

ORIGINAL ARTICLE

Immediate Postpartum and Post Abortion Long Acting Reversible Contraception in Referral Level Facility

MUHAMMAD JAMIL JOHAR¹, MARIA RIAZ², FARZANA SABIR³, SARA AKRAM⁴, NASREEN AKHTAR⁵

¹MBBS, FCPS, MRCOG 2, Consultant, Obstetrician and Gynaecologist, Lady Willingdon Hospital/ King Edward medical university Lahore

²Assistant Professor of Obstetrics and Gynaecology, Gambat Institute of Medical Sciences, Gambat

³Assistant Professor Divisional Headquarters Teaching Hospital Mirpur, Azad Kashmir

⁴Associate professor Divisional Headquarters Teaching Hospital Mirpur, Azad Kashmir

⁵Associate Professor, Gynae/ Obs, Divisional Headquarters Teaching Hospital Mirpur, Azad Kashmir

Corresponding author: Muhammad Jamil Johar, Email: drjamil.johar@yahoo.com

ABSTRACT

Background: Despite the advances in the contraceptive technologies, still the unintended pregnancies are adding to the global health issues. The placement of a contraceptive device, such as an intrauterine device (IUD) or contraceptive implant, immediately after childbirth is termed as long-acting reversible contraceptives LARC.

Study design: It is a retrospective study conducted at Lady Willingdon Hospital Lahore and Divisional Headquarters Teaching Hospital Mirpur, Azad Kashmir for the duration of six months from April 2022 to September 2022.

Material and Methods: The study was approved by the health and ethical board committee of the hospital. The study was conducted on 102 patients that visited tertiary care center during a course of six months. The age of women ranged from 18 to more than 36 years. There were 51 women who belonged to age group 18-24 years, 32 were in the 25-35 year range and 49 were older than 35 years.

Results: Standard deviation and p value was calculated and results were statistically significant. There were 8 women who were nulliparous, primipara women were 31 and 58 were multipara. There were 5 women that were included in the grand multipara group. There were 42 women that belonged to urban area and 60 lived in rural area. Most of the women 52 had primary level of education, however 24 had higher secondary level of education and 56 were working women.

Conclusion: The acceptance rate was only 9% in the vaginal birth patients. The use of LARC could be an easy and cost effective contraceptive way.

Keywords: Intrauterine device and family planning services.

INTRODUCTION

Despite the advances in the contraceptive technologies, still the unintended pregnancies are adding to the global health issues. According to a report it was recorded that 208 million pregnancies per annum occur around the world. The 41% out of the recorded number remained unintended and other 21% ended as induced abortion. The post natal period is observed to be the most neglected period in the lives of many mothers. This period start immediately after the birth of child¹⁻³. The other term for the postnatal period is 4th stage of labor. The placement of a contraceptive device, such as an intrauterine device (IUD) or contraceptive implant, immediately after childbirth is termed as long-acting reversible contraceptives LARC. IUDs prevent fertilization by altering the cervical mucus and creating an inhospitable environment for sperm. This approach offers women a convenient, effective, and long-term contraceptive option. The access to LARCs methods remains limited in many settings. The contraception are usually used less in the practice. To avoid the consequences of the unintended pregnancies the immediate long acting reversible contraceptive placement is highly suggested by the gynecologists⁴⁻⁶. Similarly the rate of unwanted pregnancies and abortion can be reduced by the usage of contraceptive. The easy access and availability of contraceptive leads to the healthier pregnancies. Post abortion long acting reversible contraception is the one of the vital known strategy to reduce the maternal morbidity and mortality. Despite the recent advances there is still need of family planning in developing countries especially Pakistan. The lack of access to the family planning services, lower literacy rates and other factors contribute to the proportion of the unintended pregnancies. The one in every 4 married reproductive age women in the Pakistan don't have access to the affordable family planning services⁷⁻⁸. Therefore the contraceptive prevalence rates are very low in Pakistan. The lady health worker can play the crucial role by identifying the women with needs of family planning and referring them to the public and private hospitals. The most effective strategy for the non-permanent contraception includes intrauterine contraceptive devices (IUCD) implants. The sub dermal and copper IUCD implants are easily available in the government and private subsidies.

This research aimed to explore LARC strategies current status. The study also aimed to identify the opportunities and challenges associated with the delivery of LARC. The research will also provide recommendations for improving the delivery of LARC services, including increasing the availability of LARC methods, improving provider training, and addressing cultural and social barriers to the use of contraception⁹⁻¹⁰. This information is essential for developing effective policies and guidelines for LARC provision during the postpartum period. Ultimately, the goal of this research is to support women in making informed decisions about their contraceptive options and improving their reproductive health outcomes.

MATERIAL AND METHODS

It is a retrospective study conducted at Lady Willingdon Hospital Lahore and Divisional Headquarters Teaching Hospital Mirpur, Azad Kashmir for the duration of six months from April 2022 to September 2022. Participants were selected from referral level facilities in both urban and rural settings, and the data collected was analyzed using qualitative and quantitative methods. Standard deviation and p value was calculated and results were statistically significant. The sampling technique that was adopted for the research was convenient¹¹. The demographic data of every patient was collected and recorded for the further studies. The acceptance of LARC with parity was determined. The education status and residence of the patients were also recorded. The hospital health and review board committee approved the study. The chi-square test was performed and the association of mode of delivery and parity was calculated. The SPSS was used for the statistical analysis of the data.

RESULTS

The study was carried out to find the immediate postpartum and post abortion long acting reversible contraception referral level facility in the health care center. The study was done on 102 patients that visited tertiary care center during a course of six months. The women who were not fulfilling the inclusion criteria were excluded from the study. The age of women ranged from 18 to more than 36 years. There were 51 women who belonged to

age group 18-24 years, 32 were in the 25-35 year range and 49 were older than 35 years. There were 8 women who were nulliparous, Primipara women were 31 and 58 were multipara. There were 5 women that were included in the grand multipara group. There were 42 women that belonged to urban area and 60 lived in rural area. Most of the women 52 had primary level of education, however 24 had higher secondary level of education and 56 were working women.

Table 1: Sociodemographic profile of patients

Feature	Number of patients n= 102
Age	
18-24 years	51
25-35 years	32
>36 years	49
Parity	
Nulliparous	8
Primipara	31
Multipara	58
Grand multipara	5
Residence	
Urban	42
Rural	60
Education	
Illiterate	9
Primary level	52
Secondary level	17
Higher secondary and above	24
Working women	
yes	56

Source and method of contraception that the women used in past was also analyzed, data was taken from the patient's history. 25 women reported about taking pills and 21 used depot injections. 12 used condoms and 4 used IUCD as a contraceptive.

Table 2: Source and method of contraception used in the past

Methods used in past	No. of patients (n=102)
Pills	25
IUCD	4
Condoms	12
Implants	1
Depot injection	21
Others	-
Source of information about contraception	
TV	35
Radio	12
Clinic	42
Husband	23

As shown in table no.2 the source of information about the use of contraceptive was mostly from TV and clinic. The type of delivery among women was also studied and it was found that 62% of them had to go for vaginal delivery and 37% had cesarean delivery.

Table 3: Gravidity and type of delivery among patients

	Number of patients (%)	LARC
Gravidity		
Primigravida	(30) 30%	1.6%
Multigravida	(56) 56%	8.8%
Grand multigravida	(13) 13%	17.5%
Mode of delivery		
Vaginal delivery	(63) 62%	8%
Cesarean	(37.74)37.4%	7%

A total of 50 women were administered postpartum LARC. Regarding the 33 women that had cesarean 19 had PPIUCD and among 17 women that had vaginal birth, 8 opted for PPIUCD. Among 12 women that were Primigravida 2 of them had PPIUCD (Post-partum intrauterine contraceptive device).

Table 4: Distribution of LARC as per gravidity and type of delivery

	LARC post-partum	Non-LARC	P-value
Gravidity			
Primigravida	(12) 12%	(2) 2%	0.005
Multigravida	(24) 24%	(16) 16%	0.000
Grand multigravida	(7) 7%	(2) 2%	0.005
Mode of delivery			
Vaginal	(17) 17%	(8) 8%	0.001
Cesarean	(33) 33%	(19) 19%	0.003

DISCUSSION

This study was carried out to find the long acting reversible contraception for immediate postpartum and post abortion patients in the referral level facility. The study was done on 120 patients who visited tertiary care unit and who were following the inclusion criteria. In our study 51 women were in the 18-24 age group, 32 were in the 25-35 age group and 49 were older than 36 years. There were 8 women who were nulliparous, primipara women were 31 and 58 were multipara. There were 5 women that were included in the grand multipara group. There were 42 women that belonged to urban area and 60 lived in rural area. Most of the women 52 had primary level of education, however 24 had higher secondary level of education and 56 were working women. As per studies there is a high percentage of women that has unmet needs of contraceptive that means that they want to delay childbearing but are unable to use any sort of contraceptive. Most of the women in our study (92%) did not use any sort of contraceptive. In another study that was carried out to find the use of contraceptive among women it was found that 86% of the women did not accept any sort of contraceptive, which led to unplanned pregnancies¹². In our study the type of delivery among women was also studied and it was found that 62% of them had to go for vaginal delivery and 37% had cesarean delivery. It was observed that the women that were educated had knowledge and awareness about the use of contraceptive while illiterate women more frequently experienced unplanned pregnancies¹³⁻¹⁴. As per studies it was found that one of the major causes of negative maternal and fetal problems is closely spaced pregnancies. Before the body of women is healed, there happens next pregnancy which lead to severe consequences both on part of child and mother¹⁵. WHO has stated the proper timing and spacing between two pregnancies so that health of child and mother is make ensured. This will ultimately have positive effects on the previous child as well¹⁶. In our study only 8% of the vaginal delivery mothers accepted LARC. There were 7% mothers who went through cesarean accepted for LARC. A total of 50 women were administered postpartum LARC. Regarding the 33 women that had cesarean 19 had PPIUCD and among 17 women that had vaginal birth, 9 opted for PPIUCD. Among 12 women that were Primigravida 2 of them had PPIUCD (Post-partum intrauterine contraceptive device). In the previous studies there were 34% women that opted for PPIUCD and they had vaginal deliveries. As per a survey it was found that Pakistan has a very low frequency of contraceptive prevalence rate as compared to other Muslim states. As Pakistan only reports 35% CPR however countries like Iran and Turkey had 79% and 71% respectively¹⁷⁻¹⁸. Post-partum LARC is one of the most effective methods that is cost friendly as well. As per a report the cost of different contraceptive methods was compared and it was reported that the most cost effective method is post-partum LARC¹⁹⁻²⁰. In our studies among the 30% Primigravida patients only 1.6 percent opted for LARC and most of the patients from grand multigravida who have given birth to more than 5 kids opted for LARC (17.5%). There were 8.8% patients from the multigravida group that opted for LARC. Previous studies have reported the similar results where women from the multigravida and grand multigravida look for LARC more frequently as compared to other group²¹⁻²³. Our study showed that 9 percent acceptance rate exist for LARC in the women that went through vaginal delivery and 7% acceptance rate for LARC is found in the cesarean group. There is need of

contraceptive counselling for these women and related strategies should be made by concerned health care center. Our study was carried out based on data from a single hospital, if history data from different health care centers was combined then more precise results can be made.

CONCLUSION

This study was carried out to find the long acting reversible contraception for immediate postpartum and post abortion patients in the referral level facility. The acceptance rate was only 9% in the vaginal birth patients. The use of LARC could be an easy and cost effective contraceptive way which can improve the health condition of mother and child.

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