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ABSTRACT

The aim of present study is to explore knowledge, attitude and usage of family planning methods among married women in reproductive age in Mosul City.

Subjects and Methods

A descriptive cross-sectional study design was adopted to accomplish the aim of the current study. Data was collected from a convenient sample of 300 married women at child bearing age who visiting a maternity and child teaching hospital in Mosul City during a period of three months. Direct interview by using reformed standardized questionnaire form was used for data collection.

Results

Out of 300 participants 69.3% % heard about family planning but only Less than half (48.7%) give a correct concept of family planning and 28.7% have no idea . The prevalence of current contraceptive usage among participates was 61.3%. Traditional methods were rated as the most common contraceptive methods formerly used by 67.3% of the sample fallowed oral contraceptive pills by 31%. Fear from side effect was the main cause that prohibiting women to use contraceptives as ranked by 42%. Women in this study had a favorable attitude towards family planning.

Conclusion and recommendations

Married women in reproductive age in Mosul City had incomplete and inconsistent information about family planning. Although, contraceptive usage prevalence was within worldwide range but traditional methods were the most commonly used methods.

Well-organized strategies should be adopted to promote family planning programs by depending on practical health education programs.

Keywords: Family planning, contraceptive methods, women health.

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INTRODUCTION

According to World Health Organization (WHO) " Family planning 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". (1) Family planning conveys benefits at individual level, household level, community or country level and global level benefits. (2,3) Indeed, family planning play a role in confirming the well-being and independence of women, by providing access to preferred contraceptive methods for women and couples thus supporting the health and progress of communities. (4) Furthermore, in countries with high birth rate family planning advancement helps in reducing poverty and hunger with prevention of maternal mortality, reduction of childhood death, and lead to women empowerment plus establishment of universal primary schooling. (2) However, Socio-cultural and economic factors were found to influence contraceptive uptake such as religion, culture, cost and fear from side effects of contraceptives. (5, 6) Also, it was found that in rural areas husband disagreement was a cause for non-use which more obvious as compared to urban areas. (7, 8) Studies in developing countries showed low utilization of contraceptive methods due to the previous reasons. (9,10,11,12,)Yet, awareness of contraceptive methods plays the important element in the continuum that leads to contraceptive uptake. (5) For that reason studies emphasized on prioritizing family planning program among primary health care programs and education by health worker together with mass media which can play important role in disseminating information about family

planning promotion. ^(6, 7, 13, 14) Surveying knowledge, attitude and usage of family planning methods among women will provide baseline data for improving the effectiveness of family planning program. Consequently, the present study aims to identify knowledge, attitude and usage of family planning methods among married women in reproductive age in Mosul City.

SUBJECTS AND METHODS

A descriptive cross-sectional study design was adopted to accomplish the purpose of the current study. At the beginning of the study an official and ethical permission was obtained from College of Medicine/ University of Mosul and Directorate of Nineveh health. The study was directed toward married women in reproductive age in Mosul City. A convenient sample enclose 300 of married women visiting Al-Kanssa Teaching Hospital in Mosul City how agree to participate during study period were involved. Data was collected from each participant by direct face to face interview after explaining the objective of the study and obtaining verbal consent. Data was collected over a period of 3 months from -1st of June 2020 to 1st of Sep 2020. Data collecting tool was a reformed standardized questionnaire form planned for the objective of the study after literature review. (10, 15, 16) The form contains three domains. First domain collect information related to general and demographic characteristics of the participants. Second one include questions designed to find the participants' awareness and known contraceptive methods, their information about health effect of contraceptive methods, source of information, past use of contraceptive, their current

usage of contraceptives, and causes of non-using them. The last domain consists of several questions to determine participants' attitude regarding family planning programmes and participants' answers in this domain were categorized in three groups: agree, don't know, and disagree. The resulted data were presented in suitable tables prepared for this purpose. Data analysis was done using software program Minitab version 20. Results were demonstrated in the form of numbers, percent. Z- test for one proportion was used to calculate p-value. P-value of ≤ 0 , 05 was considered significant.

THE RESULTS

Table 1 shows that more than half (55%) of the respondents in the age group (26- \leq 35 year) and 48% had higher education. More than half of them (58.7%) were house wives. It was also found that half of them (51%) had 2-4 children.

Table (1): General characteristics of the study population (n=300).

Characteristic	No.	%
Age		
15-≤ 25 year	69	23.0
26- ≤35 year	165	55.0
36- ≤45year	62	20.7
≥46	4	1.3
Education		
Illiterate	37	12.3
Primary school	48	16.0
Secondary school	71	23.7
Higher education	144	48.0
Occupation		
Housewife	176	58.7
Governmental employment	99	33.0
Privet non-governmental employment	25	8.3
Number of pregnancy		
0	15	5.0
1	68	22.8
2-≤4	153	51.0
≥5	64	21.3

In table 2 considerable proportion of participates (69.3%) heard about family planning (p-value=0.000). The most common known contraceptive was the traditional methods by 85% of participants fallowed by intrauterine device 56.3% and only 9.3% heard about male sterilization (vasectomy). Less than half (48.7%) considered the concept of family planning is limitation and spacing of birth and 28.7% have no idea. Regarding

non-contraceptive benefit of family planning, improvement of health was selected by 59.3% and about one third (34.3%) have no idea. Friends and relatives was rated the most common source of information about family planning fallowed by medical professionals by 32.7% and 30% respectively.

Table (2) Knowledge and Awareness regarding various family planning methods (n=300).

Variable	Agree	Disagree	P-value
	No. (%)	No. (%)	
Heard (aware) about family planning	208 (69.3)	92 (30.7)	0.000
Known family planning methods			
Condom	163 (54.3)	137 (45.7)	0.149
Oral contraceptive pills	165 (55.0)	135 (45.0)	0.094
Intrauterine devices	169 (56.3)	131 (43.7)	0.032
Injectable	77 (25.7)	223 (74.3)	0.000
Traditional methods (breast feeding Withdrawal, safe	255 (85.0)	45 (15.0)	0.000
period)			
Female sterilization	41(13.7)	259 (86.3)	0.000
Male sterilization	28 (9.3)	272 (90.7)	0.000
Concept of family planning methods			
mitation of birth	48 (16.0)	252 (84.0)	0.000
Spacing of birth	13 (4.3)	287 (95.7)	0.000
Stopping of birth	7 (2.3)	293 (97.7)	0.000
Limitation and spacing of birth	146 (48.7)	154 (51.3)	0.686
No idea	86 (28.7)	214 (71.3)	0.000
Knowledge of non-contraceptive benefits of family			
planning methods			
Prevention of sexually transmitted disease	50 (16.7)	250 (83.3)	0.000
Improvement of health	178 (59.3)	122 (40.7)	0.001
Protection against cancer	16 (5.3)	284 (94.7)	0.000
No idea	103 (34.3)	197 (65.7)	0.000
Source of knowledge or Source of information			

Media	50 (16.7)	250 (83.3)	0.000
Magazine	36 (12.0)	264 (88.0)	0.000
Internet	86 (28.7)	214-71.3	0.000
Friends/ relatives	98 (32.7)	202 (67.3)	0.000
Health professionals	90 (30.0)	210 (70.0)	0.000
Others	39 (13)	261 (87.0)	0.000

^{*}Z-test for one proportion was used for estimation of p-value.

Table 3 demonstrate a highly significant prevalence rate of current contraceptive usage among participates which was 61.3% (p-value=0.000). Traditional methods were most prevalent methods used previously as stated by 67.3% of the sample fallowed by oral contraceptive pills

31%. About one third (35.3%) chose a comfortable and easy used contraceptive. It was also found that fear from side effect was the main cause that prohibiting women to use contraceptives as rated by 42.0%.

Table (3): Contraceptive methods usage among participants (n=300).

Contraceptive usage	Agree No. (%)	Disagree No. (%)	P-value
Currently used contraceptive	184 (61.3)	116 (38.7)	0.000
Types of contraceptive method used previously			
Condom	90 (30.0)	210 (70.0)	0.000
Oral contraceptive pills	93 (31.0)	207 (69.0)	0.000
Intrauterine devices	83 (27.7)	217 (72.3)	0.000
Injectable	12 (4.0)	288 (96.0)	0.000
Traditional methods (breast feeding ,withdrawal and safe period)	202 (67.3)	98 (32.7)	0.000
Emergency contraceptive	15 (5.0)	285 (95.0)	0.000
Female sterilization	9 (3.0)	291 (97.0)	0.000
Male sterilization	0 (0)	300 (100)	0.000
Reasons for using specific contraceptive method previously			
Available	57 (19.0)	243 (81.0)	0.000
Comfortable and easy for use	106 (35.3)	194 (64.7)	0.000
Inexpensive	22 (7.3)	278 (92.7)	0.000
Confident	79 (26.3)	221 (73.7)	0.000
Husband choice	57 (19.0)	243 (81.0)	0.000
Doctor's advice	41 (13.7)	259 (86.3)	0.000
Reasons prohibiting women to use contraceptive methods			
Currently pregnant	36 (12.0)	264 (88.0)	0.000
Currently lactating	32 (10.7)	268 (89.3)	0.000
Lack of knowledge	17 (5.7)	283 (94.3)	0.000
Pressure from husband	16 (5.3)	284 (94.7)	0.000
Desire for son	12 (4.0)	288 (96.0)	0.000
Prohibition by religion	6 (2.0)	294 (98.0)	0.000
Fear of side effect	126 (42.0)	174 (58.0)	0.007
Pressure from mother in low	0 (0)	300 (100)	0.000
Non availability	5 (1.7)	295(98.3)	0.000
Expensive	7 (2.3)	293(97.7)	0.000

^{*}Z-test for one proportion was used for estimation of p-value.

Favorable attitude towards family planning was found in general among participants. Family planning methods improve mothers' health was thought by the majority of the sample (85.9%). On other hand, 72.8% of participants

were against non- usefulness of family planning methods. Only 13.1% of participants against the use of contraceptive after the birth of 1^{st} child as presented in table 4.

Table (4): Attitude toward the family planning methods among the study participants (n=300).

Sta	tement	Agree	Don't know	Disagree
		No. (%)	No. (%)	No. (%)
1-	Do you think that family planning methods support livening and psychological comfort of the family?	, ,	61 (20.4)	23 (7.8)
2-	Do you think that family planning methods improve mother's health?	258 (85.9)	22 (7.3)	20 (6.8)
3-	Do you think that family planning methods good for the baby health?	224(74.8)	47 (15.5)	29 (9.7)
4-	Is better to use contraceptive directly after birth.	195 (65.1)	79 (26.2)	26 (8.7)
5-	Family planning methods are not useful.	29 (9.7)	53 (17.5)	218 (72.8)
6-	It is right to use contraceptive after the birth of 1^{st} child.	213 (70.9)	48 (16)	39 (13.1)

DISCUSSION

Although developing countries provided reproductive health services to couples as part of developing strategies for lowering fertility and improving socioeconomic condition and sustain maternal and child health. (17, ¹⁸⁾Attending and using these services need awareness and preparedness and proper usage. Surveying women about their knowledge, attitude and usage of family planning methods is useful to provide the needed data for continuing and supporting of family planning activities. In the present study more than half (55%) of surveyed women in the age group of (26- ≤35 year). Variety of age group was seen in different studies probably related to methodological issues for instance, Abd study (19) in Bagdad 43% of women between ages of (18-25) years, and in Basrah 39.1% within age group of (20-29). (10) Also an Indian study showed (34.95%) of women belongs to the age group of 20-29 years. (20)

Majority of participants had formal education in the present study. Educational level differentiated according to study setting whether urban or rural, as literacy rate was seen of higher level in studies conducted in urban localities. (10, 14, 21) In general educated women have better information about family planning methods and their availability. (3) More than half of them (58.7%) were house wives. It was also found that half of them 51% had 2-4 children which may be the common desirable family size in Mosul City. Although, a considerable proportion of participates (69.3%) heard about family planning in this study but only Less than half (48.7%) give a correct concept of family planning and 28.7% have no idea. While, improvement of health as a non-contraceptive benefit of family planning; was selected by 59.3% and about one third (34.3%) have no idea. This reflects that there are a large proportion of women having incomplete and inconsistent information about family planning which may relate to lack of structured educational programs about family planning. Correspondingly, low knowledge proportion was reported in Al Ameen and Al Deen study (22) in Bagdad by 75.2%, in that study only (40.3%) delivered correct description and more than half (59.7%) didn't know. While, 80.6% of the participants in a Saudi study were knew about family planning, and 68.1% in that study correctly defined family planning. (23) Also, in Al-Ramadi study (86.6%) of the respondents heard of the term family planning. In comparison, a higher proportion of knowledge was found in in Northern Indian and Ethiopian study by (94%) women for both. (15,

The participates in this study rated traditional methods as the most common known contraceptive by 85% % fallowed by intrauterine device 56.3% and only 9.3% heard about male sterilization (vasectomy). Friends and relatives were ranked as the most common source of information about family planning fallowed by medical professionals by 32.7% and 30% respectively. In contrast, Gupta, Mohapatra and Kumar (14) who found that oral contraceptive pills were known by (97.7%) and the least awareness observed for traditional methods (30.5%). The source of knowledge of family planning methods in that study were mainly doctors and health worker (70.4%). (14) On other hand in a Saudi study 53.2% of the participants recognized hormonal pills, followed with intrauterine devices and the most common source of information was family members by (51.8%), followed by internet reading (37.5%) and healthcare workers (21.8%). ⁽²³⁾Principally, there should be health programs that provide accurate and proper information regarding variable family planning methods. The prevalence of current contraceptive usage among participates in this study was 61.3% which is comparable to a study in Kashmir and Cameroon. ^(25, 16) And it is lower than Sindhu and Angadi study ⁽²⁶⁾ in India, Kopp Kallner H et al study ⁽²⁷⁾ in Swedish and Sultan S et al study ⁽²⁸⁾ in Pakistan. Yet, it is higher than what estimated in Basrah and Bagdad. ^(10, 22) As well as it is higher than what is reported in Saudi Arabia, Ethiopia, Sudan and Malaysia. ^(23, 24, 29, 30) In general, contraceptive prevalence in the current study is within worldwide prevalence of contraceptive use is near 60 % although; it was 53% in developing countries. ⁽¹⁶⁾

Though, contraceptive usage is within worldwide rate, but the most previous prevalent contraceptives used were traditional methods by 67.3% of the sample fallowed oral contraceptive pills by 31%. Similarly, in a Cameroon study the traditional methods were used by 60.6 % of participants. (16) Meanwhile, Al Sammak NI found in earlier study in Mosul traditional methods were used by 41.4% and oral contraceptive pills by 37%. (31) Different results were recorded in Abd AY (19) study in Bagdad, Ebrahim and, Muhammed study in Basrah (10) in both modern methods were used by higher proportion of participants. Likewise, modern methods predominantly used by women in Mahadeen A.I etal (8) study in Jorden, Kashyap P (9) Gupta V etal (14) and Nagamala I etal (32) in India. In general, 91 % of all contraceptives used by women in reproductive age worldwide were modern method of contraception. (33) Probably women in the present study used traditional methods for spacing rather than limitation of birth. The women in the present study chose a comfortable and easy used contraceptive, as stated by more one third (35.3%). In addition, fear from side effect which was the main cause that prohibiting women to use contraceptives as rated by 42%. This may be the reason for preferring traditional methods by participants in the current study relating to their safeness according to participants' beliefs in spite of their higher failure rate. (34) In comparison, Al Ameen and Al Deen study (22) in Bagdad recorded that desire for children and method associated reasons involving side effect were stated by 37.7% and 34.7% of participants as causes of non-using contraceptives. Likewise, George and Kumar (35) reported desire for male child 30.1%, lack of knowledge 15.1% and fear of side effects 11.3% as the main causes for not using contraceptives by the participants. While, Nansseu IRN etal (16) identified the prevailing reasons impeding contraceptive practice were lack of information by 31.4 %, uselessness by 31.4 %, and fear of side effects by14.3 % of non user.In general a favorable attitude towards family planning was found among participants in the current study which is consistent with Dhaher EA study (36) in Saudi, Tilahun T et al study (24) in Ethupia and Quereishi M J et al study (20) in India. In contrast to Al Ameen MI, Al Deen LD study (22) how found high proportion with negative attitude toward family planning. Also, negative attitude was found in Jammeh SS et al study (11) in Gambia which was mainly related sociocultural believes. The positive attitude towards family planning may relate to conducting the current study in an urban society and high proportion of formal education among participants.In conclusion, married women in

reproductive age were having incomplete and inconsistent information about family planning. Although, contraceptive usage prevalence within worldwide range but traditional methods most commonly used methods as women in this study prefer method which is easy, comfortable and with less side effect. In general women have positive attitude towards family planning. It is recommended to cultivate well-organized strategies to promote family planning programs by depending on practical health education programs. Providing good counseling services to clients by doctors and health personals to provide accurate facts and correct wrong thoughts in addition to dissemination of information via mass media and internet.

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