

# Long Acting Reversible Contraceptives: Knowledge and Attitude among Married Women of Lahore

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## ABSTRACT

**BACKGROUND OF STUDY:** Long acting contraceptives are probably best methods to protect against pregnancy as they require no follow up visit, and very low profile of side effects. They need little attention after insertion and prevent pregnancy for a long period of time. Still the usage of implant and IUCD are 0.0% and 2.5% respectively. Aim of this study is to assess the Knowledge, Attitude and Beliefs about long acting reversible contraceptives among married women of reproductive age residing in peripheral part of Lahore.

**METHOD:** A cross sectional community based survey using convenience sampling technique was used to collect data from the respondents. Study conducted from Feb 2015 to June 2015. A close ended questionnaire was used. Participants were married women of reproductive age living in community of Ali Raza-abad Lahore. SPSS version 20 was used to analyze the data and descriptive statistics and chi-square was applied.

**RESULTS:** Among 154 respondents, 34% have knowledge about the implant while 73% have idea about IUCD. Only 20% women were knowing that use of implant can effectively prevent pregnancy. 44.8% have clear concept regarding protective role of IUCD against pregnancy. 55.2% women do not know how long they are protected from pregnancy while using IUCD. Decision regarding use of contraception were taken jointly by husband and wife in 68.8% of cases. Only 31% respondents said IUCD do not restrict normal routine activities while 38% do not know about it.

**CONCLUSION:** It is concluded that majority of the respondents did not have appropriate awareness about implants. Although awareness increases with age but at the same most of married women were found reluctant to use long acting reversible contraceptive method due to different false belief.

**KEY WORDS:** Knowledge, Attitude, Beliefs, Long acting reversible contraceptives.

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## INTRODUCTION

### Background of the Study

Long acting contraceptives are best methods for providing protection against pregnancy. They require no follow up visit, and probably have no side effects. They need little attention after insertion and prevent pregnancy for a long period of time<sup>1</sup>

These long acting contraceptives methods include the Intra-Uterine Devices and the progestogen implant. The Intra-Uterine Devices and progestogen implant can be removed after insertion and fertility return after removal; therefore they are name as long-acting reversible contraceptives<sup>2</sup>

In United States the more women are using long-acting reversible contraceptives. These women belongs to different race, age, education and income groups. In 2002 only 2.4% of women were using LARS, 3.7% in 2007 while in 2009, 8.5% women used these methods. These women were of different age

and race, having different education and income level.<sup>3</sup>

The implants are progestogen only methods once inserted; they provide protection from pregnancy between 3-5 years and require no further action from the user side. These new hormonal methods release chemicals stably over 24 hours, so low dose is released in a day than the daily fluctuations produced by contraceptive pills. They release chemical gradually in the body which means slow dose is required for pregnancy prevention but their effectiveness is equal to female sterilization. They are suitable for estrogen contraindicated women<sup>4</sup>.

Maternal mortality rate per thousand population in various developing countries such as Afghanistan has highest maternal death rate which is 400, Pakistan 170, India 190, Iraq 67, Sri Lanka 29, Bangladesh 170<sup>5</sup>.

The IUCD is a appliance that is in the shape of

alphabet "T" It is placed inside the uterus to provide protection against pregnancy. IUCD can remain inside of the uterus for almost ten years. Failure rate of IUCD use is 0.8%<sup>6</sup>. Fertility can be returned after removal of IUCD and it does not cause tubal infertility<sup>1</sup>. There is no age limit for the usage of IUCD. Sexually active women of any age can use it. Any women can use IUCDs regardless of whether they have had previous pregnancies or deliveries by any route. Expect for pregnant women IUCD can be inserted at any time in the menstrual cycle. Routine check-ups are not compulsory<sup>7</sup>.

Pelvic inflammatory diseases have not been reported due to IUCD usage. In a large study, the rate of this infection was 1.6 per 1,000 and was not due to IUCD use. The risk of IUCD insertion problems can be lessened with proper training. The major drawback with all IUCDs is irregularity of periods<sup>8</sup>.

The implants are thin rod that is placed under the women's skin of upper arm. The rod release progestin in the body for three years. Failure rate of implants use is 0.05%<sup>6</sup>. One of the folklore regarding implantable rod is that it can travel from the insertion site to other parts of the body. These rods are not moved anywhere<sup>9</sup>.

By eliminating false beliefs and misconceptions by giving knowledge and changing the attitude we may be able to increase LARC use and reduce accidental and closely spaced pregnancy<sup>1</sup>. Mostly women are not using LARCs because they have little knowledge regarding LARCs<sup>10</sup> and they have fear of side effects related to these methods<sup>11</sup>.

The Demographic and Health Surveys of Pakistan during 1990-91 and 2006-07, found a alarming trend showing the declining importance of hormonal methods and the IUCD in rural areas. In rural area the use of hormonal methods and the IUCD declined from 33% to 26%. In urban areas, the use of hormonal methods and the IUCD had remained relatively less at 18%<sup>13</sup>.

The most common contraceptive methods used by the women around the world at the time of this study are the pill which is 28%, or 10.6 million women and female sterilization is 27%, or 10.2 million women<sup>14</sup>.

The woman's belief that family planning decisions were made by the husband is a strongest barrier towards the use of contraceptive methods and mostly women's knowledge on IUCD was poor, even those who knew such methods believed that these methods interfere with activities that they have to perform while living in the rural area<sup>1</sup>.

Around 19.4% of the women discontinued use of their IUD at 10 months; major reason in 69.4% women being various side effects. Other reasons include geographical area, age of the woman, history of contra-

ceptive use before IUD insertion and side effects after insertion of the device. Discontinuation also related with women's satisfaction with this device<sup>12</sup>. Some respondents said that they didn't have enough knowledge of such methods. More than half of the women had a negative attitudes towards use of IUCD and Implant<sup>9</sup>.

Women mentioned the reasons for not accepting long acting reversible contraceptive is fear of having side effects after use and fear of having infertility after use. Most of the women had a non-supportive attitude towards long acting contraceptives<sup>2</sup>.

### **Significance of study**

In Pakistan only 2.5% women use intra uterine contraceptive devices and more commonly used method for pregnancy protection is female sterilization<sup>12</sup>. It is therefore very important to know depth of knowledge and attitude and associated beliefs regarding use of long acting reversible contraceptive methods( IUCD/ Implants) so that appropriate strategy may be develop to address the issue.

### **Objectives**

To assess the Knowledge and attitude of married women residing at peripheral part of Lahore about IUCD and Implants.

To find out the relationship of age with knowledge and attitude for long acting reversible contraceptives.

## **MATERIAL AND METHOD**

### **Research Design.**

Cross sectional survey through non-probability convenience sampling technique.

### **Target Population.**

Married and fertile women of reproductive age between 15- 49 years.

### **Setting.**

Research was conducted in Ali Raza-abad Lahore. Study duration Feb 2015 to June 2015.

### **Inclusion Criteria.**

Married and fertile women age 15- 49 years, apparently healthy living in Ali Raza-abad Lahore.

### **Exclusion Criteria.**

Women not living in Ali Raza-abad Lahore are excluded from the study.

### **Sample Size.**

Data was collected from 154 respondents.

### **Ethical Consideration**

A written application mentioning the purpose of the project was submitted to the Nawab of Ali Raza-abad and his approval was taken to conduct research in his community. Individual consents also taken from the study participants.

### **Research Tool.**

A close ended survey questionnaire regarding knowl-

edge, attitude and belief about long acting reversible contraceptives was used<sup>9,16</sup>. The questionnaire was modified and translated in Urdu to be easily applicable to the target population.

#### **Data Analyzes.**

The data was analyzed by using Statistical Package for Social Sciences (SPSS) version 20. Descriptive statistics presented as percentages and frequencies.

## **RESULTS**

### **Socio demographic data**

Among 154 respondents, 32.5% were between 15-28, years of age, 42.9% were between 29 – 39 years and 24.7% women belonged to 40-49 years of age as shown in Table 1. Mean age is 1.92 with 0.754 standard deviation. Among respondents, housewives were 96.1%, daily laborer and government employee 0.6%, and 1.3% respectively, while 1.9% were self employed (Table II). 46% participants were illiterate, 46% had elementary school education, and women had secondary school and high school education were 7.8% and 1.3% respectively (Table III).

### **Knowledge regarding long acting reversible contraceptives**

Only 34% participants were having Knowledge regarding long acting reversible contraceptives. Significant association between knowledge of implant and age, occupation, education was found. Only 20% women knows about protection of the pregnancy by using implants, while 44.8% women have knowledge regarding the protection of pregnancy by using IUCD, 55.2 % women do not know how long they are protected from pregnancy if they are using IUCD. Only 29% women were having knowledge regarding the site of implant administration in contrast to 67% women who knows the site of administration for IUCD. Age is significantly associated with knowledge about site of administration of IUCD mostly women which have knowledge fall in this age category 29-39 year. 70% people know that long acting reversible contraceptives prevents pregnancy occurrence. Over all knowledge is strongly associated with age as women having age between 29-39 years are more knowledgeable as compared to those who are below 29 and above 39.

### **Attitude towards use of long acting reversible contraceptives.**

Table VII shows attitude towards use of long acting reversible contraceptives, 22% participants admit that their partner decide their contraceptive use. Fifty nine percent respondent's partners do not play any role in make decision regarding use of contraceptive method. Nineteen percent women do not have knowledge

regarding this. Upon asking whether your in-laws decide for your contraceptive use? 11% said yes, 65% said no and 24% do not know the answer. Only 29% women decide their own contraceptive use. 49% are not making decision alone and 33% respondents do not know who is making decision regarding their contraceptive use. In 69% husband and wife both decide the use of contraceptives. Regarding practice, 36% respondents knows that long acting reversible contraceptives cannot cause permanent infertility, 11% respondents said yes and 53% do not know exactly. 16% respondents said that implants freely move in the body, 14% said no and 70% do not have any idea. 11% said implant causes pain, 16% and 73% said no and do not know respectively. Regarding associated illness by using implant 17% women said yes implant causes illness, 11 said no and majority of women (72%) do not know that implant causes any illness. In response to illness using IUCD, 15% women said IUCD do not causes illness, 40% and 45% said no and do not know. 66% women do not know anemia is caused by implant. 19% women agreed that implant causes anemia while only 15% women knew that implants do not cause anemia. 44% said IUCD causes anemia 15%, 41% said no and do not know respectively. 21% think that usage of implants need proper diet while 11% and 68% said no and do not know respectively. Only 31% respondents said IUCD do not restrict normal routine activities while 31% said no and 38% do not know about it. Overall 29 -39 years age women have negative attitude towards long acting reversible contraceptives.

**TABLE I: AGE OF THE RESPONDENTS**

Age	Frequency	Percent
15-28	50	32.5
29-39	66	42.9
40-49	38	24.7
<b>Total</b>	<b>154</b>	<b>100.0</b>

**TABLE II: OCCUPATION OF THE RESPONDENTS**

Occupation	Frequency	Percent
House wife	148	96.1
Daily laborer	1	.6
Government Employee	2	1.3
Own Work	3	1.9
<b>Total</b>	<b>154</b>	<b>100%</b>

**TABLE III:  
EDUCATION LEVEL OF THE RESPONDENTS**

Education	Frequency	Percent
Illiterate	70	45.5
Elementary School	70	45.5
Secondary School	12	7.8
High School	2	1.3
<b>Total</b>	<b>154</b>	<b>100%</b>

**TABLE IV: KNOWLEDGE OF IMPLANT ACCORDING TO RESPONDENT'S AGE**

		Do you know about implant?			Total
		Yes	No	Do not Know	
Age	15-28	25	17	8	50
	29-39	22	42	2	66
	40-49	6	25	7	38
<b>Total</b>		<b>53</b>	<b>84</b>	<b>17</b>	<b>154</b>

**TABLE V: KNOWLEDGE OF IMPLANT ACCORDING TO RESPONDENT'S OCCUPATION & EDUCATION**

		Do you know about implant?			Total
		Yes	No	Do not Know	
Occupation	House wife	52	83	13	148
	Daily laborer	0	0	1	1
	Government Employee	1	0	1	2
	Own Work	0	1	2	3
<b>Total</b>		<b>53</b>	<b>84</b>	<b>17</b>	<b>154</b>
		Do you know about implant?			Total
		Yes	No	Do not Know	
Education	Illiterate	13	48	9	
	Elementary School	29	33	8	
	Secondary School	9	3	0	
	Higher School	2	0	0	
<b>Total</b>		<b>53</b>	<b>84</b>	<b>17</b>	
Grand total: 53+84+17 =		154			

**TABLE VI: KNOWLEDGE REGARDING LONG ACTING REVERSIBLE CONTRACEPTIVES**

Questions	Frequency Total n=154	Percentage Total 100%
Do you know about Implant?		
1. Yes	53	34.4
2. No	84	54.4
3. Don't Know	17	11
Do you know about IUCD?		
1. Yes	113	73.4
2. No	30	19.5
3. Don't Know	11	7.1
Do you know duration of protection from pregnancy by using implant?		
1. Yes	31	20.1
2. No	96	62.3
3. Don't Know	27	17.5
Do you know duration of protection from pregnancy by using IUCD?		
1. Yes	69	44.8
2. No	60	39
3. Don't Know	25	16.2
Do you know the site of administration of Implant?		
1. Yes	45	29.2
2. No	83	53.9
3. Don't Know	26	16.9
Do you know the site of administration of IUCD?		
1. Yes	103	66.9
2. No	25	16.2
3. Don't Know	26	16.9
Are long acting reversible contraceptives prevents pregnancy occurrence?		
1. Yes	107	69.5
2. No	15	9.7
3. Don't Know	32	20.8

**TABLE VII: ATTITUDE TOWARDS USE OF LONG ACTING REVERSIBLE CONTRACEPTIVES**

Questions	Frequency Total n=154	Percentage Total 100%
Should partner decide your contraceptive use?		
1. Yes	34	22.1
2. No	91	59.1
3. Don't Know	29	18.8
Should in-laws decide your contraceptive use?		
1. Yes	17	11
2. No	100	64.9
3. Don't Know	37	24
Should you decide your contraceptive use?		
1. Yes	44	28.6
2. No	75	48.7
3. Don't Know	35	22.7
Should husband and wife both decide contraceptive use?		
1. Yes	106	68.8
2. No	14	9.1
3. Don't Know	34	22.1
Are long acting reversible contraceptives can cause permanent infertility?		
1. Yes	17	11
2. No	55	35.7
3. Don't Know	82	53.2
Dose implant move freely in the body?		
1. Yes	24	15.6
2. No	21	13.6
3. Don't Know	109	70.8
Dose implants freely move in the body and cause severe pain?		
1. Yes	17	11
2. No	25	16.2
3. Don't Know	112	72.7
Dose implants cause illness?		
1. Yes	26	16.9
2. No	16	10.4
3. Don't Know	112	72.7
Dose IUCD cause illness?		
1. Yes	62	40.3
2. No	23	14.9
3. Don't Know	69	44.8
Is Implant cause anemia?		
1. Yes	29	18.8
2. No	23	14.9
3. Don't Know	102	66.2

Is IUCD cause anemia?		
1. Yes	68	44.2
2. No	23	14.9
3. Don't Know	63	40.9
Do you think usage of implants need proper diet?		
1. Yes	33	21.4
2. No	17	11
3. Don't Know	104	67.5
Do the insertion and removal of implants are highly painful?		
1. Yes	40	26
2. No	18	11.7
3. Don't Know	96	62.3
Do you think use of IUCD restricts normal routine activities?		
1. Yes	48	31.2
2. No	47	30.5
3. Don't Know	59	38.3

## DISCUSSION

In this study majority of the women do not have knowledge about implants, only 34% women know about implants, 73% women know about IUCD.

Women have less knowledge regarding IUCD and Implants in Chakwal, Mianwalli and Bhakar<sup>15</sup>. These results are in sharp contrast to the result of a study conducted in Ethiopia in which 87.8% respondents have knowledge about implants and only 54% women know about IUCD<sup>9</sup>.

Women have less knowledge regarding the site of administration of implants and protection of pregnancy by using implant as compared to the IUCD. People have some knowledge about where IUCD is inserted and for how long it provides protection from pregnancy and more than half of the respondents have knowledge that pregnancy is prevented by using LARCs.

In contrast to the Anguzu R study in which people have more knowledge regarding the Implant and IUCD site of administration and protection of pregnancy by using these methods and many people agreed that using LARCs prevent pregnancy occurrence<sup>16</sup>. This difference occurs because these women attend the family planning centers. So women who are attending the centers are much more knowledgeable as compared to those who are not attending the clinics.

Most respondents have positive attitude as far as decision for using contraceptives is concerned; decision made by couples mutually, only 22% women said that their husband made the decision. Although studies have shown that in Pakistan husband make the decision alone for using contraceptives<sup>17</sup>.

In this study mostly people think that long acting reversible contraceptives cause permanent infertility

which is opposite to the results of study conducted in Uganda in which 63% respondents disagree this<sup>16</sup>. Misconceptions or false beliefs are prevailing in the community. People who are not aware of implants do not know anything regarding implants but those who are knowledgeable about implants have too many false beliefs regarding implants and IUCD, such as they causes illness and anemia, implants move freely in the body, causes pain, needs proper diet, IUCD restrict normal activities and religion restriction against the use of contraceptives.

When compare to other study where 162 (39.4%) of women accepted that the implant could move around unreservedly in the body and get lost upon the arrival of evacuation. One hundred eighty seven (45.5%) and 116 (28.2%) of ladies accepted that implant and IUCD bring about ailment separately. Also 147 (35.8%) and 97 (23.6%) apparent that implant and IUCD prompts anemia separately. Besides 32 (7.8%) of ladies saw that implant may bring about infertility<sup>9</sup>. 19.6 percent agreed that IUCD prevents from doing normal activities and 26.8 % said that implants cause severe pain during insertion and removal<sup>1</sup>.

### CONCLUSION

Those having knowledge about implant and IUCD has misbelieves as well, in contrast to those who do not have any knowledge. However attitude was positive as when contraception used decision taken by couples jointly. It is concluded that majority of the respondents did not have appropriate awareness about implants. Although awareness increases with age but at the same most of married women were found reluctant to use long acting reversible contraceptive method due to different false belief.

### RECOMMENDATIONS

Community based health care workers should strengthen information, education and communication to ensure that women have higher knowledge and positive attitude towards long acting contraception methods.

### LIMITATIONS

The target population was only one peripheral area of cosmopolitan city, which is limitation of a cross sectional study.

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### CONFLICT OF INTEREST.

Author declare no conflict of interest.

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