Nepalese Medical Journal, (2019) Vol. 2, 149 - 154

Original Article

An Overview of Comprehensive Abortion Care at Tertiary care Teaching Hospital

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ABSTRACT

Introduction: With the beginning of comprehensive abortion care service in Nepal, since 2004, safe abortion services in the first trimester are available in all 75 district hospitals of Nepal. Nepal has expanded comprehensive abortion care into the second trimester in 2007. This study tries to investigate the reasons for using comprehensive abortion care service and to know the post abortion contraceptive acceptance among women presenting at first and second trimester of gestation.

Materials and Methods: This hospital based prospective study was conducted among women seeking comprehensive abortion care service at first and second trimester of gestation in the out-patient department of Obstetrics & Gynaecology, KIST Medical College and Teaching Hospital from July 2017 to July 2018. Data collection was done by filling proforma and was analyzed.

Results: There were total 171 clients, out of which 78.95% (n=135) were in first trimester and 21.05% (n=36) were in second trimester of pregnancy. The reason in first trimester was completed family (39.25%) and the main reason in second trimester was maternal mental health (48.71%). Among the total study population, 16.37% (n=28) accepted contraception. The most common accepted contraceptive method was implant (n=14; 8.1%), followed by inj. depot medroxyprogesterone acetate (n=8; 4.6%).

Conclusions: The prevalence of second trimester abortion is high despite the availability of first trimester comprehensive abortion care service. The main reason for induced abortion in first trimester was completed family and in second trimester was maternal mental health. Post abortion contraceptive acceptance among comprehensive abortion care clients was very low.

Keywords: Abortion; comprehensive abortion care; Contraception; Implant

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Submitted: 10th May 2019
Accepted: 4th June 2019
Published: 20th June 2019

Source of Support: None
Conflict of Interest: None

Citation: Bhandari S, Dwa Y, Maskey S, Bajracharya M, Thakur M. An overview of comprehensive abortion care at tertiary care teaching hospital. Nep Med J 2019;2(1):149-54. DOI 10.3126/nmj.v2i1.24051

INTRODUCTION

The first Comprehensive Abortion Care (CAC) service was started at the Maternity Hospital, Kathmandu, Nepal in March 2004. Currently, safe abortion services in the first trimester are available in all 75 district hospitals of Nepal. Additionally, Nepal has expanded comprehensive abortion care into the second trimester in 2007 and the service is now available in 29 hospitals.[1] In many parts of the country, safe second-trimester services remain limited and mainly focused in urban areas.[2]

Legalization of safe abortion has certainly played pivotal role in decreasing maternal mortality ratio (MMR) from 539 in 1996 to 258 in 2015. In the year 2015/16, safe abortion service was received by 89,214 women.[3] However, unsafe abortion is still prevalent. Nationwide, more than half abortion (58%) were clandestine procedures provided by untrained or unapproved providers or induced by the pregnant woman herself.[4]

Although, safe abortion service is the reproductive rights of women, it shouldn't be misused as a method of contraception and family planning. Abortion is an option but not the solution.

However, most of the times, abortion becomes only option left. The cause of abortion may be maternal or fetal. Maternal cause again may be medical and social. Sometimes, it becomes necessary to perform CAC due to violence occurred to the female, whereas in other incidence, maternal health might not allow to continue the pregnancy. Due to unawareness of affect of various drugs and chemicals fetal defect may occur during embryogenesis and organogenesis. With the development of newer diagnostic modalities, these congenital diseases can be diagnosed within the first trimester or within mid of second trimester. This further has increased the rate of abortion due to fetal cause.

CAC is not an option for getting rid of unwanted pregnancies. All the pregnancies should be a planned one, so as to minimize CAC rate. Effective use of contraceptives, easy availability and accessibility assist in averting many abortions and its complications. So this study was conducted to investigate the reasons for using CAC service and to know the post abortion contraceptive acceptance among women presenting at first and second trimester of gestation so as to assist in developing guidelines in reducing the future abortion rate thereby saving the life of mothers from abortion-related morbidity and mortality in the country.

MATERIALS AND METHODS

This hospital based prospective study was conducted among women seeking CAC service at first and second trimester of gestation in the out-patient department of Obstetrics & Gynaecology, KIST Medical College and Teaching Hospital from July 2017 to July 2018 (Shrawan 2074 to Asar 2075). Ethical clearance was taken from hospital institutional review committee prior to commence of study. Data collection was done by filling proforma which included profile of clients including age, address, marital status, education, gravida, parity, gestational weeks, types of CAC procedure, reasons for using CAC service and contraceptive acceptance following CAC service. Proforma was filled by nursing staff and was verified by gynecologists. Eligibility was assessed from history, general examination, pelvic examination and ultrasonography when required. An informed consent was taken from all women for the study and the CAC procedure.

The types of abortion procedure performed in the first trimester were either Medical Abortion (MA) for up to 9 weeks of gestation or Manual Vacuum Aspiration (MVA) for up to 12 weeks of gestation on the request of the pregnant women. And in second trimester were either Medical Induction (MI) or Dilatation and Evacuation (D&E) for up to 18 weeks of gestation where pregnancy occurred after rape or incest, at any gestation if the fetus is suffering from a severely debilitating or fatal deformity and at any gestation if the pregnancy is harmful to the pregnant women's physical and mental health.[2] Screening for second trimester abortion in Mental Health was done by using checklist. The checklist included the following:

- Do you feel hard to get asleep? Yes/no
- Do you feel sleepy all the time or sleep a lot? Yes/no
- Do you feel very tired and weak? Yes/no
- Do you feel inferior or worthless or feel wrong doing, often? Yes/no
- Do you feel hard to concentrate, think clearly and take decision? Yes/no
- Do you feel agitated, restless or irritated? Yes/no
- Don't you like to participate in enjoying or entertaining activities? Yes/no
- Do you feel your life is worthless and unsupported? Yes/no
- Do you feel you are not able to take care of this child economically, mentally and physically? Yes/no
- Do you feel this pregnancy is going to affect your education and upcoming opportunity? Yes/no
- Do you feel this pregnancy occurred outside of marriage? Yes/no

At least three symptoms needed due to current pregnancy for mental indication. Contraceptives methods available were Condom, Combined oral contraceptive pills (COC), intramuscular Depot medroxyprogesterone acetate (DMPA), intradermal Levonorgestrel–releasing implant (Jadelle), Copper-bearing intrauterine device (Cu-IUD), Bilateral Tubal Ligation (BTL) and Vasectomy. Family planning counselling was given and service provided on clients informed choice.

Data entry was done in excel and further analyzed using SPSS 21.

RESULTS

There were total 171 abortion seeking clients during the study period, out of which 78.95% (n=135) were in first trimester and 21.05% (n=36) were in second trimester. Among 171 CAC clients, 33.33% (n=57) were of age group 20-25 years while 5.84% (n=10) were of adolescence pregnancy<19 years. 76.02% (n=130) of the clients seeking abortion were from valley and 23.97% (n=41) were from outside of valley. Majority of the clients were married (89.47%; n=153) and 10.52% (n=18) clients were unmarried. Most of them were literate (91.22%; n=156) and only 8.77% (n=15) were illiterate. 71.92% (n=123) were multigravida and 28.07% (n=48) were primigravida/nullipara. 38.01% (n=65) were multipara with two or more number of children and 33.91% (n=58) were primipara Table 1.

Table 2 and 3 illustrates the gestational age and the type of procedure of the CAC clients in the first and second trimester respectively. Out of 135 clients in the first trimester, 85.92% (n=116) were less than 8 weeks of gestation and 14.07% (n=19) were between 9-12 weeks gestation. 90.37% (n=122) had MA and 9.63% (n=13) had MVA. Out of 36 clients in the second trimester, most of the clients were between gestational age 13-15 weeks (52.77%; n=19). 88.89% (n=32) had MI and 11.11% (n=4) had D & E.

Table 1: Characteristics of Clients undergoing CAC Service

	1st Trimester CAC	2nd Trimester CAC	Total CAC Clients
AGE	n=135 (100%)	n=36 (100%)	n=171(100%)
<19 years	8 (5.92)	2 (5.55)	10 (5.84)
20 - 25 years	43 (31.8)	14 (38.8)	57 (33.33)
26 - 30 years	39 (28.8)	10 (27.77)	49 (28.65)
31 - 35 years	28 (20.7)	8 (22.22)	36 (21.05)
36 - 40 years	15 (11.11)	2 (5.55)	17 (9.94)
>40 years	2 (1.48)	0	2 (1.16)
ADDRESS			
Inside Valley	109 (80.74)	21 (58.33)	130 (76.02)
Outside Valley	26 (19.25)	15 (41.66)	41 (23.97)
MARITAL STATUS			
Married	122 (90.37)	31 (86.11)	153 (89.47)
Unmarried	13 (9.62)	5 (13.88)	18 (10.52)
EDUCATION			
Illiterate	12 (8.88)	3 (8.33)	15 (8.77)
Up to secondary level	24 (17.77)	9 (25)	33 (19.29)
Above SEE	99 (73.33)	24 (66.66)	123 (71.92)
GRAVIDA			
Primi	32 (23.70)	16 (44.44)	48 (28.07)
Multi	103 (76.29)	20 (55.55)	123 (71.92)
PARITY			
Primipara	51 (37.77)	7 (19.44)	58 (33.91)
Multipara	52 (38.51	13 (36.11)	65 (38.01)

Table 2: First Trimester CAC Clients (n=135)

	n (%)
Gestational Age	
< 8 weeks	116 (85.92)
9 - 12 weeks	19 (14.07)
Procedure of CAC	
MA	122 (90.37)
MVA	13 (9.63)

The main reason for seeking CAC service in first trimester was completed family (n= 53; 39.25%) followed by short spacing/ postpone child bearing (n=40; 29.62 %), Study (n=15; 11.11%), Unwanted Pregnancy in unmarried (n=13; 9.62%), Low socioeconomic status (n=5; 3.70%), Travel Abroad (interferes with work) (n=4; 2.96%), Risk to maternal health due to medical disorders (n=3; 2.22%) and Contraceptive failure (n=2; 1.48%) Figure 1. And the main reason for seeking CAC service in second trimester was Maternal Mental health (n=19; 48.71%) followed by Fetal Malformation (n=11; 30.55%), Intra uterine fetal demise (IUFD) (n=5; 13.88%) and Maternal Rape in one case (2.77%) Figure 2

Table 3. Second Trimester CAC Clients

	n=36 (100%)
Gestational Age (in weeks)	
13 -15	19 (52.77)
16 -18	8 (22.22)
19 -20	6 (16.66)
21 -22	3 (8.33)
Procedure of CAC	
MI	32 (88.89)
D & E	4 (11.11)

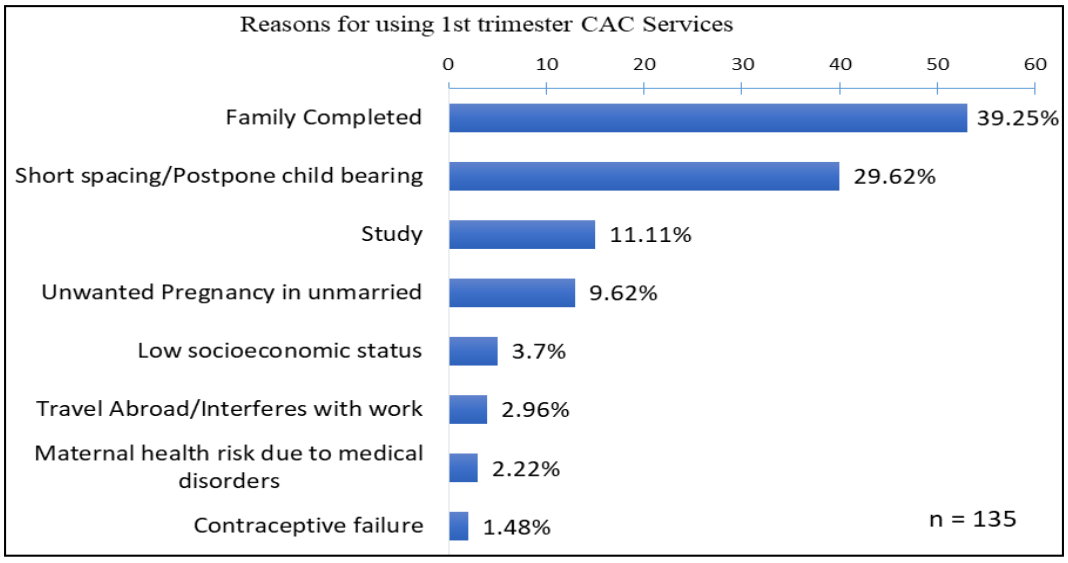

Figure 1: Reasons for using first trimester CAC Services

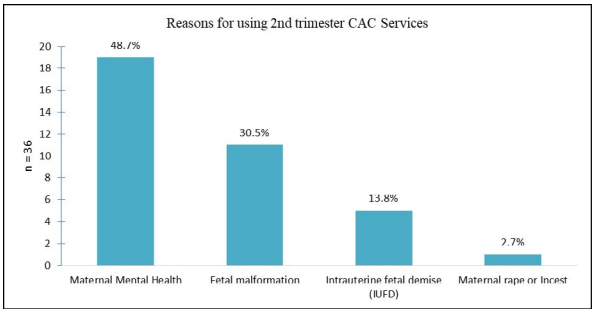

Figure 2: Reasons for using second trimester CAC Services

Among females undergoing CAC, vast majority of clients 83.62% (n=143) refused to take any methods of post abortion contraception whereas only 16.37% (n=28) of clients accepted contraception. Out of 135 clients in the first trimester, only 11.11% (n=15) accepted contraception after CAC service whereas out of 36 clients in the second trimester, 36.11% (n=13) used post abortion contraception after CAC service. The contraceptive methods used by the clients are depicted in Table 4. The most common accepted method was implant (n= 14; 8.18%), followed by DMPA (n=8; 4.67%), OCP (n=3; 1.75%), IUCD (n=2; 1.16%) and BTL (n=1; 0.58%).

Table 4: Use of Post abortion Contraception in CAC clients

Post CAC Contraception	1st Trimester (n)=36 (100%)	2nd Trimester (n)=171 (100%)	Total CAC clients (n)=135 (100%)
No contraceptive use	120 (88.88)	23 (63.88)	143 (83.62)
Oral Contraceptive Pill	3 (2.22)	0	3 (1.75)
DMPA	3 (2.22)	5 (13.88)	8 (4.67)
Implant (Jadelle)	6 (4.44)	8 (22.22)	14 (8.18)
IUCD	2 (1.48)	0	2 (1.16)
BTL	1 (0.74)	0	1 (0.58)

DISCUSSION

During the study period, total of 171 clients underwent CAC service, out of which 79% received first trimester abortion service and 21% received second trimester abortion service. The incidence of induced second trimester abortion in our study is higher than the global incidence which constitutes only 10-15%[5] but is in line with study in Northwest Ethiopia that was 19.2%[6] and lower than that of India which was 25-30 percent.[7]

Among the CAC clients, 33% were of age group 20-25 years and 28.65% were 26-30yrs which is explained by women's most fecund years while 5.84% were adolescence pregnancy which is similar to the study done in Tribhuvan University Teaching Hospital (TUTH), Nepal.[8] Majority (76%) of the clients seeking abortion were from valley and most of them, 91% were literate, possibly women near or inside the valley may have a greater desire for smaller families and better access to services whereas illiterate women and those outside of valley, may not have information on availability of service and usually they are far from the institution. Majority of the clients, 89.47% were married and 72% were multigravida and 38% multipara with two or more number of children which is comparable to the study at TUTH,[8] as women begin childbearing early after marriage and reach their desired family size relatively early without contraceptive utilization. According to Nepal Demographic and Health Survey (NDHS) 2016, the contraceptive prevalence rate among currently

married women age 15-49 is 53% with a decrease in the use of modern contraceptive methods from 44% in 2006 to 43% in 2011 and remaining stagnate at 43% in 2016.[3,9] These might explains why married women seek abortion care more often.

Out of 135 clients in the first trimester, 86% were less than 8 weeks of gestation. Majority, 90% had MA and only 9.62% had MVA. However, NDHS data (2016), showed the type of abortion procedure opted were 72% MA, 17% MVA and 7% D&E.[9] This may be due to the sampling technique. Our study included only those populations who visited to the hospital for CAC. Out of 36 clients in the second trimester, most of the clients were at early gestational age 13-15 weeks (52.77%). Majority of them, 88.88% had MI and very few, 11.11% had D & E which is in consistent with findings from study at Kathmandu Model Hospital which showed most of the clients were in 12-14 weeks (52.40%) and 94% of clients had MI and 5.37% had D&E.[10]

The main reason for seeking CAC service in first trimester in our study was completed family (39.25%) and short spacing/ postpone child bearing (29.62%). The findings of our study is comparable to that of study at TUTH which showed the reason for seeking CAC was completed family (55%) followed by unwanted pregnancy (33%) [8] whereas a retrospective study in CAC and PAC center of a maternity hospital in Nepal showed that the major reason for seeking abortion was too many children (59%) followed by illegitimate pregnancy (16%).[11] NDHS survey 2016 revealed 50% of the women obtained abortion as they did not want more children, while 12% to delay childbearing.[9] Similarly, in the study by Puri et al, 50% of pregnancies were unintended, and the unintended pregnancy rate was 68 per 1,000 women of reproductive age.[12] To prevent unintended pregnancies the Ministry of Health must strengthen program to increase access and use of informed choice of contraceptive methods and provide sexual education to general population, especially adolescents.

The main reason for seeking CAC service in second trimester in our study was Maternal Mental health (48.71%) and Fetal malformation (30.55%). Likewise, study at Kathmandu Model Hospital, in Nepal, showed the commonest reason for abortion was mental ill-health (82%).[10] In contrast, study done in New Delhi showed that factors affecting having second trimester abortion are difficulty in recognition of pregnancy and delay related to logistic problem.[13] Hence, the cause for seeking CAC service may vary depending upon social factors.

Among the total CAC clients, the vast majority of clients 83.62% (n=143) refused to take any methods of post abortion contraception whereas only 16.37% (n=28) of clients accepted contraception which is comparable to other study.[10] This is in contrast to previous studies[11,8,14] where contraceptive acceptance was quite high which could be either due to effective counselling by trained counsellor or setting precondition for abortion service (compulsory acceptance of a contraceptive method upon receiving CAC service).[15] The most common accepted method was implant, followed by DMPA in our study. Most of the women in our study refused post abortion contraception despite of the counselling that fertility can return very soon following an abortion as early as 8 days, resulting in pregnancy even before menses returns. This could be due to inadequate/ ineffective counselling by service provider, side effects of previous contraceptive use, misconceptions and myths on the use of contraception or simply they want to postpone the use of contraception till the subsequent post abortion menses. Follow up of the clients is another opportunity for contraception counselling by service provider. Contraceptive acceptance during follow up of the clients was not assessed in this study. Future studies should focus on follow-up contraceptive acceptance rate and women's preference for contraceptive methods to guide improvements in service delivery.

The strength of current study might be coverage of all CAC clients including those seeking second trimester abortion. However, the findings from our study should be considered in view of single center based study with small sample size. In addition, collecting data focused on only the main reason for undergoing CAC service could result in simplistic conclusion and may hide the real scenario. Especially, in women seeking second trimester abortion, there could be numerous psychosocial reasons like pressure from family/partner, gender discrimination (sex selective abortion) and so on behind the mental status for seeking abortion. Future surveys should ask women to report all the reasons to help illuminate women's underlying reasons for having abortion. More investigations and improved research approaches are crucial to better understand the complex situations and processes that lead to unintended pregnancy and induced abortion.

Government of Nepal should further provide training of second trimester services for providers and make more centers capable of providing such services as second trimester abortion is prevalent. Furthermore, Nepal needs to strengthen its family planning program. It's high time to introduce new contraceptive methods with fewer side effects, women are reluctant with the use of currently available contraceptive methods, in order to increase the contraceptive utilization, thus preventing unintended pregnancy and repeat abortion.

CONCLUSIONS

The prevalence of second trimester abortion is high despite the availability of first trimester CAC service. The main reason for induced abortion in first trimester was completed family and in second trimester was maternal mental health. Post abortion contraceptive acceptance among CAC clients was very low.

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