Journal of
Health, Medicine and Nursing
(JHMN)

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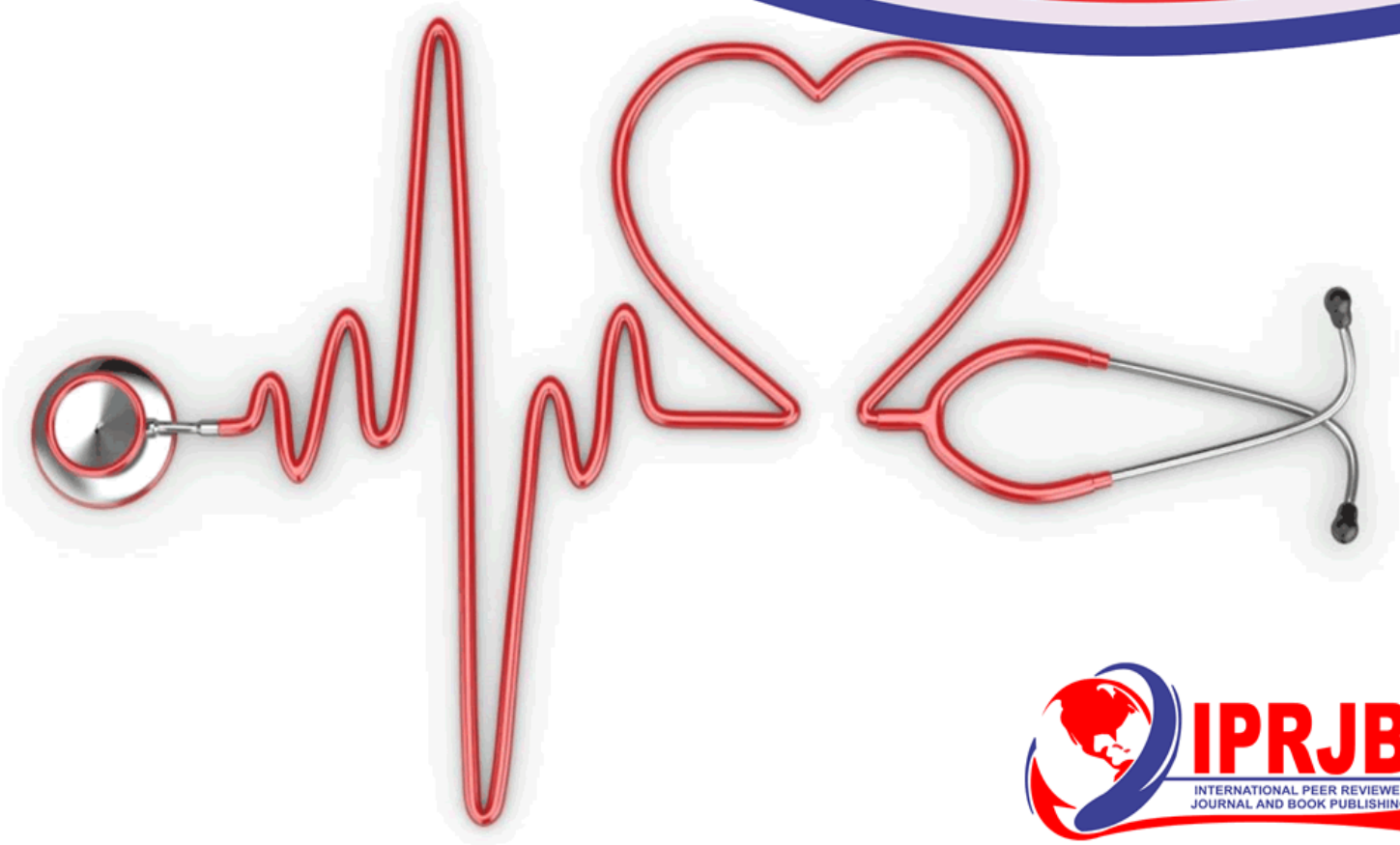

IPRJB
INTERNATIONAL PEER REVIEWED JOURNAL AND BOOK PUBLISHING

Journal of Health, Medicine and Nursing
ISSN 2520-4025 (Online)
Vol.3, Issue 3 No.4, pp 37- 60, 2018
www.iprjb.org

UTILIZATION OF CONTRACEPTIVES AMONG WOMEN OF REPRODUCTIVE AGE ATTENDING NGONG SUB-COUNTY HOSPITAL

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Abstract

Background: The main objective of the study was to determine the utilization of contraceptives among women aged (25 – 44 years) attending Ngong sub- county hospital in Kajiado, Kenya.

Methods: This study was conducted at the maternal child health, family planning /outpatient clinic at Ngong sub- county hospital. The study adopted a cross- sectional study design. The study population was women aged between 25-44 years. A sample size of 380 was realized and had questionnaires administered to them. Quantitative data was analyzed using SPSS version 20 and presented in frequencies, percentages and pie-charts. Chi square was used to determine association between various variables. Data from FGDs (in form of notes was manually coded, using themes generated from responses was analyzed and results presented in verbatim form. The study was submitted to KNH/UoN Ethical review committee for ethical approval.

Results: The study findings indicate that majority of women were between age 35-39 years. The proportion of women utilizing contraceptives was 80%. A greater proportion of women 65% preferred Depo- provera injection as a method of contraception. Education and occupation greatly influenced utilization of contraceptive p value< 0.05. It was noted that the point of access for contraceptives had a significant association with utilization of contraceptives (chi-square = 0.033, df = 2, P< 0.05). Culture effects were noted on age, occupation and education and hence a further significance with utilization of contraceptives.

Conclusion: A proportion of 80% of women using contraceptives most women have seen the need to space their births and therefore are conscious of their health and that of their babies. However there are women who are still not in any method which is an indication of exposing themselves to unintended/ unplanned pregnancy and abortions. For the success of family planning programs, male involvement is critical as they play an important role in the decision making process and use of contraceptives. There is need to encourage the community and their leaders to promote formal education so that the girl child can be empowered through education. This will boost her self-esteem and is able to make informed choices over reproductive issues.

Keywords: *Contraceptives, Utilization, Reproductive age and Ngong*

1.0 INTRODUCTION

Contraceptive allows people to attain their desired number of children and determine the spacing of pregnancies. It is achieved through use of contraceptive methods and the treatment of infertility. Reproductive health, addresses the reproductive processes, functions and system at all stages of life (WHO, 2010). Reproductive health, therefore implies that people are able to have responsible, satisfying and safe sex life and that they have the capability to reproduce and the freedom to decide if, when and how often to do so. The attention drawn to the issue of contraception by international bodies like the World health organization, and United Nations fund for population agency cannot be over- emphasized. This is due to the socio economic implications and health hazards that high population growth rate have increasingly manifested in the economies of developing countries. Inadequate family planning strategies have continuously exacerbated the vulnerability of developing countries, culminating into high maternal and infant mortality, increasing hard core poverty, disintegration of the extended family system, and high incidence of STI/HIV/AIDS. At least 25% of all maternal deaths can be prevented by family planning. One in 4 infants' deaths in developing countries can be prevented by spacing births at least two years apart (Isife *et al.*,2012). There are several contraceptive methods used in Kenya, they include, intrauterine pelvic device (IUD), Implants, injectables, pills, female and male sterilization and male and female condoms (KDHS, 2014).

Evidence suggests that women who have more than 4 children are at increased risk of maternal mortality. Reducing rates of unintended pregnancies**,** family planning reduces the need for unsafe abortion. Reducing infant mortality, family planning can prevent closely spaced and ill- timed pregnancies and births which contribute to world's highest infant mortality. Infants of mothers who die as a result of giving birth are at greater risk to die of poor health. Having smaller families allow parents to invest more in each child. Children with few siblings tend to stay in school longer than those with many siblings. Slowing population growth as a result of family planning is critical to slowing unsustainable population growth and resulting to negative impacts on the economy, environment, national and regional development efforts (Moreland and Talbird, 2006).

The World Health Organization estimated the unmet need for contraceptives worldwide to be at 215 million women of child bearing age (15-49 years). About 200 million couples still have unmet need for contraceptives, 64 million are still using traditional methods of family planning and 29% of them are women in developing countries. Contraceptive use enables people to make their informed choices about their sexual and reproductive health especially for benefit of women and children's health in the community (WHO, 2009-10).According to Moreland and Talbird (2006) when access to family planning services is increased the unmet need for family planning could be met thereby slowing population growth rate and reducing the costs of meeting Millennium development goals (MDGs) in terms of universal primary education.

Many African economies are characterized by rapid population growth that is partly attributed to high fertility rate, high birth rates accompanied by steady declines in death rates, low contraceptive prevalence rate and high but declining mortality rate (Oyedokun, 2007). The USAID/HPI (2007) found that in Sub-Saharan Africa the rate of population growth was one of the highest in the world (2.8%) compared to the rest of the world. This is likely to be an impediment towards reduction of child mortality, improvement of maternal health, achievement of universal primary education, environmental sustainability and combating HIV/AIDS, malaria

and other diseases as part of Millennium Development Goals. In a study it was estimated that over half of Kenyan's rapid rate of population growth is attributed to unwanted and mistimed birth. In Kenya, the population growth rate is increasing at the same rate as the 2009 gross domestic product 2.6% per annum, meaning that the real economic growth is virtually stagnant. A population growth rate above 2% per year makes it difficult for a country's institutions and technologies to keep up with the population pressures on all sectors of the economy (World Bank 2009).

Kenya is located in East Africa and has a population of 50 million people (World population Review, 2018). Kenya was one of the first countries in Africa to adopt a population policy to reduce the population growth rate, just four years after gaining independence in 1963 (Chimbwete, 2003; Commonwealth, 2018). According to WHO (2010) the Kenya Government is committed to improve the quality of life and to satisfy the wellbeing of her people. The unmet contraceptive need in Kenya is highest among women who are 15-49 years and declines thereafter. Kenya Demographic Health Survey (2014) revealed that (18%) of married women have unmet needs for family planning. Sexually active unmarried women reported a higher demand for FP and a higher unmet need than currently married women. The total demand was 92%, while the level of unmet need was 27%.

According to KDHS (2014), injectables are the widely used method of contraception at 26%. The report has also shown that 28% of married women with no education have an unmet need for family planning. (Mills *et al.,* 2010) observed that unmet need is often described as a problem of access and interpreted as women do not use contraceptives because they cannot find or afford them. While access is an issue, many other reasons have been cited by women for not using contraceptives, including lack of knowledge, culture, personal, religious and fear of side effects. Therefore, just making contraceptives accessible does not guarantee that women will use them.

2.0 METHODS

Study Site

This study was carried out in Ngong Sub-county Hospital. It is a Public health facility It is situated in Kajiado north constituency Kajiado County. It is in a town called Ngong. Ngong is a town near the Ngong hills along the Great Rift Valley. It is located in the south west of Nairobi in Southern Kenya. The general population of Ngong is estimated to be about 185,000 people and it is a cosmopolitan town. Ngong and its environs are well developed outskirts providing a good residing place for many Nairobi workers. The primary resources of income in the study area are livestock and agricultural initiatives. The livestock kept by the community include dairy and beef cattle, poultry, sheep and goats. Most of the cash crops in Ngong include maize which is used for both subsistence and commercial purposes. Tomatoes and other fruits like mangoes, oranges as well as vegetables are key cash crops in the community. Ngong Sub-County hospital is one of the public health facilities in Kajiado North Constituency. According to KDHS (2014) the contraceptive prevalence rate in Kajiado county stands at 45.2% compared to the national which 58%.

Study Design

The study adopted a hospital based cross- sectional study and it utilized both quantitative and qualitative data collection techniques.

Study population

The study group was women of reproductive age (25 - 44) years who attended maternal child health and family planning clinic and the outpatient department at Ngong sub-county Hospital in Kajiado county during the time of study.

Sampling procedure

The researcher used simple random sampling. The method of sampling involved giving a number to every subject of the accessible women 25 - 44 years that fulfilled the inclusion criteria. The numbers were placed in a container and then the principal investigator picked any number at random. The subjects corresponding to the numbers picked were included in the sample.

Sample size determination

The required sample size was calculated using the percentage of contraceptive prevalence of the area under study which was 45.2 % (KDHS, 2014). Ngong location has an estimated total population of 185,000 people and the number of women aged between 15- 49 years is not known.

The sample size is calculated based on Fisher's et al., (1998) as follows

$$n = \frac{z^2 pq}{d^2}$$

Where n = maximum desired sample size
z= standard normal deviation set at 1.96, which corresponds with 95% CI

p = proportion of the target population estimated to using contraceptives (45.2% = 0.452)

d = Minimum error (degree of accuracy desired) set at 0.05

q = the proportion of the remaining population (1-P)

$$q = 1 - 0.452 = 0.548$$

$$n = \frac{1.96^2 * 0.452 * 0.548}{0.05^2} = 380$$

Desired sample size (n) is 380 women.

Data collection

A structured questionnaire was administered to the study population and collected data related to the various contraceptive preferences, to determine proportion and factors associated with uptake of contraceptives collected. Community health workers from the area assisted in data collection

after being trained on data collection before commencement of the study. Two focus group discussions were conducted amongst women aged 18 - 25 and 26 - 49 years. Each group comprised between 8 - 12 participants. A guide was used to capture issues for example contraceptive preferences, factors associated with uptake of contraceptives and the prevalence. The researcher moderated the discussions while the field worker assisted in tape recording and taking notes as backups.

Data processing and Analysis

Qualitative data was transcribed, translated into English (where applicable). Codes were made for different themes (variables).The coding process was done after data had been entered into a computer according to its respective source. In the process of entering data into a computer, a template form was created and information was arranged according to the identified themes and concepts. The findings were presented in verbatim form. Quantitative data was entered, cleaned and analyzed using SPSS version 20 software. Chi-square, bivariate and multivariate analysis was done to determine relationship of the various variables. Results were presented in form of frequency tables, percentages, pie charts and measures of central tendency.

3.0 RESULTS

3.1 Socio demographic factors

A total of 380 women attending Ngong sub-county hospital were interviewed and they filled their questionnaires adequately. By religion this population consisted of 78% Christians and 19% Muslims aged 25-44 with mean age of 34.6 years. Most of them were married, unemployed and had attained secondary education (Table 1).

Table 1: Socio demographic characteristics of the respondents

Variable	Frequency	Percent (%)
Age category(n=378)		
25	49	13
25-29	54	15
30-34	68	19
35-39	93	26
40-44	47	13
44	53	15
Marital status (n=380)		
Single	51	13
Married	267	70
Separated	36	9
Divorced	13	3
Widowed	13	3
Occupation (n=380)		
Small-scale business	145	38
Farmer	117	31
Civil servant	118	31
Education level (n=380)		
None	4	1
Primary	70	19
Secondary	126	33
College/ University	180	47
Religion (n=380)		
Protestants	195	51
Muslim	72	19
Catholics	102	27
Other	11	3
Income source (n=380)		
Salary	80	21
Farm Produce	146	38
Small-scale business	154	41

3.2 Contraceptive proportion

Majority (80%) of the respondents were on contraceptive use as shown in the table below **(Table 2).**

Table 2: Proportion of contraceptive use

Variable	Frequency	Percent (%)
Contraceptive use (n=380)		
Yes	304	80
No	76	20

3.2.1 Source of information

Greater proportion of those who were using contraceptives had gotten the information from the health workers (Figure 1).

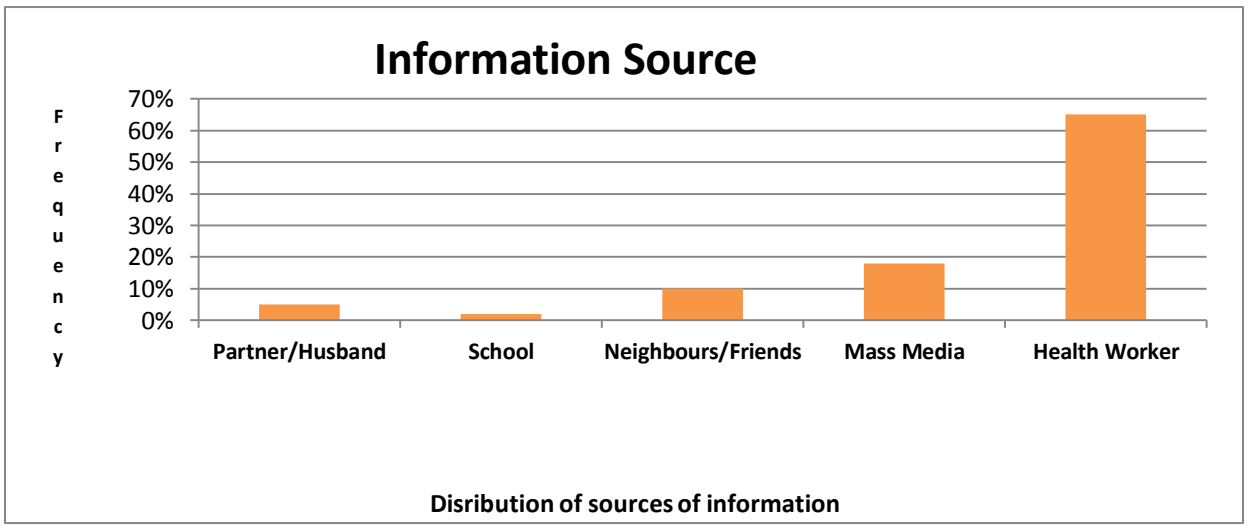

Figure 1: Information source

This finding was consistent with the focus group discussion group for 18-25 years. The health facilities and mass media were confirmed to be means of information exchange on family planning.

3.3.2 Contraceptive in use

A greater proportion (65%) of those on contraceptives used injection **(**Figure 2).

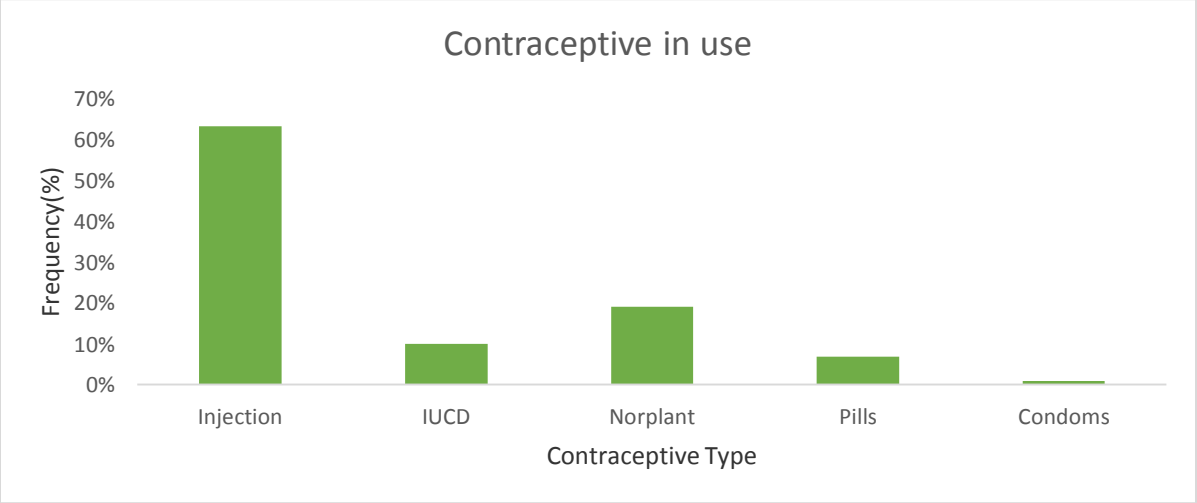

Figure 2: Type of contraceptive in use

3.3.3 Current attitude of those on contraceptive

Majority (65%) of those on contraceptive were comfortable with their current contraceptive methods (Figure 3).

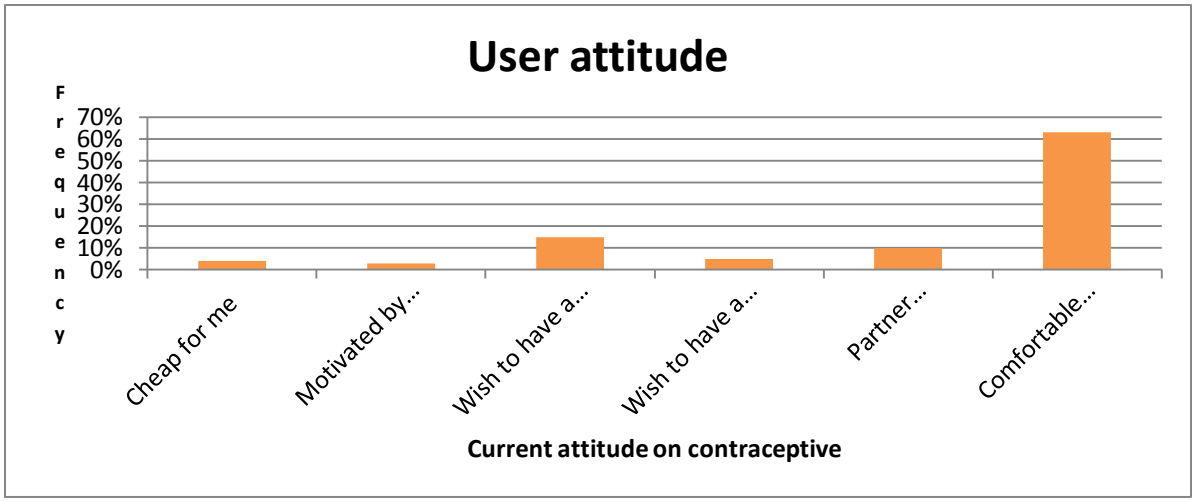

Figure 3: User attitude on contraceptive

3.3.4 Contraceptive use based on socio-demographic factors

Most of those who used contraceptives were married. There education level was college and they were aged between 30-34 years **(Table 3).**

Table 3: Contraceptive use based on socio-demographic factors

Variable	Use (%)	No Use (%)
Marital status (n=380)		
Single	12	18
Married	75	41
Divorced	8	18
Widowed	5	23
Religion (n=380)		
Protestants	51	15
Catholics	30	30
Muslim	19	55
Education level (n=380)		
Primary	7	6
Secondary	22	6
College	37	29
University	34	59
Age group (n=380)		
25	8	6
26-29	19	12
30-34	31	6
35-39	27	35
40-43	11	35
44	4	6

3.3.5 Type of contraceptives based on socio-demographic factors

Injection is common contraceptive among the married business Christian women aged 35-39 with secondary education. Distribution of all types of contraceptive within other socio-demographic factors. (Table 4 **).**

Table 4: Contraceptive type based on socio-demographic factors

Variable	Injection	IUCD	Norplant	Pills	Condoms
Marital status					
Single	15	24	17	14	17
Married	80	66	77	75	67
Divorced	3	5	3	6	10
Widowed	2	5	3	5	6
Occupation status					
Business	44	31	38	26	17
Farmer	7	17	9	14	0
Civil servant	10	14	9	21	33
Other	2	2	3	0	0
Education level					
None	0	8	0	0	0
Primary	21	28	22	20	0
Secondary	51	30	54	57	70
College	27	34	24	23	30
Religion					
Christian	78	77	87	88	80
Muslim	22	23	13	12	20
Age group					
25	15	17	10	17	0
26-29	14	15	12	14	83
30-34	18	22	23	26	17
35-39	24	26	23	26	0
40-44	12	6	14	10	0

3.4 Contraceptive access and preferences

3.4.1 Point of access

Majority (73%) of those on contraceptive access it from the hospital (Figure 4).

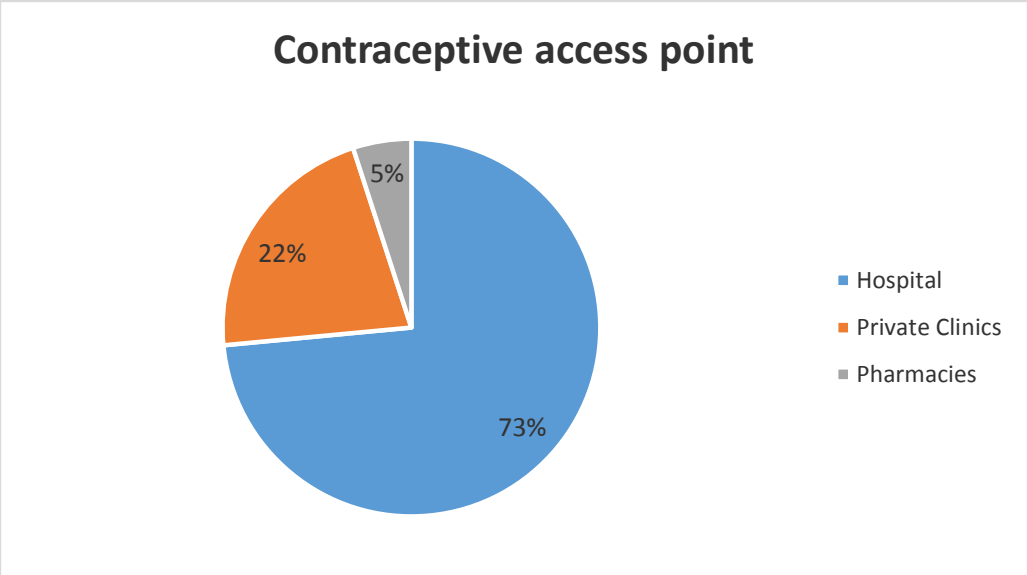

Figure 4: Contraceptive access point

3.4.2 Spouse awareness on contraceptive use

Greater proportion (74%) of husbands of the women on contraceptive were aware about the use of contraceptive by their wives (Table 5).

Table 5: Spouse awareness on contraceptive use

Variable	Frequency	Percent
Spouse Awareness		
Yes	284	75
No	96	25

3.4.3 Reason for spouse non-awareness

Major reason for spouse non-awareness was their dislike on various contraceptives methods in use (Figure 5).

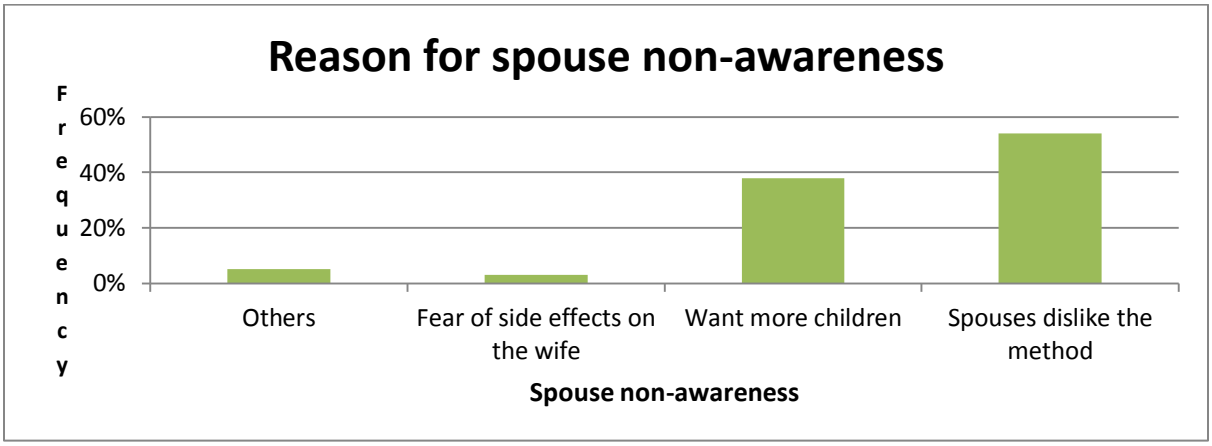

Figure 5: Reason for spouse non-awareness

3.4.4 Decision on contraceptive use

Decision on contraceptive use is mostly made by the contraceptive user herself (Figure 6)

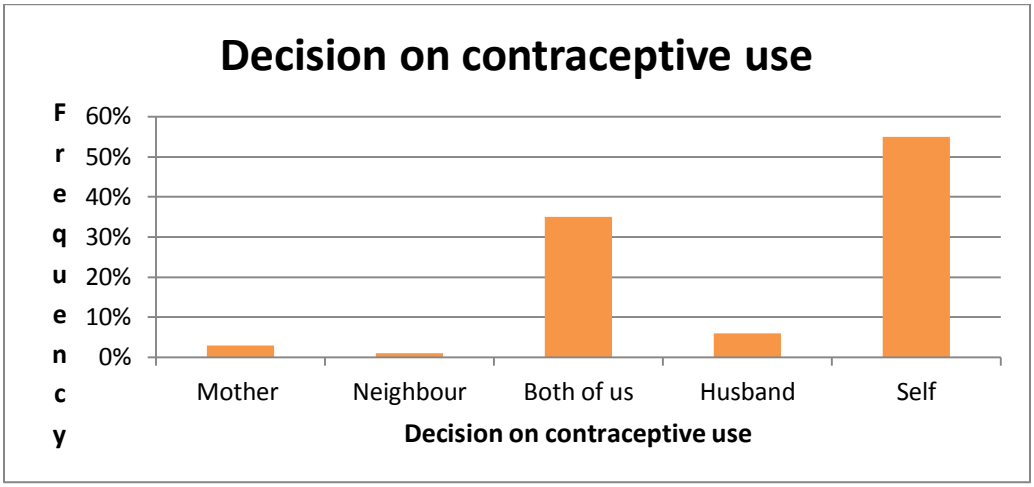

Figure 6: Decision on contraceptive use

3.5 Community acceptance to contraceptive

Greater proportion (39%) of the community does not accept contraceptive use **(Table 6).**

Table 6: Community acceptance

Variable	Frequency	Percent
Community acceptance		
Yes	232	61
No	148	39

3.5.1 Reasons for non-acceptance

Major reasons for non-acceptance of contraceptive among the community was religion based (Figure7).

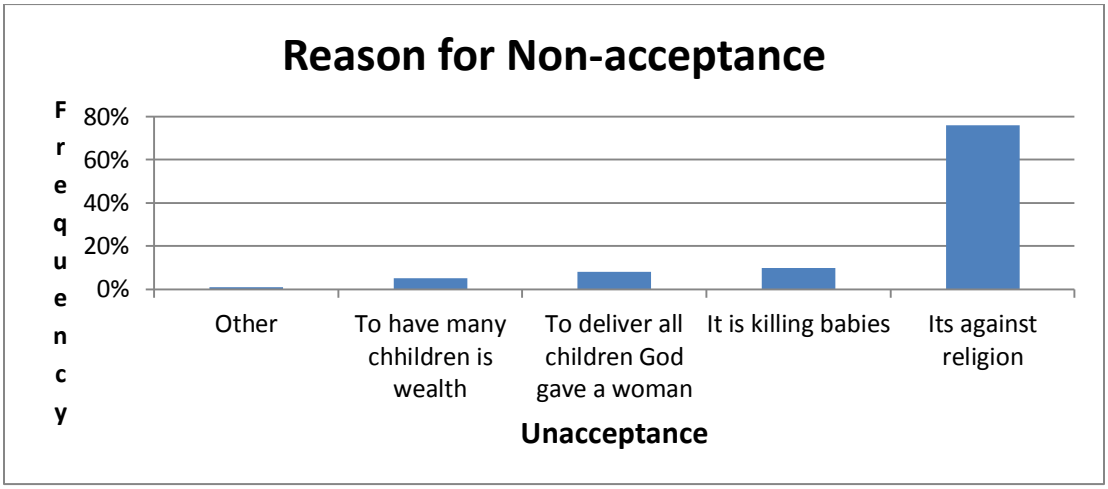

Figure 7: Reason for non-acceptance

3.5.2 Non- preferred contraceptive

More than half (55%) of the community have non- preference for tubal ligation as a contraceptive method (Figure 8).

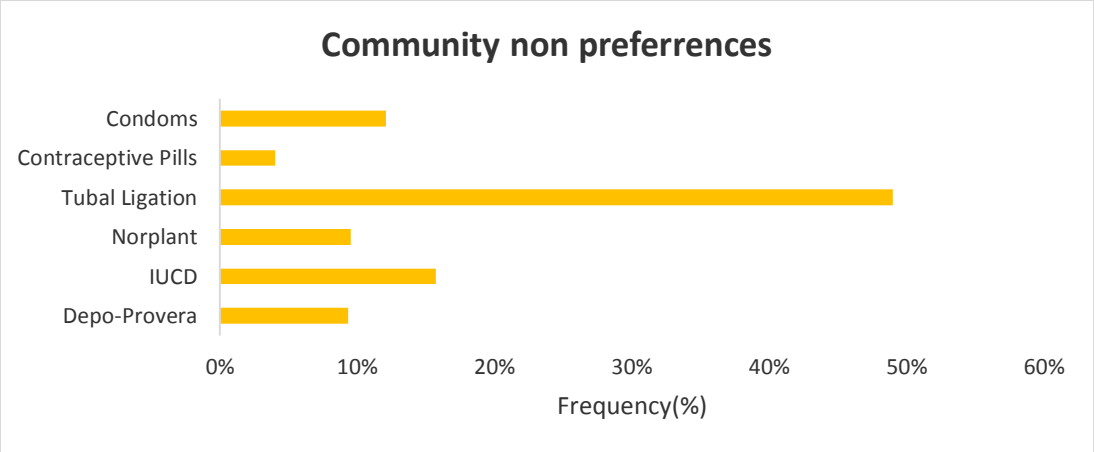

Figure 8: Community non preferences

3.5.3 Cultural effect on contraceptive use

Most respondents 50% practiced polygamy. **(Figure 9)**

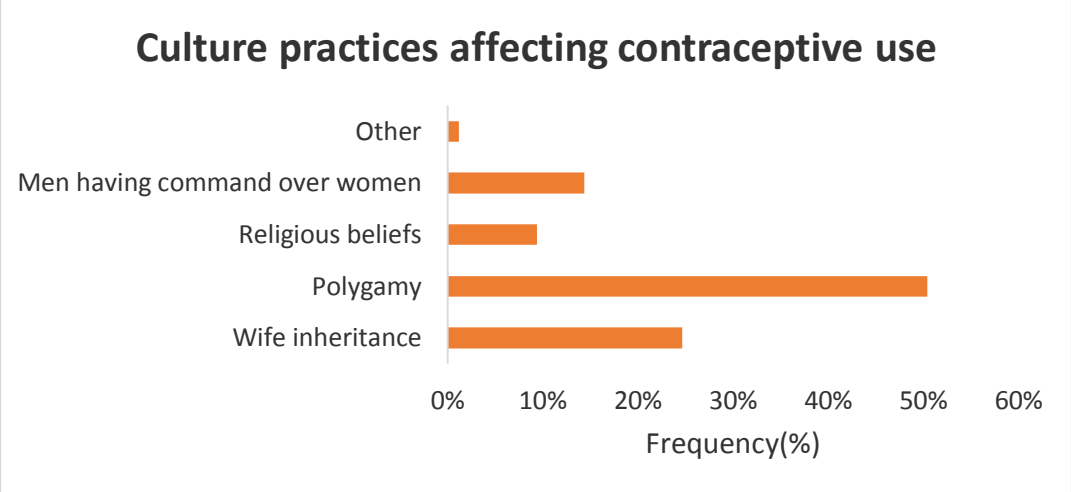

Figure 9: Culture practices affecting contraceptive use

3.5.4 Uptake of contraceptives in relation to socio-cultural factors.

The higher the age of the youngest child the higher the uptake of contraceptives.

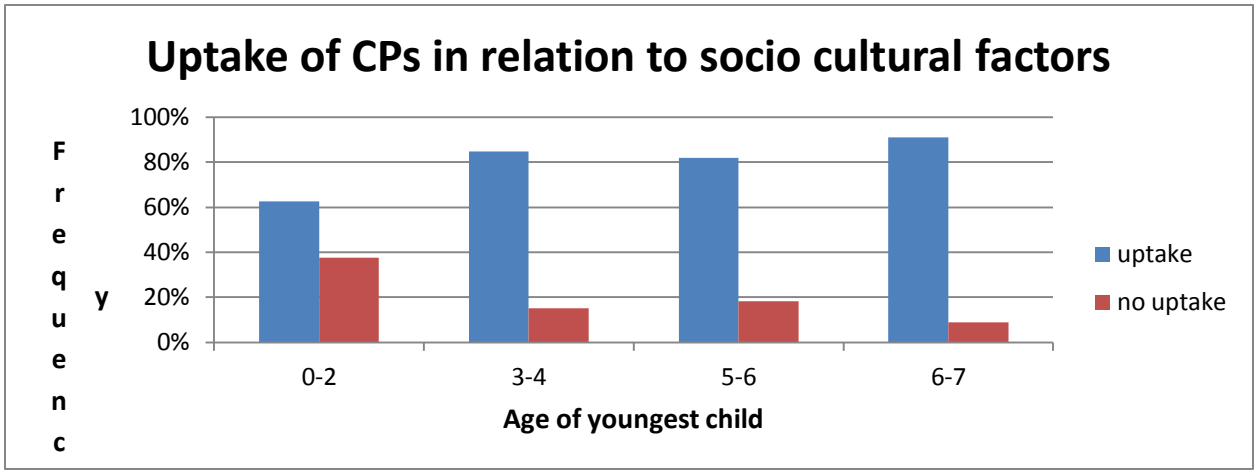

Figure 10: Age of youngest child

The respondents who needed more children and were not using contraceptives were 25%.

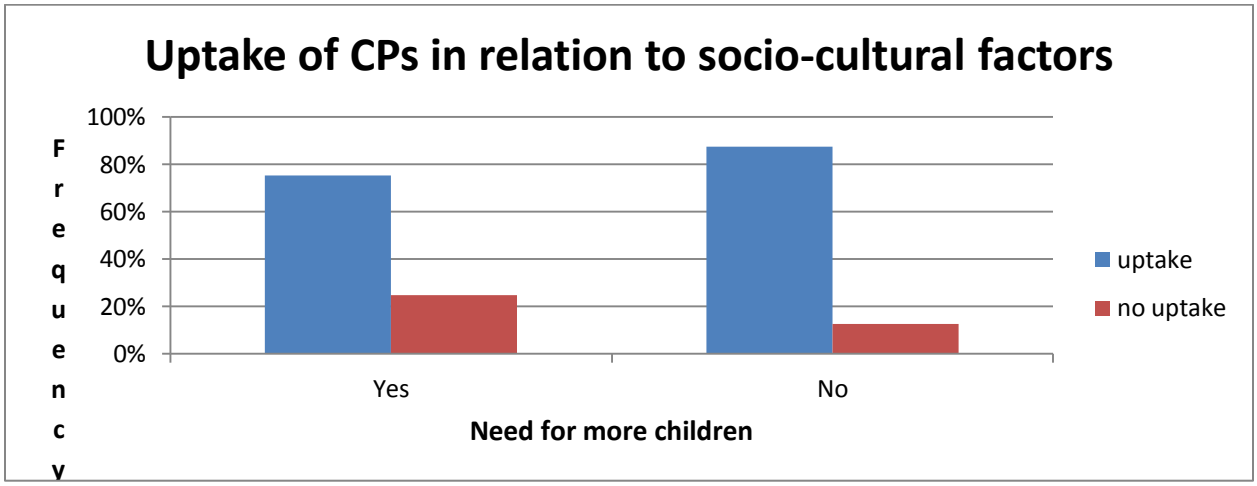

Figure 11: Need for more children.

3.5.4 Experience of contraceptive shortage

More than half of the respondents (47%) reported to have experienced shortage of contraceptive at their points of access (Table 7).

Table 7: Experience of contraceptive shortage

Variable	Frequency	Percent
Contraceptive shortage		
Yes	179	47
No	201	53

3.5.5 Provider factors that affect the uptake of contraceptives

The uptake of contraceptives is significantly affected by the facility from where one seeks the service. Those visiting the hospital have a 100% uptake of the contraceptive in relation to those visiting the private clinics and pharmacy. Other provider factors like waiting period and instance of experiencing contraceptive shortage do not significantly affect uptake.

Table 8: Contraceptive uptake in relation to provider factors.

Variable	Uptake (%)	No uptake (%)	p-value	Chi-square value	DF
Point of access					
Pharmacy	89.5	10.5	**P<0.05 (0.033)**	**6820**	**2**
Private clinic	97.0	3.0			
Hospital	100.0	0.0			
Experienced shortage of CPs					
Yes	93.7	6.3	**P>0.05 (0.371)**		
No	91.6	8.4			
Waiting period before service					
<15 min	90.9	9.1	**P>0.05 (0.072)**		
15-30 min	97.0	3.0			
31-60 min	100.0	0.0			
>60 min	100.0	0.0			

3.5.6 Suggestions on improving contraceptive use

Majority of the respondents (43%) reported the need for awareness creation on contraceptive use to improve on its use (Figure 12).

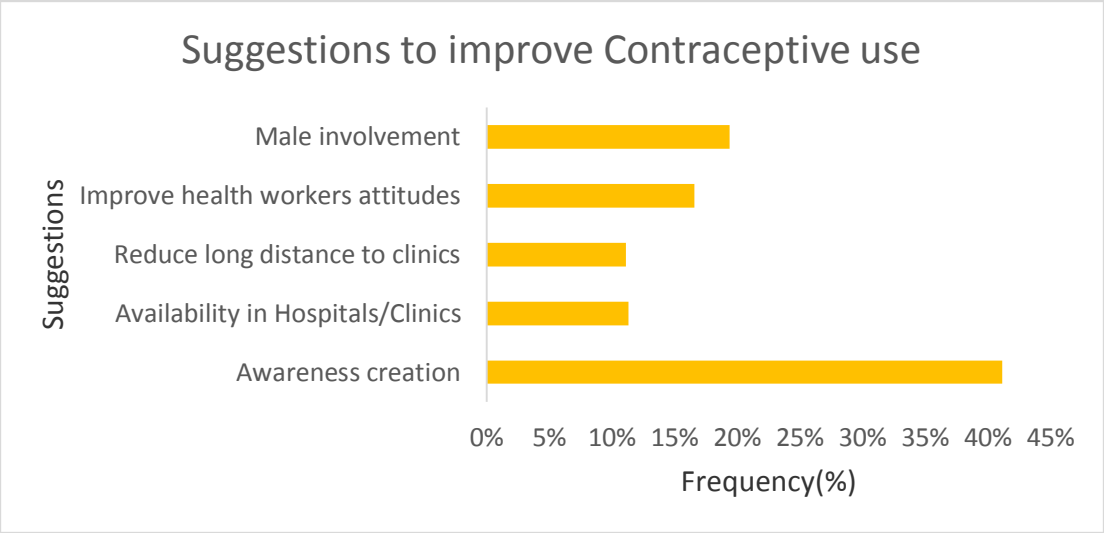

Figure 12: Suggestions on improving contraceptive use

3.6. Relation between community contraceptive acceptance and socio- demographic factors

3.6.1 Community acceptance

There was no significant association between occupation and marital status of the respondent with community acceptance to contraceptives but a significant association was found with education level, religion and the age of the respondent. The educated Christians aged below 35 years are likely to be within community that accept contraceptive use as compared to the un-educated Christians aged above 35 years of age (Table 9)

Table 9: Relation between community acceptance and socio- demographic factors

Variable	Accept	Not accept	OR	95% CI		p-value
Age			3.316	2.108	5.216	**0.001**
25-35	84	76	1.831	1.466	2.286	
36-44	47	141	0.552	0.43	0.78	
Education			1.013	0.593	1.729	**0.002**
Educated	110	177	1.003	0.902	1.114	
Un-educated	27	44	0.99	0.644	1.52	
Marital status			0.929	0.583	1.48	0.09
Single	40	67	0.949	0.683	1.319	
Married	99	154	1.022	0.891	1.172	
Occupation			1.196	0.636	2.248	0.579
Employed	19	27	1.168	0.676	2.015	
Un-employed	113	192	0.976	0.876	1.064	
Religion			0.958	0.574	1.598	**0.027**
Christian	107	173	0.99	0.884	1.11	
Muslim	31	48	1.034	0.694	1.54	

3.6.2 Culture effect on contraceptive use

There was no significant association between the religion and marital status of the respondent with culture effect on contraceptive use but a significant association was found with education level, occupation and the age of the respondent. The unemployed and educated aged above 35 years are unlikely to have culture affecting their contraceptive use as compared to the unemployed and uneducated aged below 35 years of age (Table 10).

Table 10: Relationship between culture effect and socio-demographic factors

Variable	Affect	Not Affect	OR	95% CI		P-value
Age			0.860	0.531	1.441	**0.001**
25-35	135	36	0.925	0.712	1.202	
36-44	157	36	1.075	0.834	1.387	
Education			0.426	0.195	0.931	**0.021**
Educated	235	69	0.877	0.797	0.966	
Uneducated	64	82	0.060	1.032	4.112	
Marital status			0.677	0.399	1.149	0.148
Single	84	28	0.767	0.543	1.086	
Married	217	49	1.133	0.944	1.360	
Occupation			0.368	0.195	0.695	**0.002**
Employed	32	19	0.437	0.263	0.726	
Un-employed	261	57	1.188	1.037	1.361	
Religion			0.858	0.458	1.605	0.632
Christian	234	62	0.969	0.855	1.098	
Muslim	66	151	1.129	0.684	1.865	

3.6.3 Spouse knowledge on contraceptive use

There was no significant association between the age, education and religion of the respondent with awareness of spouse on contraceptive use but a significant association was found with occupation and marital status of the respondent. The married and unemployed are likely to have their spouses aware of their contraceptive use as compared to the employed women **(Table11).**

Table 11: Relationship between spouse knowledge and socio-demographic factors

Variable	Aware	Not Aware	OR	95% CI		P-value
Age			1.363	0.844	2.200	0.205
25-35	47	124	1.171	0.925	1.483	
36-44	42	151	0.859	0.673	1.097	
Education			1.177	0.648	2.143	0.590
Educated	79	225	1.031	0.924	1.151	
Uneducated	17	57	0.876	0.537	1.430	
Marital status			2.480	1.528	4.026	**0.001**
Single	43	70	1.817	1.345	2.456	
Married	53	214	0.733	0.605	0.888	
Occupation			3.175	1.724	5.845	**0.001**
Employed	24	27	2.619	1.593	4.308	
Un-employed	70	250	0.825	0.728	0.935	
Religion			0.874	0.501	1.524	0.635
Christian	73	224	0.971	0.856	1.101	
Muslim	22	59	1.111	0.722	1.709	

3.6.4 Contraceptive current use

There was no significant association between the age, religion and marital status of the respondent with their contraceptive current use but a significant association was found with education level and occupation of the respondent. The educated that are employed are likely to be currently using contraceptives as compared to the educated that are unemployed (Table12).

Table 12: Relation between contraceptive current use and socio demographic factors

Variable	Use	Not Use	OR	95% CI		P-value
Age			1.527	0.848	2.750	0.154
25-35	150	21	1.271	0.891	1.814	
36-44	159	34	0.832	0.659	1.052	
Education			0.428	0.176	1.038	**0.040**
Educated	252	52	0.878	0.791	0.975	
Uneducated	68	6	2.054	0.936	4.510	
Marital status			0.772	0.427	1.396	0.395
Single	93	20	0.838	0.565	1.242	
Married	229	38	1.085	0.889	1.325	
Occupation			0.478	0.237	0.967	**0.049**
Employed	38	13	0.542	0.308	0.952	
Un-employed	275	45	1.132	0.980	1.308	
Religion			0.648	0.304	1.385	0.246
Christian	249	48	0.921	0.811	1.046	
Muslim	72	9	1.421	0.754	2.676	

3.7 Summary results from focus group discussions.

There were two focus group discussions conducted amongst women aged 18-25 and 26-49 years who were randomly selected. Each group comprised of twelve women. The following were the themes; awareness, method of preference, reasons of preference, fear of side effects and community acceptance of contraceptive methods. Most of the women were married, unemployed and had attained secondary education. By religion, Christians were the majority as compared to Muslims. Most of the women were between the ages of 35-39 years.

Table 13: Socio-demographic characteristics of the participants

Variable	N	Percent
Age category		
25	2	8
26-29	4	17
30-34	6	25
35-39	8	33
40-44	4	17
Marital status		
Single	10	42
Married	14	58
Occupation		
Employed	4	17
Unemployed	12	50
Small- scale business	8	33
Education level		
None	2	8
Primary	4	17
Secondary	12	50
College	55	15
University	6	25
Religion		
Christian	16	78
Muslim	8	19
Income source		
Salary	6	25
Farm Produce	8	33
Small-scale business	10	42

Table 14: Summary response(s) narrative

Theme	Main response(s)
Awareness of the various methods	"*Mimi najua njia ya dawa ya kumeza, sindano, mpira na* coil." (I know methods such as pills, Depo provera, condoms and IUCD). (FGD 2)
Method of preferences	"*Mimi napenda sindano kwa kuwa unapata na kurudi kazini, na pia unakaa kwa muda wa miezi mitatu kabla uwende tena*" (I prefer Depo provera as I am able to go back to work immediately and stay for about 3 months before going back for another injection). (FGD 1).
Reasons of preference	"*Napenda sindano kwa sababu haichukuwi muda na mzee hawezikujua."* (I prefer Depo provera because my husband won't know about it). (FDG 2).
Fear of side effects	"*Rafiki yangu alitumia* IUCD *na siku zake za mwezi zikaongenzeka mwezi mzima hadi* IUCD *ilipotolewa*." (My friend used IUCD and her menses increased and was on for a months until the IUCD was removed. (FGD 2). *" Dawa ya kumeza nilisikia na mama rafiki yangu inapoteza hamu ya kuonana kimwili na mwanaume na wengine wanasema inasababisha uchovu mwingi mwilini, kukosa hamu ya chakula, kuhisi kutapika na* *hiyo inaleta shida kwenye ndoa."* "Pills l heard make a woman "cold". They are others who complain of feeling tired and experiencing mood swings." This can bring problems in a marriage as one's partner may think they are unfaithful. "Pills also make one feel nausea and loss of appetite leading to loss of weight". (FDG 1).
Community acceptance of contraceptive methods	"*Watu wengi hawapendi kutumia njia za uzazi kwa sababu ya dini*." (Most people do not use contraceptive due to their religion). (FDG 2). One of the participants cited fears of discussing the contraceptive method with the spouses,

	friends and relatives.
Source of information	"I prefer government hospitals because in case you are sick they test blood and then the health provider can help me choose the method that suits my body type and therefore side effects will be minimal." (FGD 1). "They treat us well although sometimes you reach there and they tell you that they are busy, especially during lunch time." (FDG 2)
Decision on contraceptive use	*"Kupanga uzazi ni siri wenzetu hawana habari tunapanga uzazi na huwezi kumwambia hata rafiki bure mzee aweza kupata habari."(*FDG 1). (Family planning is a secret affair you can't tell even your best friend lest your husband gets to know).
Reasons for non-preference	"Pills i heard make a woman "cold." (Pills make one not feel any sexual arousal). (FDG 1) "*Kuna wale husema wanahisi kuchoka na kukosa hamu ya chakula na kupoteza kilo kwa sababu ya sindano."* (There women who say the feel tired, loss of appetite and loss of weight because of the injection). (FDG 2).
Suggestions on improving contraceptive use	"Health workers should take time and explain to us the various methods available, how they work and the side effects that are likely to occur". "Men also should be sensitized to the benefits and action of the various contraceptive." (FDG 2).

3.7.1 Awareness of various contraceptive methods.

Most of the participants were able to cite at least two to three existing methods that they have used or they know exist. The various methods included pills, injectables, IUCD, Implants like Jadelle, condoms and Norplant. It is important for both the married and singles to use contraceptive because for the married, it helps in the spacing of children while for the singles they may still in school and it helps them prevent unwanted pregnancies thereby staying longer at school and finishing their studies. On completion of their studies they will be able to make informed choices over their life. They will also be able to seek better jobs there by empowering them financially giving them power to negotiate on sex issues.

Conclusions

This study concluded that the proportion of women using contraceptive was at 80%. Most women have seen the need to space their births and therefore are conscious of their health and that of their babies. However there are women who are still not in any method which is an indication of exposing themselves to unintended/ unplanned pregnancy and abortions. The study findings showed that there was a positive and significant relationship between education and utilization of contraceptives. The more the women were educated the more likely they were using a contraceptive method. There is a strong need to improve the girl child education status and the need to empower the women which directly influence their decision making on reproductive issues and in turn can reduce the family pressure and opposition. It may also enable the remaining 20% not using contraceptives change their mind. The study showed that in spite of high level of awareness of contraceptive methods, the utilization was affected by various misconceptions, especially in long acting family planning methods. Women in the area did not embrace IUCD and Norplant contraceptive method as the percentage use was 8% and 15% respectively. Therefore there is need to create more awareness on the methods and to train more health care providers as the methods are effective and less expensive.

Recommendations

Based on the conclusions, the following are recommendations;

National and Kajiado County governments should strive to improve the transition rates from primary to secondary school to raise the education levels of the girl child hence promote better understanding of reproductive rights and the benefits of family planning methods. They should also seek to strengthen women empowerment programmes by providing sufficient information and how they can benefit. Kajiado County health officials should also scale up training and counselling for family planning services providers on the provision of implants and IUCDS as this will be less expensive but effective. Sensitization on the importance of having small families should be done at all levels of governance by various stakeholders concerned with matters of reproductive health. For success of family planning programs, male involvement is critical as they play an important role in the decision making process and use of contraceptives. Emphasis should be put on encouraging men to use family planning instead of leaving the burden to women, and by so doing contraceptive utilization would increase across the whole County.

Abbreviations and Acronyms

AIDS	Acquired Immunodeficiency Syndrome
CDC	Center of Disease Control
CP	Contraceptive
CPR	Contraceptive Prevalence Rate
FDGS	Focus group discussions
FP	Family Planning
KDHS	Kenya Demographic Health Survey

LARC	Long- acting reversible contraceptives
MDGS	Millennium Development Goals
MDHS	Malawi Demographic Health Survey
MMR	Maternal Mortality Ratio
NRHS	National Reproduction Health Strategy
RH	Reproductive Health
SPSS	Statistical Package for Social Science
SSA	Sub- Saharan Africa
STI	Sexually transmitted infections.
TFR	Total Fertility Rate
UNAIDS	United Nation Programme of HIV/AIDS
UNFPA	United Nation of Family Planning Association
USAID/HPI	United States Agency for International Development /Health Programs Initiatives.
WHO	World Health Organization
WRA	Women Reproductive Age

DECLARATIONS

Ethics approval and consent to participate

This study was approved by the Kenyatta National Hospital/University of Nairobi Ethical Review Committee (KNH/UoN/ERC No. (P689/10/2016). The study used structured questionnaires that were uniquely coded with results of each questionnaire being kept in strict confidence. Participating in the study was voluntary and one could withdraw at any point. The purpose of the study and its objectives were explained to local authorities, opinion leaders, hospital administrators, and community health workers from the area. Informed consent from eligible respondents was sought and only those who gave consent were included in the study.

Consent for publish

Not applicable

Availability of data and materials

That all data used in the manuscript is available for sharing; including all relevant raw data, will be freely available to any scientist wishing to use them for non-commercial purposes, without breaching participant confidentiality.

Competing Interests

The authors declare that they have no competing interests.

Funding

This study was self-funded and the author is a Masters student

Authors' contributions

Magdalene Rwamba - conceived of the study, participated in its design coordination, and drafted the manuscript.

Kenneth Ngure -participated in the design, coordination and helped to draft the manuscript.

Joseph Mutai - participated in the design of the study and helped to draft the manuscript.

All authors read and approved the final manuscript.

Acknowledgement

The author would like to acknowledge Prof Kenneth Ngure and Dr Joseph Mutai for their tireless guidance and patience. Vote of thanks goes to the study participants and the study team as a whole. I wish to express my sincere thanks to Ngong Sub County Hospital Administrators and MCH/FP clinic/Outpatient department staff for facilitating the smooth running of the study.

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