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POST ABORTION CONTRACEPTION: THE WAY FORWARD

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ABSTRACT

Abortions account for 8 percent of maternal mortality in India and usage of contraception in post-abortal period can prevent upto 90 percent of maternal mortality associated with unsafe abortions. Providing such cases with contraception before they are discharged from the hospital or health facility will help reduce the vicious cycle of repeated unintended pregnancies and unwanted births and abortions that could ease off burden from the health system. This is a prospective analytical study conducted on patients attending the Department of Obstetrics and Gynaecology of a District Hospital in Delhi from January 2019 to June 2019 (6 months) with a diagnosis of first trimester abortion (missed, incomplete, complete) based on sonography. Knowledge, attitude and practices regarding contraception among these post-abortal women was analyzed using a pre-structured questionnaire. Changing trends in acceptance of contraception among post-abortal women from 2014 to 2019 (till June) was compared retrospectively. A total of 206 women were admitted in the hospital with a diagnosis of abortion from January 2019 to June 2019, out of which 190 women underwent Dilatation and Evacuation (D & E). Maximum women who reported to the hospital with abortion were Multigravida (60.7%). 145 women (70.3%) had D & E for incomplete abortion out of which 78 (53.8%) were induced abortion. Gradual rising trend was seen in contraceptive acceptance among post-abortal women ranging from 66.6% in January 2019 to 97.7% in June 2019. Injection MPA (Medroxy Progesterone Acetate) was the most popular contraceptive among women. 120 women (58.2%) had Inj. MPA as their contraceptive choice followed by 52 women (25.2%) who opted for Intrauterine Device (IUD) insertion as family planning method. A safe induced abortion has no negative impact on future fertility. Contraception should be started within first week of abortion as ovulation may occur as early as 8-10 days after abortion. Contraceptive counseling and provision should be an integrated part of comprehensive abortion care to help women to avoid unintended pregnancy.

Key words: Abortion, Contraception, Family Planning, Post-abortal, Pregnancy

INTRODUCTION

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The ability of couple to plan the number, spacing and timing of birth is absolutely a fundamental human reproductiveright. Women living in every country, irrespective of its developmental status, have been facing the problem of unintended pregnancy. Unintended pregnancy is an important woman health issue in both developing and developed countries because of its negative association with social and economic outcome for both women and their families.

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WHO estimates that 210 million women become pregnant every year globally, out of which 75 million pregnanciesend in either induced or spontaneous abortions or still births. Many of these women die adding to the already existing high maternal mortality rate. Therefore, WHO recommends spacing of at least 6 months between the last abortion and next pregnancy, hence providing family planning services as a part of post abortion care is very important to break the cycle of repeated unwanted pregnancies [1].

Abortions account for 8 percent of maternal mortality in India and usage of contraception in post-abortal period can prevent upto 90 percent of maternal mortality associated with unsafe abortions [2]. Most of the women undergoing abortion services at a facility do not return again in near future for family planning services even though they do not want to become pregnant again. In such instances, the appropriate time to provide family planning counseling is when the woman is still at the facility. Providing such cases with contraception before they are discharged from the hospital or health facility will help reduce the vicious cycle of repeated unintended pregnancies and unwanted births and abortions that could ease off burden from the health system.

According to a statement released by FIGO, "*If a woman comes to a hospital with an incomplete abortion, we've already failed once to help her to avoid an unwanted or a mistimed pregnancy. If she leaves the facility without having any means of preventing another pregnancy in the future that may be unwanted, we've failed her twice*." (FIGO, ICM, ICN Consensus 2009)

The ability of couple to plan the number, spacing and timing of birth is absolutely a fundamental human reproductiveright. Women living in every country, irrespective of its developmental status, have been facing the problem of unintended pregnancy. Unintended pregnancy is an important woman health issue in both developing and developed countries because of its negative association with social and economic outcome for both women and their families.

AIM

- To compare changing trends in acceptance of post-abortal contraception among women over 6 years (2014-2019).
- To study the knowledge, attitude and practices (KAP) for contraception among post-abortal women.

MATERIAL AND METHODS

This is a prospective analytical study conducted on patients attending the Department of Obstetrics and Gynaecologyof a District Hospital in Delhi from January 2019 to June 2019 (6 months) with a diagnosis of first trimester abortion (missed, incomplete, complete) based on sonography.

Knowledge, attitude and practices regarding contraception among these post-abortal women was analyzed using a pre-structured questionnaire. Informed consent and confidentiality of women was ensured. Changing trends in acceptance of contraception among post-abortal women from 2014 to 2019 (till June) was compared retrospectively.

OBSERVATIONS & RESULTS

- A total of 206 women were admitted in the hospital with a diagnosis of abortion from January 2019 to June 2019, out of which 190 women under went Dilatation and Evacuation (D & E) and the rest 16 women had complete abortion on sonography (Table 1).
- Maximum women who reported to the hospital with abortion were multigravida (60.7%) marking it as the most vulnerable group for unintended pregnancies. 145 women (70.3%) had D & E

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for incomplete abortion out of which 78 (53.8%) wereinduced abortion (Table 1).

- Gradual rising trend was seen in contraceptive acceptance among post-abortal women ranging from 66.6% in January 2019 to 97.7% in June 2019 (Figure 1).
- While analyzing the data, Injection MPA (Medroxy Progesterone Acetate) was the most popular contraceptive among women (Table 1). Out of total 206 women 120 women (58.2%) had Inj. MPA as their contraceptive choice followed by 52 women (25.2%) who opted for Intrauterine Device (IUD) insertion as family planning method. Seven women chose male condom and 2 clients preferred Centchroman for preventing unintended pregnancy. Four women underwent ligation and 21 women (10.1%) did not agree to use any method of contraception despite detailed counseling (Table 1) (Figure 2).
- Over the counter availability of abortion pills made 43 women (55.1%) take it from the pharmacy store without prescription. Fourteen women (17.9%) self medicated for abortion. Only 27% women took advantage of health facility for safe abortion (Table 2A).
- 113 (54.8%) women had knowledge and advocated the use of contraception in immediate post- abortal period. In 54.8% women, importance and use of contraception had been explained by health care professionals and about 29.2% women had the awareness through mass media (Table 2A).
- In PAIUCD acceptor group, out of 52 acceptors, 21 (40.4%) women accepted it for being a long reversible method which would avoid frequent follow ups. About 36.5% women had already used interval IUCD in past and were satisfied with it. Nine women thought that Inj. MPA would cause menstrual irregularity and weight gain which made them choose IUD for avoiding unwanted future pregnancy. Three women had not heard about Inj MPA before (Table 2B).
- Among MPA acceptors, 43.3% were P0 and P1 who did not want long acting contraceptive. 36.7% women still believed that there are increased chances of uterine bleeding, infection and perforation with post-abortal insertion of IUD. Due to apprehension created by other users or non acceptance of family made 10.8% women not to accept IUD as contraception. Eleven women (9.2%) chose MPA due to associated fear of long or missing thread of IUD (Table 2B).
- While comparing the post abortion contraceptive acceptance among women from 2014 to 2019 at our hospital [Table 3], it was found that all women who underwent MTP accepted IUCD, Inj MPA or tubal ligation as family planning method whereas in cases of other abortions (missed, incomplete and complete) contraceptive acceptance rate among women showed an increasing trend overthe years (6 years) ranging from 0% in 2014 to 89.8% in 2019 (Figure 3).

DISCUSSION

The world population is likely to increase by 2.5 billion over the next 40 years. Unregulated fertility contributes to the burden on limited resources, economic development and political stability.

Use of contraceptives can prevent at least 25% of all maternal deaths by allowing women to prevent unintended pregnancies and unsafe abortions and can also help to protect them from sexually transmitted diseases [3]. One fifth of the maternal deaths in the world occur in India, which is estimated as 4 per 1000 live births, and about 8% of maternal deaths are due to unsafe abortions [4]. Being a developing country, women in India are still opting for over the counter drugs for abortion rather than focusing on contraception.

The return of fertility is rapid after first trimester abortion. The first ovulation may take place as soon as two weeks after abortion. Hence, commencement of effective contraception is necessary even before first post-abortal menstrual period [5].

We had conducted a prospective analytical study on 206 women who reported with first trimester abortion (missed, incomplete or complete) to our hospital between January to June 2019. On analyzing

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the data, we found gradual rising trend in contraceptive acceptance in women over these 6 months. Acceptance rate was 71.4% in January 2019 which increased to 97.7% in June 2019 (Figure 1).

A similar study by Banerjee et al in 2015 highlights the prevalence and attributes of post abortion contraceptive acceptance from 2456 health facilities in six major Indian states from July 2011-June 2014. In this study 81% of women accepted post-abortion contraceptive methods out of which 53% opted for short term contraceptive, 11% for IUD and 16% for sterlisation [6].

In a cross sectional study done in Ethiopia (2018) by Asrat et al, out of 552 women 500 (91%) women adopted post-abortion contraception out of which 103 (19%) received long acting reversible contraception [7]. The contraception acceptance rate was higher in this study than other studies done in Ethiopia (83%), Pakistan (72.9%) and Nepal (49.5%) [8-10].

This variation of contraception utilization across the globe could be due to respondent's level of awareness, education, religious beliefs and various misconceptions about contraceptive among study settings.

Voluntary counseling in post-abortal period regarding contraception by healthcare professionals at our hospital had played an important role in reaching this magic percentage (97.7% in June 2019). We are aiming to have 100% contraceptive acceptance in post-abortal women by next few months.

At our hospital we try to convince maximum number of post-abortal women to have some sort of contraception before discharge from the institute. Accurate and specific information about each available contraceptive method is provided in detail and myths related to specific methods are also clarified. Regular interactive sessions are also being held for service care providers at our hospital to encourage them for patient counseling and removing their doubts regarding post-abortal contraception. This effort could also be one of the reasons for increased patient compliance.

Post-abortion is the right time to introduce contraceptive counseling because women are more receptive at this time. McDougall et al (2009) and Ferreria et al (2011) reported increased contraceptive acceptance after counseling in their study [11,12]. This finding was in line with study conducted in Debre Markos (Ethiopia) where women who received family planning counseling were 4 times more likely to utilize contraceptives [13].

In our study maximum women who reported with abortion were multigravida (60.7%) indicating unmet need for contraception in this group (Table 1). Similar findings were observed in a study by Makenzius et al done in low resource settings of Kenya [13].

145 women (70.3%) had D & E for incomplete abortion out of which 78 (53.8%) were induced abortions. 43 women (55.1%) took abortion pills from pharmacist without prescription, 14 women (17.9%) had unsupervised self intake of medications and only 27% women approached the hospital for safe abortion services (Table 2A). Similar results was observed by Zavier et al (2013) where majority women took advice from nearby pharmacy stores without consulting any medical practitioner [14]. When a woman cannot access safe abortion, she approaches unskilled providers or takes self medication which increasesthe risk of incomplete or septic abortion. Attempt to induce abortion using homemade preparations are also practiced in some parts of India [15].

WHO defines any procedure for terminating an unwanted pregnancy either by person lacking the necessary skills or in environment lacking minimal medical standards or both as 'UNSAFEABORTION'. About 56 percent of total 6.4 million induced abortions are reported to be unsafe in India [16]. In addition, urban slum population is documented to have higher unmet needs for family planning and hence higher vulnerability to induced abortion practices [17]. Now a days, restricted laws for termination, high cost of abortion care and social barriers are making post abortion care an important intervention to decrease abortion related mortality and morbidity.

In our study we enquired about knowledge, attitude and practices (KAP) among post-abortal contraceptive users through pre-structured questionnaire.

We found that 54.8% women were aware of contraceptive use in post-abortal period. Source of

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information in majority of women was health care professionals (54.8%) and media (29.2%) (Table 2A). Our findings differ from studies conducted by Anjumet al & Mustafa et al where majority of women had exposure to family planning services through mass media [18,19].

In our study, 58.2% women had Inj MPA as their contraceptive choice whereas 25.2% women opted for IUD (Multiload) for family planning (Figure 2).

In PAIUCD (Post-abortal IUD) acceptor group, out of 52 acceptors 36.5% women we repreviously interval IUD users and were satisfied with it whereas another 25% women desired long reversible method of family planning. 15.4% women chose it to avoid hassle of frequent follow ups. 13.5% had concerns about MPA like menstrual irregularity and weight gain. In this group 3 women had not heard about MPA before (Table 2B).

Among MPA acceptors, 43.3% were P0 and P1 who wanted short term contraception. Around 36.7% women still believed that there are increased chances of uterine bleeding, infection and perforation with post-abortal insertion of IUD. Some women (9.2%) chose MPA due to associated fear of long or missing thread of IUD. Due to apprehension generated by other users of IUD or non-acceptance of husband, 10.8% women did not opt for post-abortion IUD (Table 2B). Though IUD usage is user independent, and is a long acting reversible contraceptive but myths and fear still surround this contraceptive.

Previously common practice was to wait for two weeks before insertion of IUD and was done at the time of post abortion follow up. This delayed insertion poses risk for unintended pregnancy and also discourages its use in women who travel long distance for post abortion care. The WHO Medical Eligibility Criteria states that IUD can be inserted immediately after first trimester abortion, spontaneous or induced surgical abortion. There is no difference in risk of complications such as expulsion, perforation, incomplete abortion or pelvic infection for immediate versus delayed insertion of IUD after dilatation and evacuation [20]. So now clinical practice has changed and IUD can be inserted at the same time after D & E. This is a safe and effective method and should be offered to post-abortal women [21,22].

We also compared changing trends in contraceptive acceptance among post-abortal women at our hospital from 2014 to 2019 retrospectively (Table 3).

It was found that all women who underwent induced surgical abortion (MTP) during the period 2014-2018 accepted IUD, Inj MPA or sterilization as family planning methods whereas in cases of other abortions (missed, incomplete and complete) contraceptive acceptance rate among women was dismally low. Post abortion contraceptive acceptance showed an increasing trend over the last 2 years increasing from 0% in 2014 to 89.8% in 2019 (Figure 3).

Various attributes for the rising trend over the years could be increased awareness among women about usage of contraception, improvised national family planning policies in increasing the number of contraceptive choices available at the health facilities, and increased focus on voluntary post-abortal contraceptive counseling helping women to choose contraceptive according to their own need. Literature was searched but no data was found in correlation to changing trends in post-abortal contraceptive acceptance at health care facilities; further studies are needed in this area.

CONCLUSION

A safe induced abortion has no negative impact on future fertility. Contraception should be started within first week of abortion as ovulation may occur as early as 8-10 days after abortion. Contraceptive counseling and provision should be an integrated part of comprehensive abortion care to help women to avoid unintended pregnancy. The motivation to initiate an effective contraception is highest in immediate post-abortal period and this opportunity to improve maternal health should be used judiciously.

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Post -abortion contraception theory of change can be detailed as-

Problem: Risk of unintended pregnancy after abortion.

Practice: Proactive voluntary contraceptive counseling at same time and location of post abortion care

Outcome: Women leaving facility with effective contraception

Impact: Fewer unintended pregnancy and unsafe abortion.

This will help to decrease the population and increase the growth of our country. We need to remember that there can be no maternal health without reproductive health and reproductive health includes contraception and family planning and access to legal and safe abortions. Planned parenthood is the need of the day and let's strive to make this a reality.

Table 1: MONTH WISE POST-ABORTION CONTRACEPTIVE SERVICES IN 2019

PARITY	**19-Jan**	**19-Feb**	**19-Mar**	**19-Apr**	**19-May**	**19-Jun**	**Total**
P0	5	4	1	6	6	3	25
P1	9	7	7	13	12	8	56
>P2	7	23	11	29	21	34	125
TOTAL ABORTIONS	21	34	19	48	39	45	206
Incomplete	12	21	11	36	28	37	145
Missed	7	9	6	9	8	6	45
Complete	2	4	2	3	3	2	16
CONTRACEPTIVE							
PAIUCD	4	12	4	10	11	11	52
Inj MPA	9	10	9	37	23	32	120
Centchroman	-	-	1	-		1	2
Sterilization	1	2	-	-	1	-	4
Barrier Method	1	-	3	-	3		7
No Contraceptive method accepted	6	10	2	1	1	1	21
% COVERAGE	**71.40%**	**70.50%**	**89.40%**	**97.90%**	**97.40%**	**97.70%**	

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Table 2: (A) KNOWLEDGE, ATTITUDE AND PRACTICES AMONG POST-ABORTAL CONTRACEPTIVE USERS

INDUCED ABORTION	78	
Self	14 (17.9%)	
Taken from Pharmacist	43 (55.1%)	
Taken from Hospital	21 (27%)	
Whether contraception can be used immediately after abortion	Yes	No
	113 (54.8%)	93 (45.2%)
If yes, source of information	Media	33 (29.2%)
	Healthcare Professional	62 (54.9%)
	Other Users	12 (10.6%)
	Educational Institution	06 (5.3%)

Table 2: (B) REASONS FOR CHOICE OF PARTICULAR METHOD

PAIUCD ACCEPTORS n= 52 (25.2%)		**INJ.MPA ACCEPTORS** n=120 (58.2%)	
❖ Previous acceptor(Interval IUD)	19 (36.5%)	❖ Want early conception	52 (43.3%)
❖ Long reversible method	13 (25%)	❖ Myths related to PAIUCD	
❖ Less follow Up	8 (15.4%)	▪ Increased uterine bleeding	24 (20%)
❖ Myths Regarding MPA	9 (17.3%)	▪ Long /Missing thread	11 (9.2%)
▪ Menstrual Irregularity	4 (7.7%)	▪ Infection	17 (14.2%)
▪ Weight Gain	3 (5.8%)	▪ Uterine Perforation	3 (2.5%)
▪ Fear of Injection	2 (3.8%)	❖ Apprehension created by IUD users	9 (7.5%)
❖ Never heard about MPA	3 (5.8%)	❖ Family reasons (non acceptance by husband)	4 (3.3%)

Table 3: POST ABORTION CONTRACEPTIVE ACCEPTANCE FROM 2014-2019 (6 Years)

YEAR	**MTP with Contraception**	**Other abortions**	**D&E with contraceptive Coverage**
2014	**60** IUD-38 Ligation-22	506	Nil (0%)
2015	**50** IUD-36 Ligation-14	430	4 (0.93%) IUD -1 Ligation -3
2016	**24** IUD-21 Ligation-3	267	7 (2.62%) IUD -1 Ligation -6

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2017	**39** IUD-33 Inj.MPA-5 Ligation-1	324	6 (1.85%) IUD- 1 Inj MPA-1 Ligation -4
2018	**45** IUD-37 InjMPA-8	402	54 (13.43%) IUD-31 InjMPA-6 Ligation -17
2019 (till June)	**17** IUD-12 Inj MPA-5	206	**185 (89.8%)** InjMPA-120 IUD-52 Ligation-4 Barrier-7 Centchroman-2

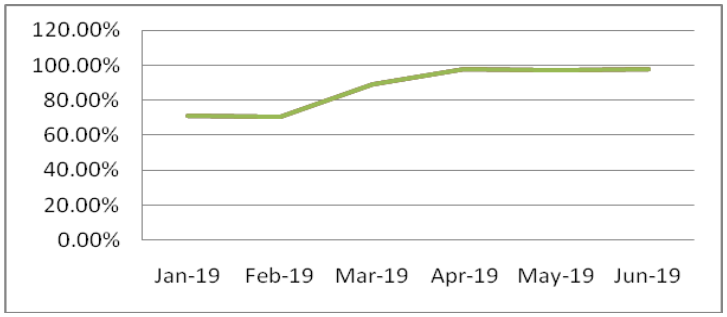

Figure 1: MONTH-WISE CONTRACEPTIVE ACCEPTANCE AMONG POST-ABORTALWOMEN (2019)

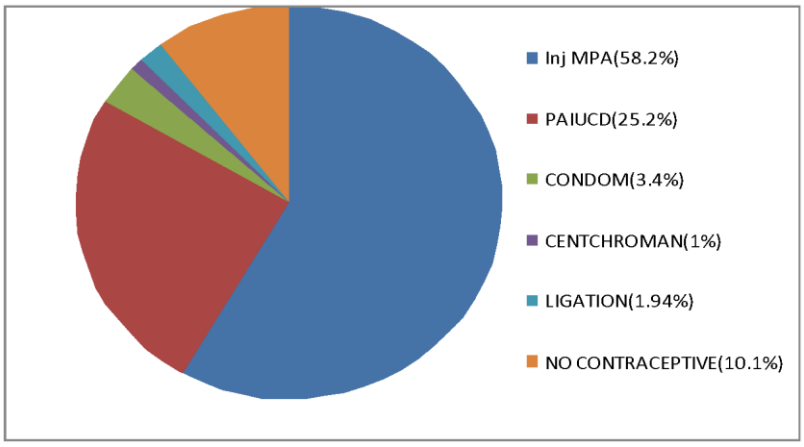

Figure 2: CONTRACEPTIVE CHOICE AMONG POST- ABORTAL WOMEN (2019)

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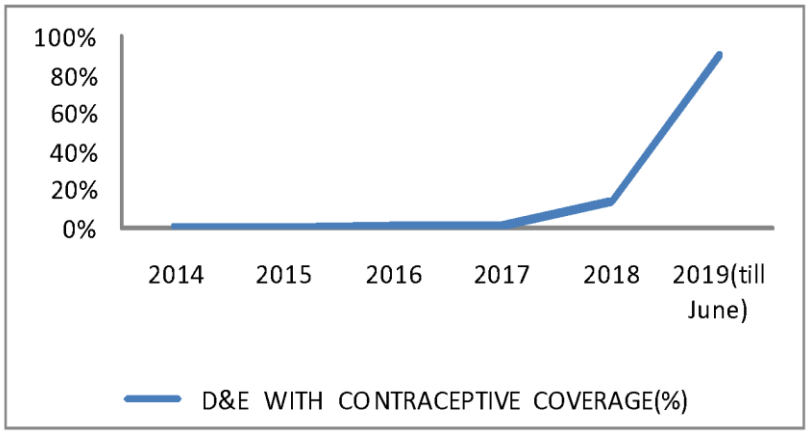

Figure 3: CHANGING TRENDS IN CONTRACEPTIVE ACCEPTANCE IN POST- ABORTAL WOMEN FROM 2014-2019

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