ORIGINAL ARTICLE

Knowledge, Attitude, and Practices Regarding Contraception Among Postnatal Mothers: A Cross-Sectional Study at a Single Institution in Lahore

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ABSTRACT

Objective: To assess the knowledge, attitude, and practice towards contraception among postnatal mothers presented in a tertiary care hospital.

Study Design: A cross-sectional descriptive study.

Place and Duration of Study: This study was conducted in the Department of Obstetrics and Gynecology, Hameed Latif Hospital, Lahore, Pakistan from February 2024 to February 2025.

Methods: A total of 325 females, aged 15-40 years, who presented in the postnatal ward within 4 weeks of delivery were selected by non-probability, consecutive sampling. Knowledge was assessed by 12 multiple-choice questions. Attitudes were assessed by a 13-item questionnaire, which could be answered on a Likert scale with 1 (strongly agree), 2 (agree), 3 (undecided), 4 (disagree), and 5 (strongly disagree). The practice was assessed by asking about the use of contraception, its duration, and type.

Results: The mean knowledge score was 9.4 ± 3.2, and the attitude score was 45.8 ± 18.9. 297 (91.4%) had a good knowledge level, and 28 (8.6%) had a score of less than 10. The knowledge score was associated with place of residence and qualification. A total of 203 (96.7%) women living in urban areas had a good knowledge score, compared with 94 (81.7%) in rural areas. Similarly, 180 (77.2%) illiterate women, 53 (86.8%) women with primary education, 19 (86.3%) with secondary education, and 9 (100%) with higher education had good knowledge. A favorable attitude was demonstrated by 198 women (60.9%), and 127 (39.1%) had a score below 50. Good contraceptive methods were practised by 102 women (31.4%), and 223 (68.6%) had poor practices.

Conclusion: There is a good level of knowledge, favourable attitudes, and poor practices regarding contraception in postnatal women; however, there is a need to raise awareness regarding the practice of these tools to ensure maternal health.

Keywords: *Contraception, Family Planning, Knowledge.*

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Introduction

Contraception is the most efficient method of family planning through different devices, procedures, and behaviors. It is a key factor in ensuring maternal health during pregnancy and after birth. While other factors, including time of marriage, infertility, and induced abortion, impact fertility, contraception has been recognized as a major determinant. The fertility rate in Pakistan has decreased from 6 to 3.6 in the last 3 decades.[1] This is highly influenced by women's social status and education.[2]

Approximately 34% of married women in Pakistan use contraceptives, among which 25% resort to modern methods and 9% use traditional tools.[3] Urban women had a 43% prevalence of contraceptives as compared to 29% in rural areas.[4] Although, these statistics are improved than the 90s (9%) and 2000s (22%), there is still a significant gap between knowledge and practice of contraceptives.[5] The most common factors influencing it are lack of decision-making power in women, religious beliefs, fear of side effects, and lack of information sources.

Since knowledge is the most important factor in effective family planning, it is essential to ensure its delivery. In Pakistan, almost all married women (96%) are aware of at least one way of contraception, half of whom have used it in the past (49%), and 30% are currently using it.[6] However, another study showed that 40-45% of women had average knowledge about contraception as a whole, but only 10-20% were classified as having good knowledge.[7]

The rationale of this study is to assess the knowledge, attitude, and practice towards contraception among postnatal mothers presented in a tertiary care hospital after delivery. In a developing country like Pakistan, the growth rate is very high, as reported in the literature. This may be due to a lack of consciousness and a higher illiteracy rate. There is also variation in the results of previous studies. Some reported the rate of knowledge, attitude, and practice of contraception as very high, while others reported low. The government has worked a lot on family planning schemes to control the growth rate but due to illiteracy, most people do not know about contraception and family planning, local estimates regarding KAP of females towards contraception and family planning in the local population will also help us to improve our practice and we will be able to develop guidelines to improve KAP of females towards contraception and family planning.

This study was conducted to assess the knowledge, attitude, and practice towards contraception among postnatal mothers presented in a tertiary care hospital.

Methods

A cross-sectional analysis was conducted at the Department of Obstetrics and Gynecology, Hameed Latif Hospital, Lahore, Pakistan from February 2024 to February 2025 after taking permission from the Ethical Review Board of the hospital vide letter no: R/HLH/1248-12, dated: 25th January 2024. A total of 325 females, aged 15-40 years, who presented in the postnatal ward within 4 weeks of delivery were selected by non-probability, consecutive sampling. The sample size was calculated with a 95% confidence level, 5% margin of error, and taking an expected percentage of the practice of contraception method, i.e., 30% in females presented in a tertiary care hospital after delivery.[8] Informed consent was obtained from each female to use their data in a research project. Females who were not ready to give informed consent were excluded.

Demographic data, including age, occupation, family system, qualification, and religion, was recorded. A specially designed questionnaire, particularly used for KAP studies, was used to assess the knowledge, attitude, and practice of females towards methods of contraception and family planning. Knowledge was assessed by 12 multiple-choice questions. Each question carried mark, and 1 mark was given for the correct answer, and no marks were given for the wrong answer. The maximum score obtained was 12, and a score > 10 was referred to as appropriate knowledge of contraception.

Attitudes were assessed by a 13-item questionnaire, which could be answered on a Likert scale with 1 (strongly agree), 2 (agree), 3 (undecided), 4 (disagree), and 5 (strongly disagree). One mark was given if the respondent selected strongly disagree, two marks were given if disagree was selected, 3 marks were given for undecided, four marks were given for selecting agree and 5 marks were given for selecting strongly agree. The maximum marks obtained were 60, and a score of more than 50 was referred to as an appropriate attitude towards contraception.

Practice was assessed by asking about the use of contraception, their duration, and type, including natural (withdrawal method), condoms, oral contraceptive pills, progesterone-only pills, injectable, intrauterine contraceptive devices, emergency contraception, bilateral tubal ligation, and vasectomy. A good practice referred to the use of any contraceptive method by females to prevent

unwanted pregnancy for at least 1 year.

All data analysis was performed by SPSS version 20. The mean and standard deviation were calculated for quantitative variables such as age and scores for knowledge, attitude, and practice.

Results

A total of 325 patients were included in this study, among whom the most common age group was 15-25 years (52.9%), and the youngest patients were between 36-40 years of age. The mean age of the patients was 25.92±6.73 years. Methods used for contraception were as follows: natural (withdrawal method) in 78 (24.0%), condoms in 251 (77.2%), oral contraceptive pills in 47 (14.4%), progesterone-only pills in 51 (15.7%), IUCD in 95 (29.2%), and bilateral tubal ligation in 75 (23.1%). Distribution of cases by educational status revealed that 233 ladies (71.7%) were illiterate, 61 (18.8%) had primary education, 22 (6.8%) had secondary level education and 9 women (2.7%) had higher education degrees. A total of 297 (91.4%) were housewives, 18 (5.5%) were government employees, and 10 (3.1%) were private employees. The demographic details of women are shown in Table 1.

Table 1: Baseline Demographic Characteristics of Sample

Characteristics	N (%)
Mean age	25.92±6.73 years
15-25	172 (52.9%)
26-35	110 (33.8%)
36-40	43 (13.3%)
Place of residence	
Urban	210 (64.6%)
Rural	115 (35.4%)
Religion	
Islam	303 (93.2%)
Christianity	22 (6.8%)
Qualification	
Illiterate	233 (71.7%)
Primary	61 (18.8%)
Secondary	22 (6.8%)
Higher Education	9 (2.7%)
Occupation	
Housewife	297 (91.4%)
Government employee	18 (5.5%)
Private employee	10 (3.1%)
Source of information	
Electronic media	190 (58.4%)
Newspaper	115 (35.4%)
Magazine	20 (6.1%)
Type of contraception used	
Natural (withdrawal method)	78 (24%)
Condoms	251 (77.2%)
Oral contraceptive pills	47 (14.4%)
Progesterone only pills	51 (15.7%)
IUCD	95 (29.2%)
Bilateral tubal ligation	75 (23.1%)

Multiple Responses Allowed

Table 2: KAP Analysis of Study Participants	
Dimension	N (%)
Knowledge	
Mean score	9.4 ± 3.2
Good knowledge	
Yes	297 (91.4%)
No	28 (8.6%)
Attitude	
Mean score	45.8 ± 18.9
Favorable attitude	
Yes	198 (60.9%)
No	127 (39.1%)
Good practice	
Yes	102 (31.4%)
No	223 (68.6%)

Table 2 shows the knowledge, attitude, and practice analysis of participants. The mean knowledge score was 9.4 ± 3.2, and the attitude score was 45.8 ± 18.9. 297 (91.4%) had a good level of knowledge, and 28 (8.6%) had a score of less than 10. A total of 203 (96.7%) women living in urban areas had a good knowledge score, compared with 94 (81.7%) in rural areas. Similarly, 180 (77.2%) illiterate women, 53 (86.8%) women with primary education, 19 (86.3%) with secondary education, and 9 (100%) with higher education had good knowledge. A favorable attitude was shown by 198 women (60.9%), and 127 (39.1%) had a score below 50. Good contraceptive methods were practiced by 102 women (31.4%), and 223 (68.6%) had poor practices.

Discussion

This study was conducted to assess the knowledge, attitudes and practice of post-natal women regarding contraception. The results revealed a high level of knowledge and favourable attitudes but poor practices. These results are consistent with local studies; however, they are significantly different from foreign studies.[9-11] The commonly recognized reason is the difference in culture and acceptability of family planning.[12,13]

Mamatha S et al. reported an 87.9% knowledge of family planning in postpartum women.[14] The commonly recognized reasons for not using contraception were fear of side effects (31%), lack of information (10%), did not find them effective (9%), and family opposition (2.2%). A Fijian study reported a moderate knowledge score of 14.95 out of 24 and a favourable attitude score of 20.56 out of 30.[15] The knowledge score was associated with parity with women having >7 children having the lowest scores. The attitude score significantly decreased with age, as women aged 20-24 had a lower score than women aged 18-19 by 6.49 points. The same pattern was noted in practice scores where women 30-34 had a lower score than women aged 18-19 by 2.41 points.[16] Olukunle TA et al. also noted a good knowledge score in 82.5% of postnatal women with a favourable attitude in 80.9%.[17] Mekonnen also reported a 74.2% knowledge rate and reported its association with urban residence (OR=2.95, 95% CI=1.34–6.48), similar to our study. Other factors indicated were previous contraceptive use, birth at the hospital and counselling for a good knowledge of family planning.[18]

As compared to our study, Sisay FA et al. had a significantly lower good knowledge rate of 36% and a favourable attitude in only 48.7% of women.[19] Urban residence, higher qualification and a good occupation were related to knowledge similar to our study. The big gap between knowledge and practice was also recognized by Archana C et al. where 81.4% had good knowledge but only 48.7% used contraceptives due to the desire of children.[20]

Our study has some limitations. Firstly, since the data was self-reported, it may include reporting bias. Secondly, we did not analyze the relationship between knowledge, attitude and practice among each other. Evaluating these associations through correlation or regression models would have provided a deeper understanding of how awareness and attitudes influence contraceptive behavior. Future studies should incorporate multivariable analyses to explore these relationships and identify

predictors of contraceptive practice more robustly.

Conclusion

There is a good level of knowledge and favorable attitudes but poor practices regarding contraception in postnatal women, however, there is a need to raise awareness regarding the practice of these tools to ensure maternal health. Strengthening counseling and addressing cultural and accessibility barriers are essential to convert awareness into sustained contraceptive use

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Author Contributions

HT: Conception and design of the work
SA: Writing the original draft, proofreading, and approval for final submission
SH: Data acquisition, curation, and statistical analysis
ZA: Writing the original draft, proofreading, and approval for final submission
BY: Validation of data, interpretation, and write-up of results
SK: Revising, editing, and supervising for intellectual content