

DETERMINANTS OF UNMET NEED FOR MODERN CONTRACEPTIVES AMONG MARRIED WOMEN OF REPRODUCTIVE AGE (15-49 YEARS)

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ABSTRACT

This study was conducted in Moshi District at Okaoni and Kibosho Magharibi Wards. Data was collected from married women of reproductive age 15-49 years, determining the current status of unmet need for Modern Contraceptives (MC), assessing reasons for unmet need for MC and identifying current initiatives taken by stakeholders to solve the problem of unmet need. The study used cross-sectional research design involving 96 women. The findings showed unmet need for MC was 59.4% of all respondents. Result further indicated that unmet need for MC was significantly related to distance from home to health facility in which women living far from health facilities were more likely to report unmet need relative to those living near to health facilities. Improvement of women access to MC through provision of MC to different public health facilities which is freely provided to women was reported as one of the initiatives taken. Conclusively, unmet need for MC is high among women of reproductive age and is because of distance from health facilities in most part of the study area. Study recommended that government and other stake holder should ensure MC are available and accessible by establishing health post after a few kilometers.

KEYWORDS: Modern Contraceptives.

1.0. INTRODUCTION

Around the world, there are a lot done in regard to modern contraceptive use, and unmet needs for modern contraceptives. In 2017, the modern contraceptive prevalence rate (mCPR) among women of reproductive age who were married or in a union in the Family Planning 2020 (FP2020) focus countries was reported to be 45.7% (95% uncertainty interval [UI] 42.4–49.1). It was similarly reported that, unmet need for modern methods was 21.6% (19.7–23.9) (Cahill et al., 2018). The growth of use of MC when compared between 2012 and 2017 for married or in a union has increased by 28.8 million globally, while at regional levels, Asia has seen growing from 51.0% to 51.8%, which is slow growth when compared to the Africa growth of 23.9% to 28.5%. For individual Africa country level, Kenya, Mozambique, Malawi, Lesotho, Sierra Leone, Liberia, and Chad registered very good success of rapid increases in relative to what was expected in 2012 (Cahill et al., 2018).

One of the major setbacks that most developing countries are facing especially in African countries in the process of attaining true development is poverty. Poverty eradication is one of the cross-cutting issues in the world and one of problems facing most of African countries. According to (Odello, 2011), poverty become a problem in most of developing countries in sub-Saharan Africa where by majority of people living on less than \$1.25 a day. Tanzania as one of African countries also suffers from the problem of poverty. Tanzania government has implemented different initiatives toward eradicating poverty in the county (Kerr, 1981). These initiatives have proved failure as the rate of poverty is still high. Rapid population increase became a crucial factor that hindering poverty eradication throughout the country as more investment implemented by the government aim at provide social services rather economic development.

According to Tanzania household 2012 census, annual growth rate was 2.7 percent with population of under 15 years representing 44.1% of the whole population and average house hold size was 4.8 people. Infant and under

five mortality increase became high as a result of rapid increase of population which hinder good access of social services particularly health services. About 36 out of 1000 infant and 51 out of 1000 under five live births die in rural area (National Bureau of Standard, 2013). In order to reduce fertility increase in Tanzania, the government has introduced the use of modern contraceptives to all women of reproductive age between 15-49 years as one of way to overcome the problem of rapid population growth. Also, the government restructured its population policy to ensure availability and accessibility of modern contraceptives to women of reproductive age residing in both urban and rural areas (National Bureau of Standard, 2013). Availability of multiple modern contraceptive methods at government health facilities has become the rule rather than the exception, and the number of health providers in government facilities who have received formal training in the provision of modern contraceptive methods has increased (Ilene *et al.*, 2011).

Despite of all intervention implemented, fertility remain at higher rate. One of the factors limiting reduction of high fertility rate is unmet need for modern contraceptives. Total unmet need for modern contraceptive use is still high in many African countries. Tanzania modern contraceptive prevalence rate (mCPR) is given as 34.9 percent (with confident intervals of 27.3 – 42.3), while unmet need for modern methods was reported to be 27.8 percent (C.I 22.8 – 33.5) and the demand satisfied with modern contraceptive methods was reported to be 55.6 percent (C.I 46.2 – 64.1) in the year 2017 (Cahill *et al.*, 2018). In East Africa, Kenya is doing very good in reducing the unmet need for modern contraceptives. Assessment shows on 2017 contraceptive prevalence was 62.3 percent and unmet need for modern methods was as low as 16.8. Unmet need for modern contraceptive became an important concept in development process as it can have impacted positively to fertility reduction if its level is well known and required measures been implemented. Action is needed to reduce unmet need among women in Tanzania and to empower them to have the families they want. Investments that expand and strengthen family planning services should remain a priority. Helping people afford and access modern contraception, especially during an economic shock, could help reduce unmet need.

The government of Tanzania have implement different initiative toward poverty alleviation but it become tough due rapid increase of population growth, which hinder efforts implemented of eradicating poverty and achieve development. Also due to rapid population growth it led to poor social services resulted to high maternal and infant mortality as a result of unmet need of contraceptives (UNFP, 2012). Unmet need for modern contraceptives increase as the demand for family planning expand thought the population. There have being improvement in contraceptive use in last years which resulted to total decline of fertility rate from 6.3 in

1992 to 5.4 in 2010 URT, (2010) and Elinami and Peter (2014). Government, NGOs and Private sectors have implemented different program aimed at increase number of modern contraceptives users to counter the problem of high fertility rate Elinami and Peter (2014). Since the implementation of this programs level of unmet need remain high. However very little information is known about determinant and the current status on unmet need formodern contraceptive. Therefore, this paper aimed to carefully assess the determinant of unmet need for modern contraceptives use among married women of reproductive age. Specifically, the paper focused in determining the current status of unmet need for modern contraceptive, identifying reasons for unmet needs for modern contraceptives among married women and listing initiatives by stakeholders to solve the problem of unmet need for modern contraceptive.

2.0. METHODOLOGY

2.1. Location

This study was carried out in Moshi Rural district in Kilimanjaro region, Northern Tanzania. The district is among the six districts of the region; bordered to the North by Rombo, to the West by the Hai, to the East by Mwanza districts. The District covers a total population of 466,73 people (National Bureau of Standard, 2012) where Chagga tribe accounting for more than 80% of total population.

2.2. Data Collection

Data for this study were collected between July to August, 2016 from four (4) randomly selected villages from two (2) wards, where a total of 96 married women of reproductive age (15 – 49 years) were interviewed. District health officers, religious leaders and in-charge officers from NGOs dealing with reproductive health were interviewed as key informants. During sampling it was assumed that among all women of reproductive age 50 percent uses MC while 50 percent do not.

Adopting the formula $n = \frac{(Z_{\alpha/2})^2 * p * q}{e^2}$ (Pourhoseingholi,

Vahedi, & Rahimzadeh, 2013)

n = sample size,

$Z_{\alpha/2}$ = confidence level

P = Probability of married women using modern contraceptives.

q = Probability of married women not using modern contraceptives.

ℓ = Marginal error, $Z_{\alpha/2}$ =95%, P=0.5, q=0.5, e=10%

$$N = \frac{(1.96)^2 * 0.5 * 0.5}{0.1^2} = 96$$

2.3. Data Analysis

The study used IBM SPSS Statistics to analyse and summarize the data collected. Descriptive statistics was used to describe the current status of unmet need for modern contraceptives by running frequencies, means,

cross-tabulation of the socio-demographic data collected. Again, the study assessed the relationship between unmet needs for MC and the reasons for unmet need for modern contraceptives among married women of reproductive age using multiple binary logistic regressions analysis. The multiple binary logistic model was formulated as:

$$\ln \left[\frac{P(Y_i=1)}{1-P(Y_i=1)} \right] = \alpha + \beta_1 \text{DISTANC}_i + \beta_2 \text{IDEALCHILD}_i + \beta_3 \text{OPPOSITION}_i + \beta_4 \text{COST}_i + \beta_5 \text{EDUC}_i + \beta_6 \text{LIVINGCHILD}_i + \beta_7 \text{AGE}_i$$

Where by

$P(Y_i = 1)$ is a probability of women with unmet need for MC,

DISTANC_i = Distance from home to health facilities (Km)

IDEALCHILD_i = Desired number of children (Number.)

OPPOSITION_i =Opposition from husband (categorical variable 1=Yes 0=No)

COST_i = Price of modern contraceptives(amount)

EDUC_i =Level of education attained by women (categorical variable 1=Primary 0=Secondary)

LIVINGCHILD_i = Current number of living children (Number)

AGE_i = Age of respondents (women)

3.0. RESULTS AND DISCUSSION

3.1. Socio demographic characteristics of respondents

Discussing modern contraceptive use requires a clear understanding of individual demographic particulars for one to successfully plan and implement health program. In order to obtain achievable program there is a need to understand demographic detailed of people in specified localities like age, marital status, education and others (Bradley *et al.*, 2012).

Results of the data for this paper showed that more than half (55.1%) of all respondents were aged below 35 years. This means most of the interviewed women were youth. Also, it was observed that 77 percent of all respondents were aged below 40 years. The education of the women interviewed revealed that 77 (80.2%) of them had primary education; implying that unmet need of modern contraceptives may be contributed by low formal education level. Husband education is said to influence the woman's use of MC. Data showed male partners education was also mainly primary (80.2%). Moshi is mainly occupied by Christians and the religion affiliation was 96%. The district is mainly rural area with very few little small-town centers, the residents were mainly self-employed in small business and farming activities.

Table 1: Distribution of respondents by Socio-demographic characteristics (n = 96).

Variable	Frequency	Percentage (%)
Age of respondent		
15-19	3	3.1
20-24	10	10.4
25-29	27	28.1
30-34	13	13.5
35-39	21	21.9
40-44	13	13.5
45-49	9	9.5
Education level		
Secondary education	19	19.8
Primary education	77	80.2
Husband education level		
Primary education	83	86.5
Secondary education	13	13.5
Type of Marriage		
Polygamy	4	4.2
Monogamy	92	95.8
Religion affiliation		
Islamic	4	4.2
Christian	92	95.8
Employment status		
Self employed	65	67.7
Formal employed	31	32.3

Fertility related information is one of the factors that contribute to unmet need for modern contraceptives among married women. 93.8 percent of all interviewed women agreed to have heard of modern contraceptive as a means of family planning. The study collected data asked women of their desire to have children after using modern contraceptives and their responses indicated 66.7 percent said yes. Among the women interviewed had live births' around 3-4 children which accounted for 40 percent, following live births of 5+ children which was 31 percent. Result in table 2 shows that number of current living children of more than half of all interviewed women was less than 3, however desired number of children was mainly reported to be 4-5 children. It was also revealed that husband's desired more children as compared to their partners.

Table 2: Distribution of respondents by fertility related information (n = 96).

Variable	Frequency	Percent (%)
Current number of living children		
<= 3	57	59.4
4 - 5	28	29.2
6+	11	11.4
Ideal number of children		
<= 3	25	26.0
4 - 5	51	53.1
6 - 8	16	16.7
9+	4	4.2
Desire of children between partner		
Same as husband	38	39.6
Husband more than wife	40	41.7
Husband fewer than wife	9	9.4
Do not know	9	9.4
Awareness about modern contraceptives		
No	6	6.25
Yes	90	93.75

3.2 Current Status of Unmet Need for Modern Contraceptives

Result from Table 3 showed that of all women who were interviewed two third became pregnant and among which one third of these pregnant women it was not their desire to conceive. This means 36.6 percent of all women who conceived had unmet need for modern contraceptive. It was also revealed only 27.1 percent of all used

contraceptives. This number means that large number of children being born by chance and not planned. The rate is alarming especially when compared to 59.4 percent of all women who responded that at a certain point in life they wanted to use modern contraceptives but fail to get it. The paper result shows the most preferably modern method is injectable (79.31) of all respondent preferring using it.

Table 3: Distribution of respondent according status of unmet need for MC.

Variable	Frequency	Percent (%)
If ever get pregnant in recent		
Yes	58	60.4
No	38	39.6
If ever get pregnant was it your desire at that time (n=58)		
Yes	37	63.79
No	21	36.61
If ever use modern contraceptives		
No	70	72.9
Yes	26	27.1
Types of modern contraceptives ever used (n=29)		
Injectable/Depo-Provera	23	79.31
Implants	4	13.79
Pill	2	6.9
If ever want to use modern contraceptives and failed to get it		
Yes	57	59.4
No	39	40.6

The study registered various reason which hinders women in access of modern contraceptives within their vicinities. A multiple response analysis revealed that distance from someone's residence to the health facility (92.3%) and cost involved in securing the MC (79.5%) were the major reasons. Women in most rural areas are much involved in so many family responsibilities which

also hinder and limit their access to MC among married women of reproductive age. This study corresponds to that conducted by Stephen *et al.* (2014) in Burkina Faso, that revealed that awareness and distance had significance influence on unmet need for modern contraceptives.

Table 4: Reasons for unmet need for modern contraceptives among married women according to respondent perception.

Variable	Frequency	Percent (%)
Cost/Expensiveness of MC	31	79.5
Lack of information	10	25.6
Distance to health center	36	92.3
Opposition	4	10.3
Means of transport	13	33.3
Family responsibility	28	71.8

*Data were based on multiple responses

3.3 Determinant of unmet need for Modern Contraceptive among Married Women

Binary multiple regression model was computed to measure association for the mentioned reason (Distance, opposition, cost, and other social demographical factor like age, ideal number of children, and number of living children) and unmet need for modern contraceptives among married women of reproductive age.

Result from multiple logistic regression model show that distance to health center is the only significant reason associated with unmet need for modern contraceptives among married women as shown in Table 5. The results clearly showed decrease of distant to the nearest health post or centre is significant associated with decrease of unmet need for modern contraceptive at (OR=0.35,

$P<0.05$) implying that decrease of distance in one kilometer will influence more women to access modern contraceptive. This implies that women who reside far from health facilities are likely to have high unmet need for modern contraceptives compare to those live nearest health facilities. Other reasons involved in model like opposition, ideal children, cost, education and age were not significantly associated with unmet needs for modern contraceptive at ($P<0.05$). The study corresponds with study conducted by Tefera, (2014) in Ethiopia who reported that women who resides in rural areas are more likely to have unmet need for modern contraceptive. This can be explained by the fact that accessibility of MC is limited as health facilities located at far distance in rural areas.

Table 5: Determinant of unmet need for modern contraceptive among married women of reproductive age according to multiple logistic regression model (n=96).

Predictor	B	S.E.	Wald	Sig.	Exp(B)
Distance to health center	-1.051	0.520	4.089	0.043	0.350
Ideal number of child	1.126	0.670	2.828	0.093	3.084
Opposition from partner	0.488	0.527	0.860	0.354	1.629
Cost for MC	-0.089	0.515	0.030	0.862	0.914
Education of Woman	0.353	0.672	0.276	0.599	1.424
Number of Living child	-0.884	0.618	2.045	0.153	0.413
Age of the Woman	-0.028	0.564	0.002	0.960	0.972
Constant	-0.817	1.683	0.236	0.627	0.442

Nagelkerke R Square 0.24

4.4 Initiatives taken by stakeholders to solve the problem of unmet need for modern contraceptives among married women of reproductive age.

Key informants' interviews revealed that government is responsible on providing modern contraceptives tools to all government health centers. These contraceptives are provided depending on the ability of health center to provide this service. Most of health center being provided with most four type of modern contraceptive which are Injectable, Implant, IUD, Pills and Condoms. The most technical tools (vasectomy) are being provided periodically by expert from big hospitals. (*"We are facing a challenge of low education on providing full services to our center vasectomy and other which require more knowledge but expert from big hospital help as to provide these services and it is periodically. At our health we are most providing those which did not require*

more knowledge like Injectable (Depo Provera), Pills, implants and condoms." said one of the medical clinical officer from one health centre).

Results from intensive interview with different key informant also revealed that, there are different training provided to health attendant in different period of time. Most training provided is short course which are prepared by government within a specified period of time. Also, according to result from interviews it was reported that there are other trainings prepared by health center to member of community to facilitate provision of modern contraceptive (non-technical) like pills and condoms. The study convicted with the study conducted by Jacqueline et al., (2011) who insisted the need of improving health services, training and supply of MC to the community.

5. CONCLUSION

The study establishes that current status of unmet need for modern contraceptives among married women of reproductive age on study area is significant high compare to the national level of unmet need of modern contraceptive. Overall, 32 percent of currently married women have an unmet need for modern contraceptives (TDHS 2015-2016). According to finds from this study show that level of unmet need for modern contraceptives rise as most of women fail to use because of distance. Also result from a study show that there is different initiative taken by government in providing these contraceptive to different government health center and hospital and can be accessible freely by women. Also, there is different training to health attendants particularly to ensure each woman is given service according to her desire of using a certain type of modern contraceptives.

6. RECOMMENDATION

Basing on the finding from the study, some recommendations are laid down

- i Government and other stakeholder should ensure modern contraceptives are available throughout the year to all public health facilities.
- ii Government and other stake holder should establish health post after a few kilometers that deal with reproductive health particularly provision of modern contraceptives as the decrease of distance will contribute to high accessibility of modern contraceptives hence decrease of unmet need for modern contraceptives to women.
- iii Also, the government should introduction of long training to health attendants to impact them with required knowledge and become competent in providing this services to the community effectively.

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