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Clinical Post-Abortion Contraceptive Acceptance and Choice Among Women Receiving Abortion Care at Tertiary Center In Chitwan District, Nepal

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ABSTRACT

Aims: To find out the acceptance of contraception after abortion and the factors affecting its use.

Methods: A prospective cross sectional study was carried out from February 2020 to February 2021 on women seeking safe abortion care services in College of Medical Sciences Teaching Hospital, Chitwan, Nepal. A systematic sampling technique was used to reach the sample size.

Results: Out of total 200 women who came for safe abortion 73% participant had induced abortion and 27% had spontaneous abortion. The main reason for induced abortion was completed family (43.3%). The acceptance rate of contraceptive was 78%. Most frequently used contraceptive was oral contraceptive pill (OCP) followed by depo-provera. The age of the patient, high parity, number of living children, reason for abortion and family planning counseling were independent factors that increase the acceptance of contraceptive post abortion. The education, occupation, past history of contraceptive use and abortion although did not affect the use of contraceptives.

Conclusions: This study shows that if we give proper contraceptive counseling post-abortion, acceptance rate of contraceptives can be increased. Therefore family planning services after abortion need to be strengthened.

Keywords: acceptance; contraceptive; post-abortion; family planning

INTRODUCTION

WHO estimates 40-50 million abortions worldwide every year. If recommended guidelines are to be followed, abortions are extremely safe, but many women undergo unsafe abortion. Around

4.7-13.2% of the maternal death occurs each year due to unsafe abortion. Maternal mortality is high in developing countries by 220 deaths per 100000 unsafe abortions.¹ The Government of Nepal also legalized abortion and made a safe abortion policy for comprehensive abortion care (CAC) on 2002.² In Nepal there is high level of unwanted pregnancies about 35.5% and the prevalence of contraceptive use is low about 44%.³ The unwanted pregnancies are mostly because family planning services are unavailable or lack of knowledge about family planning methods.

The unsafe abortion rate and the mortality and morbidity related to it can be reduced by avoiding unwanted pregnancy. The abortion and contraception use has a strong correlation, where as with the increase in contraceptive use there is decrease in abortion rate with steady fertility rates over time.⁴ Immediately after abortion patients are very receptive to accept subsequent family planning measures. These patients are highly motivated to switch on to effective contraceptive methods.⁵

So, if proper family planning counseling is done post-abortion it will help to increase the contraceptive acceptance rate and reduce the unwanted and unplanned pregnancies. Post abortion contraceptive should be started immediately as pregnancy can occur before commencement of menstruation. The objective of this study is to find the acceptance rate of family planning measures in women post abortion and the factors affecting their use.

METHODS

This is a prospective cross-sectional study done on women seeking comprehensive abortion care services (CAC) from College of Medical Sciences- Teaching Hospital, Bharatpur, Chitwan, Nepal from February

2020 to February 2021. The purposive sample included all women who seek CAC following abortion irrespective of whether it was spontaneous or induced. The sample size calculated was 200 using the cochrane formula taking prevalence of 49.5% from a study done by Shrestha et al in 2013.⁶

After clinical history and patients' consent abortion process was observed and post-abortion counseling was performed for the choice of contraceptives including surgical method. If the participant denied using any contraceptive the reason for denial was noted. They were asked to report to hospital without any delay in case of fever, excessive or irregular per-vaginal bleeding and foul-smelling discharge. The data were analyzed using SPSS-20.

RESULTS

Total 200 participants who came for first trimester abortion between the study periods were included in this study. Most of the participants (58%) were from age group 20-29 years. The maximum participants were married (97.5%), multigravida (75%) and housewives (45.5%). Most of the participants had only received the primary level education (36%). [Table-1]

Table-1: Demographic variables (N=200)

Variables	Categories	N(%)
Age	<20	23 (11.5%)
	20-29	116 (58%)
	30-39	56 (28%)
	>40	5 (2.5%)
Marital Status	Married	195(97.5%)
	Unmarried	5(2.5%)
Parity	Primigravida	50(25%)
	Multigravida	150(75%)
Occupation	Agriculture	33(16.5%)
	Service	9(18%)
	Business	39(19.5%)
	Housework	91(45.5%)
	Student	19(9.5%)
Education	Illiterate	41(20.5%)
	Primary	72(36%)
	Secondary	70(35%)
	Post-secondary	17(8.5%)

Three-fourth had induced abortion (n=146, 73%) and one-fourth spontaneous (n=52, 27%). The main reason for induced abortion was completed family (43.3%) followed by family planning failure (26.8%). Other reasons for induced abortion were affected baby (10.2%), spacing (6.8%), endangered health (4.2%), sex determination (2.8%), unmarried (1.5%), fetal abnormality (1.4%), rape (1.4%) and economic problem (1.4%).

A large number of participants (42%) were not using any method of contraception prior to this pregnancy; 29.2% were using some natural method of contraception including withdrawal method and lactation and 21.8% had used male condom. A small proportion of participants were using OCP (2.5%) and depot-provera (4.5%).

The contraceptive acceptance was seen in 156(78%) participants. The acceptance rate was slightly higher among induced abortion than spontaneous abortion by 80% vs 72%.

Contraceptive acceptance who has induced abortion, maximum participants opted for permanent method (17.1%) followed by depo-provera and copper-T (16.4%) each. Among those who had spontaneous abortion maximum participants opted for OCP (44.4%) followed by depo-provera (20.3%). But when seen collectively most of the participants opted for OCP (21%) followed by depo-provera (16.5%). [Figure-1]

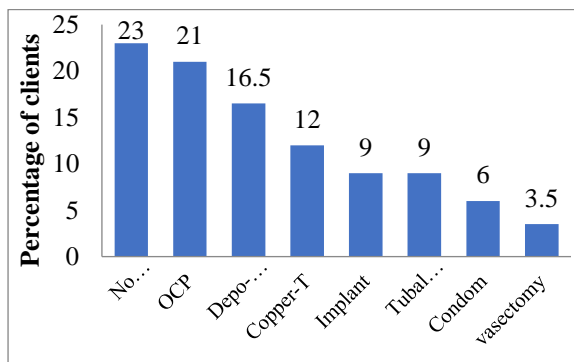


Figure-1: Post-abortion contraceptive acceptance rate

Amongst the participants who accepted contraceptive methods acceptance rate was seen high in multigravida than primigravida which was 123(78.8%) and 33(21.2%) respectively. The proportion of different contraceptive method accepted by the participants according to parity has been shown in [Figure-2].

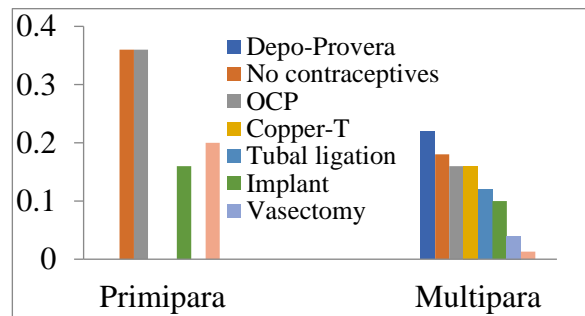


Figure-2: Proportion of contraceptive choice according to parity (p<0.05)

Contraceptive acceptance in different age group were 17(73.9%), 89(76.72%), 45(80.3%) and 5(100%) for age group <20years, 21-30 years, 31-40 years and >40 years respectively. The proportion of different contraceptive method accepted by the participants according to age group has been shown in [Figure-3].

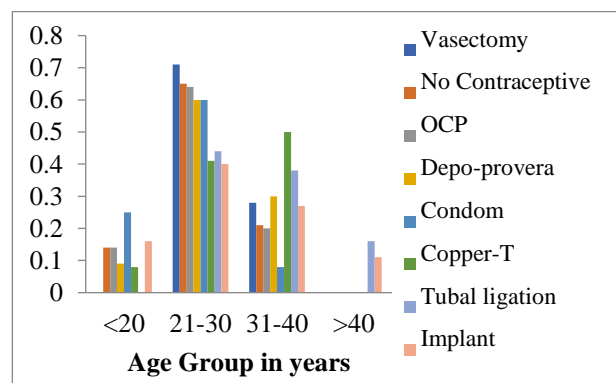


Figure-3: Proportion of contraceptive choice in different age group

Contraceptive acceptance according to education status were 35(85.3%), 53(73.6%), 58(82.8%) and 10(58.82%) for illiterate, primary, secondary and post-secondary level respectively. The proportion of different

contraceptive method accepted by the participants according to the level of education status has been shown in [Figure-4].

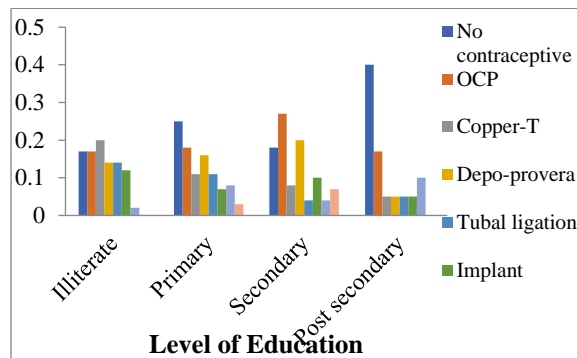


Figure-4: Proportion of contraception choice with level of education

Among the total participant, 44(22%) denied use of any means of contraceptive devices. The reasons for the denial of usage of any contraceptives was use of withdrawal method (81%), fear about its side effect(13%), contraindicated due to health issue (45%) and in 2% husband refused to use any of the contraceptives.

DISCUSSION

The knowledge, attitude of women concerning contraception and providing one to one counseling and information are major factors for the acceptance and adherence of any family planning methods.⁷

On enquiry, 42% were not practicing any contraceptive measures and rest were using inconsistent methods like natural method, withdrawal method, lactation amenorrhea (LAM) or barrier method; hence many resulted in failure. In this study out of 200 participant, 146(73%) had induced abortion and 52(27%) had spontaneous abortion. The main reason for the induced abortion was completed family and failure of family planning methods, 50% and 19.9% respectively. In a study conducted by Zavier et al the main reason for abortion was failure

of contraception followed by completed family by 56% and 43% respectively.⁸

In this study contraceptive acceptance was 78% which was slightly low in comparison to the past abortion contraceptive acceptance rate in other part of the world. In a study published from Ethiopia the post abortion acceptance rate was 90.6%.⁹ Likewise, it was 97.8% in a study published from Brazil in 2008.¹⁰ But the finding is similar to a study conducted in Nepal by Khanal et al with 83% post-abortion contraceptive acceptance rate.¹¹ Immediately after abortion women are sensitive and receptive for acceptance for family planning measures which can save their time, pain and resources.¹²

In about 91 % women ovulation occurs within a month post abortion and almost 40% have unprotected intercourse in first month post abortion, making them vulnerable to pregnancy.¹³ Therefore, contraceptive counseling should be done to all irrespective of induced or spontaneous abortion. Among those who have accepted contraceptive, maximum participant opted for OCP (21%) followed by depo-provera (16.5%). It was contrary to the study which concluded most chosen method were injectables followed by oral contraceptive.^{6,14} As this study included both induced spontaneous abortion the method of choice might have varied as most participated with spontaneous had opted for OCP and with induced abortion opted for permanent sterilization followed by depo-provera. Borges et al in their study who included both included and spontaneous abortion also reported maximum respondents used oral pill over the time following abortion.¹⁵ Kathpalia SK in his study also had reported maximum women undergoing induced abortion preferred permanent sterilization 39.6% followed by semi-permanent methods of contraception.¹⁶ There

is limited evidence about what works to help clients choose an appropriate method. However, proper counseling, communication, type and resources of abortion, the knowledge and attitude of women have been much focused.

The contraceptive acceptance rate was the highest in age group >40 yrs (100%) and lowest in age group <20yrs (73.9%). The choice of contraceptive was OCP followed by depo-provera in age group <20yrs and 21-30 yrs. However, in age group 31-40yrs choice of contraceptive was copper-T followed by depo-provera. Whereas in age group >40 years maximum opted for permanent sterilization. The difference observed between each group on various contraception on was statistically significant ($p<0.05$). Older women had higher odds of contraceptive use compared to the younger counterparts.¹⁵ Unintended pregnancy being most common cause of abortion, motivated women >40yrs or 31-40 yrs to accept family planning measures. Early age of women was an important factor for decreased contraceptive acceptance in a study from Shanghai.¹⁷

Most of the clients using contraceptives were multipara (78.8%) and acceptance rate in primipara was 21.2%. The preferred choice of contraception for the multipara was depo-provera and for primipara was OCP. The difference observed between each group was statistically significant ($p<0.05$). Multipara with completed family or with the increase in the number of induced abortions in past, the acceptance rate of contraceptive increased. Deferring pregnancy immediate after abortion by using contraceptive measure is the sole motivating factor in multipara than in women with low parity and those who had spontaneous abortion.

Contraceptive acceptance rate among illiterate group was 85.36% and among educated group was 76.10%. The preferred choice of contraception for the illiterate group was copper-T and educated group chose oral contraceptive pills followed by depo-provera. The difference observed between each group on various contraception was not statistically significant ($p=0.17$). The study done by Borges et al also reported years of schooling were not associated with the use of contraceptives.¹⁵ However, the result was contrary to the studies which showed contraceptive acceptance was higher in educated group than uneducated group.^{6,18} The higher the education the more the knowledge about the natural method of contraception, led the participant to deny the use of any contraceptive and choose natural method or withdrawal method. But, the illiterate groups even if they have poor knowledge about contraceptives were willing to accept the use of condoms after counseling.

In this study the main reason for not using any contraceptive measures was the use of withdrawal method as a family planning measure. In this era with the increase in the literacy rate, the couple has knowledge of natural method of family planning measures. Therefore, the knowledge of natural method of family planning and with the fear of side effects of contraceptive they opted for natural method of contraception. Analyzing the various factors in this study, independent major factors to affect the increased use of contraception are age of the patient, high parity, number of living children, reason for abortion, induced abortion, family planning counselling and exposure to mass media. The education, occupation, past history of contraceptive use and previous abortion did not affect the use of contraceptive measures.

Lack of follow up of contraceptive acceptors could not assure its adherence as the limitation of this study.

CONCLUSIONS

Our study shows that if we give proper medical consultation and contraceptive counseling, acceptance rate of contraceptives can be increased. Training health staffs, midwives and nurses regarding post-abortion contraception; improving contraceptive counseling, increasing availability of contraceptive choices and providing access to contraceptives on the same setting and site can help to increase the acceptance rate of post-abortion contraceptives.

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