

## Knowledge, attitude and practices regarding implants among women of childbearing age

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### Abstract

A cross-sectional survey was conducted from February 2016 to September 2016 to assess the knowledge, attitude and practices regarding contraceptive implants among women of childbearing age visiting the Reproductive Health Services Centre, Civil Hospital, Karachi. A total of 396 adult, non-pregnant, married women of childbearing age, between 18 and 49 years, were interviewed using a structured questionnaire. Only 153 (38.6%) of the respondents had any knowledge about implants, out of whom 122 (79.7%) had acquired the information from family planning clinics. Almost two thirds of the respondents, 267(67.4%) were in favour of using implants as a contraceptive method. Moreover, 244 (61.6%) respondents were of the opinion that if given a choice, they will use implanon, though out of the 316 (79.8%) respondents who had ever used contraceptives, only 3 (0.9%) used implants. Despite a favourable attitude, limited knowledge and poor practices of the respondents were the highlights of the study findings.

**Keywords:** Knowledge, Attitude, Contraception, Progestins, Women.

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### Introduction

Globally, an estimated 44% of pregnancies between the years 2010 and 2014 were unintended, and though the unintended pregnancy rate declined by 30% in the developed regions, it fell only 16% in the developing regions. During the same period, more than half of such pregnancies ended in abortion in both the developed and developing regions of the world.<sup>1</sup> A recent survey found that 46% of all pregnancies in Pakistan are unintended, with national abortion rate being 50 per 1,000 women aged 15–49 (95% CI = 41–60); substantial variations were found among provinces, with highest induced abortion rates in Baluchistan (60/1,000), followed by Sindh (57/1,000), Punjab (51/1,000) and Khyber Pakhtunkhwa

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(35/1,000).<sup>2</sup>

Contraceptive implants are a progestin-based quickly reversible contraceptive method with few side effects.<sup>3</sup> They greatly reduce compliance issues, with increased effectiveness.<sup>4</sup> This makes them the contraceptive method of choice for women who have difficulty in adhering to a contraceptive regime, who have completed childbearing but are not yet ready for permanent sterilisation, who have anaemia with heavy menstrual bleeding, who have chronic illness and cannot become pregnant, who intend to breastfeed, and who desire a long-term protection.<sup>3</sup>

Implanon, a sub-dermal contraceptive implant, was approved by the United States Food and Drug Administration in 2006 and consists of a single preloaded and disposable rod containing 68mg of the progestin Etonogestrel, and, like other progestin-based implants, functions primarily by inhibiting ovulation and restricting sperm penetration through cervical mucus.<sup>3</sup> Literature provides evidence of metabolic safety of Etonogestrel contraceptive implant in healthy women whose placement reportedly induces changes consistent with a lower risk of insulin resistance and dyslipidaemia.<sup>5</sup>

The frequent side effects of implants as compared to other methods of contraception, particularly intrauterine contraceptive devices, include bleeding irregularities and acne.<sup>6</sup> The contraindications for the use of implantable contraception include known or suspected pregnancy, history of thromboembolic disorders, active liver disease or tumour, undiagnosed genital bleeding, known or suspected breast cancer and hypersensitivity to implant components.<sup>3</sup>

Through voluntary informed choice of the couples, contraceptive methods are used for family planning. Provision of information about different methods of contraception to the eligible couples is of key importance as it increases their knowledge about the available contraceptive methods and the one which suits them best. This knowledge, followed by the practice of contraception, builds and modifies their long-term attitudes towards family planning. Though studies with similar/overlapping objectives have been conducted previously, to the best of the authors' knowledge, the available recent local estimates

are limited at best.<sup>7-10</sup> In the given context, this study was planned to assess the knowledge, attitude and practices regarding contraceptive implants among women of childbearing age visiting Reproductive Health Services Centre, Civil Hospital, Karachi.

### Methods and Results

A cross-sectional survey to assess knowledge, attitude and practice about contraceptive implants was conducted from February 2016 to September 2016 at the Reproductive Health Services Centre, Civil Hospital, Karachi. After taking ethical approval from the host institution, i.e. Baqai Institute of Health Sciences, Baqai Medical University, as well as due permission from population welfare department of Sindh, adult married women aged from 18 to 49 years were included in the study by using convenience sampling technique. Pregnant women and those not willing to provide verbal informed consent were excluded from the study. Taking the percentage frequency of the study outcomes as 50% for the most liberal estimate, with 95% confidence level and 5% precision, the minimum required sample size was calculated to be 385 participants. After checking eligibility and taking verbal informed consent, all the respondents were interviewed by the principal investigator using the study questionnaire that had earlier been tested for face validity. The questionnaire was developed in English initially but was later translated to Urdu for interview purposes. The data was entered in Statistical Package for Social Sciences version 19 and descriptive statistics were calculated in terms of means and standard deviations for continuous variables, while for categorical variables it was calculated in the form of frequencies and percentages.

Against the minimum required sample size of 385, the total data acquired was from 396 participants. The mean age of the respondents was 29.48±5.05 years; the mean period of marriage was 10.24±4.56 years, whereas the mean number of children was 5.11±2.03. Majority of the respondents 317(80.0%) aged between 26-35 years, while 167 (42.2%) of them were educated to secondary level. Furthermore, about three quarters of them 295 (74.5%) were housewives, while 283 (71.5%) lived in a nuclear family set up. Majority of them 271 (68.4%) were from urban areas, whereas 287 (72.5%) had a monthly household income of 10,000 to 20,000 rupees only.

The study results revealed that the main sources of knowledge about family planning methods were husband/mother-in-law/family members 128 (32.3%), family planning clinic, 122 (30.8%) and neighbours 89 (22.5%) whereas the most heard of method of contraception were intra-uterine contraceptive device by

**Table:** Knowledge, Attitude and Practice Profile (n=396).

Variables	n (%)
<b>Do you know about family planning?</b>	
Yes	396 (100)
No	Nil
<b>What was your source of knowledge about family planning methods?</b>	
Husband/Mother-in-law/Family members	128 (32.3)
Neighbours	89 (22.5)
Electronic/Print media	44 (11.1)
Family planning clinic	122 (30.8)
Lady health visitor, nurse or doctor	13 (3.3)
<b>About which of the following methods of contraception you have heard the most?</b>	
Intra-uterine contraceptive device	151 (38.1)
Oral pills	131 (33.1)
Injections	31 (7.8)
Implants	3 (0.8)
None	80 (20.2)
<b>Do you know implant is also a method of contraception?</b>	
Yes	153 (38.6)
No	243 (61.4)
If yes, from where did you come to know it? (n=153)	
Husband/Mother-in-law/Family members	13 (8.5)
Neighbours	5 (3.3)
Friends	6 (4.0)
Family planning clinic	122 (79.7)
Lady health visitor, nurse or doctor	7 (4.5)
<b>Do you know that if you plan your pregnancy using implants or any other method of family planning it can influence your health positively?</b>	
Yes	267 (67.4)
No	129 (32.6)
<b>Do you know if implants have any side effects?</b>	
Yes	44 (21.2)
No	352 (78.8)
<b>Do you think implants as a contraceptive method should be used?</b>	
Yes	267 (67.4)
No	129 (32.6)
<b>If you are given the choice of a long acting reversible contraceptive like implanon, will you use it?</b>	
Yes	244 (61.6)
No	152 (38.4)
<b>If no, why? (n=152)</b>	
I prefer other methods	66 (43.4)
My husband/family will not agree	86 (56.6)
<b>Do you think all pregnancies should be planned?</b>	
Yes	220 (55.6)
No	176 (44.4)
<b>Why do you think people do not use contraceptives?</b>	
Desire to become pregnant	212 (53.5)
Fear of side effects	101 (25.5)
Not Sure	83 (21.0)
<b>Have you ever used any contraceptive method?</b>	
Yes	316 (79.8)
No	80 (20.2)

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**Table:** (Continued from previous page).

Variables	n (%)
<b>If yes, what type of contraceptive did you use? (n=316)</b>	
Oral pills	131 (41.5)
Intra-uterine contraceptive device	151 (47.8)
Injections	31 (9.8)
Implant	3 (0.9)
Were your all pregnancies planned:	
Yes	215 (54.3)
No	181 (45.7)
Are you currently using any contraceptive method?	
Yes	192 (48.5)
No	204 (51.5)

151 (38.1%), followed by oral pills 131 (33.1%). Furthermore, 153 (38.6%) had knowledge about implants, out of those 122 (79.7%) had acquired it from family planning clinics. Less than a quarter of them, 44 (21.2%) said that implants have side effects, whereas two third of them, 267 (67.4%) thought that implants should be used as a contraceptive method. Moreover, 244 (61.6%) were of the opinion that if given the choice of a long acting reversible contraceptive like implants, they will use it, though out of 316 (79.8%) respondents who had ever used a contraceptive method, only 3 (0.9%) had used implants (Table).

## Discussion

The study results revealed that only 38.6% of the respondents had knowledge about implants being a method of contraception. Likewise, Jabeen C and Umbreen G in 2016 reported 34.4% of the respondents to have knowledge regarding implants,<sup>9</sup> while, 21.2% of the participants were of the opinion that implants have side effects. Similarly, Mubarik M et al, in 2016 found that 20.0% of the participants were of the opinion that implants have side-effects.<sup>8</sup>

It was also found in our study, that 79.8% of the respondents had ever used any contraceptive method. Mubarik M et al, in 2016 though reported only 26.7% of the respondents to have ever used a contraceptive method.<sup>8</sup> Furthermore, 43.4% of those who refused to use implants for the purpose of contraception if given the choice said so because either they preferred other methods of contraception or didn't think implants to be feasible for them. Likewise, Mubarik M et al, in 2016 found 37.0% of such respondents to cite similar reasons for not using implants.<sup>8</sup>

Surprisingly, only 0.9% of the participants had ever used implants. Similarly, Talpur AA et al, in 2017 cited only 4.7% of the participants interviewed to have ever used implants.<sup>10</sup>

It was further seen that 48.5% of the respondents were currently using any contraceptive method. Unlike our study results though, Azmat SK et al, in 2015 found only 18.3% of the respondents to currently use any contraceptive method.<sup>7</sup> Such a difference in findings is not unexpected as the latter study was a community-based survey conducted in Punjab as opposed to the current study, a hospital based survey carried out in Sindh.

## Conclusion

Despite a favourable attitude, limited knowledge and poor practices of the respondents were the highlights of the study findings. Though it is acknowledged that women of childbearing age visiting a reproductive health centre are not an ideal surrogate of the general population of such women, the resultant estimates nevertheless provide a current local assessment that can be used for future informed decision making.

The limitations of the study include the use of convenience sampling technique and a questionnaire that could not be checked for internal consistency due to time constraint.

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