

Knowledge and Attitude Concerning Intrauterine Contraceptive Device among Sample of Women in Baghdad

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ABSTRACT

Background: There are different kinds of birth control that act at different points in the process, from ovulation, through fertilization, to implantation.

Objective: To evaluate knowledge and attitude about intrauterine contraceptive device and impact factors impaired this knowledge.

Methods: A cross-sectional study was enrolled 301 females aged 15-45 years, which was conducted in Baghdad, from the 1st of February to the 30th of June 2016. Data were collected by direct interview by investigator under guidance of questionnaire.

Results: Participants' mean age was 31± 8.03 years. Participants' knowledge revealed that 97.3% of them knew what was IUCD and 96.6% were aware of the aim of using the IUCD, especially IUCD-Copper. Testing the participants' attitude toward the use of IUCD, 56.1% believed that the device was effective and 41.5% believe it was safe.

On other hand, there were 76.1% of them have got poor knowledge score, 22.9 % have got fair knowledge score and only 1.0% of the participants have got good knowledge score.

Conclusion: Most of the females in the child-bearing age who participated in the study knew what IUCD was, and they gained their information from friends, neighbours and relatives rather than from health care providers in PHCCs. In addition, family planning knowledge were associated with highly educated women and with advance age.

Keywords: Intrauterine contraceptive device, Knowledge, Attitude, Impact factors.

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Contraception prevents pregnancy by interfering with the normal process of ovulation, fertilization, and implantation. From a global perspective, countries currently face the crisis of rapid population growth that has begun to threaten human survival. A patient's choice of contraceptive method involves factors such as efficacy, safety, non-contraceptive benefits, cost, and personal considerations⁽¹⁾.

There are different kinds of birth control that act at different points in the process, from ovulation, through fertilization, to implantation. Each method has its own side effects and risks and some methods are more reliable than others⁽²⁾.

Family planning is critical for the wellbeing of women and their families and it can accelerate a country's progress toward reducing poverty and achieving development goals. Because of its importance, universal access to reproductive health services (including family planning) is identified as one of the targets of the United Nations Millennium Development Goals⁽³⁾.

A growing number of women are using contraception; still, not all of the need has been satisfied. A significant number of women have "unmet need" for family planning-that is, they prefer to avoid a pregnancy for at least two years but are not using a family planning method. These women are at risk of having unintended pregnancies which endanger the health of the women and their families and put a burden on society as a whole^(4,5).

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In Iraq, there has been an increase in the prevalence of the use of contraception methods as well as awareness of unplanned pregnancies⁽⁶⁾.

Family planning services were provided by the Iraq Family Planning and the private sector for medical indications only till the year 1994 where the policy was changed and the government issued a decree allowing the provision of family planning services to all Iraqi women^(7,8).

In 2006, Multiple Indicators Cluster Survey showed that the rate of using any method of contraception in Iraq was 49.8%, the use of modern methods was 32.9% and use of traditional methods was 17%⁽⁸⁾. In 2011, the results of Multiple Indicator Cluster Survey 4 (MICS-4) showed that the prevalence of contraceptive use among married women (or their husbands) was about 51%, modern methods of contraception were practiced by 33% of the women, while 18% were using traditional methods. The pill was the most common modern contraceptive used (15%). A study by Aldabbagh and Al-Qazaz stated the acceptable level of knowledge and positive practices among Iraqi women seeking health care respect to birth control methods. Because contraception and family-planning decision-making are almost always the responsibility of both partners, the involvement of men in contraception knowledge issues is important. Females with lower levels of education require continued education and regular communication about the importance of fertility control⁽⁶⁾. Among the traditional methods, the most commonly practiced method was withdrawal (coitus interruptus) (14%)^(8,9). These methods have higher failure and discontinuation rates than long-acting, reversible contraception and require significant patient compliance⁽¹⁰⁻¹²⁾. Regarding the use of intrauterine contraception devices it remained low (10%) when compared with use of less effective, reversible methods⁽¹³⁾.

Many factors affect the rate of using IUCDs. Women value safety, effectiveness and ease of use in a birth control method,

characteristics inherent to IUC. Low utilization is likely due to a variety of factors, including patients' misconceptions and providers' reluctance to encourage use^(14,15). The aim of study, to evaluate the knowledge and attitude concerning intrauterine contraceptive devices (IUCDs) among sample of women in Baghdad and to identify the impact of certain variables on their knowledge.

Methods

A cross-sectional study was conducted at the Gynaecology consultation clinic in Baghdad Teaching Hospital of Medical City and Al-Shaheed Abdul-Sahib DaKhil Primary Health Care Center (PHCC) in Al-Kadhunia PHC sector from the 1st of February to the 30th of June 2016.

Data were collected by direct interview by investigator under guidance of questionnaire.

The questionnaire included general demographic information: age, occupation, educational level, address, marital status, duration of marriage, no. of children, and no. of abortions.

All the candidates were asked about their previous knowledge regarding IUCD, and the source of their knowledge.

Regarding knowledge, each question (8 questions) was given a score of five if it was answered correctly and zero for wrong answer. Knowledge score ranged from zero-40; candidates with scores ranging (31-40) were considered with good knowledge, those scoring (21-30) were considered with fair knowledge, those scoring below 21 were considered with poor knowledge.

Attitude was assessed using four items each one has three responses; disagree, neutral or agree. Attitude score ranged from 4-12; candidates with scores of (12) were considered with positive attitude, candidates with scores (9-11) were considered neutral attitude and those scoring below nine were considered with negative attitude.

Data entry and analysis was done by SPSS version 23. Variables were presented in tables and figures. Chi- square test was used to test the significance of association between categorical variables. P value of less than 0.05 was considered statistically significant.

Oral consent was obtained from every participant. A consent was obtained from the Council of the College of Medicine, University of Baghdad to establish this study.

Results

The study was enrolled (301) Females aged 15-45 years with mean age was 31 ± 8.03 years. Participants' knowledge revealed that although 97.3% of them knew what was IUCD and 96.6% were aware of the aim of using the IUCD, especially IUCD-Copper, (Table 1).

Testing the participants' attitude toward the use of IUCD, 56.1% believed that the

device was effective and 41.5% believe it was safe, (Table 2).

On calculating their scores, it was found that although most of the participants knew what IUCD was and aware of its aim, still 76.1% of them have got poor knowledge score, 22.9 % have got fair knowledge score and only 1.0% of the participants have got good knowledge score, (Table 3).

Asking the participants about the source of their knowledge regarding IUCD revealed that 77.4% of them received their knowledge from friends, neighbors or relatives, 31.0% from gynecologist's private clinic, (Table 4).

Studying the association between participants' age, educational status and their knowledge scores regarding IUCD revealed that age and educational status significant association, (Table 5). Being married number of children and abortions were significantly associated with knowledge, (Table 6).

Table 1: Knowledge of the participants regarding intra-uterine contraceptive device.

Characteristics	Correct response	
	No. (301)	%
What is the IUCD?	293	97.3
Types of IUCD	18	5.9
Complications of using IUCD	42	13.9
Side effects of using IUCD	129	42.8
Failure rate while using IUCD	90	29.9
Aim of using IUCD-Copper	291	96.6
Aim of using IUCD-Mirena	7	2.3
Who is eligible candidate for using IUCD	10	3.3

Table 2: Attitude of the participants about intra-uterine contraceptive device.

Assessing attitudes	Agree		Disagree		Neutral	
	No.	%	No.	%	No.	%
IUCD is effective	169	56.1	80	26.6	52	17.3
IUCD is safe	125	41.5	120	39.9	56	18.6
Copper IUCD is against your religion, customs and traditions	82	27.2	119	39.6	100	33.2
Levonorgestrel (LNG) IUCD is against your religion, customs and traditions	34	11.3	85	28.2	182	60.5

Table 3: Scores of candidates' knowledge and attitudes regarding intra-uterine contraceptive device.

Scores	No. (301)	%
Knowledge' scores		
Good (31-40)	3	1.0
Fair (21-30)	69	22.9
Poor (<21)	229	76.1
Attitudes' scores		
Positive (12)	45	15.0
Neutral (9-11)	97	32.2
Negative (<9)	159	52.8

Table 4: Source of candidates' knowledge* regarding intra-uterine contraceptive device.

Source	No. (301)	%
Private gynecologist	94	31.0
Doctors at PHCCs	4	1.3
Internet	25	8.3
Friends, neighbors or relatives	233	77.4
Media and books	31	10.2
None	9	2.9

* Some got their information from more than one source

Table 5: Association between participants' age, educational status and occupation, and their knowledge scores regarding intra-uterine contraceptive device.

Variables	Knowledge scores				P value
	Good/Fair		Poor		
	No. (72)	%	No. (229)	%	
Age groups (in years)					0.0008*
≤ 20	0	0.0	37	100.0	
21-30	23	22.8	78	77.2	
31-40	40	32.5	83	67.5	
≥ 41	9	22.5	31	77.5	
Educational level	No. (72)		No. (229)		0.026*
Illiterate /Read and write	13	18.1	59	81.9	
Primary School	20	23.0	67	77.0	
Intermediate School	16	29.6	38	70.4	
Secondary School	3	9.1	30	90.9	
Institute, College and Higher	20	36.4	35	63.6	

Table 6: Association between participants' marital status, duration of marriage number of children, number of abortions and currently being pregnant and their knowledge scores regarding intra-uterine contraceptive device.

Variables	Knowledge scores				P Value
	Good/Fair		Poor		
	No. (72)	%	No. (229)	%	
Marital status					0.008*
Ever-Married	71	26.0	202	74.0	
Unmarried	1	3.6	27	96.4	
Number of children	No. (72)		No. (229)		0.00009*
No children	6	7.9	70	92.1	
1	5	14.7	29	85.3	
2-4	37	28.7	92	71.3	
≥ 5	24	38.7	38	61.3	
Number of abortions	No. (72)		No. (229)		0.04*
None	38	19.2	160	80.8	
1	19	33.9	37	66.1	
≥ 2	15	31.9	32	68.1	

* Statistically significant association.

Discussion

The current study revealed that although 97.3% knew what is IUCD only 1.3% got their knowledge from health care providers in the PHCCs. Main sources of women's knowledge regarding the IUCD was relatives, neighbours or friends and private gynaecologist. This finding agreed with a study done in Saudi Arabia during 2010 by Al- Sheeha⁽¹⁶⁾. Whereas Mahadeen et al 2012 found that television was the most commonly reported source of information followed by health worker (60.3%)⁽¹⁷⁾.

In the current study, most of the women were aware of what IUCD mean still their knowledge regarding the types, complications, side effects, failure rates and who is eligible was limited. Surprisingly most of the participants were aware of Copper-IUCD and the aim of using it yet only few knew about the hormonal IUCD (LNG-IUS) and the aim of using it other than contraception. This can be attributed to the fact that copper-IUCD is available free of charge in public sector family planning clinics and many of primary health care centres PHCC. Same findings were found by Stanwood and Bradley⁽¹⁰⁾.

Van Zijl et al⁽¹⁸⁾ in South Africa during 2010 found that only half of their participants had knowledge about Cu-IUCD and only 2% of them knew about LNG-IUS.

Regarding the effectiveness of IUC, more than one fifth of the participants in the current study underestimated the effectiveness of IUCD compared to nearly two thirds of the participants in a study done by Hladky et al⁽¹¹⁾ from USA during 2011. As for the safety, nearly half of the participants in the current and in Hladky et al⁽¹¹⁾ studies believed that intrauterine contraception is safe.

In consideration of side effects, the majority of the participants in this study believed that copper IUD increase the risk of pelvic infection, menorrhagia, ectopic pregnancy and prolonged duration of menses, and few participants thought that IUD increases the risk of infertility and

cancer. These findings agreed with Hladky et al study in USA in 2011⁽¹¹⁾.

In addition, the majority of the participants in the current study couldn't recognize the appropriate candidate for IUCD use.

On scoring respondent's knowledge and attitude it was found that more than three quarters of our participants were with poor knowledge score, more than half of them were with negative attitude score. This was slightly higher than the scores measured by the South African study⁽¹⁸⁾ in which 54% of the participants had poor knowledge.

On studying the factors that affect participant's knowledge it was found that their knowledge score improved as they got older, and with higher educational attainment. Same conclusion was reached by the South African study⁽¹⁸⁾ and the American study⁽¹¹⁾ where IUCD knowledge increased with education of the women, age and parity.

Participants' negative attitude towards IUCD use in the current study could be attributed to participants' misconceptions derived from existence of myths and rumours about the IUCD among women and the subsequent concerns about the impact of IUCD use on women's health. This agreed with a study done in El Salvador by Johnson L et al⁽¹⁹⁾.

On the other hand, positive attitude was found in 15% of the participants in the current study and the main reasons behind their positive attitude were that the IUCD was convenient, effective, and safe. This finding agreed with the American study in which the main reasons behind their positive attitude were the convenience and favourable side effect profile of the method⁽¹¹⁾.

In conclusion; most of the females in the childbearing age who participated in the study knew what IUCD is, and they gain their information from friends, neighbours and relatives rather than from health care providers in PHCCs. In addition, family planning knowledge's are associated with

highly educated women and with advance age.

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