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Awareness and Associated Correlates of Contraception Use among Patients of Reproductive Age: A Cross-sectional Analysis at Jinnah Postgraduate Medical Centre, Karachi

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ABSTRACT

Objective: To assess the level of awareness of contraception among patients of reproductive age groups.
Study Design: Cross-sectional analytical study.
***Place and Duration of Study*:** Jinnah Postgraduate Medical Centre, Karachi Pakistan, between Jul 2018 to Jul 2019.
Methodology: Women aged more than 18 years and not disoriented at the time of data collection were included in the study. Women younger than 18 years or those getting treatment for psychiatric illnesses or amenorrhea were excluded from the study. A predefined proforma was used to collect data from the study participants.
Results: The mean age of the female patients was 26.5±8.6 years. The awareness regarding contraception was seen in 207(64.2%) female patients. Notably, 190(59.1%) women were aware of contraceptive methods. 210(65.3%) of the female patients considered contraception a safe practice. 225(69.7%) female patients thought contraception was necessary for child spacing. 82(25.4%) female patients had used some contraceptive at least once in their lifetime. Most women use oral contraceptive pills because of their easy-to-use and inexpensive features. Age and marital status significantly associated with the degree of awareness among participants (p<0.05).
Conclusion: The study concluded that most of our study population were well aware of contraception and its uses, but they avoided using the contraceptive methods because of certain religious boundaries and misconceptions regarding the harmful effects of contraception on their health.

Keywords: Awareness, Birth control, Contraception, Family planning.

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INTRODUCTION

Contraception is a technique to avoid or prevent pregnancy used by two sexually active adults.[1] Contraception is important for child spacing since it gives sufficient time to the mother to build up enough nutrition in her body to physically and mentally support a pregnancy. This helps prevent premature babies birth, which may occur in women suffering from certain medical conditions such as hypertension, diabetes mellitus, placental problems, and infections.[2] If there is not enough gap between the birth of two children, then it may adversely affect the physical and mental well-being of the mother. Some women also suffer from postpartum depression due to hormonal changes in their bodies after giving birth.[3] Contraception significantly prevents these complications and promotes maternal and child health. Contraception not only helps to prevent premature births and lowers the incidence of congenital abnormalities, but it also helps to prevent unplanned pregnancies.[4]

There are various factors which determine the method of contraception a person chooses. Some of these factors include taking advice from a physician, gathering information from social media, and taking advice from close relatives and friends who are currently using contraceptives or have used them.[5]

Women living in developing countries do not have access to health education awareness or proper medical guidance, care and support. Hence, the women have been deprived of their basic right to use contraception and the adequate knowledge necessary to make the right decision to avoid any postnatal complications or unwanted and unsafe pregnancies, which may put their and the fetus's lives at risk.[6,7]

There are several contraception/birth control methods, including the long-acting reversible contraception known as an intrauterine device or a subdermal implant. This has the highest success rate and provides long-term reversible contraception.[8] Other methods include hormonal contraception, pill-based system, barrier methods, such as condoms and

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diaphragms, sterilization methods and behavioural methods, and periodic abstinence of sexual intercourse during ovulation.[8,9]

Contraception allows women to put off having children until their bodies can fully support a pregnancy. Contraception benefits women with certain medical conditions that render them unfit to support a pregnancy.[6] It prevents pregnancy in women with a high risk of pregnancy-related complications, in women who don't have access to proper medical care and in women who are not financially stable to support a pregnancy.[4-6] It can also prevent pregnancy for older women who face pregnancy-related risks. Furthermore, contraceptive use also reduces the need for abortion by preventing unwanted pregnancies.[7]

Contraceptive methods have become more widely available worldwide due to a considerable decline in infant mortality, especially in countries that promote family planning and encourage women to use contraceptives through contraceptive programs.[9] Contraception is important for the health of both mother and child. In addition, child spacing is a must, so the need to practice contraception is essential.[10]

Adequate knowledge and awareness play a significant role in determining the use of contraceptive methods by women. The current study aimed to assess the degree of expertise and other correlates and their relationship with the help of contraception.

METHODOLOGY

This cross-sectional analytical study was conducted between July 2018 to July 2019 for 12 months. Ethical approval (JSMU/IRB/2018/140) was obtained before the inception of data collection. A non-probability consecutive sampling method was employed to enrol participants in the study. Keeping a confidence interval of 95%, a margin of error of 5.5% and a predicted response rate of 50%,[11] a sample size of 323 was obtained.

Inclusion Criteria: Women aged between 18 years and 60 years, who gave consent to participation, could understand the Urdu language, and were not disoriented at the time of data collection were included in the study.

Exclusion Criteria: Women younger than 18 years and those who were getting treatment for psychiatric illnesses such as depression, anxiety, or amenorrheic were excluded from the study.

For data collection, we selected patients from different departments of Jinnah Postgraduate Medical Center, Karachi Pakistan.

After obtaining written consent from the patients, data was collected through a predefined pro forma validated by two community medicine experts and consisted of 21 questions translated into simple Urdu language as a means of convenience to the patients. Our researchers did face-to-face interviews with the participants by verbally explaining all the questions in simple Urdu, as they were not educated enough to read and understand them. Questions were about knowledge, attitude and practice of contraception.

Statistical Package for Social Sciences (SPSS) version 22:00 was used for the data analysis. The data was then interpreted. Continuous variables were presented as mean with standard deviation. Categorical data were presented as frequencies and percentages. Study outcomes were evaluated according to the demographic characteristics of the patients to determine an association between the independent variables and the outcome of the study using the chi-square test. The *p*-value of lower than 0.05 was considered statistically significant.

RESULTS

A total of 323 participants in the study were all females. The mean age of our participants was 26.5±8.6 years. The majority were married individuals (289, 92.3%). The majority belonged to the age groups of 18 to 37 years. 49(15.2%) females were not formally educated, 47(14.6%) passed primary school, 83(25.7%) middle school, 85(26.3%) were matriculated and 21(6.5%) did masters level education. 298(92.26%) female patients were married, 18(5.57%) were divorced, and 7(2.17%) were widows (Table-I).

Overall, age and marital status significantly impacted the awareness level of contraception. However, the awareness of contraception increased in parallel with age and marital status (Table-II).

Table-III illustrated that 207 (64.1%) women were aware of contraception. 190 (59.1%) were aware of the different contraceptive methods commonly used. Women of reproductive age groups were of the view that contraception was a safe practice and it was necessary. However, 244 (75.5%) of women, despite being aware that contraception is needed and it is an effective method of birth control, avoided using different contraceptive methods because they were scared of the adverse effects of contraceptives.

Table-I: Demographic Characteristics of the Study Participants (n=323)

Demographic Characteristics	Frequency (%)
Age Groups	
Less than 18 years	5 (1.5)
18-27 years	128 (39.6)
28-37 years	103 (31.8)
38-47 years	74 (22.9)
48-57 years	10 (3.1)
Greater than 57 years	3 (0.9)
Marital Status	
Married	298 (92.3)
Divorced/Separated	18 (5.6)
Widowed	7 (2.1)
Education Status	
Not formally educated	49 (15.2)
primary school	47 (14.6)
middle school	83 (25.7)
matriculate	85 (26.3)
intermediate	38 (11.8)
master and further	21 (6.5)

Table-II: The associated Factors of the Level of Awareness of Contraception among Study Population (n=323)

Characteristics	Awareness about Contraceptives		*p*-value
	Yes n (%)	No n (%)	
Education			
No formal education	28 (57.1)	21 (42.9)	
Primary school	27 (57.4)	20 (42.5)	
Middle school	61 (73.5)	22 (26.5)	
Matriculate	50 (58.8)	35 (41.2)	0.184
Intermediate	25 (65.8)	13 (34.2)	
Master and further	16 (76.2)	5 (23.8)	
Age			
Less than 18 years	1 (20.0)	4 (80.0)	
18-27 years	70 (54.7)	58 (45.3)	
28-37 years	73 (70.9)	30 (29.1)	
38-47 years	55 (74.3)	19 (25.7)	0.004
48-57 years	5 (50.0)	5 (50.0)	
Greater than 57 years	3 (100.0)	0 (0)	
Marital Status			
Married	185 (62.1)	113 (37.9)	
Divorced/Separated	16 (88.9)	2 (11.1)	0.03
Widowed	6 (85.7)	1 (14.3)	

Figure-1 illustrated the number of females aware of the various side effects of contraceptives. 119(36.7%) females marked no side effects indicating a lack of awareness about the adverse impact of using the contraceptives.

Figure-2 illustrated that 82(25.4%) female patients had used some contraceptive at least once in their lifetime. The following figure also demonstrated that most women used oral contraceptive pills because of their easy-to-use and inexpensive features.

Table-III: Degree of Awareness of Contraception and its Uses among Study Participants (n=323)

Item	Frequency (%)
Do you know what is Contraception?	
Yes	207 (64.1)
No	116 (35.9)
I do not know	0
Do you know any Method of Contraception?	
Yes	190 (59.1)
No	113 (35.0)
I do not know	19 (5.9)
Do you think it is a Safe Practice?	
Yes	21 (65.3)
No	29 (9.0)
I do not know	83 (25.7)
Do you think Contraception is Necessary?	
Yes	225 (69.7)
No	22 (6.8)
I do not know	76 (23.5)
Do you Intend to use any Contraceptive Method In Future?	
Yes	202 (62.6)
No	45 (14.0)
I do not know	76 (23.4)
Have you Ever used Contraceptives?	
Yes	79 (24.5)
No	244 (75.5)
I do not know	0

DISCUSSION

In this study, awareness of contraception among patients of reproductive age groups in Jinnah Postgraduate Medical Centre, Karachi Pakistan, was analyzed in 64.2% of female patients compared to 98% and 93.1% awareness in studies conducted in Lahore and India.[11,12] It was seen that most female patients had awareness about contraception, but most had strikingly low practice. This indicated a wide gap between awareness and the practice of contraception. However, the current findings aligned with studies conducted in Karachi and Lahore.[13] The reasons for low practices were certain religious boundaries, misconceptions and myths regarding contraception that it may enter into the abdomen of the females and may have adverse effects on the women's health.

The mean age of the female patients was 32.62±9.1 years. It was seen that four-fifth percent of women were aware of different contraceptive methods. The most widely known method was oral contraceptive pills, followed by the diaphragm, contraceptive implants, and condoms. A study conducted in Lahore and India showed that the most known contraceptive method was oral contraceptive pills; 68% and 74.8%, respectively, showed that more people were aware of oral contraceptive pills than ours.[11,12] A similar study

was conducted in Nepal, where the most known contraceptive methods were Depo Provera (78%) followed by oral contraceptive pills (74%).[14] A total of 191(61.6%) female patients were aware of the side effects of contraception as compared to 56.8% awareness in a similar study conducted in Karachi.[7] The most feared side effects were infertility (36.77%) followed by weight gain by one-fifth of the participants, menstrual problems, nausea and vomiting. Nevertheless, more than three-fifths of female patients considered contraception a safe practice.

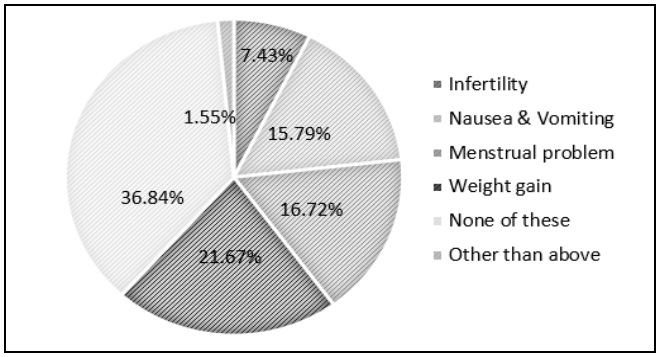

Figure-1: The frequency of Participants who had Awareness about the Side Effects of Different Contraceptives (n=323)

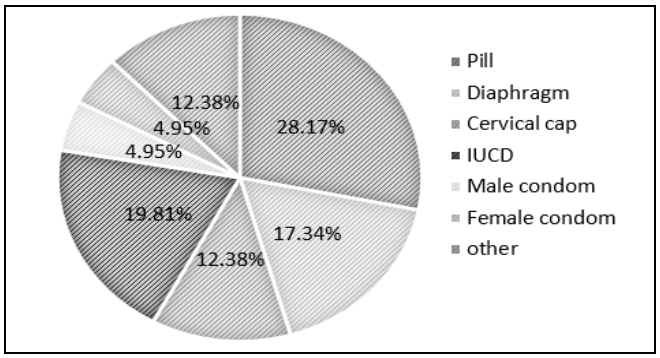

Figure-2: Practice of Contraceptives in Study Population (n=323)

In our study, the contraceptive practice was very low as compared to studies conducted in Sukkur and Khyber Pakhtunkhwa, where it was seen that the majority (three-fifths of the study population) had used some contraceptive methods in the past.[15,16] The most chosen methods were oral contraceptive pills (28.4%), followed by IUCD (19.75%), diaphragm (17.28%) and condoms (12.35%). In a similar study conducted in Rawalpindi most used methods were combined oral contraceptive pills (34.6%) followed by IUCDs (26.9%), tubal ligation (21.8%) and condoms (16.7%).13 50.18% of females preferred tubal ligation as a contraceptive method of choice in a study conducted in Andhra Pradesh, India.[17,18] The major side effects experienced by female patients after using different contraceptives were headache (26.17%) followed by weight gain (16.78%) and mood swings (13.42%). A study conducted in district Khushab, Punjab, showed that 71.6% of participants believed using contraceptives caused infertility.[16] In our study, the increasing age and marital status significantly correlated with the degree of awareness of contraception among study participants.

Over three-fifths of female patients were aware of different contraceptive methods. Still, most female patients, around 241 female patients, avoid using contraceptives because most of them believe its risks outweigh their benefits. We analyzed that only a minority of the female patients were currently using contraceptives or had used them in the past. This indicated the low practice of contraception in our setting. There should be more awareness programs regarding the importance of contraception and its impact on the health of women, as it decreases the rate of maternal and infant morbidity and mortality.[7,18] It is important to spread awareness regarding contraceptives' beneficial uses, not just limited to birth control. Still, it also helps to regulate heavy menstrual bleeding. In addition, it prevents the transmission of sexually transmitted diseases, particularly condoms are commonly used for this purpose in different parts of the world as they are cheap and easily available.

There were certain negative findings that demanded the need for awareness among female patients of reproductive age groups. Most female patients believe that the use of contraceptives will do more harm to their health than good. They think that it causes weight gain, menstrual irregularity and infertility. Some women believed that using contraceptives interfered with the natural process of birth, which they believed to be a sin, so they avoided using contraceptives.

Through all of these findings, we came to realize that the majority of the female patients visiting JPMC were well aware of the use of contraceptives, but there was still a very low practice rate. As healthcare practitioners, we should clear people's misconceptions regarding the harmful effects of contraceptives. It is important to educate people about the benefits of contraception, which are not just limited to birth control. It is also important to educate female patients, their family members, and their husbands about the importance of contraception in child spacing and decreasing maternal and infant mortality rates.

Further study can be carried out on the same study question on a broad scale, including all socioeconomic classes, people from different literacy backgrounds with varying schools of thought and people who do not visit hospitals for treatment. In future, separate research should be conducted to assess the awareness of contraception among spouses of female patients. Some female patients who were a part of our research said they avoid using contraceptives as their spouses do not allow them.

LIMITATIONS OF STUDY

We also faced several problems during data collection, leading to limitations in our research. One of the hurdles was the language barrier. Our questionnaire was designed in Urdu; therefore, we failed to collect data from non-Urdu speaking patients, which could not be represented in our result. Moreover, we did consecutive convenience sampling from JPMC, which covered all patients from low and middle-class socioeconomic groups. We also noted the medical registration number of every patient; thus, only those patients approached who were registered. Therefore, we have excluded all the non-registered cases from our study.

CONCLUSION

The study concluded that most female patients coming to the JPMC knew contraception and its uses well. Still, they avoided using the contraceptive methods because of certain religious boundaries and misconceptions regarding the harmful effects of contraception on their health. Therefore, we need to work on spreading awareness of contraception by organizing more awareness sessions for the general population, especially in rural areas where there is a need for more awareness programs.

Conflict of Interest: None.

Author's Contribution

Following authors have made substantial contributions to the manuscript as under:

SZH: Data analysis, data interpretation, approval of the final version to be published.

THZ: Conception, study design, drafting the manuscript, approval of the final version to be published.

BSS & RT: Data acquisition, Critical review, approval of the final version to be published.

MJ & SS: Study design, data analysis, drafting the manuscript, critical review, approval of the final version to be published.

KA: Drafting the manuscript, data interpretation, approval of the final version to be published.

Authors agree to be accountable for all aspects of the work in ensuring that questions related to the accuracy or integrity of any part of the work are appropriately investigated and resolved.

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