

Women Preference for Family Planning Methods

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Abstract

Background: Family planning is the key for preventing the social, economic and health consequences that result from unintentional pregnancies. Women's preferences for various contraceptive methods vary due to many factors. **Aim:** The study was aimed to assess women preference for family planning method. **Study design:** A cross sectional design was used. **Settings:** The study was conducted at the hospital and all seven family planning units in mitSalsil centrer ;namely: (Center for Motherhood and Childhood Care, Family Medicine Center in New Kufr, Family Medicine Center in Algafra, Union Unit, Unit El Jawaber, glasses unit and Unit of Crimea). **Sample type:** A convenience sample. **Study sample:**Two hundred and six women who attended the aforementioned family planning units through aduration of six months from July 2017 to December 2017. **Tool:** A structure interviewing schedule was used. It consists of three parts: Part one to identify socio-demographic data, obstetric, gynecological, medical, surgical history, part two questions to assess woman preferences of FB method and factors influencing contraceptive preference, part three questions to assess woman received enough counseling from the nurse regarding family planning methods. **Results:** The family planning methods preferred by women were the hormonal method (94.1%), (58.7%)preferred oral contraceptives, (30%) preferred injectable while (5.3%) preferred implants. Other non-hormonal family planning methods were IUD (40.7%) and lactational (9.7%). The two major factors that affected contraceptive preference were husband communication (53.9%) and religious affiliationsehoch (32%). **Conclusion:** The study concluded that family planning method preferred by women was the hormonal contraceptives whereas the least preferred method was lactational amenorrhea. Oral contraceptives were the most frequently preferred due high efficacy, easy use and reversibility. **Recommendation:** Information, education, and communication activities regarding family planning services should be strengthened by the MOH and target women before marriage,Family Planning programs (IEC) should target women before marriage in every possible way to teach those types, indications, adverse effects and reasons for choice of contraception methods.

Keywords: Contraceptives, Family planning, Preferences, Women.

Introduction

Family planning (FP) includes utilization of various methods of fertility control by an individual or a couple to space births or to promote desired gestations (**Solo and Festin, 2019**). FP can prevent social, economic and health outcomes resulting from unwanted pregnancies. Birth control benefits arise in particular among pregnancies at greater risk of maternal, perinatal and childhood deaths including those at extremely young (<18 years) or old (>34 years) mother's age; at high parities; with small inter-pregnancy interval as well as pregnancies ended with abortion. FP for high risk pregnant females can decrease risk of mother's mortality by up to 58 % (**Salisbury et al., 2016**). Birth control methods include oral pills, implants, injectables, patches, vaginal rings, intra-uterine devices, condoms, man and woman sterilization, lactational amenorrhea, withdrawal and fertility awareness dependent methods. Each method possesses a different mechanism of action as well as effectiveness. The effectiveness is measured by the number of gestations per 100 females using the method per year. Methods are classified by their effectiveness as commonly used into: highly effective (0–0.9 gestations / 100 females); Effective (1–9 pregnancies per 100 women); moderate effective (10–19 gestations / 100 females); Less effective (≥ 20 gestations / 100 females) (**WHO, 2020**).

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There are many factors that affect FP methods as desired children number, initial source of FP knowledge, and duration of FP utilization, FP intention, provider bias, informed choice as well as method availability, accessibility, and acceptability. In addition, the utilization of FP methods is usually problematic due to ignorance, taboos associated with cultural and religious affiliations (**Adama-Hondégla et al., 2015**).

Few studies have focused on woman's preference for FP methods. Most of literature has utilized choice as a proxy for preference by assuming females are selecting and then utilizing a favored method. But, few studies have comprehensively described the unique construct of birth control method preferences or estimated whether females are utilizing their favored method, and consequently recognized what barriers might interfere with utilization of favored methods (**He et al., 2017**).

The role of nurses in FP includes counseling and education. Thus they need up to date, accurate information regarding FP methods and share such information with females seeking contraception (**Puri et al., 2017**). They should also offer correct information to women making them able to catch suitable FP methods according to their characteristics and preferences, answer questions regarding method handling, provide scheduled consultations to evaluate tolerance and solve doubts about methods' utilization (**Solana Morete and González López, 2015**).

Significance of the study

The FP has gained a worldwide attention due to its significance in decision making regarding population growth and country development. Child bearing and birth control methods' utilization are among the most significant decisions on reproduction which could be taken by a couple to detect children number they desire (**Suntai, 2016**).

According to (**Eshak, 2019**) 60% of currently married females are using contraception in Egypt .The Intrauterine Device is the most widely used methods about(36%) of married women were utilizing IUD, (12%) oral contraceptive pills, and (7%) injectable. Relatively small percentages of females were utilizing other modern methods; e.g., (1 %) utilizing condom, only (6%) had information regarding emergency contraception. Prolonged breastfeeding is the most known traditional method. Only (3%) of females revealed utilization of a traditional method so that the study will do to assess preference of women regard family planning methods.

Aim of the study

This study aimed to assess women preference for family planning method.

Research questions

- What are women preferences for family planning methods?
- What are the factors influencing women's preference to select family planning methods?
- Does women had received enough counseling from the nurse on the use of different family planning methods?

Subject and Method

Study design: A cross sectional descriptive design was used in this study.

Study setting: This study was conducted at MitSalsil Central Hospital, Center for Motherhood and Childhood Care, Family Medicine Center in New Kufr, Family Medicine Center in Algjafra, Union Unit, Unit ElJawaber ,glasses unit and Unit of Crimea.

Sample type: A convenience sample technique was recruited to select the study subjects.

Study sample: The study sample was included all women who attended to family planning unit at predetermined setting from the beginning of July2017 to December 2017.

Tool of data collection:

A Structure Interviewing Schedule : It was designed by researcher using the national and international references. It is consist of three parts.

Part I: It include socio-demographic characteristics of woman as (age, education level, occupation, residence, income) and obstetric, gynecological, medical, surgical history.

Part II: Questions to assess woman preferences of family planning method as (easy to use, husband decision, fear of complications of other methods, dislike foreign body, method most understood, medically safe, low cost, widely available, protects against sexually transmitted infections, high effectiveness, long duration of action, medically safe).Also, questions to assess factors influencing contraceptive preference as demographic factors, economic factors and service provider factors.

Part III: Questions to assess women received enough counseling from the nurse such as: Greet the women respectfully, ask the women about their family planning needs, tell the women about family planning methods, help the women to make decisions about choices of methods, indication, types of family planning methods, advantage, disadvantage, contraindication.

Validity of the tool

The study tool was developed by the researcher based on review of relevant and current literature, and then reviewed by three experts from the faculty of nursing (women's Health and Midwifery Nursing Department) in Zagazig University. These experts assessed the tool for the clarity, relevance, application, comprehensive, and understanding. This constituted the face and content validation of the tool.

Reliability of the tool

Reliability of tool was tested for its internal consistency by using Cronbach's alpha value for reliability of the tool =0.861

Pilot study

Pilot study was carried out for one month in predetermined setting to evaluate the clarity and applicability of the tool, as well as to estimate the time needed for answer. The results of the pilot study didn't included in the sample size and according to analysis of pilot results, modifications of the tool were done as paraphrasing of some sentences.

Ethical Consideration

Ethical approval was obtained from the research Ethics Committee at the Faculty of Nursing, Mansoura University. Approval was taken from the director of predetermined setting to obtain the official permission to conduct the study after explaining its aim .Informed consents were obtained from every woman involved in the study &after clarification the nature objective of the study. The women were reassured about the anonymity, privacy, safety and confidentiality of the collected information throughout the whole study. The women were informed about their rights to refuse participation or withdraw from the study at any time. The results were be used as component of the necessary research for master study as well as for publication and education.

Research process

The process was carried out through two stages; preparatory and operating stages. Preparatory stage included: reviewing literature, developing tools and pilot study while the operating stage included; data collection and data analysis.

The preparatory stage

It included reviewing the local and international relevant literature and theoretical knowledge about the various aspect of the study using articles, books, journals to select data collection tools and make necessary modifications. This stage lasted six month (July2017 to December 2017).

Operating Stage

- I. **Data Collection Phase:**After obtained permission data were collected from predetermined setting. Data were collected from MitSalsil central hospital in three days, from the Center for Motherhood and Childhood Care in two days, from the Family Medicine Center in New Kufr in one day, from the Family Medicine Center in Aljafra in one day, from the Union Unit in one day, from the Unit El Jawaber in one day, from the glasses unit in one day and from the unit of Crimea in one day per month from 9 am to 12 pm for six months started at the beginning of July 2017 to December 2017. The researcher interviewed each woman individually for 25-30 minutes, during the interview; the researcher asked the woman about socio demographic characteristics, obstetric data then ask about thepreference for family planning methods.
- II. **Data Analysis Phase:** Gathered data were coded, processed and statistically analyzed using SPSS (statistical package of social sciences), version 20.0(SPSS, Chicago, IL). Categorical data were expressed in number and percentage. Data of age were normally distributed and were expressed in mean \pm standard deviation (SD). Chi-square test was used for comparison of variables with categorical data. Cronbach's alpha test was performed to test for the internal consistency of the tool used in the study. Statistical significance was set at $p < 0.05$.

Results

Table (1): Distribution of the studied sample according to their socio-demographic Characteristics

Items	n (206)	%
Age (years)		
<20	30	14.6
20 – 40	159	77.2
>40	17	8.3
Mean ±SD	29.7 ±7.9	
Educational level		
Illiterate	48	23.3
Basic education	141	68.4
Higher education	17	8.3
Occupational status		
House wife	196	95.1
Working	10	4.9
Residence		
Rural	100	48.5
Urban	106	51.5
Income		
Not enough	57	27.7
Enough	143	69.4
Enough and save	6	2.9

Table (1) shows the distribution of the studied sample according to their socio-demographic characteristics. It was found that the average age of the studied group was (29.7) years, about (68.4%) of them had basic education. Most of the studied sample (95.1%) were house wife and (51.5%) of them from the Urban. More than two third (69.4%) of them just had enough income.

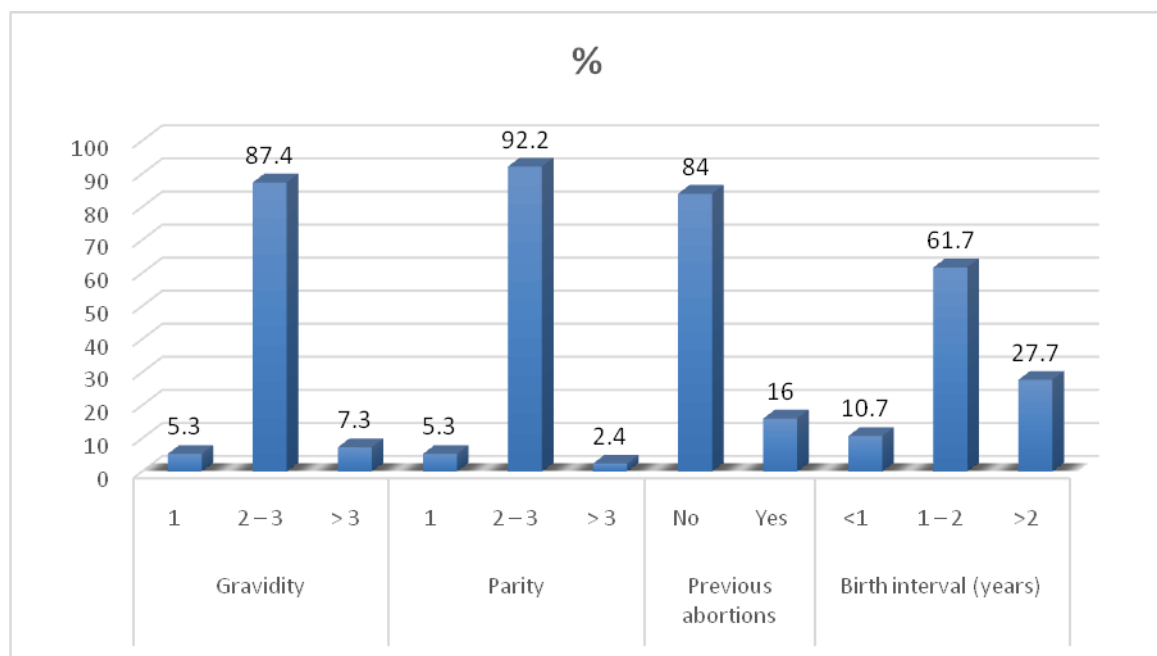


Figure (1): Distribution of the studied sample according to their obstetric history

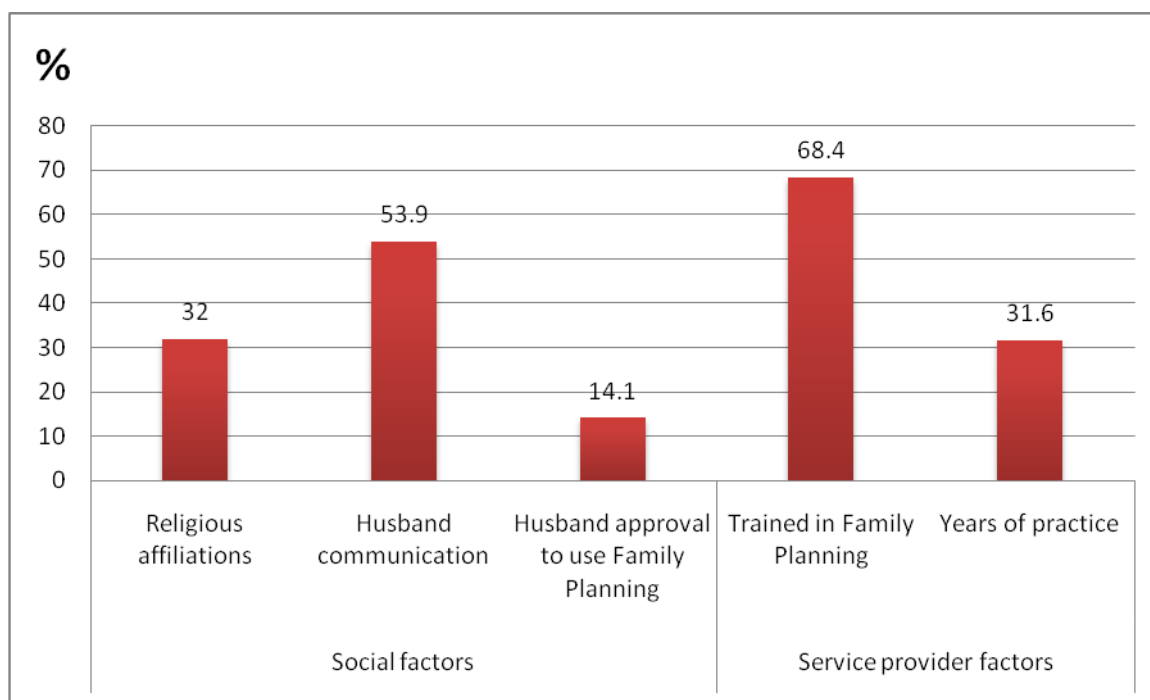


Figure (2): shows the factors influencing contraceptive preference and choice of family planning methods.

Table (2) frequency distribution of the studied group according to the preference of family planning methods.

Cause of preference	Natural method		Hormonal method							
	lactational amenorrhea (n=20)		Oral contraceptives (n=121)		Injectable contraceptives (n=144)		Sub dermal implant (n=11)		intrauterine device (n=84)	
	N	%	N	%	N	%	N	%	N	%
Easy to use	8	40.0	22	18.2	20	13.9	5	45.5	21	25.0
High effectiveness			26	21.5	34	23.6	6	54.5	18	21.4
No cost	7	35.0								
Medically safe	5	25.0			21	14.6				
Reversible method			21	17.4	17	11.8			23	27.4
More than one			52	43.0	31	21.5				
Long duration of action					21	14.6			22	26.2

Table (2) shows the distribution of the studied sample according to cause of preference of family planning methods it was found that 20 case (9.7%) of studied sample preferred the lactation method as (40%) of them show it easy to use, It was found that 121 case (58.7 %) of studied sample preferred the oral contraceptives as (21.5%) show it highly effective, and cause of preference Injectable contraceptives, It was found that 144 cases (69.9 %) of studied sample preferred the Injectable method as (23.6%) reported it highly effective ,It was found that 11cases (5.3 %) of studied sample preferred the Subdermal implant method as (54.5%) reported it highly effective . cause of preference intrauterine device, It was presented that 84 cases (40.8 %) of studied sample preferred the Intrauterine device method as (27.4%) of them show it reversible methods.

Table (3) Association between woman age and preference of family planning method

Items	Age (years)						Chi square test	
	<20		20-40		>40			
	N	%	n	%	n	%	X ²	P
Lactation (n=20)								
Safe	0	0.0	4	23.5	1	100.0	6.294	0.178
No cost	0	0.0	7	41.2	0	0.0		
Easy to use	2	100.0	6	35.3	0	0.0		
Oral contraceptives (n=121)								
Easy to use	5	29.4	16	17.2	1	9.1	15.617	0.016
High effectiveness	2	11.8	21	22.6	3	27.3		
Reversible method	2	11.8	13	14.0	6	54.5		
More than one	8	47.1	43	46.2	1	9.1		
Injectable contraceptive (n=144)								
Easy to use	2	8.0	17	15.7	1	9.1	9.349	0.499
High effectiveness	7	28.0	25	23.1	2	18.2		
Reversible method	1	4.0	15	13.9	1	9.1		
Long duration of action	7	28.0	12	11.1	2	18.2		
Medically safe	2	8.0	16	14.8	3	27.3		
More than one	6	24.0	23	21.3	2	18.2		
Intrauterine device (n=84)								
Easy to use	1	20.0	17	25.4	3	25.0	9.699	0.138
High effectiveness	1	20.0	15	22.4	2	16.7		
Reversible method	2	40.0	21	31.3	0	0.0		
Long duration of action	1	20.0	14	20.9	7	58.3		

Table (5) shows the association between woman age and family planning method preference. It was found that there were association between woman age and preference oral contraceptives method (P=0.016)

Table(6): Association between birth interval and preference of family planning method

Items	Birth interval (years)						Chi square test	
	<1		1-2		>2			
	N	%	N	%	n	%	X ²	P
Oral contraceptives (n=121)								
Easy to use	3	30.0	14	18.9	5	13.5	3.340	0.765
High effectiveness	3	30.0	16	21.6	7	18.9		
Reversible method	2	20.0	12	16.2	7	18.449		
More than one	2	20.0	32	43.2	18	48.6		
Injectable contrac. (n=144)								
Easy to use	3	15.8	14	16.3	3	7.7	10.670	0.384
High effectiveness	5	26.3	21	24.4	8	20.5		
Reversible method	2	10.5	9	10.5	6	15.4		
Long duration of action	6	31.6	9	10.5	6	15.4		
Medically safe	1	5.3	15	17.4	5	12.8		
More than one	2	10.5	18	20.9	11	28.2		
Intrauterine device (n=84)								
Easy to use	4	66.7	16	29.6	1	4.2	17.970	0.006
High effectiveness	1	16.7	11	20.4	6	25.0		
Reversible method	1	16.7	17	31.5	5	20.8		
Long duration of action	0	0.0	10	18.5	12	50.0		

Table (6) shows the association between birth interval and preference of family planning method. It was found that there were association between birth interval and intrauterine devices (P=0.006).

Discussion

The present study aimed to assess women preference for family planning methods. The study research questions were supported by the study findings. Such findings evidenced that majority of the studied women preferred injectable contraceptive followed by oral contraceptives then IUD. This preference was affected by many factors including social and service provider factors.

Additionally the study reported that most of the studied sample received enough counseling from the nurse. Regarding obstetric history of study women, it was found that more than two thirds of the studied sample had gravidity two to three times, also, majority of them had parity two to three times, a few of the studied sample had history of abortion. Less than two third of them had 1-2 years birth interval.

Study performed by **Thulaseedharan, (2018)** to assess the use and preferences of contraceptive methods among young married women in Trivandrum district, Kerala, India. That study has reported that had less than one third of involved women had more than one child, and the difference in the average age at first child birth and most recent child birth was only 2.2 years. The difference between the study results and other studied might be due to level of awareness and general health.

Moreover, a study performed by **Mosha et al., (2017)** to assess women's preferences for different contraceptive methods attribute differ as regards the type of relations and other aspects of their life. They have found that the most frequently favored modern contraceptive method was injectable, followed by oral contraceptives, and then Norplant. The agreement between the study's results may be due to common benefits among the participants including efficiency of the method, reversibility, minimal adverse effects, convenience and long duration of use.

Causes of preference of family planning methods have been discussed in the current study. Regarding preference of lactation, it was found that 20 cases (9.7%) of studied sample preferred the lactation method as more than third of them show it easy to use, nearly one third show it cheap and less than one third show it safe. In agreement with that, the study performed by **Elweshahi et al., (2018)** have reported that postpartum amenorrhea was the most common cited reason for non-use of planning method while fear of side effects or the procedure of application was the second most common cause. Lactation without amenorrhea was reported by minority of women as the main reason for non-use.

Also regarding subdermal implant method, it was found that 11 cases (5.33%) of studied sample preferred the subdermal implant method as half of them reported it highly effective and more than one third of them reported it easy to use. While as regard preference oral contraceptives method, it was found that 121 case of studied sample preferred the oral contraceptives as less than one third show it highly effective and minority of them show it easy to use and reversible method.

In agreement with that, the Egyptian study evaluating HCMs by **Yousif and Mansour, 2018** has reported that injectable and implants were more likely to be used for a longer period (4+ years), and women were less likely to discontinue its use, compared to those using contraceptive pills, differences observed are statistically significant ($p < 0.001$). The study findings revealed a higher tendency to recognize the benefits of HCM among the studied women. However, most of them used the method on their own without the advice from the physician and do not adhere to the system of follow up unless complications aroused or they need to switch to other method of contraception.

Additionally regarding preference of intrauterine device in the current study, it was presented that 84 cases (40.77%) of studied sample preferred the Intrauterine device method as about one third of them show it reversible method, long duration of action and reported it easy to use, while minority of them show it highly effective.

Similarly, the study performed in Turkey by **İnal et al., (2017)** has observed that IUDs were the most preferred method of contraception in this particular region. This might be explained to some extent with their easy access and being covered by the social security system. In Turkey, Family Health Centers provide free IUDs; their installation and all gynecologic examinations are free in these centers. In contrast, OCs was not paid for by the social security system.

Moreover, a study by **Apanga and Adam, (2015)** to identify the factors influencing a woman's use of family planning services. A multinomial model is fitted to examine the determinants of the barriers to service use found that half of all urban poor women identified psychosocial reasons as the primary barrier to using family planning services. Administrative barriers were the second most commonly reported barrier, with few women reporting cognitive and physical barriers to FP service use. This could be attributed to subjective perceptions about the barriers that vary from one person to another according to cultural and personal characteristics and the quality of service provided.

The present study has reported the factors influencing contraceptive preference and choice of family planning methods. It was found that husband communication represent the half followed by religious associations which represented one third. Regards service provider factors about two thirds reported trained in family planning followed by (31.6) years of practice.

In harmony with these findings, a study performed by **Egede et al., (2015)** on Nigerian women to determine the prevalence and factors affecting the choice and sources of contraceptive options. That study has reported the reasons for choosing a contraceptive method, discontinuation of a chosen method, and not using any method of contraception. The commonest etiologies for selection of a contraception method were personal choice, approval of the husband, recommendation by friends, low charge, safety, and religious approval (The most common etiology for not using any form of contraception included desire for more children, followed by religion prohibition, husband's disapproval, and fear of adverse side effects. Additional reasons associated with cultural belief and the possibility of utilization of different methods abortion, cost, personal wishes, and no recognizable etiology.

In a harmony of these findings, a study performed by **Firman et al., (2018)** has evaluated the associations between the selection of hormonal contraception method and women's age by age groups. It was found that the use of the skin patch reduced with decreasing age, whereas the contraceptive pill was most preferable by the youngest and oldest women's groups. Women aged 25 to 44 years favored the vaginal ring. Additionally, a research performed by **Ulbricht et al., (2019)** to identify whether use of IUD is affected by a history of induced abortion and the type of contraceptives used until costs are covered, has analyzed data from 301 female residents in Mecklenburg-West Pomerania and has revealed that no associations were detected between preferring the IUD and age in the included women.

Interestingly, the present study has found association between birth interval and preference of intrauterine devices. But, no association was found between birth interval and contraceptives (either oral or injectable). Denoting that included women might prefer IUD planning method as IUD could be a good reversible and effective method in achieving birth interval between children.

Conclusion

The results of the study can be concluded that the main family planning method preferred by studied women was the hormonal method (94.1%). (58.7%) of them preferred oral contraceptives, (30%) used injectable contraceptives while (5.3%) preferred implants. Other non-hormonal family methods reported to be preferred were IUD use (40.7%) and lactation method (9.7%). The two major factors that influenced the contraceptive preference and choice of family planning methods were husband communication followed by religious affiliations. There was a significant association between woman age, gravidity and preference of oral contraceptives method.

Recommendations

- Information, education, and communication (IEC) activities regarding family planning service should be strengthened by the MOH through mass media messages, encouraging and broadening the activities of health workers in the study area.
- Family Planning programs (IEC) should target women before marriage in every possible way to teach those types, indications, adverse effects and reasons for choice of contraception methods.
- Lactational amenorrhoea should be encouraged to be used by women as it medically safe and economic method.
- **Further research:** Assess availability and accessibility of contraceptive information and services.

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Conflicts Of Interest Disclosure

The authors declare that there is no conflict of interest.

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