

## Perceptions on the Availability, Accessibility and Use of Modern Contraceptive Methods among Women in Iringa Municipality, Tanzania

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### Abstract

*A study involving 218 women of reproductive age between 18-49 years was carried out in Iringa Municipality to identify the perceptions on the availability, accessibility and use of modern contraceptive methods. Interviews, focus group discussion, documentary review and field observation were used in data collection. Findings show that more than a half (51.4%) of the studied population reported high availability of modern family methods. Among the methods available, male condom, injectable and implants were known by more than 75% of the respondents. Out of 218 respondents, 161 (73.8%) were using modern family methods in which 67.7% reported to experience no problem in accessing the services. However, the remaining 32.3% affirmed to experience some problems while accessing the services. The major problems encountered were shortage of family planning service providers and deficit of some methods such as implants. The use of modern contraceptive methods was found to be associated with age and occupation ( $p=0.05$  and  $p=0.1$ ) respectively. It is concluded that, modern contraceptive methods are available, accessible and used. In order to lower fertility rates in the study area more education is needed to the community on the essentials of using permanent modern methods such as sterilization especially to those with reasonable number of children. Additionally, there is also a need to involve males by educating them on the significance of these methods in controlling fertility so as to expand the utilization to both men and women.*

**Keywords:** Tanzania, modern contraceptives methods, availability, accessibility, perception,

### 1.0 Introduction

The availability and use of modern contraceptive methods in Africa, Tanzania in particular is still minimal (Darroch and Singh, 2013; Bongaarts and Casterline, 2013). This has led to persistent high fertility currently observed in this continent, a situation which is more pronounced in Sub-Saharan region when compared to the standards of the rest of the world (Bongaarts and Casterline, 2013; World Bank, 2009; Caldwell, and Pat Caldwell, (2002). Resistant to fertility change in this region is aggravated by low levels of modern contraceptive prevalence and use which is 25% (World Bank, 2010). Other reasons include the value of children in terms of labour supply enhanced by respect to the elders, strong traditional beliefs in fertility formed in eras of very high child mortality, and poor family planning programs undermined by skepticism among politicians and bureaucrats about their fitting in with African contexts (Dommermuth, Klobas, Lappega, 2011; Adeleye et al, 2010; World Bank, 2009; Caldwell and Caldwell, 2002).

Being one among the countries in the Sub-Saharan region, Tanzania is characterized with high fertility of 5.4 children per woman (United Republic of Tanzania and Micro International Inc, 2010; World Bank, 2010) as compared to that of Kenya and Rwanda (4.6) children per women (Muhoza, Broekhuis and Hooimeijer, 2014). Despite the sound improvements in the availability of modern family methods in Tanzania, obstacle to the uptake of the methods among women exists. These include, deficit in some of the available and used methods, limited numbers of family methods' service providers and skills, low education to users especially on permanent modern contraceptive methods, fear of social disapproval, side effects posed by these methods to users' health, husbands' opposition, preference for large family sizes and concerns that women's use of contraceptives will lead to extramarital sexual relations (Kabagenyi et al, 2014; URT, 2010; Cleland et al, 2006). Iringa municipality is experiencing high fertility associated with high birth rates (Municipal Development Report, 2012). The availability and use of modern contraceptive methods is a vital aspect in limiting fertility in any society (Browne and LaLumia, 2014). Lack of it translates into high fertility which creates problems of little access to opportunities such as employment and consequently culminates into poverty (Browne and LaLumia, 2014). The purpose of this study was to examine among other things, the women's perceptions on the availability, accessibility and use of modern contraceptive methods in Iringa Municipality Tanzania.

### 2.0 Methodology

#### 2.1 Description of the study area

Iringa Municipality (**Figure 1**) is one among the four districts in Iringa Region. Other districts are Kilolo, Iringa Rural and Mufindi. The Municipality extends between latitude  $7^{\circ} 45'$  and  $7^{\circ} 50'$  South of the equator and longitude  $35^{\circ} 40'$  and  $35^{\circ} 45'$  East. The Municipality covers an area of 162 square kilometres with 14 wards and 162 streets varying in size significantly. The wards are Kihesa, Mkwawa, Mwangata, Kitwiru, Ruaha, Mtwivila, Ilala, Makorongoni, Mivinjeni, Kitanzini, Mshindo, Gangilonga, Kwakilosa and Mlandege.

## 2.2 Research design and sampling procedures

This research employed a cross-sectional research design. The design was used on the grounds that, it allows the collection of data from different groups of respondents at a time. Simple random sampling was employed to select the two studied streets out of eight in Kihesa ward. The eight streets were written in pieces of papers, mixed in a box and then, one piece after another was picked without replacement. Kihesa and Semtema streets were selected after the exercise. The selection of the sample size was based on the sampling frame of females' reproductive age ranging from 18-49 years in the two streets. According to the inventory list as given by the ward executive officer, Kihesa street had 1598 females aged 18-49 years while Semtema street had 1128 females. According to Boyd et al, (1981) five percent of the study population can suffice a sample under a certain circumstances. Therefore, 8% of the sampling frame was calculated to get the sample size as shown below;

$$8/100 \times 1598 = 128 \text{ (Kihesa)}$$

$$8/100 \times 1128 = 90 \text{ (Semtema)}$$

Moreover, from the inventory list of households given by the ward executive officer, Kihesa had 1215 households while Semtema had 932 households. Basing on the household size of 4.4 in Iringa municipality (URT, 2012) a total of 171 households (8%) were randomly chosen. It was expected that at least 752 people would be found and the expected 218 women respondents of reproductive age 18-49 years would be obtained among them. From 171 households 74(8) of households in Semtema streets were randomly chosen and 97 (8%) of all households in Kihesa street were randomly selected. Thereafter, the selected households in each street were listed on pieces of paper and mixed in a box to select the first house as a starting point for interviews. All women of reproductive age 18-49 years in each household who were willing to take part were interviewed. Thereafter, the exercise continued to the next house until the sample size of 218 women of reproductive age was obtained.

## 2.3 Data collection methods, analysis and presentation

The study involved both qualitative and quantitative data collection methods including interviews, focus group discussion, documentary review and field observation. Interviews and documentary review were used to collect both qualitative and quantitative data. Semi-structured questionnaires were administered to 218 women of reproductive age 18-49 years. The age 49 was chosen as a cut-off point because many women above 49 years are no longer fertile. In-depth interviews were conducted between the researcher and family planning service providers who provided information on methods available, access and used. Moreover, documentary review was used to supplement missing information. Conversely, focus group discussions and field observations were used to collect qualitative data. Focus Group Discussions were conducted to 3 groups, each with 8 respondents who were the users of modern contraceptive methods at Ngome health centre. The purpose was to get general information on peoples' perceptions regarding the use of modern contraceptive methods, the availability rates and problems encountered on service accessibility. Field observations were used to cross check the physical availability of modern contraceptives methods and their use.

Furthermore, descriptive statistics including frequencies, percentages, mean, and inferential statistics were carried out with the help of Statistical Package for Social Sciences (SPSS version 16.0) and Microsoft Excel 2003). Content analysis was employed in analyzing qualitative data collected through key informants interviews and FGD. Nvivo software (version 10) was employed in coding and analyzing qualitative data obtained from the field. Results on quantitative data have been presented through tables while the qualitative data were presented through quotations.

## 3.0 Results and Discussion

### 3.1 Socio-economic characteristics of women respondents included in the study

The study by Wado, (2013) has shown that understanding the socio-economic characteristics of women like marital status, education, occupation and age is of importance in the study of contraceptive use since they have influence on the access and use of contraceptive methods. As indicated in Table 1, 34% of the respondents were aged between 23-27. Fewer than 5% were above age 43. This implies that majority of the survey population were still in early reproductive ages. The possibility of this group to bear more children is still high if modern contraceptive methods cannot be used effectively. Similar observation was made by (Eliason, 2014) in Ghana.

Moreover, the study observed that most of the women 62% had primary education, 24% had secondary education, 8% attained tertiary education and only 6% had no formal education. The domination of respondents with primary education level had an impact on occupation where larger numbers of respondents (48.6%) were housewives as compared to 15.6% who were in formal employment. Traditionally, to be a housewife provides more chance to reproduce than being employed. Similar observation was also noted by Aryeetey et al, (2010) in Ghana and Rinko, (2003) in Malawi. Based on marital status, more than half of the women (55%) were married and the smallest population of 3% each was for widowed and divorced. A study by Nangendo, (2012) in Kenya observed that being married exposes a woman to frequent sexual activities as compared to single, widowed and divorced.

### 3.2 Availability rates of modern contraceptive methods in Iringa Municipality

The study results in Table 2 show that more than half (51.4%) of the surveyed population reported high availability of the methods. High availability of the methods in the study area provided a room for respondents to choose which method was appropriate based on age, number of children having and respondent's health. Respondents reported the methods to be available in the public and private hospitals and commercial outlets such as pharmacies and some especially condoms were found in normal shops. Similar observation was reported by Aryeetey, (2010) in Ghana. Results in Table 3 show various methods available and used in the study area. Male condom, pills, injectables and implants each was known by more than three quarters (75%) of the respondents while female condom, loop, diaphragm and intrauterine device (IUD) each was known to less than 15% of the surveyed population. Studies by Nangendo, (2012) in Kenya and Aryeetey et al, (2010) in Ghana reported male condom, pills and injectables to be mostly known.

### 3.3 Accessibility of modern contraceptive methods in Iringa Municipality

As indicated in Table 4, out of 218 women 161 (73.8%) were using modern family methods and the remaining 57(26.2%) were not using any of the method. Among those who were users of contraception, 67.7% reported to experience no problem in accessing the services. The given reasons were that services were highly available and it needed no one to travel long distances in search for it. Also, respondents reported to get these services freely throughout the working days. This was also noted by Williamson et al, (2009) in Mali where women asserted that access to modern methods was not a problem. However, the current study in Table 4 indicates 32.3% of the users reported to encounter different problems while accessing the services. The major reported problems were shortage of family planning service providers and deficit of some methods particularly implants. The mentioned problems encountered when accessing family planning services were further reported during the FGD: “There is no time for questions, service providers are occupied and no conversation between service providers and clients about clear information on the use or side effects of the method to the user is given, even health checkup is not done” (woman, 33 years old, employed with tertiary education).

Other woman discussant added that; “Some of the methods such as implants finish up early compared to other methods. Most clients prefer implants as they offer a wide range of time (three years) before one can come back for the second time service hence creating high demand for the method which affect availability”....(woman, 29 years old, self employed with primary education)

### 3.4 Use of modern contraceptive methods in Iringa municipality

Having examined on the available methods and their accessibility, the study further explored the rate of used of modern contraceptive method. As indicated in Table 5, out of 161(73.8%) of women who were using modern contraceptive methods 39.7% were using injectable, 22.5% implants, 18.6% pills, 15.5% condom, 3.1 loops and the remaining 0.6% were sterilized. Injectable and implants were more preferred as they have high accuracy of prevention to pregnancy than pills and condoms. Also with injectable and implants frequent visit to clinic for the service was reduced as compared to other methods. Sterilization was least preferred due to its irreversible in nature where those who opted for it were no longer in need for more children.

The findings concur with that of Tsedeke et al, (2006) in Ethiopia and Aryeetey et al, (2010) in Ghana who noted injectables, pills, and male condoms to be commonly used methods. Sterilization was least preferred due to its irreversible in nature where those who opted for it were no longer in need for more children. The study further examined on the relationship between socio-economic characteristics and their influence on the use of family planning methods. Results in Table 6 shows that age and occupation of the respondents had strong influence on the use of modern contraceptive methods ( $p=0.05$  and  $0.1$ ) respectively. Based on age, majority of the surveyed population (see Table 1) were in the younger reproductive ages (23-27years) which have an influence on the use of modern contraceptive methods. The results are in line with that of Malalu et al, (2014); Okech, Wawire, and Mburu, (2011) both in Kenya who asserted that younger adult women were more likely to use contraceptives than older adult women.

Moreover, results on the relationship between occupation and use of family planning indicates that those who were employed be it public, private or self employed deemed to use the modern family methods than housewives. Conversely, marital status, education and religion had no correlation with the use of family planning methods. This implies that there were no clear pattern between married and unmarried, those with high and low level of education as well as Christian and Muslims on the use of modern contraceptive methods.

### 4.0 Conclusion and Recommendations

Modern contraceptive methods are available, accessible and used in Iringa municipality. The methods are found to be available in hospitals, health centres, pharmacies and locally situated shops. This can also be reflected in other Municipality in Tanzania. Based on the availability and methods used, the study concludes that if appropriately used, these methods would help reduce fertility levels. However, more education is needed to the community on the essentials of using permanent modern methods such as sterilization. Additionally, there is also a need to involve males by educating them on the significance of these methods in controlling fertility so as to expand the utilization to both men and women. Moreover, expansion of family planning services as well as training of family planning service providers could be a viable solution in improving the availability, accessibility and effective use of modern contraceptive methods.

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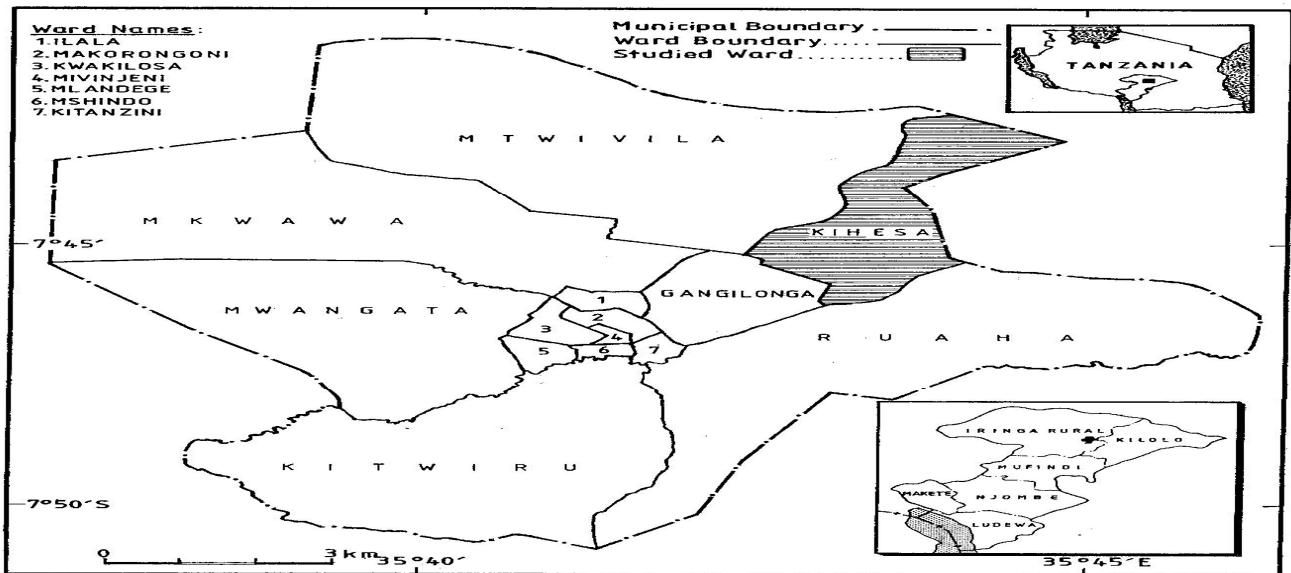


Figure 1. Location of Iringa Municipality showing the study area

Table 1: Socio-economic characteristics of respondents included in the study

Characteristics	Frequency (N=218)		Percentage (%)
Streets: Kihesa	128		58.7
Semtema	90		41.3
Age groups (Years):	18-22	28	13
	23-27	74	34
	28-32	57	26
	33-37	26	12
	38-42	24	11
	43-47	9	4
Education level:	None	14	6
	Primary	135	62
	Secondary	52	24
	Tertiary	17	8
Marital status:	Single	35	16
	Married	119	55
	Living together	50	23
	Divorced	7	3
	Widowed	7	3
Occupation:	Employed	34	15.6
	Self employed	57	26.2
	Housewives	106	48.6
	Students	21	9.6

Table 2. Availability rates of modern contraceptive methods in Iringa Municipality

Availability Rates	Number (N = 218)	Percentage (%)
High	112	51.4
Medium	101	46.3
Low	3	1.4
Do not know	2	0.9

Table 3. Contraceptive methods available and known by respondents in Iringa Municipality

Methods	N = (218)	
	Yes (%)	No (%)
Male condom	99.4	0.6
Pills	94.3	5.7
Injectables	87.0	13.0
Implants	75.8	25.2
Female condom	14.5	85.5
Loop	11.0	89.0
Diaphragm	6.0	94.0
Intrauterine devices (IUD)	2.8	97.2

Table 4. Problems encountered when accessing family planning services

	If encountered problem	Frequency (n=161)	Percentage (%)
Yes		52	67.7
No		109	32.3
<b>Problem</b>			
	Shortage of service providers	30	57.7
	More time spent	05	9.6
	Shortage of some methods	15	28.8
	Distance	02	3.9

**Table 5. Number of users/none users and modern family methods used among women**

Variable	Frequency (N= (218)	Percentage (%)
Users	161	73.8
None Users	57	26.2
Methods	Frequency (n = 161)	Percentage (%)
Male condom	64	39.7
Pills	36	22.5
Injectables	30	18.6
Implants	25	15.5
Female condom	5	3.1
Female sterilization	1	0.6

**Table 6. Effects of socio-economic profile on the use of modern contraceptive methods**

Variable	Chi-square value	df	P
Age	69.484	30	0.000*
Marital status	21.820	24	0.590
Education	20.829	18	0.288
Religion	7.329	6	0.292
Occupation	26.913	18	0.081**

\*Significance at 5% level,  $p < 0.05$ , \*\*Significance at 10% level,  $p < 0.1$

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