

**FACTORS TOWARDS LOW CONTRACEPTIVE UPTAKE: DOES
PROVIDERS' CAPACITY MATTER?
A CASE IN MOROGORO DISTRICT COUNCIL**

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A CASE IN MOROGORO DISTRICT COUNCIL**

By

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**An Evaluation Proposal Submitted in Partial/Fulfillment of the Requirement for
Award of Degree of Masters of Health Monitoring and Evaluation (H;M&E)
School of Public Administration and Management- Mzumbe University**

2015

CERTIFICATION

We, undersigned certify that, have read and hereby recommend for the acceptance by Mzumbe University a dissertation entitled “Factors towards contraceptive uptake: Does providers’ capacity matter? A case, in Morogoro District Council, in partial fulfillment of the requirement for the masters degree of Health Monitoring and Evaluation (HM&E), School of Public Administration and Management(SOPAM) Mzumbe University.

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DECLARATION

I, Stephen Jonas Mduma, hereby declares that, this dissertation is my own work in origin, and that conducted through my own effort and that, it has not been submitted anywhere, and should not be presented to any university for a similar or any other degree award..

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DEDICATION

This dissertation is dedicated to my dearest family, Mrs Beatrice C. Mchome (Wife), Yona S. Kitua (Son), Nasemba S. Kitua (Daughter) and Mary S. Kitua (Daughter). “For the Bible preachers say, God is my shepherd; thou shall not run in dept” Psalm: 24. May the grace of God be upon those who believe in Jesus Christ?

ABBREVIATIONS

FP	Family Planning
WHO	World Health Organization
UNICEF	United Nations International Children Education Fund
NRC	National Research Council
GOT	Government of Tanzania
MOHSW	Ministry Of Health and Social Welfare
NRMSP	National Roadmap Strategic Plan
PHSPD	Primary Health Services Development Program
NFPCIP	National Family Planning Costed Implementation Program
CPR	Contraceptive Prevalence Rate
HCP	Health Care Providers
DC	District Council
SACP	Short Acting Contraceptives
LACP	Long Acting Contraceptives
PACP	Permanent Acting Contraceptives
NGO	Non Government Organization
FPAT	Family Planning Association of Tanzania
RCH	Reproductive and Child health
MCH	Maternal and Child Health
MDG	Millennium Development Goals
DMO	District Medical Officer
HF	Health Facility
UN	United Nations
ANC	Antenatal Clinic
NBS	National Bureau of Statistics
SOPAM	School of Public Administration and Management
MU	Mzumbe University
DNO	District Nursing Officer

DRCHCO	District Reproductive Child Health Coordinator
CDC	Centre for Disease Control
TPHS	Tanzania Population and Housing Survey
RMO	Regional Medical Officer
NFPRA	National Family Planning Research Agenda
HC	Health Centers
CO	Clinical Officer
ACO	Assistant Clinical Officer
NO	Nursing Officer
ANO	Assistant Nursing Officer
EN	Enrolled Nurse
NA	Nurse Assistants
DO	Dental Officer
ADO	Assistant Dental Officer
MD	Medical Doctor
AMO	Assistant Medical Officer
RAG	Reproductive Age Group

ABSTRACT

The main objective of the study was to determine the role of providers' capacity in enhancing contraceptive uptake. A descriptive cross sectional study design was used to a randomly selected 51 respondents of whom 26 were health providers and 25 were clients. The specific objectives were to determine magnitude of FP providers availability, to examine providers' capacity in terms of training, skills, mentorship, experience, data generation and use for provision of FP services, to determine the magnitude of providers' capacity for FP advocacy, to determine the degree of provider capacity in FP supply forecasting and to determine the level of provider capacity in meeting FP consumers' choice.

Findings revealed that, contraceptive uptake in Morogoro DC was 28% which was low compared to 37% of the region. Also findings on availability of FP providers revealed that overall deficit of HCPs were 46.7% for dispensaries and 28.6% for health centers respectively. There was no statistical significant different between current contraceptive utilization and availability of health care providers with X^2 Pr = 0.933 > 0.05 at 95% confident limit. Further findings on FP providers capacity revealed that lack of mentorship was at 66.6% for health centers and 100% for dispensaries and it was statistically significant with X^2 Pr = 0.007 and correlation coefficient with $P > |t|$ 0.006 < 0.05 at 95% confident limit. Likewise overall family planning stock-out was 73.08% for both health centers and dispensaries. When this variable was compared with health facility types it was statistically significant with X^2 Pr = 0.012 and correlation coefficient with $P > |t|$ 0.006 which is < 0.05 at 95% confident limit. Findings for FP/providers/clients decision making tool revealed that 92.31% of respondent reported that there were no tool available in their health facilities, statistically significant with X^2 Pr 0.007 and correlation at $P > |t|$ 0.006 < 0.05 at 95% confident limit. Conclusively: This research study had revealed that, consistent availability of contraceptives, health care providers, providers /clients decision making tools and mentorship could enhance contraceptives uptake level in the community.

TABLE OF CONTENTS

CERTIFICATION	i
DECLARATION	ii
COPYRIGHT.....	iii
ACKNOWLEDGEMENT	iv
DEDICATION.....	v
ABBREVIATIONS	vi
ABSTRACT	viii
TABLE OF CONTENTS	ix
LIST OF FIGURES	xiii
LIST OF TABLES.....	xiv
OPERATION DEFINITIONS.....	xv
CHAPTER ONE.....	1
BACKGROUND AND PROBLEM STATEMENT	1
1.1 Background	1
1.2 Problem statement	3
1.3 Overall evaluation question	4
1.3.1 Specific evaluation questions	4
1.4 Overall objectives.....	4
1.5 Specific objectives.....	5
1.6 Significance of the evaluation.....	7
CHAPTER TWO.....	8
LITRATURE REVIEW	8
2.1 Family planning definition.....	8
2.2 Effect of family planning interventions	8
2.3 Factors contribute to family planning uptake	8
2.4 Male involvement in family planning.....	10

2.5 Tanzania population and housing census.....	11
CHAPTER THREE	13
METHODS	13
3.1 The study area	13
3.2 Study period	13
3.3 Study approach.....	13
3.4 Study design	14
3.5 Study domains	14
3.6 Indicators and variables	16
3.7 Population and sampling procedure	16
3.7.1 Target population.....	16
3.7.2 Source population	16
3.7.3 Study population.....	16
3.7.4 Study frame and sampling unit.....	17
3.7.5 Sample size.....	17
3.7.6 Sampling procedures and techniques.....	17
3.7.7 Inclusions and Exclusion criteria.....	18
3.8 Data collection.....	18
3.8.1 Development of data collection tool.....	19
3.8.2 Data collection field work.....	19
3.8.3 Data management and analysis	20
3.8.4 Data entry and cleaning	20
3.8.5 Data analysis	21
3.9 Ethical Clearance.....	21
3.10 Study limitation	21
CHAPTER FOUR.....	23
PRESENTAION OF FINDINGS.....	23
4.1 Introduction	23

4.2 Sample size and sample characteristics	23
4.3 Findings on contraceptive uptake level	26
4.3.1 Morogoro DC contraceptive uptake trends (from secondary sources)	26
4.3.2 Current contraceptive uptake for Morogoro DC (Primary sources)	27
4.4 Findings for specific evaluation objectives	28
4.4.1 Availability of health care providers in numbers	29
4.4.2 Availability of health care providers by cadre	31
4.4.3 Health provider capacity in training, skills, data use, mentorship and experience	34
4.4.4 Health care capacity for family planning advocacy	38
4.4.5 Health care providers capacity for family planning supply forecasting	38
4.4.6 Providers' capacity to meet consumers choice	40
4.5 Logistic regression for outcome domain	42
4.5.1 Logistic regression for specific evaluation domains	42
CHAPTER FIVE	45
DISCUSSION OF EVALUATION FINDINGS	45
5.1 Contraceptive uptake	45
5.1.1 Availability of Health care providers in terms of number and cadre	47
5.1.2 Health care providers capacity	49
5.1.3 Providers capacity in FP supply forecasting	52
5.1.4 Providers capacity to meet consumers' choices	53
CHAPTER SIX	56
SUMMARY, CONCLUSSION AND IMPLICATIONS	56
6.1 Introduction	56
6.2 Summary	56
6.3 Conclusion	60
6.4 Program implications	60
6.5 Recommendations	62
REFERENCES	63

APPENDICES:	67
APPENDIX 1: QUESTIONNAIRE FOR HEALTH WORKERS.....	67
APPENDIX 2: QUESTIONNAIRE FOR FP CLIENTS	70

LIST OF FIGURES

Figure 1: Conceptual framework.....	6
Figure 2: Marital status of RCH/FP clients (n=25)	26
Figure 3: Three years contraceptive uptake trend among Reproductive Age Group (RAG) in Morogoro DC: 2012-2014	27
Figure 4: Current contraceptive users' v/s health care providers' availability.....	28
Figure 5: Cadre available at three health centers (n=6)	33
Figure 6 Cadre available v/s ability for provision different types of family planning methods: (n=26).....	33
Figure 7 Health care providers mentorship by health facility types (n=26).....	36
Figure 8 Family planning utilization v/s health facility types (n=51)	37
Figure 9: Percentage of family planning advocacy training	38
Figure 10: Family planning providers/clients decision making tool by health facility types (n=26).....	41

LIST OF TABLES

Table 1: Variables measurement and source of information's	15
Table 2: Health care providers age, sex, and higher level of education (n=26)	24
Table 3: Health care providers sex and higher level of education (n=26)	24
Table 4: RCH/FP clients age, sex, marital status and higher educational level (n=25)..	25
Table 5: Reproductive health and family planning clients education level (n=25).....	25
Table 6: (n=20) Available/s required minimum number of health care providers	30
Table 7: (n=6) Available health care providers'/s required minimum number for health centers	30
Table 8: Family planning forecast training by health facility types (n=26).....	39
Table 9: Family planning stock-out by health facility types (n=26).....	40
Table 10: Correlation coefficient of health care providers' experience and health facility types n (26).....	42
Table 11 n=26: Correlation co-efficiency of mentorship and health facility types	43
Table 12 n=26: Correlation co-efficiency of health care providers/clients decision making tool and health facility types.....	43
Table 13 n=26: Facility types: Correlation co-efficiency of family planning stock-out and health types	44

OPERATION DEFINITIONS

Family Planning: This is referred to an intention of the couple or people who are cohabiting to plan the number of children they need.

Contraceptive: Refers to medicinal product or appliances' used for the purpose of preventing unwanted pregnancy.

Contraceptive uptake: Refers to the magnitude of contraceptive use in a given community.

Contraceptive prevalence rate: The number of people who use contraceptive in a certain time period over the population in need of contraceptive in a given community.

Maternal mortality: is defined as number of deaths which are associated to pregnancy related causes during a given time interval.

Infant mortality: refers to number of deaths among children < 1 year of age during a given time period.

CHAPTER ONE

BACKGROUND AND PROBLEM STATEMENT

1.1 Background

Family planning (FP) interventions have been proven to be among important strategies in the reduction of maternal death throughout the world (World Health Organization [WHO] & United Nations International Children Education Fund [UNICEF], 2010). It is estimated that about 358,000 maternal deaths occur throughout the world, but only 1,700 deaths occurred in developed world, which account for 2% of all maternal deaths worldwide (UNICEF, 2010). In developing countries, maternal deaths account for 98% of all deaths occurring due to pregnancy-associated problems (Butta, 2013). Sub-Saharan Africa and South Asia, accounts for 56% and 29% of all maternal deaths. Both regions account for 85% of global burden of maternal deaths (Singh & Darroch, 2012).

It is estimated that in 2012, a total of 250,000 maternal deaths were prevented worldwide, through reduction in number of un- intended pregnancies due to increased in the use of different types of modern contraceptive methods (Cleland, 2012). This number corresponds to about 40% of the total 355,000 maternal deaths which occurred in the study year (Cleland, 2012). According to Sigh and Darroch et al. (2012) FP interventions contributed, to increased use of modern methods of contraception throughout the world, and this has contributed into reduction of 230, million births every year. Also, FP remains the strategy of choice for reducing unwanted pregnancies.

A study by Saufuddin et al. (2010) suggests that an increase in use of modern methods of contraceptive would reduce over 44% maternal death worldwide. The same results propound that if FP program interventions wouldn't have been in place, maternal mortality would have been even higher at 77%. Further evidence suggests that FP interventions can reduce both maternal and child mortality even without attaining higher level of economical development (United State of America Washington DC, National

Research Council [NRC], 1993). Among Sub-Saharan African countries Botswana, Kenya and Zimbabwe have been shown to do better in the reduction of both maternal and child mortality. These countries have achieved these goals because they created good environment for successful implementation of family program, high level of political commitment and have put in place good population development policies (NRC, 1993).

Tanzania is among countries with high maternal mortality rate in Sub Sahara Africa, and this is a challenge for efforts to enhance mother and child health wellbeing. It is estimated that 13,000 women die each year in the country due to problems of pregnancy, which is about 578 per 100,000 live births (TDHS, 2010). Having recognized that, the Government of Tanzania (GOT) through Ministry of Health and Social Welfare (MOHSW) instituted strategies to ensure that all women and men of reproductive age have access to quality family planning services as one among other priorities (MOHSW, 2010).

The government acknowledges that FP contributes towards both national health and social development goals. This has been described in the National Road Map Strategic Plan [NRMSP], (2008-2015) that outlined several challenges for reduction of maternal, newborn and child mortality. Among the challenges outlined was low utilization of modern FP methods in the country. This plan further stated that to reduce both maternal and children mortality, health sector plays a major role. It also emphasized that strengthening FP service delivery at all level will contribute largely into reduction of maternal and children mortality in Tanzania (MOHSW, 2008). Also the Primary Health Services Development Program (PHSPD- (MMAM), which focuses on improving health care services will contribute into reduction of maternal and child mortality. This strategy will be achieved through increase in production of new Health Care Workers (HCW) and building of new health facilities in all wards in the country (MOHSW, 2013). If the strategies stated above are monitored accordingly, they will provide successful outputs

that will allow people in the rural areas to have easy access to the health facilities and it is assumed that as a result utilization of modern FP services will also increase.

1.2 Problem statement

In spite of the efforts of establishing different programs and strategies to have the family planning services in place, in Tanzania, FP uptake is relatively low country wide, with uneven distribution across the regions (MOHSW, 2013). According to National Family Planning Costed Implementation Program [NFPCIP], (2010-2015) current Contraceptive Prevalence Rate (CPR) in Tanzania is at 27% for married couples and 28% for both married and unmarried women of child bearing age (MOHSW, 2013).

In Morogoro region the current uptake for all FP methods is at 37%. The 2010 projected contraceptive prevalence rate (CPR) for the region was that by 2015 it would reach 45%. Although the region is above the national CPR of 27%, it is still below the projected CPR for the region of 45% (TDHS, 2003-2004). A study by Mosha et al. (2013) in Kilombero district in Morogoro region in Tanzania investigated on perception and gender dynamics as contributing factors to low contraceptive uptake. The author found out that, clients fear of side effects, low involvement of male partners in decision to use FP, and fear of being labeled as unfaithful were among factors contribute to low CPR.

Another study in Malawi done by Kamvazina et al. (2007) suggests that among factors that contributed to low FP uptake were contraceptive supply, lack of integrations of FP to other services, and consistent contraceptive methods availability. The same study suggests that Health Care Providers (HCP) for family planning play a big role in increasing contraceptive uptake at community level, only if they are adequate in number, better trained, skilled and experienced in provision of different types of FP methods. These methods are Short Acting Contraceptives (SACP), Long Acting Contraceptives (LACP) and Permanent Acting Contraceptives (PACP). Other additional providers attribute that should be strengthened are: providers' capacity for advocacy, providers' capacity for FP supply forecasting ability and providers capacity in meeting consumers

choice for FP. According to family planning programme components and standards role of health care providers are to ensure that contraceptives and appliances' are consistently and adequately available, counseling and advocacy meetings are conducted, youth and adolescent education is provided and mentorship is frequently done as required. Also they should ensure that family planning clinic operation provides conducive environment for clients among others (MOHSW, 2004). Although there are plenty of literature that has investigated on low uptake of contraceptive elsewhere as well as in Tanzania, only a few have done study on family planning providers' capacity for execution of different FP methods. The question this study intends to address is on the role of providers' capacity towards contraceptive uptake among other factors.

1.3 Overall evaluation question

What contributes to the uptake of contraceptive in Morogoro District Council (DC)?

1.3.1 Specific evaluation questions

- i. To what extent does providers' availability contribute to contraceptives uptake?
- ii. To what level does providers' capacity in terms of training, skills, experience and data use contribute towards contraceptives uptake?
- iii. To what degree does provider capacity for FP advocacy contribute to contraceptives up take?
- iv. To what level does provider capacity in supplies forecasting contribute to contraceptive uptake
- v. To what extent does provider capacity in meeting consumers' choice contribute to contraceptive uptake

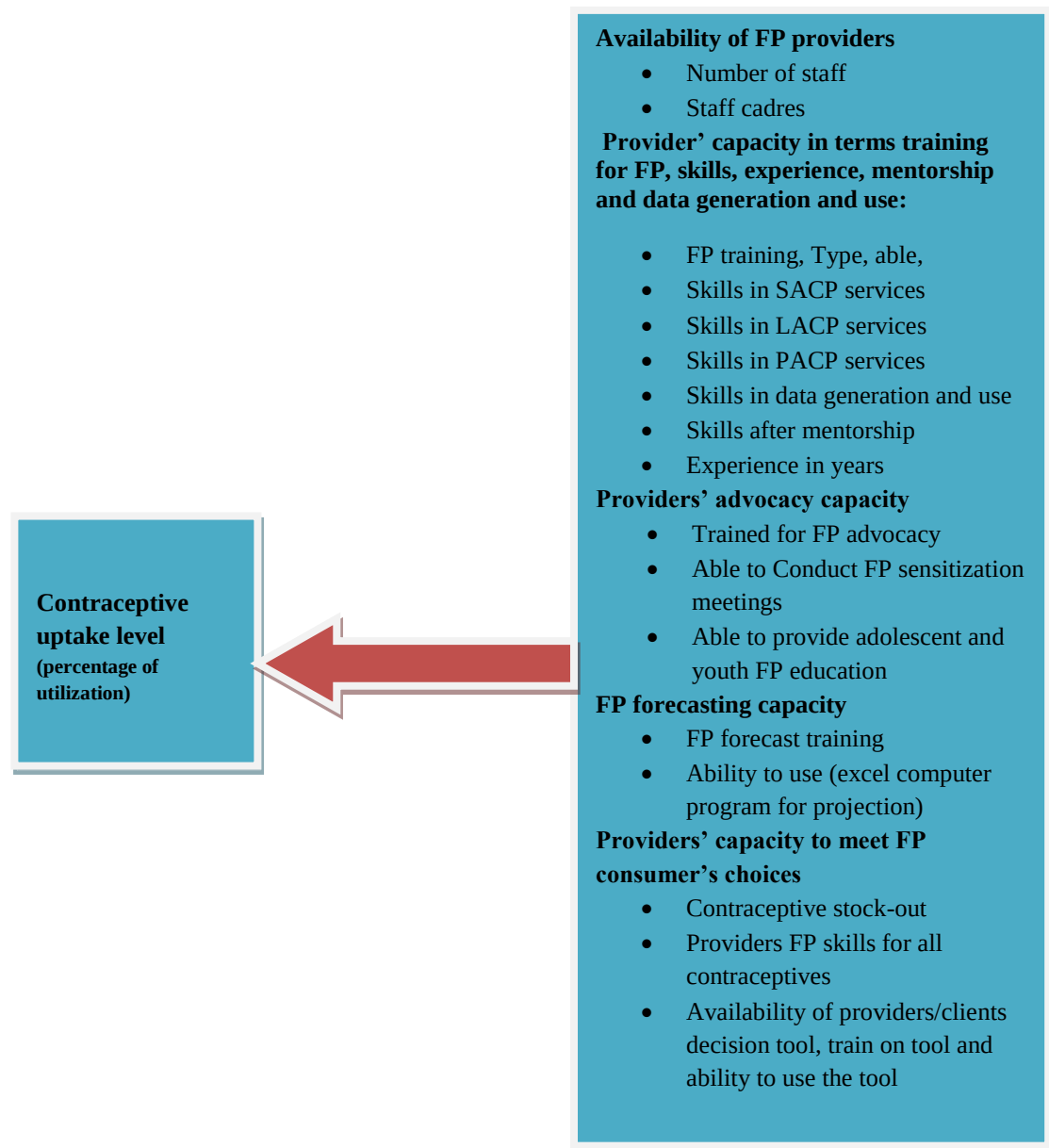
1.4 Overall objectives

To determine the role of providers capacity for enhancing contraceptive uptake, in Morogoro DC

1.5 Specific objectives

- i. To determine magnitude of providers availability for FP services
- ii. To examine FP providers' capacity in terms of training, skills, experience and data use for provision of services
- iii. To determine the magnitude of providers' capacity for FP advocacy
- iv. To explore the degree of provider capacity in FP supply forecasting
- v. To determine the level of provider capacity in meeting FP consumers' choice

Figure 1: Conceptual framework



Source: Field report on family planning 2015

1.6 Significance of the evaluation

Among the strategies areas identified in the National Family Program Costed Implementations (NFPCI) for scaling up contraceptive uptake was the area of capacity building for family planning health care workers throughout the country (MOHSW, 2010). The set strategies for building capacities of health care workers in the field of family planning have therefore been in implementation for about four years now. This is therefore an opportune moment to evaluate the status of implementation of this strategy and show evidence of the level of achievement of the intended objectives among which was to scale up CPR to reach 60% by 2015 (MOHSW, 2010).

This evaluation is of critical importance towards understanding the level contributed by implementing the strategy on enhancing contraceptive uptake at the community level. It is also significant in revealing capabilities for FP service providers, which will inform policy and practice towards immediate and long term solutions required to strengthen FP. Through understanding what has been achieved so far and problems being encountered in the process of implementing this strategy, we shall be in a position to provide evidence based information on how the process of executing FP services can be improved.

CHAPTER TWO

LITRATURE REVIEW

2.1 Family planning definition

Family planning refers to a voluntary act of awareness and needs arising from individuals in marriage or those who are cohabiting to decide on the number of children's spacing in the interest of their welfare and wellbeing. These issues are rarely discussed among members of African families. (MOHSW, 1989)

2.2 Effect of family planning interventions

Family planning enables mothers and children to enjoy better health by reducing numbers of unintended pregnancies it also allows better access to health services like immunization, nutrition, surveillance and antenatal care. FP is an efficient and proven health intervention in reducing mother and childhood morbidity and mortality (MOHSW, 1989).

2.3 Factors contribute to family planning uptake

The use of modern method of FP has been on increase in several parts of the world, especially in Asia and Latin America, but in Sub Saharan African countries the contraceptive uptake is continuously slowing down and in some countries has stagnated (WHO, 2013). Among the reasons contributing to low family planning uptake are, limited access to contraceptive in particular among young people, poor sub groups of population, and unmarried people, fear of experiencing untoward effect, cultural or religious beliefs, poor quality of available services and gender based obstacles (WHO, 2013).

In Pakistan the contraceptive uptake is still low as reflected by the prevalence rate of 17%, for married women of reproductive age group 15-49 years (United Nations [UN], 2001). The major factor identified in the study were, husbands influence on decision making, that's willingness, but also house hold characteristics and mother in law influences. Others were lack of education, physical morbidity and lack of social interaction and poverty. The study suggested that for the government to increase contraceptive uptake, efforts should be directed at family planning implementation process considers these complexities of service provision for increasing acceptance for and use of FP (Rob, 2000).

Kamvazina et al. (2007) also found that lack of using the service is slightly higher in the rural areas of Malawi compared to urban. The study also highlighted that positive provider discussion and encouraging women in using family planning at Antenatal Clinic (ANC) during their first pregnancy can be among the solutions to increase compliance and use of modern contraceptive methods among women in rural areas. Other issues that emerged in this study were fear of untoward effects and coincidental ill health. Conveniences, privacy and lack of adequate FP methods were highlighted as among contributing factors for low CPR especially in the rural areas (Kamvazina, 2007).

Another study carried out in Rwanda reported several social cultural obstacles to FP use, including male dominance in decision-making and preference for boys rather than girls. In this study many respondents reported that family size is predominantly determined by male partner (Felix, 2007). This study's results are similar to those studies done in Uganda and Tanzania; indicate that most East African countries face similar problems on FP uptake.

The qualitative study carried out in Kilombero and Ulanga districts in Tanzania to explore the social constraints affecting the uptake of contraception revealed that, distance to FP service provision site, untoward effect of methods, costs incurred and lack of individual knowledge were mentioned among the reasons for never having used any modern method of contraception (Lakshani, 2013). Not only these but also social

obstacles to using FP identified include religious beliefs, spousal, familial, parents and grand-parents influence, pressure to have a child of preferred gender, negative cultural norms about fertility, disapproval by husband or spousal or other gender influences which affect independent woman's decision. Others were side effects or coincidental health issues like rumors, that family planning is harmful usually from peer groups. These findings are in consistent with other researches across Africa and other developing countries (Lakshani, 2013). This community misconception when mixed with the negative attitudes of service providers, poor accessibility to services, and inadequate family planning supplies at the health facilities increased unmet needs gap. Other service factors that may also prevent FP service utilization and uptake includes, waiting times, unofficial contribution in the public sector, and either no or limited quality of information provided during care (MOHSW, 2013).

2.4 Male involvement in family planning

A study done in Uganda that explored the perception of both men and women about contraceptive se revealed that unmet need for contraceptive should be the responsibility of both men and women. A number of evidence from other studies including this one suggested that when men are involved in FP services, the women's contraceptive need and compliance to FP also increases, therefore reduces the unmet need and increases contraceptive uptake (Kabegenyi, 2014). Also, a study conducted in Kumi district, Uganda found out that only about 18% of mothers attending antenatal clinic (ANC) received education regarding family planning services and yet 71% intended to use FP in the future (Namazzi, 2013). These studies indicates that there is still a need for family planning among women of reproductive age despite of all previous efforts done, therefore all government including Tanzania should ensure that the process of executing FP services runs smoothly to reduce the existing unmet need.

The study in Malawi revealed an increased percentage of men discussing and using contraception with their spouse, also the team revealed that majority of men agreed and have started discussing and using FP methods with their spouses. They concluded that

Contraceptive acceptance and uptake level can be increased if men were involved about the choices of which method of FP is suitable for them and their spouses (Shattuck, 2011). Encouraging contraceptive uptake by motivating men to communicate with their partners about FP could be an alternative approach that can produce positive outcome towards modern contraceptive use. This statement refers to the result of a study carried out in Malawi in 2008, which revealed that intervention involving men's awareness and communication with their partners about family planning increased knowledge and communication and hence increased use of FP, compared to those communities where intervention was not done (Dominick, 2011).

FP services can be made more accessible and convenient to clients if they consider other service needs of their clients. Involving female spouses' clients with frequently used Maternal and Child Health (MCH) and reproductive services would lower costs to clients and reduce missed opportunities for service delivery (Namazzi, 2013). These studies tell us that a multi-conceptual model approach towards not only access to but use of FP methods needs to be used. A multisectoral approach and integrations of FP services into other health services should be considered at this time period, and periodic evaluation of the program could serve the purpose.

Another qualitative study carried out in Mwanza, Tanzania also revealed that both males and females were concerned about untoward effect of modern method of FP. The most feared untoward effects are those from misconceptions that arise within the communities. Almost all men took what their wife or a friend tells them and because what they are told are merely myths they prevent their partners from using FP (Mosha, 2013).

2.5 Tanzania population and housing census

Tanzania population and housing census report that the current population is at 44.9 million people (NBS, 2012). It has been observed that increase in population does not match with increased need for family planning as the emerging youth populations aged

14 to 25 years are not reached. This has caused increased in early marriage and unwanted pregnancies because they lack FP knowledge, this has been explained elsewhere in several literatures searched, also the African upbringing norms as among the factors prevent FP uptake (MOHSW, 2013).

This continued increased in the rate of population is also causing more constraints to social and economic development in the country. The current annual rate of growth is 2.9 percent; Tanzania's population is projected to reach 65 million by 2025. This increase in population will ultimately lead to an increased need for family planning services and consequently the unmet need for FP (NBS, 2012). From several literatures reviews, there is knowledge gap on process evaluation of family planning program because many of researchers in FP explored factors that prevent increased in contraceptive uptake disregarding application of evaluating the effect of providers capacity for execution of family planning services. This important aspect of research if applied could come out with recommendations which can provide additional options for scaling up contraceptive uptake in Tanzania.

The government of Tanzania has invested a lot in FP implementation and even the National Family Planning Research Agenda (NFPRA) 2015-20 has formulated strategy for scaling up FP uses among communities these strategies needs to be monitored and evaluation during their implementation process and towards the end. Ministry of Health and Social Welfare needs to improve FP uptake in the coming decade in order to reduce the unmet gape for contraception among women of childbearing age group (MOHSW, 2013).

CHAPTER THREE

METHODS

3.1 The study area

This research study was carried out in Morogoro District Council (DC) which is among the seven Districts in Morogoro region Tanzania. The region has total population of 2,218,492. Morogoro DC has an area of 11,925 Sq. km. which is 17% of the total area of Morogoro region. Administratively the district has 6 divisions, 29 administrative wards, and 146 villages. The district total population is 286,248 according to 2012 census report. It is located between latitudes 8 and 10 degrees North –East of Morogoro region and south of the equator between longitudes 32 and 38 degrees east. About seventy percent of the district population lives in the rural areas and their major activities are subsistence farming and few are pastoralists (TPHS, 2012). The district has a total of 55 government health facilities which account for 80.6%, out of 68 total health facilities.

3.2 Study period

This study was done between mid October 2014, and 22 June 2015. This evaluation included the following activities, proposal development, data collection, data aggregations, data cleaning, software computer data entry, data analysis, data interpretation and dissemination of study findings on 14th September 2015.

3.3 Study approach

This study applied quantitative research approach through a descriptive cross-sectional survey (Brayman, 2001). Cross-sectional study cuts across various populations at one point in time. Advantages of using cross section study design was that it requires little resources such as time, money and manpower (Baylei, 1995)

3.4 Study design

A descriptive cross-sectional study design was used and both structured closed/ open ended questionnaires were developed and administered to the study respondent in February 2015. Questionnaires were field tested before administered. Additional reason for using cross-section design was that it provides useful data for simple statistics description and interpretations (Babbie, 1995).

3.5 Study domains

Study domains were divided in to two categories, (i) independent domains which were: availability of family planning care providers, family planning providers' capacity in terms of skills, advocacy, mentorship, experience and data generation and use, providers' capacity for family planning advocacy, providers' capacity to meet consumers' choices and providers' capacity in FP supply forecasting. (ii) Dependent domain which is contraceptives uptake. Table 1 describes the relationship of these domains and data analysis technique which was used.

Table 1: Variables measurement and source of information's

Domain	Variables	Measurement	Source of information's
Contraceptive uptake level (dependant)	Contraceptive uptake	% of contraceptive uptake (Whether one uses contraceptives Yes/No) To what extent? (5Scale Likert) What type, frequency)	Health Care Providers (HCP) Clients
Availability of FP provider	HCPs' number	% of HCPs per dispensary	Client District Medical Officer (DMO) HF's
Providers capacity in terms of skills, experience, mentorship and	Cadre	Types of cadre available % of cadre available against cadre required (Number of different cadres/health facility) over the years	HCPs'
	Skills for SACP	% of HCPs' trained for SACP against available staff	HCPs'
	Skills for LACP	% of HCPs' trained for LACP against available staff	HCPs'
	Skills for PACP	% of HCPs' trained for PACP against available staff	HCPs'
	Skills for data generation and use	% HCPs' trained for data generation and use	HCPs'
Data generation/use	Skills for all type of FP	% of HCPs' with mixed skills (all types) against staff available	HCPs'
	Experience	% of HCPs' experienced for FP) (Number of years in health care services)	HCPs'
	Mentorship	% FP mentorship visits per HF Have you had mentorship assistance on FP? Who trained you? When? How? How long?	HCPs'
	Training for FP Advocacy	% HCPs' trained for FP advocacy	HCPs'
	Conduct sensitization meeting	% of sensitization meetings conducted, (number of sensitization meetings for national and local leaders conducted in/catchment area)	HCPs'
	Trained for FP education for youth	% of youth education on FP conducted in a year	HCPs'
Providers capacity in FP supply forecasting	FP fore casting training	% of HCPs' trained for FP forecasting/facility	HCPs'
	Computer use (excel)	% HCPs able to use excel computer program	HCPs'
	FP commodities stock out	Frequency of FP commodities stock out in a year? Which type?	HCPs'

Providers capacity to meet consumers' choice	Commodity availability	% of FP commodities available in a facility	HCPs'
	Availability providers/clients decision tool	-Trained on providers/client decision tool -Able to use the tool	HCPs'
	Provider FP skill mix	% of provider with FP skills mix (all)	HCPs'

Source: Reports from the respective HFs for 2015

3.6 Indicators and variables

This has been shown and described in Table 1.

3.7 Population and sampling procedure

3.7.1 Target population

The proposed target population was health care workers who provide family planning services among government health facilities and clients who attend to receive RCH/FP in the respective health facilities in Morogoro district council.

3.7.2 Source population

The source population was all health care workers who provide family planning services among selected HFs and clients who receive family planning services in the respective health facilities in Morogoro region. Two levels of health care delivery were included in the study; these were the health centers and dispensaries. The reasons for applying the two levels resided in the fact that the study required to examine the variations of health delivery and capacity of the health workers at these levels

3.7.3 Study population

The study population was all health care workers who provide services in these randomly selected health facilities in Morogoro DC. Other people forming the population of the study were reproductive and child health/family planning users.

3.7.4 Study frame and sampling unit

The study frame were all selected government health centers (HC) and Dispensaries in Morogoro DC, while sampling unit were health care providers (HCP) who provide daily health services and their clients in selected health centers and dispensaries in the study area.

3.7.5 Sample size

A total sample size of 51 study respondents were enrolled in the study which involved 26 health care providers and 25 RCH/ FP clients, were selected from 14 study frame of health facilities. Non probability sampling technique was used to select study sample. Purposive sampling procedure was employed to ensure that only the relevant personnel dealing with reproductive and child health in the study areas are selected. All 26, health care providers, were interviewed to obtain information on FP service provision. While on the other hand 25 clients were interviewed. Family planning clients were picked randomly as they exit from receiving service in RCH/ FP clinics. Two HCPs' and two Clients have been interviewed from each health facility.

3.7.6 Sampling procedures and techniques

The sample of study population was drawn from a frame of government HFs which offers FP services in Morogoro district council. In the district there are two categories of HFs these are health center and dispensaries. The district has total of 68 health facilities but only 43 government dispensaries and 6 HCs offers FP services, which makes a total of 49 health facilities. In these 2 categories of health facilities, 11(25%) of dispensaries and 3(50%) of health centers were randomly selected. This selection used simple "Hut" method of randomization. A total of 14, sample frame of health facilities was chosen. The reason why non probability sampling to health care providers was applies because each staff has unique qualification and responsibilities which can't simply be replaced. For clients a systematic random selection was used as they exit from service provider.

All study respondents were informed on the purpose of the study in details, and consent was read to them before questionnaires administration. In addition, respondents who were approached accepted to sign the consent form and participated voluntarily. Anonymity was maintained by substituting names for numbers and privacy was ensured during tools administrations.

Sampling limitations: the sample size which was earlier estimated was not achieved due to absence of expected respondent during study period. Although the response rate was not reached, the study findings were not affected. Attrition rate was only 8.9% which is acceptable as has not gone beyond 30% and had not affected representative sample size which should be at least 5% of the population studied (Boyd, 1981).

3.7.7 Inclusions and Exclusion criteria

Inclusion: Health care workers who provide health services in the selected health facilities had been included in this evaluation study because of their attributes. While and RCH/Family planning clients who attend in the respective facilities has also been included in the study.

Exclusion: Health care provider in the selected health facilities who do not provide clinical services and RCH/ family planning clients who receives other services apart from RCH/FP.

3.8 Data collection

Data collection followed a quantitative research approach based on the goal of evaluation. The goal of this evaluation was to determine the role of health care providers' capacity for improving contraceptive uptake in the district.

3.8.1 Development of data collection tool

Both structured closed and open ended questionnaires which were coded were developed and used to obtain information regarding study domains. The reason why open ended questionnaire were used was that there were factors for which their responses' varies and this provided freedom of information while closed ended questionnaires were mainly for variables which produces dichotomous outcome although all were coded for easy analysis.

3.8.2 Data collection field work

Activities of data collection started in early February 2015, after the proposal document approval submitted to study supervisor, head of department and director School of Public Administration and Management (SOPAM) Mzumbe University. The director then produced and endorsed signed letter to study supervisor to enable him to carry out the research evaluation study.

In the first week of February 2015, initial activity was pre arranged meetings with District Medical Officer (DMO) and District Reproductive/Child Health and Family Planning Coordinator (DRCH/FP). The district medical officer provided the team with an introductory letter to be produced upon visit to the selected health facilities. Also DMO assigned DRCH/FP coordinator to assist the team throughout the period of the study.

Together study team leader and DRCH/FP coordinator went through a list of all government health facilities, and list them by name on the piece of paper. They put them in an empty box, thoroughly mix them and picked one paper each time. The exercise was repeated up until when 11 numbers of dispensaries was reached. The same exercise was done for health centers'.

In The second week of February 2015 team leader who was the sole responsible person started visiting randomly selected health facilities to interview study participants. The

team started with Fulwe dispensary, Mikese dispensary and Ngerengere health Center which were 30Kms, 35Kms and 80Kms away from district Head Quarter (HQ) respectively. The following week the team travelled further south of the district to collect information's on the other health facilities of which the furthest health facility to district HQ was Bwakila chini 90Kms away. Administration of questionnaires was done in person (by study supervisor) who is the principle investigator for this study. The information's was collected based on six evaluation domains which were: (i) contraceptive uptake (ii) FP providers' availability (iii) FP providers capacity in terms of skills for SACP, LACP and PACP, skills for generate and use data, mentorship ability and experience (iv) capacity for FP advocacy (v) providers capacity to meet consumers choices and (vi) providers capacity for contraceptives supply forecasting. All respondent were informed on the purpose of study and asked to voluntarily participate in the study. Those who agreed were asked to sign consent form which was provided to them. Actual data collection exercise took three weeks, that's from second week to end of February 2015.

3.8.3 Data management and analysis

Data from field work was properly organized and arranged in paper files as raw data. Collected data from the field was checked for completeness manually, this exercise was conducted on daily basis. Raw data had been stored in a locked cupboard for safety until five years after report submission.

3.8.4 Data entry and cleaning

Data was initially entered in excel worksheet, Microsoft excel computer program software- 2007@ Microsoft incorporation, code book was prepared before data were entered. Data was imported into STATA pack 13 computer software for data analysis. Copyright 1985-2013 StataCorp LP StataCorp, 4905 Lakeway Drive, College Station, Texas 77845 USA, 800-STATA-Phhttp://www.stata.com 979-696-4600, stata@stata.com. Double data entry procedures were applied for data validity, accuracy and consistency.

3.8.5 Data analysis

Data was imported into STATA computer program software for analysis. Data description was done by using both frequency tables and bar charts. For variables that showed statistical significant by chi2 test, application of Pearson correlation coefficient was applied. The purpose was to observe correlation coefficient among variables and not only their significance at 95% confidence interval (CI) but also their significance correlation. Data analysis based on six domains (i) contraceptive uptake (ii) FP providers' availability (iii) FP providers capacity in terms of skills for SACP, LACP and PACP, skills for generate and use data, mentorship ability and experience (iv) capacity for FP advocacy (v) providers capacity to meet consumers choices and (vi) providers capacity for contraceptives supply forecasting.

3.9 Ethical Clearance

This study was approved by Mzumbe University Ethical Committee Board and clearance/permission letter was obtained before it starts. This complies with upper studies research procedures. Permission to conduct the study in Morogoro DC was obtained through District Executive Director (DED) and DMO. Study subjects were asked to voluntarily participate in providing information to the study and signed consent was obtained before the study started.

3.10 Study limitation

This research study collected valuable information with respect to providers' capacity for provision of family planning services. Also clients' information for contraceptive utilization was obtained. Although these data were collected accurately the result of this study may have limitations to generalization of the findings. Generalization for the whole country will not be possible because of heterogeneity in the provision of FP services in different regions and districts in Tanzania. Social, economical and geographical characteristic differences may be strong factors in this respect. There were constraints faced during data collection the reason had been that, health facilities are

located far away from each other and some areas were hard to reach. However study team overcomes this by hiring a private car for that purpose. The results of this study will however point to possible factors limiting FP provision which will require further exploration in large studies involving more districts of different regions.

CHAPTER FOUR

PRESENTAION OF FINDINGS

4.1 Introduction

The main study objective was to determine the role of health care providers' capacity for enhancing contraceptive uptake in relationship to various skills. The specific evaluation study objectives were (i) to determine providers availability for FP services, (ii) to examine FP providers' capacity in terms of skills, experience, mentorship and data generation and use in the provision of services, (iii) to determine providers' capacity for FP advocacy, (iv) to explore the degree of provider capacity in family planning supply forecasting and (v) to determine the level of provider capacity in meeting FP consumers' choice. The findings are organized in the following manner: First the sample characteristics are presented followed by a presentation of data related to the main evaluation question, which is also followed by an analysis and presentation of data for each specific evaluation study objective.

4.2 Sample size and sample characteristics

Total study sample were 51 respondents which was 91.07% of the 56 targeted, hence the study fell short by 8.93% of the expected sample size. There were two categories of health facilities which were 3 health centers and 11 dispensaries. The choice of respondents was such that there were 2 health care providers and two RCH/FP clients from each health facility. There were two types of sample size characteristics as displayed in Table 2 and 3.

(i) Health care providers' demographic characteristics

Table 2: Health care providers age, sex, and higher level of education (n=26)

Variable	Observation	Mean	Std. Dev.	Min	Max
Age in years	26(100%)	38.76923	8.237998	24	57
Sex	26(100%)	1.769231	.4296689	1	2
Higher Education	26(100%)	3.692308	.6793662	2	4

Source: Reports from the respective HFs for 2015

Table 3: Health care providers sex and higher level of education (n=26)

Variable	Higher level of education			
	Primary	Secondary	Collage	Total
Male	0	0	6(28.57%)	6 (28.57%)
Female	3 (11.54%)	2(7.96%)	15(71.43%)	20 (76.92)
Total	3 (11.54%)	2(7.96%)	21(80.77%)	26 (100%)

Source: Reports from the respective HFs for 2015

Tables 2 and 3 show that among 26 health care providers' males were 23.08% and females were 76.92%. Their mean age was 38.7 years, maximum age was 57 year and minimum age was 24 years of age. Furthermore findings revealed that 11.54% females had attained primary education, 7.96% had attained secondary education while 71.43% had attained collage education. For male 28.57% had attained collage education and for both groups male and female their minimum level of education was (2) primary education while their highest level of education was (4) collage graduate.

(ii) Reproductive health and family planning clients demographic characteristic

Table 4 shows the demographic characteristic of clients whose total were 25. Their mean age was 29.72, minimum age was 18 years and maximum age was 46 years and they were all female (2). Furthermore in Table 5 findings revealed that in relation to clients level of education 28% had no education 64% had primary education while 8% had attained secondary education. Their minimum level of education was no education (1) and highest education level among clients was secondary education (3).

Table 4: RCH/FP clients age, sex, marital status and higher educational level (n=25)

Variable	Obs	Mean	Std. Dev.	Min	Max
Age	25	29.72	8.38908	18	46
Sex	25	2	0	2	2
Maritalsta~s	25	2.6	1.47196	1	5
Higheredul~	25	1.8	.5773503	1	3

Source: Reports from the respective HFs for 2015

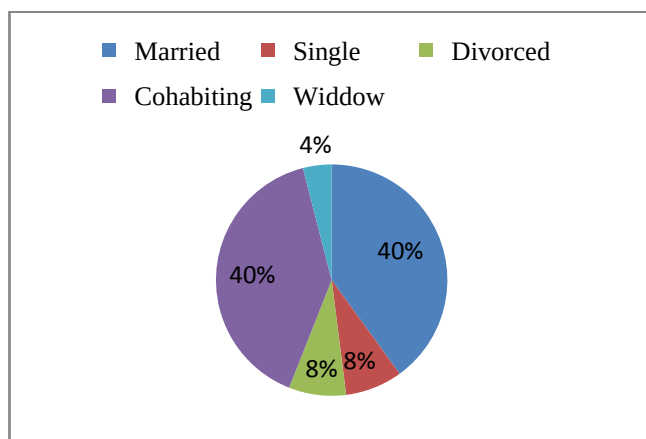
Table 5: Reproductive health and family planning clients education level (n=25)

Higher level of education	Freq.	Percent	Cum.
No education	7	28.00	28.00
Primary education	16	64.00	92.00
Secondary education	2	8.00	100.00

Source: Reports from the respective HFs for 2015

Additional findings revealed that there were five categories of marital status and three categories of education level as described in Figure 2. The number of married women was 40%, single were 8%, divorced were 8%, cohabiting were 40% and there were 4% of divorced women. From these observation clients who receives RCH/FP services in fourteen clinics within visited health facilities had normal distribution in terms of age and all fell under the reproductive age group 15-49.

Figure 2: Marital status of RCH/FP clients (n=25)



Source: Reports from the respective HFs for 2015

4.3 Findings on contraceptive uptake level

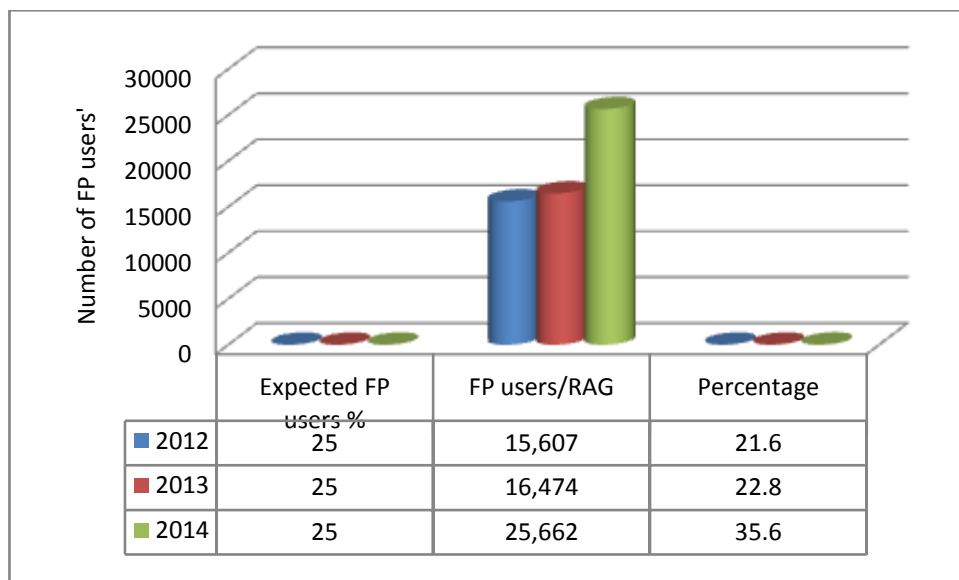
Contraceptive uptake level was the major evaluation question in this study, under this domain variables (factors) examined were age, sex, educational level and marital status which were under RCH/FP clients' characteristics as revealed by findings in Table 3. Current contraceptive uptake level was the dependent variable where clients were asked whether they were using any type of modern contraceptive method and responses' were dichotomous (yes or no). First description was that of Morogoro DC contraceptive uptake trends for the past three years from 2012 to 2014 followed by current contraceptive uptake level which also was cross tabulated with health care providers' availability among health facilities.

4.3.1 Morogoro DC contraceptive uptake trends (from secondary sources)

According to report from Morogoro district council RCH/FP coordinator (2014) there was 72,000 women and men in the reproductive age group between 15 to 49 years and 18,000 were expected to become contraceptive clients. Trends of contraceptive users in the district as shown in Figure 3 for the past three years were as follows: In year 2012 there were total 72,000 women and men of reproductive age group. This figure remained the same for three consecutive years and expected contraceptive users were 18000 (25%)

However in 2012 contraceptive users were 15,607(21.6 %). In 2013 contraceptive users were 16,474(22.8%) and in year 2014 contraceptive users were 25,662 (35.6%).

Figure 3: Three years contraceptive uptake trend among Reproductive Age Group (RAG) in Morogoro DC: 2012-2014



Source: Reports from Morogoro DC for 2015

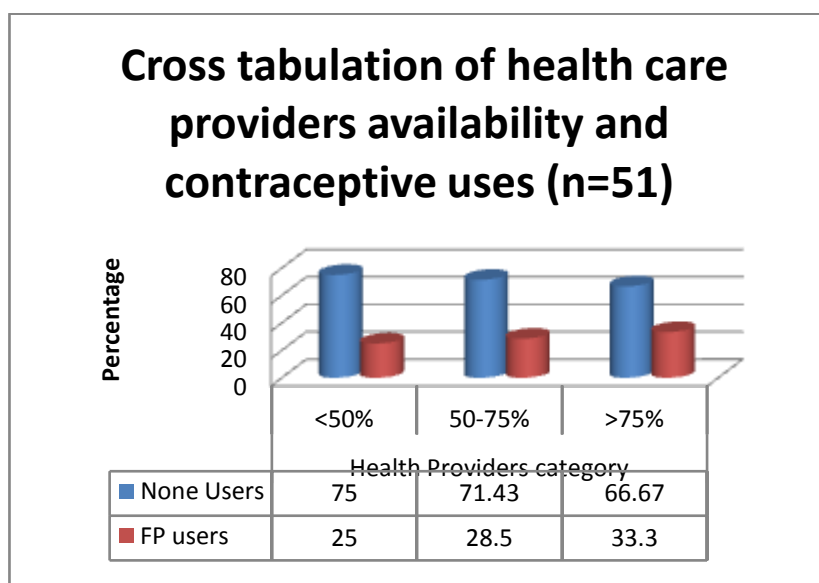
From this contraceptive use trend it shows that there was small different increase in use of contraceptives. From year 2012 to 2013 there was an increase in use of 1.2%, while from year 2013 and 2014 the different was 12.8%.

4.3.2 Current contraceptive uptake for Morogoro DC (Primary sources)

Data from the clients revealed that among the 25 respondents from fourteen different health facilities, those who reported using contraceptives were 28%. It was of interest in this study to cross tabulate and compare current contraceptive utilization and availability of health care providers. Findings in Figure 4 revealed that among 51 respondents health facilities whose number of health care providers was below 50% of the required clinical health workers also had few 25% contraceptive users. Health facilities whose number of health care providers was between 50-75% had 28.57% current contraceptive users.

Further findings revealed that health facilities, whose numbers of health care providers was above 75%, had 33.33% contraceptive users. There was no statistical significant different between current contraceptive users and availability of health care providers among health facilities with Pearson chi2 (2) = 0.1394 Pr = 0.933>0.05 at 95% confident limit.

Figure 4: Current contraceptive users' v/s health care providers' availability



Source: Field report on family planning 2015

4.4 Findings for specific evaluation objectives

Total study respondents were 26 health care providers and all responded to study questionnaires administered to them. Health facilities visited were: Bwakila Chini, Fulwe, Kibungo Juu, Kikundi, Kisemo, Magogoni, Mfumbwe, Mikese, Msonge, Mvuha and Tulo dispensaries while Ngerengere, Kiroka and Mkuyuni were health centers. The main hypothesis for all objectives was that FP was positively associated with availability of health care providers, providers' capacity in terms of training, skills, experience and mentorship, advocacy capacity, FP supply forecasting and capacity to meet FP consumers' choices.

4.4.1 Availability of health care providers in numbers

Under this study domain, variables (factors) which were examined were number of health care providers and cadre distribution among health facility levels. Respondents were health care providers who provide RCH/FP services in their respective health facilities and their responses' were compared with national staff guideline. According to this guideline minimum required numbers of clinical HCPs' for a dispensary are 8 and for health centers are 28. Table 6 and 7 show a summary of the results for this domain based on what existed at the health facilities versus what is prescribed by the Ministry of Health and Social Welfare, Health Sector Staff Guideline (2014) Tanzania. Data shows that there was a great deficit of FP/ HCPs. This coincided with the health providers' views. The following section highlights the deficit experienced at the specific health facilities.

(i) Availability of staff at the dispensary level

A total of eleven dispensaries were visited and 20 health care providers were interviewed. Findings as shown in Table 6 revealed that all dispensaries had an average shortage of 50% health care providers. Fulwe and Kisemo dispensaries had a deficit of 1 health care provider each, with deficit of 12.5% required number of 8. Mikese and Mvuha dispensaries had each a deficit of 2 HCPs been a deficit of 25% of required number for each. Kikundi dispensary had a deficit of 4 HCPs being 50% of the required number. The following dispensaries, Bwakila Chini, Kibungo Juu, Mfumbwe, Msonge and Tulo each had a deficit of 5 HCPs being 62.5% of required number for each. Magogoni dispensaries had a deficit of 6 HCPs being 75% of the required HCPs.

Table 6: (n=20) Available v/s required minimum number of health care providers for dispensaries

Facility name	Available HCPs	Minimum required HCPs/dispensary	Deficit (-)/ Surplus (+)
Bwakila Chini	3	8	-5(62.5%)
Fulwe	7	8	-1(12.5%)
Kibungo Juu	3	8	-5(62.5%)
Kikundi	4	8	-4(50%)
Kisemo	7	8	-1(12.5%)
Magogoni	2	8	-6(75%)
Mfumbwe	3	8	-5(62.5%)
Mikese	6	8	-2(25%)
Msonge	3	8	-5(62.5%)
Mvuha	6	8	-2(25%)
Tulo	3	8	-5(62.5%)
Total	47	88	-41(46.7%)

Source: Reports from the respective HFs for 2015

(ii) Availability of staff at health centers' level

There were three health centers visited and for each 2 health care providers were interviewed total 6 their responses' are displayed in Table 7

Table 7: (n=6) Available health care providers'/s required minimum number for health centers

Health facility name	Available staff	Minimum required	Deficit (-)/ Surplus (+)
Ngerengere HC	22	28	-6(18.6%)
Mkuyuni HC	22	28	-6(18.6%)
Kiroka HC	16	28	-12(42.9%)
Total	60	84	-24(28.6%)

Source: Reports from the respective HFs for 2015

According to national health clinical staff guideline the required number of clinical health care providers for health centers should be 28 in number per each. However findings in Table 7 shows that all three HCs visited revealed had a deficit of health care providers ranged from 18.6% to 42.9%. Ngerengere HC, available staffs were 22 which was 81.4%, with a deficit of 18.6% of minimum required number of clinical health care

providers. Mkuyuni HC had the same number of HCPs' 22 which was 81.4% of available HCPs' being a deficit of 18.6% of minimum national clinical HCPs' required. This was not the same for Kiroka HC where available number of clinical HCPs' were 16 which was 57.1% having a deficit of 42.9% of required minimum clinical health care providers.

4.4.2 Availability of health care providers by cadre

Cadre availability was measured against national required number of cadre by health facility category. The district medical officer health report of 2014 showed that, at the health centers' level minimum cadre required were as follows: Medical officer(MD)=1, Assistant medical Officer(AMO)=1, Clinical Officer(CO)=2, Assistant Nursing Officer(ANO)=1, Nurses=9, Medical Recorders=1, Medical Attendants=6, Health Laboratory technologist =1, Health Officers=1, Assistant Laboratory technologist=1, Pharmaceutical technologist=1, Assistant Pharmaceutical Technologist=1, Assistant Dental Officer=1, Dental Therapist=1, Community Health worker=1 and Assistant Social Welfare Officer=1, this making total of clinical health care workers required equals to 28.

District medical officers' health report of 2014 also shows that, minimum cadre required for dispensaries were as follows: CO/ Assistant Clinical Officer(ACO)=1, General Nurse=1, pharmaceutical assistant=1, RCH/FP nurse=1, Laboratory Assistant=1, Medical Attendant/Nurse Assistant (NA)=1, Community Health Worker=1, total 8, clinical health care workers.

(i) Availability of cadres at dispensary level

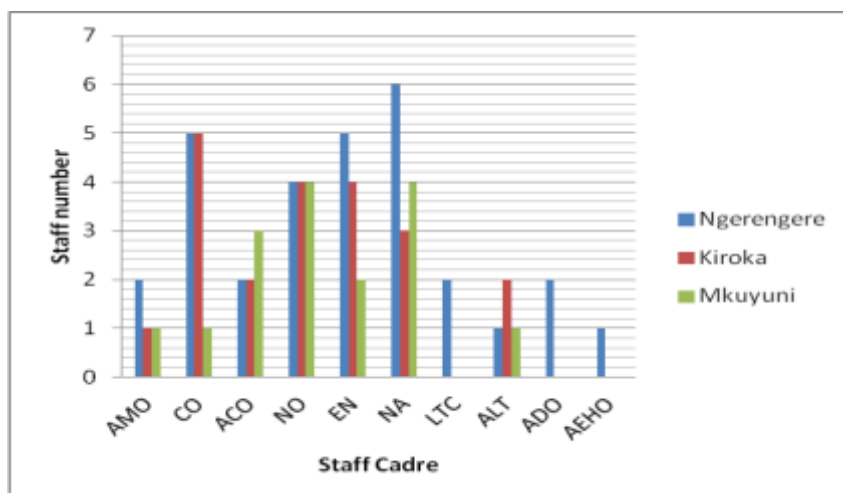
At dispensary level a total of 20 HCPs were interviewed from 11 dispensaries and all responded to the questionnaires. Findings were: Fulwe had 3 Clinical officer (COs), 2 Enrolled Nurses (ENs) and 2 Nurse Assistant (NAs) and 1 (Lab assistant) total 8 which was 100% of required cadre. Kisemo had 2(COs), 1 Nursing Officer (NO), 2 (EN) and 2 (NAs) total 7 which was 87.5% of required cadre. Msonge had 1 (CO), 1(ACO), 1 (ENs)

and 1 (NAs) total 4 which was 50% of required cadre. Kibungo juu had 1 (CO), 1(EN) and 1 (NA) total 3 which was 37.5% of required cadre. Mvuha had 2 (CO), 2 (ENs) and 1 (Assistant environmental officer) total 5 which was 62.5% of the required cadre. Kikundi had 1 (CO), 1(EN) and 1 NA total 3 which was 37.5% of required cadre. Mfumbwe had 1(CO), 1 (EN) and 1(NA) total 3 which was 37.5% of required cadre. Tulo had 1 (CO), 1(EN) and 1(NA) total 3 which was 37.5% of the required cadre. Bwakila chini had 1 Assistsnt Clinical Officer (ACO), 1(EN) and 1(NA) total 3which was 37.5% of the required cadre. Mikese had 1 (CO), 2 (EN), 1 (NA) and 2 Assistant Environment Officers, total 6 which was 75% of the required cadre. Magogoni dispensary had 2(EN) and 1 (NA), total 3 which was 37.5% of the required cadre.

(ii) Availability of cadres at health centers level

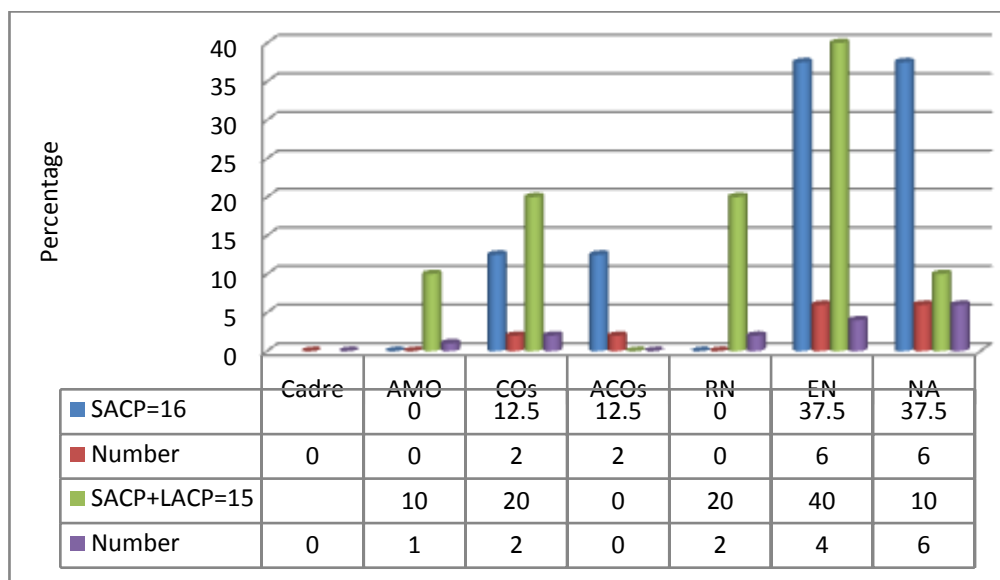
Figure 5 findings revealed that among 6 respondents from 3 health centers visited, Ngerengere health center had 2 Assistant Medical Officers (AMOs), 5 COs, 2 ACO, 2 Nursing Officers (NOs), 2 (ANOs) 5 Enrolled Nurses (EN), 6 Nurse Assistant (NA), 2 laboratory technologist and 1 Assistant lab technologist, 2 Assistant dental officer (ADO) and 1 Environmental health officer. Total numbers of different cadres were 29 with surplus of 1 which was 4% of required number of cadre. Kiroka HC had 1 AMO, 5 COs, 2 ACOs, 2 NOs , 3 ANO, 4 ENs, 3 NAs and 2 assistant lab technologist making a total 22 which was 78.5% , with deficit of 21.5% of cadre required. Mkuyuni HC had 1 AMO, 1COs, 3ACOs, 1 Nutrition officer, 3 NOs, 1 ANOs, 1Social welfare Officer, 2 ENs, 4 NAs and 1 Assistant lab technologist making the total of 18 which was 64.2% of required cadres with deficit of 35.8%.

Figure 5: Cadre available at three health centers (n=6)



Source: Reports from the respective HFs for 2015

Figure 6 Cadre available v/s ability for provision different types of family planning methods: (n=26)



Source: Reports from the respective HFs for 2015

With respect to cadre, when it was cross tabulated with ability for provision of different contraceptive methods findings in Figure 6 revealed that among 26 respondents 10% AMOs was able to provide both SACPs and LACPs. For COs 12.5% were able to provide SACPs while 20% were able to provide both SACPs and LACPs. For assistant clinical officers 20% were able to provide SACPs while no body was able to provide LACPs. With regard to RN 20% were able to provide both SACPS and LACPs. Furthermore findings revealed that EN 37.5% were able to provide SACPs while 40% were able to provide both SACPs and LACPs. Additional findings shows that for NA 37.5% were able to provide SACPs while 10% were able to provide both SACPs and LACPs. There was no statistical different between cadre availability and ability to provide different types of FP methods with Pearson chi 2(5)= 8.0136 Pr = 0.155.

Furthermore overall findings revealed that despite of the great deficit of health care providers for both dispensaries and health centers as shown in Table 6 and 7. Among 25 respondents who were clients 92% said they were satisfied with service they received while 85.71% said that they were not forced or insisted on the type of family planning method they use.

4.4.3 Health provider capacity in training, skills, data use, mentorship and experience

Under this study domain variables (factors) which were examined included: training for FP, skills for provision of different FP methods, training for data generation and use, experience and mentorship. This domain defines capacity in term of training, skills acquisition, skills application, experience as well as mentorship. Mentorship is an important consideration under this domain because it provides in-service training if done as required.

(i) Trained for family planning and skills application

Findings revealed that among 26 respondents, those who have never had any FP in-service training in the past one year prior to study survey were 73.08%, while those who

received any type of FP training in the same period were 26.9%. This was for all category of health facilities both health centers and dispensaries. Among those who were trained 42.85% received Implant and IUCD training and the remaining 57.2% received one type of FP training in the following sequential order 14.2% FP counseling, 14.2% FP advocacy, 14.2% Injectable depo- provera and 14.2% received oral and injectable depo- provera.

Findings for skills application showed that 61.54% were able to provide SACP, while 10 38.46% were able to perform both SACPs and LACPs. Findings further revealed that there was no HCP specifically for provision of family planning services. There was lack of capacity in providing permanent acting contraceptives methods in all health centers’.

When type of family planning training was measured in comparison with health facility type, the result indicated that at health center level among 6 respondent 83.3% had no FP in-service training in the past one year. At dispensary level among the 20 respondent (70% had no FP in-service training in the past one year prior to study survey. There was no statistically significant different between trained for FP and health facility categories. Application of Pearson χ^2 (1) =0.4170 Pr=0.518>0.05 at 95% confidence limit.

(ii) Trained for data generation and use

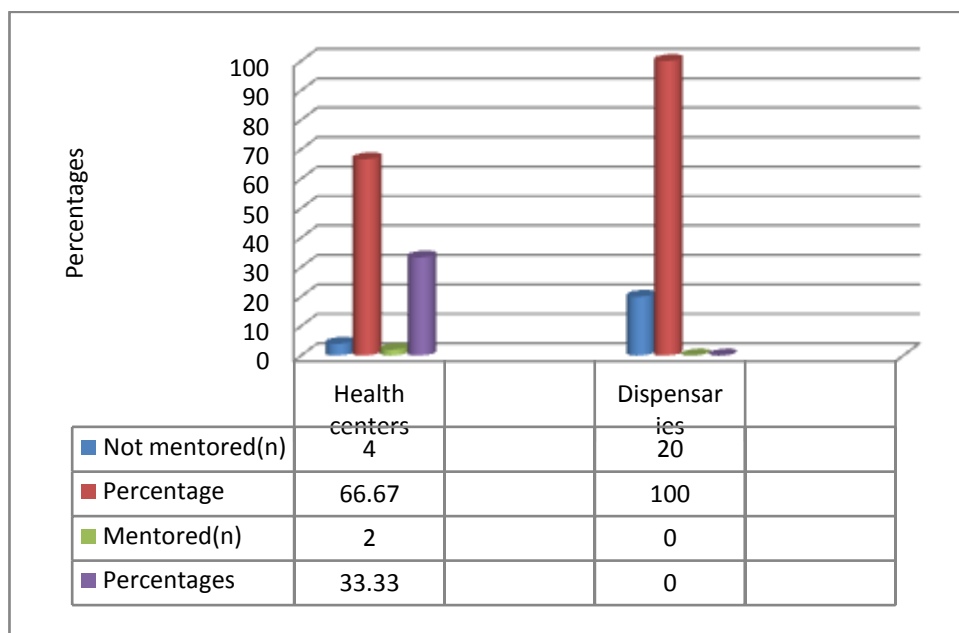
With regard to data generation and use among 26 respondents overall findings indicated that from both health centers and dispensaries only 19.23% had ever received data generation training. None of these had received any training on data use. When data training was compared to type of health facility, the findings showed that among 6 HCs respondents 16.67% had ever received data training, while 83.33% were not trained on data generation and use. At the dispensary level among 20 respondents only 20.00% had received training on data generation and use, while 80.00% had never received any training on data generation and use. This could affect family planning uptake level as when health care workers are not trained on data, they do not take care in ensuring data quality as they do not know what it means to generate credible data. There was no

statistical significant different between trained for data generation and use among health facility types with Pearson $\chi^2(1) = 0.0330$ $Pr = 0.856 > 0.05$ at 95% confident limit.

(iii) Mentorship for family planning

Findings suggested that among 26 respondents only 7.69% were mentored for family planning provision in the past one year while 92.31% were not mentored. When this variable was compared with two health facility types' findings in Figure 7 revealed that among 3 HCs visited 6 respondents 66.6% were not mentored for the past one year while only 33.4% received mentorship. At dispensary level, 20 all had never had any type of FP mentorship which was 100%. This meant that mentorship could play a crucial role in improving family planning uptake level if it shall be done consistently as required. This was statistically significant $\chi^2(1) = 7.22$ $Pr=0.007$.

Figure 7: Health care providers mentorship by health facility types (n=26)



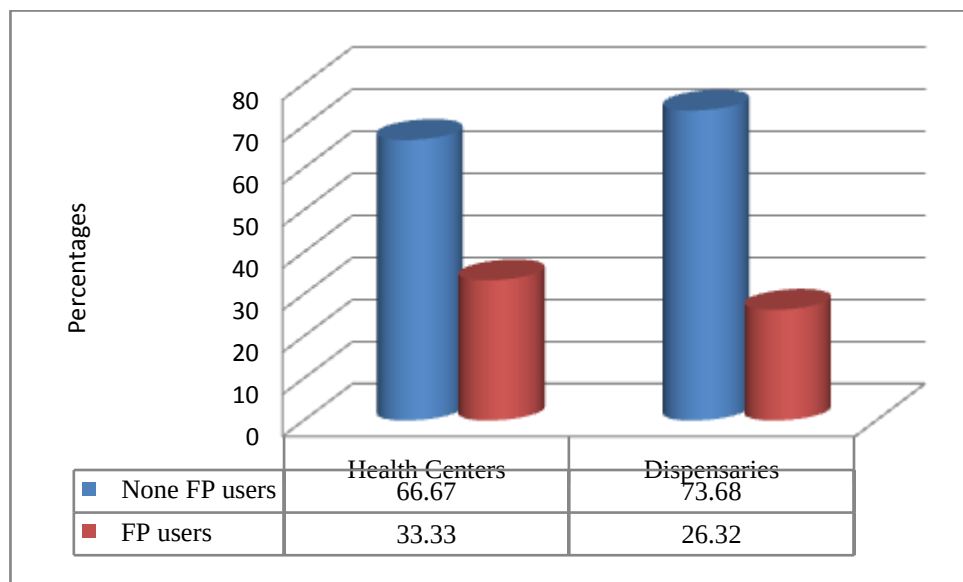
Source: Reports from the respective HFs for 2015

(iv) Experience for family planning provision

Regarding the experience of health care providers in provision of FP, findings indicated among 26 respondents most experienced HCPs had 32 years at work, while the least experienced had less than 1 year at work. When experience in years category was compared with type of health facility the result indicated that, among 3 health centers 16.69% health care workers had less than one year experience and 16.69% had over 3years but less than 5 years of experience while 66.67% health care workers had more than 5, years of work experience in FP.

At dispensary level there were 20.0% health care personnel had 1-3 years of work experience, and 80.0% of health care workers had over 5, years of experience in family planning provision. This was significant with Pearson chi2 (3) = 7.9733 Pr=0.047< 0.05 significant level at 95% confident limit.

Figure 8 Family planning utilization v/s health facility types (n=51)



Source: Reports from the respective HFs for 2015

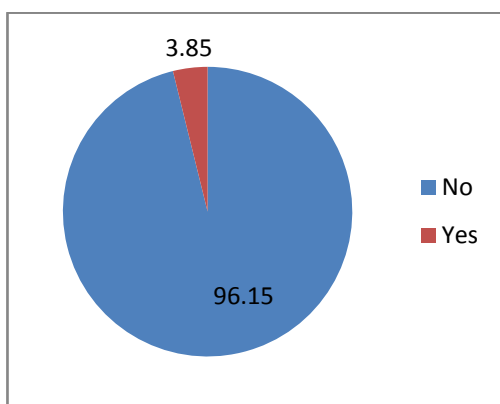
When experience was compared with FP utilization the findings in figure 8 revealed that over all family planning utilization was only 26.32%. Further findings revealed that health care providers which had over five years experience in family planning

service provision were 66.67 for health centers and overall family planning utilization was 33.33%.

4.4.4 Health care capacity for family planning advocacy

Under this domain variables which were examined included: training for FP advocacy, training for FP adolescent and youth education and ability to conduct both community and adolescent and youth family planning education.

Figure 9: Percentage of family planning advocacy training



Source: Reports from the respective HFs for 2015

The study findings as shown in Figure 9 revealed that among 26 respondents 3.85 had received FP advocacy training in the past one year, while 96.15% were not trained for FP advocacy. Also the study revealed that all 100% respondent had not received adolescent and youth family planning education training. Furthermore the study revealed that 100% were not able to conduct adolescent and youth education as well as community family planning sensitization meetings.

4.4.5 Health care providers capacity for family planning supply forecasting

Variables under this study domain were: Family planning forecast training, ability to use excel computer program. The findings revealed that among 26 respondents 30.77% had received FP forecast training in the past one year while 57.69% were not trained and 11.54% did not know whether there was any type of FP supply forecast training.

When this variable was compared among two health facility types, findings in Table 8 revealed that among 26 respondents, there were 6 respondents from 3 health centers whose responses' showed that only 16.67% had been trained on FP supply forecasting while 83.39% were not trained on FP supply forecasting. At dispensary level among 20 respondents only 35% were trained on FP supply forecasting while 50% were not trained on FP supply forecasting and 15% did not know whether there was FP supply forecasting training. For those who had received training, all had Integrated Logistic Supply (ILS) as type of training and the duration of training was one week. Also findings revealed that there was nobody among the trainees who was able to use x cell computer program. For this domain, there was no statically significant different with respect to training for FP supply forecasting between the two health facility types. Pearson chi2, Pr=0.318 >0.05 at 95% confidence limit.

Table 8: Family planning forecast training by health facility types (n=26)

Forecast training	HF-type		
Train	Health centre	Dispensary	Total
		Total	
No; (n)=	5	10	15
%	83.33	50.00	57.69
Yes (n)=	1	7	8
%	16.67	35.00	30.77
Don't Know (n)=	0	3	3
%	0.0	15.00	11.54
Total (n)=	6	20	26
%	100.00	100.00	100.00
Pearson chi2(2) = 2.2931 Pr = 0.318			

Source: Reports from the respective HFs for 2015

4.4.6 Providers' capacity to meet consumers choice

For this study domain variables were: contraceptive stock-out, available providers/clients FP decision making tools and providers ability for provision of different FP methods.

(i) Contraceptive stock-out

Table 9: Family planning stock-out by health facility types (n=26)

FP Stock out	HF-Type		
	Health centre	Dispensary	Total
No; (n)=	4	3	7
%	66.67	15.00	26.96
Yes (n)=	2	17	19
%	33.33	85.00	73.08
Total (n)=	6	20	26
%	100.00	100.00	100.00
Pearson chi2(2) = 6.2623 Pr = 0.012			

Source: Reports from the respective HFs for 2015

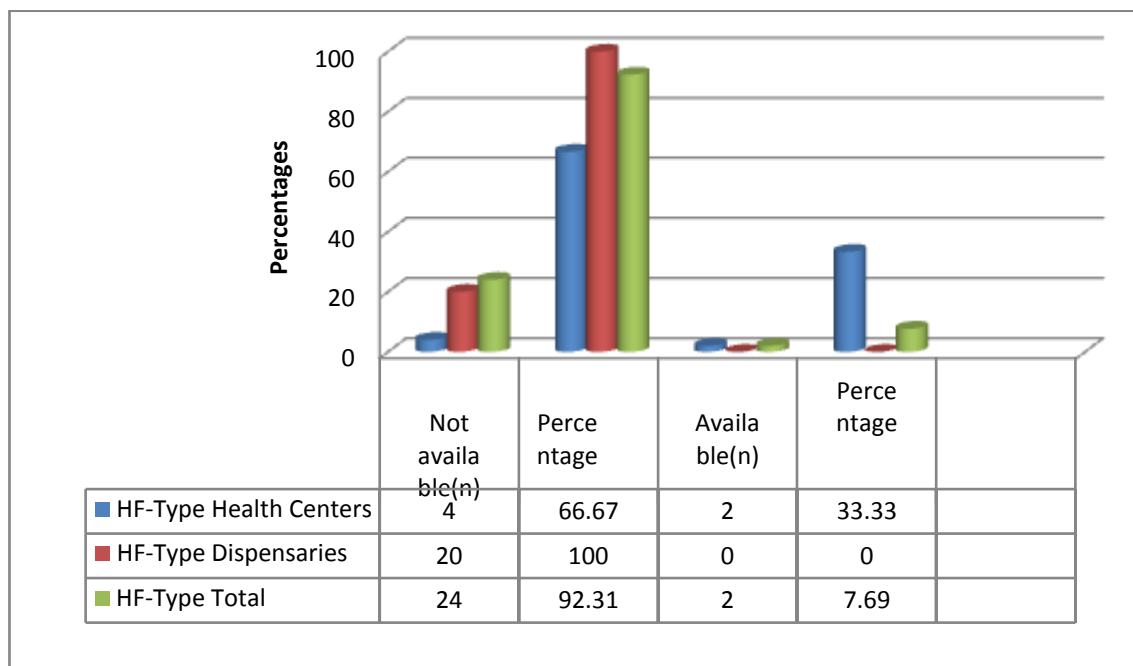
Findings as shown in Table 9 revealed that among 26 respondents 73.08% reported to have experienced frequent contraceptive stock-out in their facilities while only 26.96% reported that there was no contraceptive stock out observed in their health facilities. When contraceptive stock out was compared among two health facility type for FP findings indicated that among 6 respondents for HCs 66.67% said that there was no stock out observed in the past one year, while 33.33% revealed that there had been FP commodities and appliances stock-out for the same period during the survey time.

At dispensary level findings showed that among 20 respondents 15% said that there was no FP drugs and appliances stock-out, while 85.00% reported to have observed stock-out in the past one year. This was statistically significant with Pearson chi2 (1) = 6.2622 Pr = 0.012<0.05 at 95% confidence limit.

(ii) Family planning providers/clients decision making tool

With respect to providers/clients decision making tools overall findings revealed that among 26 respondents only 7.69% of HCPs' said that FP/providers/clients decision tools were available while the rest 92.31% said that there were no FP/providers/Clients decision making tool in their facilities. When this variable was compared among two health facility types findings in Figure 9 revealed that at dispensary level 20 respondents 100% reported that there was no FP/providers/clients decision making tool while at the health centre level 6 respondents 33.33% said there was providers clients decision making tool while 66.66% said there was no providers clients decision making tools. For those who responded that there were decision making tools, all declared that they also had received in-service training on the tool. These providers were all from Mkuyuni health center. This was statistically significant with Pearson chi2 $Pr=0.007 < 0.05$ at 95% confident limit.

Figure 10: Family planning providers/clients decision making tool by health facility types (n=26)



Source: Reports from the respective HFs for 2015

4.5 Logistic regression for outcome domain

The findings were that among 25 respondents age was correlated with current contraceptive uses by -0.02415, which indicates that at one unit increase in age contraceptive uptake decreases by 0.9 point. There was no statistically significant with $P > |z| = 0.598 > 0.05$ at 95% confident limit. This could mean that age alone was not determinant factor for contraceptive uses, that's why providers' capacity becomes important among contributing factors for contraceptive uses. When health facility category was correlated with current contraceptive users results picked -0.08 point which indicated that for both health facility categories, there was 0.92 point decrease in contraceptive uses, and there was no statistically different between contraceptive users and health facility type $P > |z| = 0.936 > 0.05$ at 95% confident limit.

4.5.1 Logistic regression for specific evaluation domains

Pearson correlation coefficient was applied to four variables on specific evaluation domains which were statistically significant with Pearson chi2 test at 95% confident limit. These were, experience, contraceptive stock-out, mentorship and availability of FP/ HCPs/clients decision making

(i) Family planning health care providers' experience

Table 10: Correlation coefficient of health care providers' experience and health facility types n (26)

Experiency~y	Coef.	Std. Err.	t	P>t	[95% Conf.	Interval]
2.health facility type	.2666667	.4263323	0.63	0.538	-.61324	1.146573
_cons	3.333333	.3739182	8.91	0.000	2.561604	4.105063

Source: Reports from the respective HFs for 2015

Findings as described in Table 10, indicate that compared to 2 health facility type, health care providers of 1 health facility type (health centers) are on average “0.266” less (significant). This reveals that compared to 2 health facility type, health care providers

for health centers are on average “0.7” less experienced although it was not statistically significant with $P>t$ 0.538 at 95% confident limit. The findings suggest that although experience seems to play a role for improving contraceptive uptake level with Pearson chi2, it was not the same with Pearson correlation coefficient when correlated with current contraceptive users.

(ii) Family planning care providers mentorship

Table 11 n=26: Correlation co-efficiency of mentorship and health facility types

Mentorship	Co-efficiency.	Std. Err.	t	P>t	[95% Conf. Interval]	
2.hftype	- .33333330.011	.1097134	-3.04	0.006	-.5597707	-.1068959
_cons	.3333333	.096225	3.46	0.002	.1347346	.5319321

Source: Reports from the respective HFs for 2015

When mentorship was correlated with health facility type, findings from Table 11 shows that, compared to lowest level of health facility type (dispensaries) health care providers of 2HF type on average 0.33 less (significant). This reveals that compared to 2 health facility type, health care providers for health centers are on average “0.7” more mentored which was significant with $P>t = 0.006 < 0.05$ at 95% confident limit.

(iii) FP providers/clients decision making tool

Table 12 n=26: Correlation co-efficiency of health care providers/clients decision making tool and health facility types

Decision Tool	Coefficiency	Std. Err.	t	P> t	[95% Conf. Interval]	
2.hftype	-.3333333	.1097134	-3.04	0.006	-.5597707	-.1068959
_cons	.3333333	.096225	3.46	0.002	.1347346	.5319321

Source: Reports from the respective HFs for 2015

Findings in Table 12 shows correlation co-efficiency of availability of FP providers/clients decision making tool with health facility type, the findings were, compared with the lowest level which was dispensaries (2HF type), HCPs of (2HFs type) are on average 0.333 less (significant). Therefore compared to dispensaries, HCPs

of health centers were on average 0.7 point fewer providers /client's tools availability. This was statistically significant at $P > t \ 0.006 < 0.05$ at 95% confident limit.

(iii) Family Planning stock-out

Findings as shown in Table 13 reveals that, compared to 2HFtype, health care workers of 1HF/type, are on average “0.5” increased (significant). Which means compared to 2 health facility type, health care providers of health facility type 1(health centers) are on average “0.5” more affected by FP-stock-out, statistically significant with $P > |t| \ 0.01 < 0.05$ at 95% confident limit. .

Table 13 n=26: Facility types: Correlation co-efficiency of family planning stock-out and health types

FP-Stock-out	Co-efficiency.	Std. Err.	t	P> t	[95% Conf. Interval]	
2.HF/type	.5166667	.1872375	2.76	0.011	.1302275	.9031058
_cons	.3333333	.1642181	2.03	0.054	-.0055962	.6722629

Source: Reports from the respective HFs for 2015.

CHAPTER FIVE

DISCUSSION OF EVALUATION FINDINGS

5.1 Contraceptive uptake

This evaluation research study was carried out in Morogoro district council from February to July 2015 and it had two major parties: (i) health care providers' capacity and (ii) contraceptive uptake (Clients). In this study we investigated factors towards low contraceptive uptake, extent to which providers' capacity matters. The discussion will focus on findings drawn from the study frame of randomly selected 14 government health facilities which included 3, health centers and 11 dispensaries.

A total of 51 study sample which comprised of 26 convenient selected health care providers and 25 randomly picked RCH/FP clients were obtained. This discussion will start with main evaluation objective, which was contraceptive uptake level and followed by domains under health care providers' capacity which carries specific evaluation research objectives.

These findings suggests that among 25 RCH/FP clients, contraceptive uptake in Morogoro DC was low at 28%, despite that majority of clients 92% confirmed as having knowledge on contraceptives.

This finding corresponds with Tanzania national contraceptive uptake which is at the same level 28%, but less than that of Morogoro region which is at 37% (MOHSW, 2013). When compared with countries like Kenya which is our neighbor and both are developing countries, the contraceptive uptake was low than that of Kenya which was at 39% (Okech, 2011).

Also when age was correlated with current FP uses it picked coefficient of -0.024 which means that a unit of increase in age negatively affected FP uses by -0.024 point. There was no statistically significant different between age of clients and contraceptive uses with $P > z -0.43 > 0.05$ at 95% confident limit. Therefore although age was correlated with

current contraceptive users but it was revealed that it was not an independent factor that could improve contraceptive uptake hence factors under capacity for health care providers should be considered as well.

Also when current contraceptive uses were correlated with availability of health care providers it picked 0.016 which means that on average 0.084 increase in number of health care providers can contribute into increase in contraceptive uses (not significant). This was not significant with Pearson correlation coefficient at $P > |z|$ 0.423 which indicates that although availability of health care providers was correlated with current FP users but it was not an independent predictor variable for improving contraceptive uptake level in the community. Therefore from these findings there is a need to support capacity building strategies for health care providers in order to enhance rapid and stable increase in contraceptive uses for the district.

Likewise when current contraceptive users were compared with health facility type there was no statistically significant difference on uptake level among health facility categories Pearson chi2 (1) Pr = 0.739 > 0.05 at 95% confident limit. This finding indicates that contraceptives utilization does not depend on type of health facility which means that capacity building for health care providers should be strengthened. This finding correspond with study done by Jitta et al. (2008), which found similar observation that age of client, knowledge and waiting time were among factors that prevent FP service utilization due to lack of capacity. Therefore improving clients contraceptive uses does not depend on change of age for clients or availability of health care providers alone. This could mean that government effort on maternal mortality reduction can as well be affected as family planning utilization plays a major role (UNFPA&PATH, 2010)

Hence enabling health care providers through in-service training for family planning, mentorship, availability of working tools as well as availability of contraceptives should be given priorities at all level of family planning service delivery points. These findings suggest that family planning clients are obtained in a passive way and there is no

proactive initiative to sensitize community members about advantage of contraception's, this has resulted into the low contraceptive uptake for the district.

5.1.1 Availability of Health care providers in terms of number and cadre

Finding shows that for all health facilities visited during the study survey among 26 respondents there was severe shortage of HCPs' at dispensary level compared to Health centers. Dispensaries suffer cadre inadequate as well as uneven distribution of health care workers than Health centers. With respect to dispensaries the study found that no dispensary had reached minimum number of health care providers required according to national health care staff guideline.

There were six dispensaries among eleven with less than 50% of clinical health care providers and severe shortage of HCPs was observed at Magogoni dispensary where there were only two HCPs with deficit of 75% of required clinical HCPs per dispensary. For health centers findings revealed that all three health centers visited there were over 50% of clinical health care providers. However all three health centers had deficit of clinical health care providers at various levels. Overall most affected health center was Kiroka where there was deficit of 46.2% of required number of health care providers. Findings further revealed that only Ngerengere health center had lab technician while the rest had assistant lab technicians, this is great deficit as these cadres concerns with assisting doctors in confirming patient's diagnosis.

Furthermore findings in Figure 4 revealed that health facilities with few health care workers also the contraceptive uptake was low. The findings further revealed that as number of health care workers increase the contraceptive uptake also increased although there was no much difference. This indicates that number of health care providers contributes to utilization of contraceptives as where there were many health care providers also the utilization of contraceptives increased.

As for cadre no health facility visited had adequate cadre, there was inconsistent cadre availability for both health centers and dispensaries. When cadre was cross tabulated

with ability for provision different methods of family planning findings in Figure 6 revealed that 40% of enrolled nurses were with skills for provision of both SACPs and LACPs. For clinical officers their skills for provision of SACP+LACPs was 20%, which was the same as trained nurses which also their skills for provision of SACPs+ LACPs was 20%. Other cadre was assistant medical officers whose skills for SACPs+ LACPs was at 10%, followed by nurse assistants whose skills for provision of SACPs+ LACPs was at 10%. The last cadre was that of assistant clinical officers which had no skills for provision of LACPs but had skills for only SACPs. There was no statistical different between cadre and ability for provision of different family planning methods with Pearson chi 2(5) Pr = 0.155. This indicates that as it was for number of clinical HCPs cadres for health care providers were not satisfactory at all level of health delivery.

This implies that enrolled nurses, clinical officers and trained nurses are cadre with skills for provision of both SACPs and LACPs among health facility levels in the community. Therefore efforts for improving family planning service provision should be directed to these cadres. However no cadre had skills for provision of permanent methods of family planning in all health facilities visited lack of which could negatively affect contraceptive uptake as women and men who wish to stop child bearing can't get the service. For all health centers only Ngerengere had lab technologist. This is a great deficiency as these cadres are essential when it comes to disease diagnosis.

These results correspond with the findings published by (MOHSW, 2008), which found that there was shortage of government health workforce as well as capacity for provision of different health services family planning been among them. The shortage of health workforce was at 65% in Tanzania during the time study was done. This findings indicates that new strategies need to be deployed focusing on number, capacity and skills of health care providers in order to facilitate increase in contraceptive uptake at the community and hence national level.

5.1.2 Health care providers capacity

For this domain variables were; Training for different contraceptives, trained for data generation and use, FP skills, experience and mentorship. Although training for FP and other health services, seems to be an important trigger motivator for program performance and success (MOHSW, 2010). This was not the same for Morogoro district council where evaluation results revealed that among n=26 study respondent in all 14, visited health facilities only few 26.9% had ever received at least one type of family planning training for the past one year while 73.08% had not. For those who reported that they had received FP training some were trained for only short acting contraceptives while others reported to have received both short acting and long acting contraceptive methods. These findings revealed that no one had ever received training for permanent acting contraceptive methods and there was no statistical significant different between FP training and health facility type Pearson chi2 (1) Pr = 0.518>0.05 at 95% confident limit.

Furthermore study also revealed that for both health centers and dispensaries there was no person specifically allocated for FP service provision. This means that FP lacks focal person specifically for its services. Therefore findings reveal that not only availability matters when it comes to contraceptive uptake level in the community. Other factors like ability and skills which can be obtained from in-service-training and mentorship should be given priority.

This means that Morogoro district council suffers lack of allocation of health care providers specifically for family planning program service provision. In this case health workers are obliged to takes responsibility of providing family planning services among other services when a responsible person with required skills is not available. This practice could lead into lack of inefficiency and accountability.

Similar findings were observed from study on assessment of health system strengthening in Rwanda by Maurice et al. (2012) which revealed that adequate health workforce,

with training and skills improves contraceptive uptake as well as other services. Also according to Tanzania health system assessment (MOHSW, 2010) they found that there was a gap for individual health care providers' capacity for provision of essential comprehensive health services including permanent method of family planning due to lack of training. This means that where capacity for delivering health services more important permanent methods of family planning are lacking can indirectly affects contraceptive uptake as clients who wish to stop child bearing won't be able to fulfill their desire.

For data generation and use overall findings suggested that among 26 respondents those who were trained on data were 19.23% while those who were not trained on data were 80.77%. When data generation and use was compared with health facility types there was no statistical significant different between training on data generation and use and health facility types. With Pearson chi2 (1) $Pr=0.856$ which is less than 0.05 at 95% confident limit. This could mean that training on data generation and use could enhance contraceptive uptake in the community because health care providers will value data they collect and ensure quality in data collection. Also this is supported by findings done in Tanzania (MOHSW, 2010) to asses' health system performance, which indentified that there was a capacity gap for health care providers. This gap could only be filled by increasing number of health care workers as well as providing in-service training both for data generation and use and other methods of family planning.

With respect to experience on FP and health service delivery which was categorized in to four groups as follows, less than one year, one year to three years, over three years but less than five years, and over five years of experience. Findings indicated that 80% of study respondent had experience of over five years in both FP and general health service delivery and was significant Pearson chi2 (3) $Pr = 0.047 < 0.05$ at 95% confident limit. With logistic regression although experience was correlated with contraceptive users but was not independent predictor factor that can influence contraceptive uptake and was not statistically significant with $P > t \ 0.538 > 0.05$ at 95% confident limit. This means that

experience could be among factors which could enhance contraceptive uptake together with other capacity building factors put into consideration. Furthermore when experience was compared with family planning utilization findings

With respect to training for FP advocacy and trained for FP adolescent and youth the study revealed that neither at dispensary level nor at health center no one had ever receiver both type of training for the past one year. From these findings family planning program needs to review its current strategies and strengthen advocacy on family planning for both community and youth. Therefore family planning program can learn from findings of a study done in Rwanda by Maurice et al. (2012) on impact of health system strengthening on coverage of maternal health services where findings confirmed that there was an increase of contraceptive prevalence (351% increase v/s 150%), The primary factors for this observed achievement were increase in health workforce and their skills including advocacy.

In Figure 7 findings suggested that among 26 respondents 7.69% had been mentored for family planning provision in the past one year while 92.31% were not mentored. When mentorship was compared with health facility types it was reveled that mentorship was hardly done for health facilities in the periphery. At the level of dispensaries among no health care provider had ever received mentorship for FP service provision in the past one year. This was significant with Pearson chi2 (1) Pr = 0.007<0.05 at 95% confident limit. Also when logistic regression was applied it was significant with $P > |t|$ 0.006<0.05 at 95% confident limit. From these findings it shows that mentorship if done appropriately could contribute into increase of contraceptive uptake in the rural area where majority of the study population lives.

These results correspond with Tanzania health system assessment report (MOHSW, 2010). This report concluded that there was lack of training for health care workers at all level, and suggested that capacity building should focus on- job training and mentorship, as these when applied appropriately can results into improving not only quality but safe

delivery of health services. This was also identified as the means of efficient use of both human resource as well as financial resources.

5.1.3 Providers capacity in FP supply forecasting

Findings indicated that, there was very little number of health care providers who received FP supply forecast training for the past one year. Among 26 respondents majority of HCPs' 57.69% had never had any type of either FP forecast or for other health services. Also findings revealed that 30.77% of health care providers had received FP forecast training in the past one year while 57.69% were not trained and 11.54% did not know whether there was any type of FP supply forecast training. Also when this variable was compared with health facility types there was no statistically difference between FP forecast training and health facility type Pearson $\chi^2(2)$ Pr = 0.318 > 0.05 at 95% confident limit.

This has implication for FP program performance as train people for FP supply forecasting enables them to acquire both knowledge and skills as capacity and could improve contraceptive uptake at all levels. Also training health care providers on data generation and use empowers them and enables them to own their data and this could improve data quality and credibility at the grassroots. This is supported by study done by Maurice et al. (2012) which found that among factors which could increase contraceptive uptake was training for both data and contraceptive methods. This finding indicates that training for family planning forecasting is done at very low level which could not produce any difference among health facility levels. Efforts should be made to ensure provision of training for FP forecasting to enhance increase in contraceptive uptake level.

5.1.4 Providers capacity to meet consumers' choices

This domain had, FP commodity availability, family planning methods stock-out, Providers/Clients decision making tool and able to provide all types of contraceptives as variables. The overall findings suggest that among 26 respondents reported that although there were FP drugs and appliances' in all 14, health facilities. Further findings revealed that contraceptive availability was of varied type and no health facility was fully equipped with all FP methods. FP drugs and appliances' were inconsistently available. The predominant type of method was oral contraceptives, followed by oral plus injectable depo provera, implanon and condoms. These were followed by diaphragm, spermicidal and appliances' for both tub ligation and vasectomy. There was no statistical significant difference between commodity availability and health facility type with Pearson chi2 $P = 0.432 > 0.05$ at 95% confident limit.

This indicated that family planning drugs and appliances' availability was a problem in majority of health facilities visited. The reason poses by majority of respondents was that Medical Store Department (MSD) was the sole distributor and that the distribution was not provided as scheduled. Furthermore respondents revealed that there was frequent delay in distribution of contraceptive drugs and appliances' and this contributes much into inconsistent availability. For these findings, consistent availability of contraceptives could contribute into improving the uptake level at the community and hence national level. These findings are supported by the Primary Health Service Development Program 2007-1017, which was launched in 2007. Among the program focus was strengthening equipment and drug supplies to ensure consistent availability of service provision including family planning (MOHSW, 2007).

With FP appliances and commodities stock-out, among 26 respondents most of them 73.08% reported sporadic FP commodities and appliances stock-out. This was statistically significant with Pearson chi2 (1) $P = 0.012 < 0.05$ at 95% confident limit when it was compared to health facility types. When logistic regression was applied to look into correlation of FP commodity stock-out among health facility types it was

significant with $P < 0.05$ at 95% confident limit. Reason for FP stock-out which was reported by many was that medical store department was a sole distributor of contraceptives but they were not supplying FP commodities as scheduled.

This indicates that family planning commodity stock out was an independent predictor of contraceptive uptake and efforts should be made to ensure that there is consistent availability of FP drugs and commodities at all level of health delivery. These results indicated that lack of contraceptives could have influence in contraceptive uptake. These findings correspond with NFPCIP, which indicated several factors contribute into regional variation of contraceptive uptake. Among the factors were infrastructure which is associated with FP supply and lack of skilled health providers (MOHSW, 2013)

With respect to providers/clients decision making tool among $n=26$ majority, 92.3% of the respondents reported that in their health facilities there were no providers/clients decision making tool and that they had never seen it, and this was significant with Pearson $\chi^2 (1) P = 0.007$ which is less than 0.05 at 95% confident limit when this was compared with health facility types. Also when this variable was correlated with health facility types it was statistically significant with $P < 0.006$ which is < 0.05 at 95% confident limit. For these findings availability of FP/providers clients decision making tool was seen as independent predictor of contraceptive uptake. These findings revealed that availability of family planning providers/clients decision making tool seems to contribute significantly to contraceptive uptake level. This could increase clients' freedom of choice on type of contraceptive methods they prefer.

Findings also revealed that all respondents reported as not being able to provide all types of contraceptive methods. This corresponds with studies done by Calhoun et al. (2013) on health care providers imposed restriction to client's access to family planning in Urban, Uttar, and Pradesh, India. The study found that health care providers' contributes into preventing clients to receive FP methods of their choices. The study suggested that, there was a need for in-service training to health care providers' with focus on reviewing current guidelines and eligibility for provision of different types of FP methods.

Therefore findings from this study implies that there is a need for family planning program managers, to make purposeful effort to ensure that in all health care delivery point there are consistent availability of FP drugs and appliances. Family planning managers should ensure that, all health facilities are provided with providers /clients decision making tools, train and provide mentorship to health care providers' on different FP methods. These efforts if instituted appropriately can enhance increase in contraceptive utilization at the community level.

CHAPTER SIX

SUMMARY, CONCLUSION AND IMPLICATIONS

6.1 Introduction

This chapter presents the summary, conclusion and policy implication of the study. The summary will provide key study findings. The conclusion will show what the study finding suggests and recommendation part will show what strategies need to be undertaken. The policy implication will show what could happen if effective measures would not be taken into consideration.

6.2 Summary

Overall evaluation question was to determine the role played by health care providers capacity in the uptake of contraceptives in Morogoro district council. The study collected both secondary data on contraceptive uptake level and primary data. Secondary data were obtained from RCH/FP office while primary data were collected among clients who came for RCH/FP clinic services.

Evaluation research study major explanatory domains were, availability of Health care providers by number and cadre, providers' capacity in terms of skills, experience, health care providers' advocacy capacity, FP supply forecasting capacity, and capacity to meet contraceptives consumer's choices. All these major domains contained sub variables with their corresponding measurement as indicated in Table 1. The literature comprises of theoretical and empirical studies and information's related to factors which influence contraceptive utilization and the roles that health care providers plays for enhancing contraceptives uptake.

(A) Summary of evaluation outcome domain

The overall findings for contraceptive uptake were 28%. It was of interest in this study to cross tabulate and compare current contraceptive utilization and availability of health care providers. Findings in Figure 4 revealed that where health facility had number of health care providers below 50% also had few 25% contraceptive users. While Health facilities whose number of health care providers were between 50-75% had 28.57% current contraceptive users. Findings further revealed that health facilities, whose number of health care providers was above 75%, had (33.33%) contraceptive users. This could mean that where health facility had less number of health care providers also the level of uptake of contraceptive was negatively affected although the difference was marginal. There was no statistical significant different between current contraceptive users and availability of health care providers among health facilities with Pearson chi2 (2) $Pr = 0.933 > 0.05$ at 95% confident limit.

The study also revealed that majority of respondents 92% confirmed as having previous knowledge on contraceptive methods but there was no statistically different between previous contraceptive knowledge and current contraceptive users with Pearson chi2 (1) $Pr = 0.358 > 0.05$ at 95% confident limit. This implies that previous contraceptive knowledge does not have influence on contraceptive uptake, which means that other factors within health care providers' capacity should be considered.

(B) Summary for independent domains

There were five independent domains as shown in Table 1. For the first domain which was health care providers availability in number and cadre overall findings revealed that there was great deficit of both number and cadre among all types of health facilities.

Further findings revealed that among 26 respondents overall shortage of health care providers at dispensary level was 46.7% and at health centers level was 28.6%. Findings for cadre revealed that at dispensary level cadre deficit ranged from 0% to 62.5%. Great shortage of cadre was found at the following dispensaries, Kibungo Juu, Kikundi,

Mfumbwe, Tulo, Bwakila Chini and magogoni dispensaries where each dispensary had deficit of 62.5% of cadre respectively. Further findings revealed that cadre deficit at health center level ranged from 0% to 35.8%. Great deficit was found at Kiroka health center with 21.5% and Mkuyuni health center with 35.8% deficit. Available cadre was cross tabulated with ability to provide different types of family planning methods. Findings revealed that most cadre were able to provide SACPs and LACPs while no cadre was able to provide permanent method of family planning methods. There was no statistical difference between cadre and ability to provide different types of contraceptive methods with Pearson chi 2(5) Pr = 0.155.

The second independent domain was Health care providers' capacity in terms of training, skills, data generation and use, mentorship and experience. For training in family planning provision overall findings among 26 respondents revealed that 26.9% had received training for family planning and 73.08% were not trained in the past one year. For those who were trained they confirmed that they had received either short acting or long acting contraceptive methods. Further findings revealed that no health care provider was trained for permanent acting contraceptives. There was no statistical difference between training for family planning and health facility types with Pearson chi2 (1) Pr= 0.518>0.05 at 95% confident limit.

For data generation and use overall findings among 26 respondents revealed that 19.23% were trained on data generation and use while 80.77% were not trained for the past one year. There was no statistical difference between training for data generation and use and health facility types with Pearson chi2 (1) Pr=0.856>0.05 at 95% confident limit.

Overall findings for mentorship in Figure 7 suggested that among n=26 respondents 7.69% had been mentored for family planning provision in the past one year while 92.31% were not mentored. When mentorship was compared with health facility types it was statistically significant with Pearson chi2 (1) Pr = 0.007 and Pearson correlation coefficient with $P > |t|$ 0.006<0.05 at 95% confident limit. From these findings it shows

that mentorship if done appropriately could contribute into increase of contraceptive uptake in the rural area where majority of the study population lives.

For experience overall findings revealed that among 26 respondent 80% had over five years of experience in family planning provision while 20% had experience of less than five years. This was significant with Pearson chi2 (3) $Pr = 0.047 < 0.05$ at 95% confident limit. When experience was correlated with current contraceptive uses it indicated that it was not independent predictor variable for contraceptive uses. This was not significant with $P > |t| 0.538 > 0.05$ at 95% confident limit.

The third independent domain was health care providers' advocacy capacity for health centers and dispensaries. The overall findings among 26 respondents revealed that no health care provider had received any type family planning advocacy training for the past one year in these two levels of health care delivery points. This indicates that there are no strategies in place to enable health care personnel acquire and practice advocacy knowledge in the community.

The fourth independent domain was FP supply forecasting capacity which had the following variables, family planning forecasting training and ability to use excel computer program. The overall findings among 26 respondents revealed that 30.77% of health care providers had received FP forecast training in the past one year. Furthermore 57.69% were not trained and 11.54% of health care providers were not aware whether such type of training was available. Findings further revealed that there was no health care provider who was able to use excel computer program. When this variable was compared with health facility type there was no statistical difference between FP forecasting training and health facility types with Pearson chi2 (2) $Pr = 0.318 > 0.05$ at 95% confident limit.

The fifth independent domain was providers' capacity to family planning consumer's choices. The variables were FP commodities availability, FP stock-out and availability of provider's clients' decision making tools. Findings among 26 respondents revealed

that family planning drugs and appliances' were inconsistently available for both health centers and dispensaries. Further findings revealed that 73.08% of respondents reported to have experienced FP drugs and commodities stock out at their respective health facilities. When this was compared with health facility type it was statistically significant with Pearson chi2 (1 Pr = 0.012 and Pearson correlation coefficient with $P > 0.006$ which is < 0.05 at 95% confident limit.

For health care providers/clients decision making tool findings revealed that 92.3% of health care providers reported that there were no tool in their respective health facilities. When this was cross tabulated with health facility types it was significant with Pearson chi2 (1) Pr 0.007 and with Pearson correlation coefficient it was significant with $P > 0.006$ which is < 0.05 at 95% confident limit.

6.3 Conclusion

Findings from this study research had revealed that availability of health care providers, equal and even distribution of cadre for health care providers, mentorship, availability of providers/clients decision making tool and consistent contraceptive availability are among factors in favor of contraceptive uptake. Therefore health care providers' capacity had been proved as an important domain which can contribute into improvement of contraceptive uptake level in the community. District Health Management team should ensure consistent availability of contraceptives as well as providers/clients decision making tools, for both health center and dispensaries' levels.

6.4 Program implications

Health care providers' availability is very crucial for family program success. This is important because majority of government health facilities among fourteen visited during time of the survey had insufficiency number of health care workers as well as cadre. According to the descriptive results which indicated that no health facility had HCP specific for family planning, this means that available HCPs offer both RCH/FP services as well as other health services. Therefore lack of health care providers at all

level of health delivery will likely affect family planning program success. Likewise mentorship is also considered as strong none monetary motivation when provided frequently and appropriately. Family planning program is likely to be affected if mentorship will not be given priority because mentorship provides opportunity for health care providers to update their knowledge and skills also act as none monetary motivation.

Likewise when there is constant availability of Contraceptive drugs and appliances' it is more likely that there will be positive client's responsiveness towards use of contraceptives. Therefore frequent contraceptive stock-out would negatively affect contraceptive use and decelerate contraceptive uptake rate. Availability of FP providers/clients decision making tool enables health care providers to come with agreement with RCH/FP clients on which type of contraceptive to use, hence its' availability will increase freedom of choice for clients. This will reduce health care providers restrictive, and dominance on decision as to which appropriate FP method for their clients. If these tools are not available as has been observed in majority of health facilities visited, and if nothing will be done, FP program is likely to face low contraceptive uptake rate in future.

Therefore mentorship for family planning, consistent availability of contraceptives, health care providers and availability of providers /clients decision making tools are important variables for enhancing contraceptives uptake. Hence if DHMT needs to improve contraceptive uptake level in future, effort to strengthen those areas should be among proprieties. The strategy for enabling health care providers should aim at increase mentorship assistance for family planning, providers' clients' decision making tools and consistent availability of different type contraceptive drugs and appliances at all level of health delivery.

6.5 Recommendations

- District Health Management Team should ensure that there are equal, even and adequate number of health care providers in all level of health facilities
- Frequently mentorship should be given priority and be provided every year for health care providers' who deals with family planning.
- DHMT should ensure that there is constant availability of contraceptives and Providers/clients decision making tools in each level of health facility type.
- DHMT should ensure constant availability of all types of family planning drugs and appliances' at all levels of health delivery.
- National Costed Family Planning Program Implementation strategies set forward in 2010 should be monitored for their implementation towards the end of 2015.

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APPENDICES:

APPENDIX 1

QUESTIONNAIRE FOR HEALTH WORKERS

How are you Sir/madam, my name is Stephen J Mduma, i am studying Masters of Health Monitoring and Evaluation at Mzumbe University Tanzania. I am conducting an evaluation study on providers' capacity for provision of safe and effective family planning services among selected health facilities in Morogoro DC. The overall goal of this evaluation is to look into what contributes to the uptake of contraceptive in the study population. I am requesting for your time and asking you to participate in the study by answering questions regarding provision of FP services in your health facility. This will not take more than ten minutes of your time, would you like to participate, yes ☐ no ☐

Sign_____ Thanks so much.

Note: Please put tick in appropriate box where there are answer options

SECTION A: GENERAL INFORMATIONS			
SN	Questions	Responses	Codes
A1.	Name of health facility	_____	
A2.	District	_____	
A3.	Category of health Facility	i. Health Center ☐ ii. Dispensary ☐	1 2
SECTION B: DEMOGRAPHIC/EDUCATION AND PROFESSIONALS BACKGROUND			
	Sex	Male ☐ Female ☐	1, 2
B1.	Professional training	i. Clinical officer ii. Assistant Clinical Officer iii. Trained Nurse iv. Nurse Assistant v.. Others _____	1 2 3 4 5
B2.	How many years have you worked in the health sector	_____	
B3.	What is your level of education	i. Primary education ☐ ii. Secondary education ☐ iii. College graduate ☐ iv. University graduate ☐	1 2 3

B4.	Title (e.g. MO In -charge	_____	
SECTION C: INFORMATION CONCERNING STUDY DOMAINS			
Availability of FP providers			
C1.	Do you know the number of clinical staff required for this HF?	Yes ☐ No ☐	1, 0
C2.	How many clinical (staff) are working in this health facility?	_____	
C3.	Do you think the number of staff is adequate for provision of quality services?	Yes ☐ No ☐	1, 0
C4.	Do you think there is a need to have additional number of staff?	Yes ☐ No ☐	1, 0
Providers' capacity in terms of skills, experience, mentorship, and general and use			
D1.	Are you offering FP services in this dispensary?	Yes ☐ No ☐	1, 0
D2.	How long have you been offering FP services	_____	
D3.	Have you received FP training in the past one year	Yes ☐ No ☐	1, 0
D4.	If yes what were you specifically trained for	_____	
D5.	Which FP services are you able to provide?	i. Short (pills,Injectable, condoms,) ☐ ii. Long (Norplant, IUCD) ☐ iii. Permanent (Vasectomy, Tuboligatin) ☐	1, 2 3
D6.	Is there a staff specifically for FP services?	Yes ☐ No ☐	1, 0
D7.	If no, does it mean every clinical staff can offer FP services in this health facility	Yes ☐ No ☐	1, 0
D8.	Have you had mentorship assistance for FP in the past one year?	Yes ☐ No ☐	1, 0
D9.	If yes which FP services were you assisted/mentored for?	_____	
D10.	How was mentorship done?	i. In-service training ☐ ii. Seminar ☐	
D11.	Where did this mentor come from?	i. DMO office ii. (NGO) _____	1 2
D12.	After mentorship are you able to offer what you were trained or	Yes ☐ No ☐	1, 0
D13.	Are you collecting FP information (Data)?	Yes ☐ No ☐	1, 0
D14.	Were you trained on how to collect data and filling the register	Yes ☐ No ☐	1, 0
D15.	Which FP data collecting tool are you using	_____	
D16.	Are you able to use data you are collecting to improve FP services? If yes verify _____	Yes ☐ No ☐ Copy data analysed ☐	1, 0

Providers capacity for FP advocacy			
E1.	Have you been trained for FP advocacy?	Yes ☐ No ☐	1, 0
E2.	If yes? Are you conducting FP sensitization meeting for leaders (national local)	Yes ☐ No ☐ If yes verify _____	1, 0
E3.	How many sensitization meetings are you required conducting in a year?	_____	
E4.	How many leaders meeting have you conducted this year	_____	
E5.	(a)Had you been able to convince leaders to assist you in FP provision? (b)If yes how _____	Yes ☐ No ☐	1, 0
E6.	Have you had training on provision of youth FP education?	Yes ☐ No ☐	1, 0
E7.	If yes had you been offering community youth FP education?	Yes ☐ No ☐ If yes ? obtain a copy _____	1, 0
E8.	(a)Does adolescent and youth attend for service in this clinic? (b) If yes how many attend per month?	Yes ☐ No ☐ (b) _____	1, 0
Providers capacity in FP supply forecasting			
F1.	Have you had FP forecasting training?	Yes ☐ No ☐	1, 0
F2.	If yes, Which type of training was that?	_____	
F3.	Are you able to use Excel computer program for FP forecasting?	Yes ☐ No ☐	1, 0
F4.	Have you had contraceptive stock out in the past		
Providers' capacity to meet FP consumers' choice?			
G1.	Which types of FP commodities always available in this HF?	_____	
G2.	Had you at any time had FP commodity stock out in the past one year?	Yes ☐ No ☐	1, 0
G3.	Does this dispensary have FP client/providers decision making tool? If Yes Verify? obtain copy	Yes ☐ No ☐	1, 0
G4.	Were you trained on how to use the Provider/clients decision making tool?	Yes ☐ No ☐	1, 0
G5.	Are you able to use the tool for decision making?	Yes ☐ No ☐	1, 0
G6.	Are you able to provide all types(SACP,LACP and PACP) of FP?	Yes ☐ No ☐	1, 0

APPENDIX 2

QUESTIONNAIRE FOR FP CLIENTS

How are you Sir/madam, my name is Stephen J Mduma, i am studying Masters of Health Monitoring and Evaluation at Mzumbe University Tanzania. I am conducting an evaluation study on providers' capacity for provision of safe and effective family planning services among selected health facilities in Morogoro DC. The overall goal of this evaluation is to look into what contributes to the uptake of contraceptive in the study population. I am requesting for your time and asking you to participate in the study by answering questions regarding provision of FP services in your health facility. This will not take more than ten minutes of your time, would you like to participate, yes ☐ no ☐

Sign_____ Thanks so much.

SECTION D: INFORMATION ON CONTRACEPTIVE UPTAKE (CONSUMERS)			
SN	Questions	Responses	Codes
1.	Name of health facility	_____	
2.	District	_____	
3.	Category of health facility	i. Health Center ☐ ii. Dispensary ☐	1 2 3
SECTION B: DEMOGRAPHIC/EDUCATION BACKGROUND			
	Sex	Male ☐ Female ☐	1, 2
1.	What is your age in years?	_____	
2..	What is your level of education	i. Primary education ☐ ii. Secondary education ☐ iii. College graduate ☐ iv. Post graduate ☐	1 2 3 4
3.	Marital status	i. Married ☐ ii. Single ☐ iii. Divorced ☐ iv. Cohabiting ☐ v. Widow ☐	1 2 3 4 5
Contraceptives uptake			
1.	Do you have knowledge about modern methods of Family Planning before coming to this	Yes ☐ No ☐	1, 0

	clinic?		
2.	Have you ever used any type of contraceptive? (If yes go to quest 3)	Yes ☐ No ☐	1, 0
3.	To what extent had you been using contraceptives	1= When i am in danger days 2= Only when i am afraid of pregnancy 3=When husband is around 4= During suckling 5= Always until when I need another child	Likert scale Unit Grade 1= Poor 2= Average 3= Good 4= Very good 5= Excellent
4.	If no why don't you use FP?	_____	
5.	Are you currently using any modern contraceptive method?	Yes ☐ No ☐	1, 0
6.	What type of contraceptive are you using	_____	
7.	Was this type of contraceptive your personal choice?	Yes ☐ No ☐	1, 0
8.	If no who chose for you?	_____	
9.	How long have you been using contraceptives?	i. _____ Months ii. _____ Years	
10.	Have you had any problem with contraceptives use?	Yes ☐ No ☐	1, 0
11.	Are contraceptives always available when you need them?	Yes ☐ No ☐	1, 0
12.	Were you given education about contraceptives uses by a provider?	Yes ☐ No ☐	1, 0