ASSOCIATION BETWEEN ABORTION AND ACCEPTANCE OF POST ABORTION CONTRACEPTION

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ABSTRACT

Post-abortion contraceptive uptake is essential in reproductive health, as it helps to identify women's contraceptive needs, reduce unintended pregnancies and prevent subsequent abortions. Integrating abortion services with family planning counselling at all levels of health facilities can enhance contraceptive acceptance. This study aimed to evaluate the acceptance of various family planning methods following different abortion services over one year period, at a family planning center, Department of Obstetrics and Gynecology Tribhuvan University Teaching Hospital. This study analyzed the women who participated in contraceptive counselling and accepted different types of contraceptives following different methods of first and second trimester abortions services. The study included women who received post-abortion contraceptive counselling and services, excluding those with termination beyond the second trimester or those seeking only postpartum contraceptive counselling or post-abortion care. It aimed to analyze the association between different methods of abortion and contraception acceptance post-abortion. Among 100 women who had spontaneous and induced abortions, 89% received post-abortion counselling and 75% accepted various types of contraception immediately after abortion. About one third of women were aged 25–29 years (30%), 99% were married, 40% were graduates and 48% were housewives. Abortion methods included medical abortion (62%), manual vacuum aspiration (MVA) (35%) and dilatation and evacuation (3%). Contraceptive acceptance rates were: short-acting reversible contraception (SARC) 60%, long-acting reversible contraception (LARC) 14%, and permanent methods 1%. Among medical abortion recipients, most chose SARC (43%) followed by LARC (4%). For those undergoing MVA, 16% chose SARC, and 9% chose LARC. Condoms were the most accepted SARC method (22%). The study demonstrated that post-abortion counseling significantly increases acceptance of various contraceptive methods, with SARC being the predominant choice, especially condoms among users.

KEYWORDS

Abortion, medical abortion (MA), manual vacuum aspiration (MVA), short acting reversible contraception (SARC), long acting reversible contraception (LARC)

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INTRODUCTION

Safe abortion is a decisive component in addressing maternal disability and mortality but not the sole solution for its prevention. Women who undergo abortions are often inclined to utilize contraceptives to avoid unintended pregnancies, however information about post abortion contraceptive uptake remains limited.

Post abortion contraception is defined as initiation of contraceptive methods immediately abortion. after Being important element of comprehensive abortion care, post abortion contraception is a critical approach for preventing unwanted pregnancies, alleviating its complications and avoiding repeated abortions.1 Post-abortion contraception counselling is recognized as a crucial component of post-abortion care, aiming to address these objectives.² Provision of abortion and post abortion contraception helps women end current and prevent future unintended pregnancies during the same visit.

Approximately 72 million out of 205 million pregnancies worldwide end in abortion, with 43 million being induced abortions. In 2014, Nepal recorded 323,100 abortions, of which 137,000 were legal, and 63,200 women received treatment for abortion complications. The abortion rate stood at 42 per 1000 women aged between 15-49 years, with 50% of pregnancies being unintended, resulting in an unintended pregnancy rate of 68 per 1000 women of reproductive age.³

Ovulation occurs 6-7 days post-abortion and immediate contraception helps to prevent subsequent pregnancies and complications from repeated abortions.^{4,5} An interval of less than six months between an induced or incomplete abortion and a subsequent pregnancy is significantly associated with pregnancy outcomes, such increase the risk of preterm birth, low birth weight, premature rupture of membrane and abortion.6,7

Contraceptive acceptance are high when post abortion family planning (PAFP) counselling and services are integrated with abortion services at all level in health facilities.8 PAFP is an essential component of post abortion care (PAC), which is an important strategy to reduce maternal mortality by treating complications like hemorrhage and sepsis related to unsafe abortions. This study aimed to evaluate the acceptance of different types of family planning methods in relation to the types and methods of abortion services at our family planning center.

MATERIALS AND METHODS

This study was conducted in the Family Planning Centre, Department of Obstetrics and Gynecology, Tribhuvan University Teaching Hospital, over a period of one year (September 2021-August 2022). All consecutive eligible women were enrolled in the study after IRC approval (Ref. No.: 125 (6-11) E2 078/079).

All women who underwent induced and spontaneous abortion at the center and took post abortion contraceptive counselling and services in the particular center were included. encompassed Exclusion criteria women terminated beyond the second trimester postpartum those solely attended contraceptive counselling or post abortion care (PAC). Supervision and monitoring involved pre and post procedure counselling and postabortion contraception services. Follow-ups were encouraged to identify any complications related to post-abortion or post-contraception six weeks post procedure.

Data were recorded on Microsoft Excel and SPSS-16, which included variables such as age. marital status, education, occupation, trimester of abortion, type of abortion (spontaneous/ induced), methods used (medical/surgical), post-abortion contraceptive counselling and services, types of contraceptives (long-acting/ short-term/permanent) and factors influencing acceptance or rejection of post-abortion contraception. Data were analyzed with SPSS-16 using appropriate statistical tools. The study aimed to evaluate the demographic and methods of abortion influencing post-abortion contraceptive acceptance.

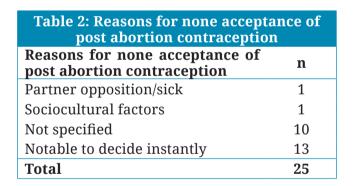
RESULTS

A total of 100 women who had induced or spontaneous abortions during the study period were included in the study. Regarding demographics, about one third of women were at the age group of 25–29 years (30%) followed by 30-34 years (27%), 20-24 years (23%), >40 years (6%) and <19 years (2%). Majority were married (99%).

Regarding education status of women, 2/5th were graduates (40%) followed by secondary (34%) and primary levels (23%), while 3% were uneducated. About one half of the women were housewives (48%), 26% were job holders, 16% were doing business and 10% were students (Table 1).

Medical abortion, MVA and dilatation and evacuation were chosen by 62%, 35% and 3% respectively. Eighty-nine percent of the women received immediate post-abortion counseling,

Table 1: Socio-demographic characteristics of the study population (n = 100)					
Variables	n (%)				
Age (Years)					
<19	2				
20-24	23				
25–29	30				
30–34	27				
35-39	12				
>40	6				
Marital status					
Married	99				
Unmarried/cohabiting	1				
Highest education attained					
No formal education	3				
Basic/primary	23				
Secondary	34				
Graduate	40				
Occupation					
Housewife	48				
Job	26				
Business	16				
Student	10				



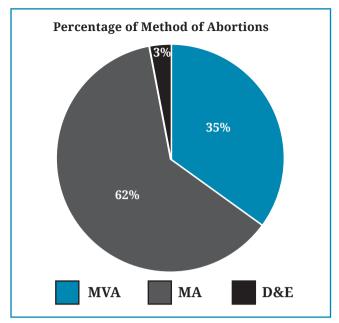


Fig. 1: Method of Abortion (n=100)

while 11% declined it. Of those who received the counselling, 75% chose to use different methods of contraception.

Among total women who took MA (62%), 47% accepted post abortion contraception and 15% refused of using any contraception. While women who underwent MVA (35%), 26% accepted different methods of contraception and 9% of women refused of using any method post MVA. Similarly, among women who had D&E, 2% accepted post abortion contraception while 1% refused.

With regards to educational status, maximum number of women who chose SARC, 40% were graduates, 34% had secondary level and 23% has primary level.

Table 3: Association between POG and methods of contraception							
Division of POG	SARC (%)	LARC (%)	Permanent (%)	None (%)	Total (%)		
upto7wksPOG	42	3	0	10	55		
8-10wksPOG	16	9	1	11	37		
11-12wks POG	1	1	0	3	5		
13-28wks POG	1	1	0	1	3		
Total	60	14	1	25	100		

Table 4: Assoc	sociation of different types abortion and contraception methods Contraception methods					
Abortion methods	SARC (%)		Permanent (%)		Total (%)	
MVA	16	9	1	9	35	
MA	43	4	-	15	62	
D&E	1	1	-	1	3	
MI	-	-	-	-	-	
Total	60	14	1	25	100	

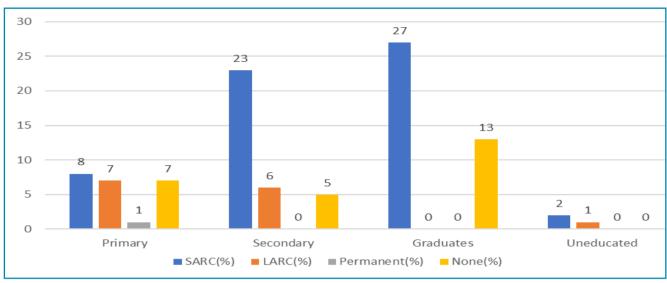


Fig. 2: Association between education of women and method of contraception

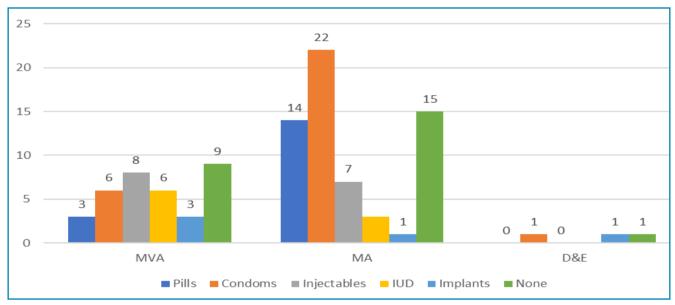


Fig. 3: Contraception types in relation to abortion methods

Maximum number of women who had terminated pregnancy up to 7 weeks of gestation (55%), 42% had chosen SARC as post abortion contraception and those who had aborted in less than 10 weeks period of gestation (37%), also had chosen SARC (16%) as method of contraception post abortion.

Different types of contraception accepted post abortion were SARC 60%, LARC 14% and permanent methods by 1%. Similarly, among the SARC, condoms were chosen by majority (29%) followed by pills (17%), injectable (15%), IUDs (9%) and implants (5%).

Women who underwent medical abortion, majority chose SARC (43%) followed by LARC (4%). And those who went through manual vacuum aspiration, 16% chose SARC and 9%

choose LARC. Women who had MA, condom was accepted by majority (22%) and women who had MVA had accepted different LARC as well as SARC with variable numbers (Table 4, Fig. 3).

DISCUSSION

The association between contraception and abortion rate sparks considerable debate. Some argue that more contraception means fewer abortions, reducing the need. While others claim that increased use of contraception leads to more abortions, opposing the idea. This debate highlights the complex interplay between contraceptive practices, societal norms, access to reproductive healthcare and individual choices.

In this study, majority of the women fall in the age group of 25-29 years (30%). In contrary, a health survey in Nepal had highlighted a significant proportion of women accessing abortion services were aged 15-24 years, constituting approximately one-fifth of the total of study population. Indeed, this difference could be attributable to different sample size and population group attaining the services.

During this study period medical abortion (62%) was preferred by more women than manual vacuum aspiration (35%), the finding is in concordance with other studies comparing MVA and MA.^{10,11}

The preference of MA over MVA might be due to several reasons including its noninvasive nature along with hesitancy for internal examination and intervention. In addition, MA is more popular choice among educated women because of better awareness, confidence of using drugs and willingness of symptoms assessment by self.

Worldwide, leading experts recommend that use of contraception should begin immediately after abortion, as with delay, 50% of women do not return for contraception. Hence, for immediate use of contraception, post-abortion contraception counselling is considered to be utmost important. Researchers have found that post abortion counselling and services significantly influence safe motherhood practices among women of reproductive age.

Post abortion period is considered to be right time to introduce contraceptive services because women are more receptive. In our study we found that 89% of women took immediate post abortion contraceptive counselling. Similarly, a national level health survey revealed that 51% of abortions were conducted in authorized facilities, 53% of women aged 15-49 received contraception information, and only 25% used it within two weeks.⁹

Various factors may influence the post abortion family planning counselling such as family planning service being not available at the same center, partner not present during counselling, informal counselling or the choice was not left to the patient as is expected in 'Cafeteria Approach' wherein every available method is offered to her and she herself makes the choice.¹³

Studies from various setting in India have shown that 49-96% of abortion clients want contraceptive methods after an abortion. Studies conducted in Ethiopia showed that the prevalence of post abortion family planning

utilization is disproportionate across different parts of the county ranging from 45.8% to 91%. However, 75% of women in our study received various contraceptive methods.

Post abortion contraception methods received in our center were SARC (60%), LARC (14%) and permanent method (1%) which was consistent with the study done by several authors. 17,18 In contrary, Prata et al.19 reported that majority chose long acting and adoption of long-acting methods was linked to higher level of education. However, we observed that the majority of educated women (58%) opted for SARC 61%. This differences could be attributed to factors such as sample size and the demographics of the population studied. Accessibility, privacy, lower cost and freedom to stop without consulting provider were the reasons for choosing SARC. În a study from Uganda, Tibaijuka *et al.*²⁰ showed that majority of urban women chose SARC because they could easily stop it without involving a health personal.

Among SARC accepters, condoms was accepted by majority (29%), similar to a report from Ghana which showed that couple preponderancely adopted condoms (20%) post abortion.²¹ This increase acceptance of condom use could be due to easy accessibility and popularity.

In this study, majority of women accepted contraception after a medical abortion, similar to findings by Banerjee *et al.*²² Following the WHO guideline 2009 the SARC were prescribed along with the first dose of medical abortion drug. This could be the reason for higher acceptance rate after medical abortion.

In contrast with our study, Kalyanwala *et al.*²³ reported that women who had surgical abortions were more likely to choose longacting contraception compared to those who had medical abortions. This is because sterilization and IUD insertion can be done immediately after surgery, while women who have medical abortions are often advised to wait until their next menstrual cycle.

In a study at tertiary level maternity hospital in Nepal, post abortion LARC use was higher (16%) than in rural areas (1.4%) with higher use among older women and those with more than one child. In this study, post abortion LARC use was 14% but the choice of contraception type did not differ with age and parity. ^{24,25}

Studies undertaken by CREHPA in 1997-98 on post abortion care in Nepal showed that 20-48% women required hospital admission due to abortion related complications. Many studies have shown pregnancy related complications

vary with gestational timing. However this study showed only one post abortion complication before 12 weeks gestation. The Kenyan studies revealed that 70% of post-abortion care occurs within the first 12 weeks of pregnancy, while 39% of young women undergo abortions after 12 weeks, with 46% experiencing severe complications. ^{26,27}

Our study have some limitations, such as small sample size, short study duration, inadequate follow up. However the study concluded, the women who received post-abortion counselling persuaded to adopt various contraceptive methods. Among those who underwent medical abortion, the majority chose to use SARC as their post-abortion contraceptive method.

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REFERENCES

- Sataloff RT, Johns MM, Kost KM. WHO, post abortion family planning: practical guide for programme managers. Geneva: WHO; 2013
- Abebe MA, Kassaw WM, Shewangashaw EN et al. Post-abortion contraception acceptance and associated factors in Dessie Health Center and Marie Stopes International Clinics, South Wollo Northeast, Amhara Region, 2017. Int J Reprod Med 2019; 2019: 1327351. DOI: 10.1155/2019/13 27351.
- 3. Puri M, Singh S, Sundaram A *et al.* Abortion incidence and unintended pregnancy in Nepal. *Int Perspect Sex Reprod Health* 2016; 42: 197-209. DOI: 10.1363/42e2116.
- 4. Schreiber A, Sober S, Ratcliffe S *et al.* Ovulation resumption after medical abortion with mifepristone and misoprostol. *Contraception* 2011; 84: 230-3.
- 5. Makhlouf AM, Clifton GR. Adverse pregnancy outcomes among women with prior spontaneous or induced abortions. *Am J Perinatol* 2013; 31. DOI: 10.1055/s-0033-1358771.
- Bigelow AC, Bryant SA. Short inter pregnancy intervals: an evidence-based guide for clinicians. Obstet Gynecol Surv 2015; 70: 458-64. DOI: 10.1097/OGX.000000000000195.
- 7. Agudelo A, Belizian IM, Breman R. Effect of inter pregnancy interval after an abortion on maternal and perinatal health in Latin America. *Int J Gyn Obst* 2005; 89: s34-40
- 8. Malarcher S, Polis C. Using measurements of unmet need to inform program investments for health service integration. *Studies Family Planning* 2014; 45: 263-75. DOI:10.1111 /j.1728-4465.2014.00388.
- 9. Ministry of Health, New ERA and The DHS Program. Analysis of Nepal demographic and health survey 2016 data. Kathmandu, Nepal.
- Panta OB, Bhattarai D, Parajuli N. Medical abortion versus manual vacuum aspiration in a hilly district hospital of Eastern Nepal: a comparative study. Kathmandu Univ Med J 2013; 43: 206-9.

- 11. Das V, Jain S, Gupta HP, Agarwal A *et al.* Evaluation of newer methods of early pregnancy termination. *J Obstet Gynaecol India* 2005; 55: 454-6.
- 12. National Department of Health, Republic of South Africa. National clinical guideline on the Choice on Termination of Pregnancy Act for implementation of the guideline. 1st ed. 2019. ISBN: 978-0-621-49038-1
- 13. Kathpalia KS. Acceptance of family planning methods by induced abortion seekers: an observational study over five years. *Med J Armed Forces India* 2016; 72: 8-11. DOI: 10.1016/j. mjafi.2015.08.001.
- 14. Dhillin BS, Chandhiok N, Kambo J, Saxena NC. Induced abortion and concurrent adoption of contraception in the rural areas of India (an ICMR task force study). *Indian J Med Sci* 2004; 58: 478-84.
- 15. Helena A. Factors influencing contraceptive uptake among women with induced abortion presenting at Kath, Kumasi-Ghana. *Glob Educ Res J* 2014; 2: 209–42.
- 16. Atnafu E, Geda B, Oljira L *et al.* Postabortion contraceptive acceptance rate and its determinants among women receiving abortion service before discharge from the health facilities in Harar, Eastern Ethiopia. *Obstet Gynecol Int* 2022; 2022: 4050844. DOI: 10.1155/2022/4050844
- 17. Izugbara C, Wekesah FM, Sebany M, Echoka E, Amo-Adjei J, Muga W. Availability, accessibility and utilization of post-abortion care in Sub-Saharan Africa: a systematic review. *Health Care Women Int'l* 2019; 41: 732-60. DOI:10.1080/07399 332.2019.1703991
- 18. Prata N, Gessessew A, Cartwrightc A *et al.* Provision of injectable contraceptives in Ethiopia through community-based reproductive health agents. *Bull World Health Organ* 2011; 89: 556-64 DOI:10.2471/BLT.11.086710
- 19. Mehata S, Bhattarai N, Menzel J et al. Prevalence and correlates of postabortion long-acting reversible contraceptive (LARC) use among young women (24 and below) in Nepal: strategy

- in the search for improvements. *BMC Reprod Health* 2019; 16: 55.
- 20. Tibaijuka L, Odongo R, WelikheE *et al.* Factors influencing use of long-acting versus short-acting contraceptive methods among reproductive-age women in a resource-limited setting. *BMC Women's Health* 2017; 17: 25.
- 21. Benson J, Andersen K, Brahmi D *et al.* What contraception do women use after abortion? An analysis of 319,385 cases from eight countries. *Global Public Health* 2018; 13: 35-50. DOI:10.108 0/17441692.2016.1174280
- 22. Banerjee SK, Gulati S, Andersen KL, Acre V, Warvadekar J, Navin D. Associations between abortion services and acceptance of postabortion contraception in six Indian States. Studies in Family Planning 2015: 46: 387-403. DOI:10.1111/j.1728-4465.2015.00039
- Kalyanwala S, Acharya R, Zavier F et al. Adoption and continuation of contraception following medical or surgical abortion in Bihar and Jharkhand, India. Int'l J Gynecol Obstet 2012; 118

- (Suppl 1): S47-51. DOI:10.1016/j.ijgo.2012.05.010
- 24. Paudel P, Paudel L, Bhochhibhoya M, Vaidhya SA, Shah N, Khatiwada D. Pattern of abortion care in a tertiary level maternity hospital in Nepal. *J Nepal Med Assoc* 2013; 52: 432-6.
- 25. Mehata S, Paudel YR, Dotel BR, Singh DR, Poudel P, Barnett S. Inequalities in the use of family planning in rural Nepal. *Biomed Res Int* 2014; 2014: 636439. DOI:10.1155/2014/636439.
- 26. Abebe MA, Kassaw WM, Shewangashaw EN et al. Postabortion Contraception Acceptance and Associated Factors in Dessie Health Center and Marie Stopes International Clinics, South Wollo Northeast, Amhara Region, 2017. Int J Reprod Med. 2019. doi: 10.1155/2019/1327351
- 27. Benson J, Andersen K, Healy J, et al. What Factors Contribute to Postabortion Contraceptive Uptake By Young Women? A Program Evaluation in 10 Countries in Asia and sub-Saharan Africa. Glob Health Sci Pract. 2017 Dec 28; 5(4): 644–657. Published online 2017 Dec 28. doi: 10.9745/GHSP-D-17-00085.