cycle beads..... LAM..... Rhythm method..... Withdrawal..... Not using any No response.....	1 1 1 1 88 -99	0 0 0 0 0
11	Ni sababu gani zinakusukuma wewe kutumia njia za kisasa za uzazi wa mpango?			
12	je ulilipia hiyo njia ya uzazi wa mpango unayotumia sasa?	Ndiyo..... Hapana.....	1 0	
13	je, unafahamu ni muda gani inakaa hiyo njia ya uzazi wa mpango ya kisasa unayotumia sasa hivi?	Ndiyo..... Hapana.....	1 0	
14	Je ni mauthi yapi ya hiyo njia ya kisasa unayotumia sasa?			
15	Zipi kati ya dhamani zifuatazo umekuwa ukimiliki kabkla ya mwaka 2016?	Aridhi…….. Mifugo…….. Mazao……..……. Kiosk……...……. Nyuma iliyoboreshwa…….……. Biashara……...…….	1 2 3 4 5 6	

		Nyingine,taja .……...……	7	
16	Zipi kati ya dhamani zifuatazo umekuwa ukimiliki tangu mwaka 2016 mpaka sasa?	Aridhi……..	1	
		Mifugo……..	2	
		Mazao……..…….	3	
		Kiosk……...…….	4	
		Nyuma iliyoboreshwa…….…….	5	
		Biashara……...…….	6	
		Nyingine,taja ……...……	7	
17	Ni dhamani zipi kati ya zifuatazo zinechangiwa na uwepo wa mradi?	Aridhi……..	1	
		Mifugo……..	2	
		Mazao……..…….	3	
		Kiosk……...…….	4	
		Nyuma iliyoboreshwa…….…….	5	
		Biashara……...…….	6	
		Nyingine,taja ……...……	7	
18	je, ni kwa kiasi gani umiliki wako wa dhamani umechangiwa wewe kufanya maamuzi ya kutumia njia za kisasa za uzazi wa mpango?			
19	Wapi ulikuwa ukipata taarifa kuhusu njia za kisasa za uzazi wa mpango kabla ya mwaka 2016?	**PUBLIC SECTOR:**		
		Government hospital ……	1	
		Government health center. ……	2	
		Family planning clinic... …….....	3	
		Outreach (public sector)…..…...……	4	
		Fieldworker/VHT ……...…..	5	

		PRIVATE MEDICAL SECTOR:		
		Private hospital/clinic....……..…….	6	
		Pharmacy……..……..……..	7	
		Private doctor.. …….…….……	8	
		Outreach (private sector)……..….....	9	
		Fieldworker……. ……..	10	
		Maternity home.. …….……	11	
		OTHER SOURCE:		
		Shop ……..……	12	
		Church. ……..…….	13	
		Friend/Relative... ……...	14	
		Other...……	15	
		Don't know...……..……	-88	
		No response.....	-99	
20	Wapi unapata taarifa kuhusiana na njia za kisasa za uzazi wa mpango tangu mwaka 2016 mpaka sasa?	**PUBLIC SECTOR:**		
		Government hospital ……	1	
		Government health center. ……	2	
		Family planning clinic... …….....	3	
		Outreach (public sector)…..…...……	4	
		Fieldworker/VHT ……...…..	5	
		PRIVATE MEDICAL SECTOR:		
		Private hospital/clinic...……..…….	6	
		Pharmacy……..……..……..	7	
		Private doctor.. …….…….……	8	
		Outreach (private sector)……..….....	9	
		Fieldworker……. ……..	10	
		Maternity home.. …….……	11	
		OTHER SOURCE:		
		Shop ……..……	12	

		Church. …….……. Friend/Relative... ……... Other...…… Don't know...……..…… No response.....	13 14 15 -88 -99	
21(a)	Ulishawahi kuhudhulia mafunzo yoyote yale ya njia za kisasa za uzazi wa mpango kabla ya mwaka 2016?	Ndiyo..... Hapana.....	1 0	
21(b)	kama ni ndiyo, je nani aliendesha hayo mafunzo?	…….		
21(c)	nini ulijifunza toka kwenye hayo mafunzo?			
22(a)	je, umeshawahi kuhudhulia mafunzo yoyote yale ya njia za kisasa za uzazi wa mpango tokea mwaka 2016 mpaka sasa?	Ndiyo..... Hapana.....	1 0	
22(b)	kama ni ndiyo, je nani aliendesha hayo mafunzo?			
22(c)	nini ulijifunza toka kwenye hayo			

	mafunzo?			
23	ni sababu gani zinakufanya wewe usitumie njia za kisasa za uzazi wa mpango?			
24	ni sababu gani za kitamaduni zinakufanya wewe kutotumia au kuzuia kutumia njia za kisasa za uzazi wa mpango?			
25	Unafikiri nini kifanyike ili kuboresha matumizi ya njia za kisasa za uzazi wa mpango?			

Appendix III - Consent to participate in a research

A research on **ASSESSING** women economic empowerment strategy on **THE USE OF MODERN FAMILY PLANNING METHODS AMONG WOMEN OF REPRODUCTIVE AGE IN KILOLO DISTRICT, IRINGA-TANZANIA.**

Dear Madam,

You are hereby invited to participate in a study conducted by Alfred Mwanjali for a master's Dissertation at Muhimbili University of Health and Allied Sciences.

Your participation in this study is entirely voluntary. You should read the information below before deciding whether or not to participate in the study. Your participation in the study will involve answering the questionnaire which contains 56 questions.

PURPOSE OF THE STUDY: The purpose of this study is to assess **ADVOCACY ON FAMILY PLANNING AND OWNERSHIP OF ASSETS STRATEGIES TO THE USE OF MODERN FAMILY PLANNING METHODS AMONG WOMEN OF REPRODUCTIVE AGE IN KILOLO DISTRICT, IRINGA-TANZANIA**.

VOLUNTARY PARTICIPATION: Participation in this study is voluntary and you have a right to refuse to consent. If you consent to participate, you have the right to withdraw from the study at any time if you wish to do so.

BENEFITS: There are no direct benefits for participating in the study. However this study will provide information on the **ADVOCACY ON FAMILY PLANNING AND OWNERSHIP OF ASSETS STRATEGIES TO THE USE OF MODERN FAMILY PLANNING METHODS AMONG WOMEN OF REPRODUCTIVE AGE.** This information will be useful for program implementers on redesigning and improving implementation process. Also, the findings will add knowledge on the influence of the intervention to individual behavior on the use of modern family planning methods

RISKS AND DISCOMFORT: There are no risks or discomforts involved in this study.

COMPENSATION FOR TIME: You will not receive any payment or other compensation for participation in this study. There is also no cost to you to participate in the study except your time.

CONFIDENTIALITY: Your participation in this study will remain confidential and your identity will be disclosed. There will be no any link between your identity and response.

REVIEW AND APPROVAL: The review and approval of the study has been done by the Ethical committee of Muhimbili University of Health and Allied Sciences (MUHAS).

RESULTS: The results of the study will be made available to you through a planned means of research dissemination and will be compiled in a research paper for publication as part of a partial fulfillment of a master's degree.

CONSENT FORM: I confirm that I have read carefully, understood the information provided and consent to participate in the study.

CONTACT: If you ever have questions about this study, you should contact the Principal Investigator Alfred Mwanjali from Muhimbili University of Health and Allied Sciences, P.O. Box 65001, Dar-es-Salaam. (Tel. 0759035690/ 0714511669)

The research has been reviewed and approved by Ethical Research Committee of Muhimbili University of Health and Allied Sciences, MUHAS. Please if you have any question about your rights as a participant, you may contact.

Dr. Bruno Sunguya,

Chairman of the Senate Research and Publications Committee,

P.O Box 65001, Dar es Salaam (Tel 022-21503002-54 06, 2152489)

Prof. Phare Mujinja; MUHAS: P.O Box 65001, Dar-es Salaam.

(Tel. 0715271170) who is the supervisor of this research.

Agreement Part

I therefore request your participation in this study;

DO YOU AGREE? [ ] YES [ ] NO (Tick for the appropriate response)

If you agree, sign below

Participant's signature…….. Date…….

Investigator's signature……..Date…….

Kiambatanishi cha IV - Ridhaa ya kushiriki kwenye utafiti

Utafiti kuhusu mkakati wa mradi katiaka kuwawezesha wanawake kiuchumi na matumizi ya uzazi wa mpango zaa katika wilaya ya Kilolo, Mkoani Iringa,

Mpendwa Mshiriki;

Nakukaribisha kushiriki katika utafiti unaofanywa na Bw. Alfred Mwanjali, mwanafunzi wa shahada ya pili (udhamili) kutoka katika chuo kikuu cha afya na sayansi shirikishi Muhimbili.

Kushiriki kwako katika utafiti huu ni kwa hiari unatakiwa kusoma taarifa zote katika fomu hii na kuaamua kushiriki au kutokushiriki katika utafiti huu.

MADHUMUNI YA UTAFITI: Dhumuni la utafiti huu ni kuangalia kuhusu ufahamu na elimu ya uzazi wa mpango na mkakati wa umilikajaji wa dhamani na matumizi ya uzazi wa mpango kwa wanawake wenye uwezo wa kuzaa katika wilaya ya Kilolo, mkoani Iringa.

USHIRIKI: Ushiriki katika utafiti huu ni wa hiari na una haki ya kukataa kushiriki katika utafiti. Kama umekubali kushiriki utatakiwa kuweka sahihi yako katika fomu hii nakujibu maswali utakayokuwa unaulizwa na msahili.

FAIDA: Hamna faida ya moja kwa moja kwa wewe kushiriki katika utafiti huu. Ila matokeo ya utafiti huu yatasaidia kuboresha utekelezaji wa mradi.

HASARA: Hakuna hasara za moja kwa moja zitakazotokana na utafiti huu.

FIDIA: Hakuta kuwa na malipo yoyote kutokana na ushiriki wa utafiti huu na pia kama mshiriki hutakuwa na gharama zozote za wewe kushiriki katika utafiti huu ispokuwa muda wako tu.

USIRI: Ushiriki wako katika tafiti hii utabaki kuwa siri na taarifa zote zitakazokusanywa zitashughulikiwa kwa usiri wa hali ya juu. Jina lako halitatumika katika taarifa zozote.

KUIDHINISHA UTAFITI: Mapitio na uidhishaji wa utafiti huu umefanywa na kamati ya maadili ya utafiti kikuu cha afya na sayansi shirikishi Muhimbili.

MATOKEO: Matokeo ya utafiti huu yatapatikana kupitia uwasilishwaji katika chuo kikuu cha afya na sayansi shirikishi Muhimbili, na wadau, pia ripoti ya utafiti itawekwa kwa umma (publish) ili iweze kusaidia kutekeleza shughuli za lishe na tafiti zingine.

FOMU YA UTAFITI: Nakiri kwamba nimesoma maelezo yote kwa umakini na nimeelewa kila kilichoandikwa katika fomu hii.Ninaelewa kwamba ninaweza kujitoa muda wowote nitakaotaka kujitoa katika tafiti hii.

MAWASILIANO KUHUSIANA NA UTAFITI HUU

Kama una maswali kuhusiana na utafiti huu unaweza kuwasiliana na mtafiti mkuu, Alfred Mwanjali kutoka chuo kikuu cha afya na sayansi shirikishi Muhimbili, S.L.P 65001, Dar es Salaam. Na. (Tel. 0759035690/ 0714511669).

Utafiti huu ulipitiwa na kukubaliwa na kamati ya mapitisho ya utafiti ya chuo kikuu cha cha afya na sayansi shirikishi Muhimbili. Iwapo una maswali kuhusu utafiti huu, unaweza kuwasiliana na

Dr. Bruno Sunguya Mwenyekiti wa kamati ya chuo utafiti na machapisho, P.O Box 65001, Dar es Salaam (Tel 022-21503002-06, 2152489), au **Prof. Phare Mujinja**; MUHAS: P.O Box 65001, Dar-es Salaam. (Tel. 0715271170) ambaye ni msimamizi wa utafiti huu.

Makubaliano

Hivyo basi, unaombwa kushiriki katika utafiti huu; utauliza maswali ambayo yatahitaji kupata maelezo kutoka kwako,pia tutachukua mkojo kwa ajili ya kupima kiwango cha kemikali ya zebaki. JE WAKUBALI? NDIYO:…… HAPANA……. (Weka alama ya vema panapohusika)

Endapo umekubali, tia saini hapa chini:

Saini ya mshiriki…….. Tarehe……

Saini ya mtafiti……..……Tarehe ……