Issues and Challenges in Second Trimester Abortion Services in a Multispecialty Tertiary Care Center

Anjana Karki Rayamajhi, MBBS, MD; Kundu Yangzom, DGO, FRTCOG; Shova Gurung Maharjan, MBBS; Ramnath D Shrestha, MBBS, MD; Nani Dangol, PBBN
Department of Obstetrics and Gynecology, B & B Hospital, Gwarko, Lalitpur, Nepal

Address of Correspondence:
Anjana Karki Rayamajhi, MBBS, MD
Department of Obstetrics and Gynecology, B & B Hospital, Gwarko, Lalitpur, Nepal
Email: anjanakarki.rayamajhi@gmail.com

Received, 5 April, 2019
Accepted, 1 May, 2019

Though majority of women avail abortion services in first trimester, some need abortion services later in the second trimester. Different issues and challenges are encountered by the women and providers during second trimester abortion services.

The study aimed to find out the reasons for second trimester abortion services and to analyze the issues and challenges faced by the women and the providers during second trimester abortion services.

A total of 160 women undergoing abortion in the second trimester were followed up during two years of study period (16 July, 2016-15 July 2018). Demographic profile, clinical details, reasons for abortions in the second trimester of pregnancy, the issues and concerns raised by each woman and family members were documented. The concerns raised and challenges faced by members of the provider team were noted during history taking, service provision, documentation and case discussions and VCAT sessions.

Of 160 women 117 underwent D&E while 43 underwent MI. Majority of the women were between 20-39 years, with at least one child and 50 percent presented between 15-19 weeks. The most common reason for women coming for abortion in the second trimester was maternal physical and mental health reasons seen in more than 50% (94/160) with majority having mental health reasons (63/160). Fetal indications, either a dead fetus, abnormal fetus or potentially compromised fetus was seen in about 40 percent women (65/160). Women undergoing second trimester abortion had many issues and concerns including the emotional trauma of fetal death or anomaly, handling of the fetus and fetal parts, privacy, choice of procedure and issues of pain relief during the procedure. The providers had some challenges in

ascertaining the confusions in mental health issues like failed contraceptives, failed medical abortions, while most providers were more comfortable in providing services in case of fetal death or abnormalities. Limited number of trained providers, frequent change of provider team members and limited VCAT orientation were also other provider challenges.

Women need safe second trimester abortion services due to various reasons. These services raise different issues and challenges to both the woman and the providers. Safe second trimester abortion services need to be supported by favorable policy, trained providers, regular knowledge and skill update of the providers and raising public awareness.

Keywords: dilatation and evacuation, fetal parts, medical induction, second trimester abortion, VCAT.

Abortion can arouse different discussions ranging from emotional, ethical, legal, religious, reproductive health right issues to conscientious objection by the health professionals. Nepal has witnessed a huge change in the area of safe abortion services. Before 2002, abortion was totally illegal in our country while after the change in law of the land, abortion services have become an integral part of reproductive rights of Nepali women. Current abortion law, Nepal Criminal Code (Muluki Ain) amended in 2002, states that a woman can avail abortion in the first trimester i.e. up to 12 weeks with her consent. Parental consent or guardian's consent is needed only if the woman is a minor below 16 years of age or not in a state to give consent. Abortion services for up to 18 weeks is legal in pregnancies resulting from rape or incest and at any stage in pregnancy if physical/mental health or life of the pregnant woman is at risk or if the fetus is dead, deformed or has conditions which can be incompatible with life. Abortion is illegal when performed on grounds of fetal sex or without the woman's consent. Health professional have to be trained and listed to provide safe abortion services while the site where abortion is provided also has to be listed. After legalization of abortion, clinical services were started in 2004 initially for first trimester pregnancy and in 2007 training of providers for second trimester abortion services was started. Despite the decrease in restrictions, according to a national, facility-based study however, about 13 percent of the women presenting for safe abortion in 2006 were denied abortion services because they were more than 12 weeks pregnant.[1] Though majority of the abortion occurs during the first trimester, 10-15% of women seek abortion services in second trimester due to a variety of reasons. Young age, late recognition of pregnancy, being unsure about continuing the pregnancy, financial and logistic barriers in seeking earlier abortion, fetal and maternal indications, rape, incest, failed abortion performed in first trimester are some of the reasons women seek abortion in second trimester.[2] As compared to first trimester abortions,

the procedure of Dilatation and Evacuation (D&E) and Medical Induction (MI) for second trimester abortion is technically more challenging to the providers while to seek abortion at advanced gestations can be more challenging to the women and her family as well[1]. According to Wu et al who analyzed the gaps in equity, access and quality in abortion services 15 years after legalization of abortion services in Nepal, second trimester abortion services are still restricted to limited sites with limited number of trained provider.[3] By 2017, 46 providers have been trained and listed and 24 sites have been certified and listed as second trimester abortion service sites.[4]

Aim of the study

The study aimed to find out the reasons for second trimester abortion services and to analyze the issues and challenges faced by the women and the providers during second trimester abortion services.

Materials and Methods

Women who underwent abortion after 12 weeks of pregnancy from 1st Shrawan 2073 till 32nd Asadh 2075 (July 16,2016- 15th July2018) were followed up during the study period. Detailed history was taken and clinical examination done to note demographic profile, estimation of gestational age, and reasons for seeking abortion was ascertained. Baseline investigations including hemoglobin, ABO grouping Rh typing and serology was determined in all cases. All women had ultrasonography before starting abortion procedure. Other relevant investigations were done depending on any coexisting morbidities. Thorough counselling was done regarding the procedure of Dilatation and Evacuation (D&E) or Medical Induction (MI) after indication and need for abortion ascertained. D&E and MI procedure were performed according to national protocol based on WHO recommendations.[2,5,6,7] Women planned for D&E were admitted in a day care unit early morning when vaginal/sublingual/buccal misoprostol 400 mcg administered at 3-4 hourly interval and uterine evacuation performed once the cervix was soft and admitted tip of finger. After evacuation, the woman was observed for minimum 2 hours and discharged when stable. For MI, oral mifepristone 200mg was given in out-patient basis and admitted 24-48 hours later for 3-4 hourly 400mcg misoprostol vaginal/buccal/sublingual administration till fetal expulsion. The woman was discharged after MI only after ensuring that the abortion process was complete and the woman was stable. All women presenting at 12-14 weeks of gestation were provided D&E. Women at and beyond 20 weeks were provided MI. This decision was based on the skill, experience and confidence of the members of the provider team. Women between 15-19 weeks of gestation were given the choice between D&E and MI. Thorough counselling was done regarding both the procedures to help the woman chose one procedure. These women were counselled about the possibility of the need to convert D&E to MI if the cervix was not prepared with maximum 4 doses of misoprostol and MI to D&E if fetal

SN		Characteristics	No	%
1	Age	19 years and less	4	3%
		20-39 years	146	91%
		40 years and above	10	6%
2	Gravida/parity	Primigravida/Nullipara	55	34%
		G2 and higher order gravida	104	65%
		Grand multipara G5P4	1	1%
3	Gestational Age	12-14 weeks	32	20%
		15-19 weeks	80	50%
		20 weeks and above	48	30%
4	Marital status	Unmarried	20	13%
		Married	117	73%
		Recent death/separation of partner	23	14%

Table 1 –Baseline characteristics of women undergoing second trimester abortion

expulsion did not occur after repeated doses of misoprostol, or the woman could not tolerate the pain despite administration of analgesics or any adverse clinical events like onset of fever, increased risk of uterine rupture etc.

The detailed clinical course and outcome of each woman was recorded. During pre- and intra-procedure counselling, the concern and issues expressed by each woman and her family members was noted. The treating team tried to counsel and support the women about these issues. The concerns and issues expressed by members of the treating team including on-duty medical officers, nurses, nurse aids, operating room staff and anesthesia team members were also noted. Regular discussions on abortion values was done among the team members based on Value Clarification and Attitude Transformation (VCAT) training manual to help clear confusions on indications and during counselling the women and family members.

Results

A total of 160 women were followed-up till discharge of which 117 underwent D&E and 43 underwent MI. Majority of the women availing second trimester abortion services in this center were adult women aged between 20-39 years and in stable union, most had at least one child. About fifty percent presented between 15-19 weeks of gestation (**Table 1**).

The main indication for second trimester abortion was maternal mental health issues as seen in more than half of the women ,94/160 **(Table 2)**. Majority underwent D&E 117/160. All of 80 women presenting between 15-19 weeks of gestation were given choice between D&E and MI, all chose D&E **(Table 3)**.

SN	Main Indication	No	%
1. Fetal	Fetal death	38	23.70%
	Gross fetal anomalies	18	11.20%
	Fetal problems	9	5.60%
		65/160	**40.60%**
2. Maternal	Maternal physical health	31	19.30%
	Maternal mental health	63	39.30%
		94/160	**58.70%**
3. Rape/Incest	Incest	**1/160**	**0.62%**

Table 2- Indications for second trimester abortions

		Remarks
Total D&E	117	
Total MI	43	
Planned MI converted to D&E	5	Pain, prolonged time, fever
Planned D&E converted to MI	0	
Only D&E offered (12-14 weeks)	32	
Only MI offered (20 weeks and more)	48	5 cases later converted to D&E
Choice between D&E and MI given in 15-19 weeks gestational age	80	All chose D&E
Complications of D&E	BT needed in 4 cases	All 4 hemorrhage during evacuation of missed abortion
Complications of MI	12 cases needed removal of placenta/placental tissues	
Pain management choice	8 chose local anesthesia for D&E	
Intracardiac/intraamniotic digoxin to induce fetal death	8 cases of MI	All at and beyond 20 weeks gestation

Table 3- D&E and MI procedure choices

Challenges and issues associated with the woman and family

During discussions and counselling with the women and family members, certain issues and challenges were identified.

1)***Women with fetal death / missed abortion*** **–** The women and the family member wished to know the cause of fetal death, whether it would affect her current health, future fertility and any recurrence in future. However, none opted for fetal/placental karyotype.

2)*Women with fetal anomalies* – The women and family members wanted to know the cause of anomaly. All 18 women who had some anomaly detected in ultrasonography opted for termination even when the anomaly was not lethal. Mild hydrocephalus was detected in two fetuses at 18 weeks but both women opted for termination as opposed to follow-up. The woman and family members wanted to know the risks of recurrence of anomaly in future.

3) ***Choice between D&E and MI***-Women between 15-19 weeks were given a choice of MI and D&E. All 80 women at these gestations chose D&E. Most (69/80) women stated that predictable time of evacuation and discharge on the same day in the event of no complications was the reason for choosing D&E. Some (11/80) women did not find the prospect of mini-labor with associated pain, waiting time for expulsion and the whole process of fetal expulsion, acceptable. Longer hospital stay with MI was also a reason for choosing D&E.

4) ***Choice of pain relief***-Women choosing D&E were given a choice of local anesthesia (paracervical block, with oral ibuprofen and diazepam) during which they would be awake and aware of the procedure or short intravenous sedation for pain relief. Only 8 women chose local anesthesia. Pain during the procedure was a major concern for majority of the women and their family members.

5) ***Fetus/fetal part handling and disposal***-Majority (112 of 117) women undergoing D&E, did not wish to see fetal parts after uterine evacuation. In all MI cases, fetus was shown to at least one family member. Only 10 of 43 women undergoing MI herself wanted to see the fetus after expulsion. fetal parts removed after D&E were disposed by the hospital as per waste disposal protocol. Only one family took the fetus for disposal after MI, based on their cultural beliefs while rest asked the hospital to dispose it.

6) ***Privacy***-was a major issue mainly for single unmarried women, all of whom chose D&E.

Issues and challenges associated with the members of provider team

These points were identified, noted, discussed to address these by the team during filling the history sheet, service provision documentation, counselling and during VCAT sessions.

1. ***Ascertaining indications*** -Maternal mental health indications for second trimester abortion was verified based on the national protocol and form. Anxiety due to late recognition of pregnancy, alleged failed contraceptives like use of oral

contraceptive pills and depot medroxyprogesterone injections and failed medical abortion taken in the first trimester were difficult to establish at times. Inadvertent intake of medications like antibiotics, antiallergics, proton-pump inhibitors for gastritis etc. in first trimester of pregnancy were sometimes difficult to establish. However, these seemed to cause many women stress, anxiety and sleeplessness due to worry about fetal side effects. They were eligible to avail abortion services on mental health indications.

2. ***Definite evidence led to positive attitudes***-One woman presented at 14 weeks of pregnancy after 5 years of minilap sterilization and late recognition of pregnancy. All members of the provider team felt that such instances of failed permanent sterilization are more valid indications for second trimester abortion services. Ultrasonographic evidence of fetal anomalies was an instance when all providers felt comfortable needing no further discussions on the validity of the indications.

3. ***Failed medical abortion taken in first trimester*** - was encountered in 7 women. However, all had taken the medication from local pharmacies, with limited recall of brand, dose and timing of intake. There was some hesitation among the providers whether such instances of failed medical abortion cases were eligible to avail second trimester abortion services.

4. ***Availability of trained providers***-During the two years period, only one trained and listed provider of second trimester abortion was available in this center constantly while medical officers, nursing team and support staff changed frequently. One of the criteria to train and list the provider and site is that the provider has to undergo Value Clarification and Attitude Transformation (VCAT) training and VCAT orientation has to be conducted in the site before starting the services. Four sessions of VCAT orientation was conducted during the two years period involving nursing and support staff during which provider issues and challenges were discussed and noted. VCAT is very essential and helpful to identify abortion values of the providers and helps in developing supportive attitudes for abortion services, especially for second trimester abortions.

5. ***Handling and disposal of fetus, fetal parts, placenta*** **-** was a major issue with medical officers, nursing staff and support staff.

6. ***Induction of fetal death***- Provider team members found inducing fetal death by intracardiac /intra-amniotic digoxin injection quite unpleasant and repeated discussion among the team members was necessary to plan and administer digoxin.

7. ***Contraceptive counselling***- Linkage with contraceptive counselling was sometimes difficult due to other commitments of the provider team, including time issue as a dedicated family planning counselor is not available in this center. Though contraceptive counselling was done to all cases only 12 women took long acting reversible contraceptives (subdermal implant Jadelle was inserted in 8 cases and IUCD in 4 women)

immediately after the abortion.

8. *Provider preference and experience of D&E and MI* - was another issue. Timed evacuation and confidence of the skill of D&E at 12-14 weeks was the reason that all 32 cases were provided D&E at this gestational age. For women between 15-19 weeks, choice was given between D&E and MI while for those at and beyond 20 weeks were planned for MI as the lead provider felt that D&E at this stage could be technically challenging. However, of the planned 48 cases of MI 5 had to be converted to D&E due to women not tolerating the pain during cervical dilatation and prolonged time taken for fetal expulsion and fever. These 5 women changed their mind and opted for D&E after third dose of misoprostol.

Discussion

The hospital where this service is being provided is a private multispecialty tertiary care center. Safe abortion services are provided as an integral part of reproductive health services; however, a dedicated comprehensive abortion care unit is lacking. The women seeking second trimester abortion services may represent women with different health needs as there were pregnant women who had suffered road traffic accidents, women needing nephrectomy, and others having co-morbidities like uncontrolled diabetes mellitus, urosepsis etc. All these women had been admitted for minimum half a day in day-care unit, hence significant time could be dedicated to pre and post abortion counselling, including some discussions on issues and challenges. Most countries around the world allow abortion to save the life of the mother. Some countries have very restrictive abortion laws while many have very liberal laws allowing abortion at request of the women. Abortion is safer and technically easier when performed during first trimester while it becomes difficult and challenging to both the provider and the women as the gestation advances. In our study the most common reason for women coming for abortion in second trimester was maternal physical and mental health in more than 50% (94/160) and fetal indication, either a dead fetus, abnormal fetus or potentially compromised fetus seen in about 40 percent women (65/160). Maternal mental health was the primary reason for availing second trimester abortion in 63/160, almost 40% in our study while Karki et al found maternal mental health reason as high in 82% of women in their study.[8] In these 65 women with fetal issues, the pregnancy apparently started as either a planned or desired pregnancy as opposed to unplanned or unwanted pregnancies in other studies. Only 20 women were unmarried or single while 3 women stated that they conceived outside marriage in our study as compared to Shivastava et al who found completed family size with unwanted pregnancy as a major reason for availing second trimester abortion and being unmarried as the reason in only 5% of the women.[9] CHREPA, Nepal and Guttmacher Institute in their release of fact sheet of February 2017, have estimated unintended pregnancy rate for Nepal was 68 per 1000 women of

reproductive age in 2014 with about one third of these unintended or mistimed pregnancies ending in abortion.[10] Maternal physical health issues like road traffic accidents, fall or trauma, need for x-rays, CT scans, surgeries etc. lead to change in context and plans of the woman and her family leading to sudden decision not to continue the pregnancy. Maternal mental health issues were challenging to establish and required more effort and counselling to ascertain the legality and need for second trimester abortion. Availability of trained and listed provider was limited with only one provider being available during the study period. Frequent change of other members of the provider team was another challenge. VCAT is key essential to establish second trimester abortion besides other physical infrastructures and back-up operating room facilities. Handling of the fetus and fetal parts for disposal was a major issue for the women, her family and hospital staff. Examination of fetus, fetal parts, placenta and membranes is essential to ensure completeness of abortion, for documentation, gestational age determination by fetal foot length, any fetal/placental anomalies and to help determine probable cause and time of fetal death as well.[2]

Timed and predictable course of D&E and need for only few hours of hospital stay was highly acceptable to women as opposed to waiting for fetal expulsion in MI. Provider team members also preferred D&E as the fetal expulsion during MI was unpredictable, occurring many a times when the lead provider was not available in the premises. This was a cause of concern in 18 women who had previous cesarean scar. Among 43 women undergoing MI, 12 needed check uterine evacuation after fetal expulsion due to retained placenta/placental tissues. Only 8 women chose local paracervical block while majority undergoing D&E opted for short intravenous sedation for pain relief. In dedicated safe abortion centers, providers are more familiar with the procedure and the woman seeing other women undergoing the procedure under local anesthesia may find local anesthesia more acceptable. WHO recommends use of local anesthesia during D&E for pain relief with counselling and sympathetic treatment by the staff while routine use of general anesthesia is not preferred,[5] however short intravenous sedation can be used when needed.[2]

All abortions should be done as early during pregnancy as possible but as late as necessary. Some pregnancies start as planned and wanted but due to a variety of reasons become unwanted later. Fetal anomalies are detected and confirmed usually in later part of second trimester. Fetal death can occur at any stage of pregnancy. The need for safe abortion services at advanced gestational age can arise in a wide variety of contexts. Second trimester abortion can be technically challenging to the provider and emotionally challenging to the women and her family. Puri et al have reported significant number of providers have denied abortion services when they perceived the woman's reason for abortion to be insufficient and for women presenting in second trimester

while many providers could not recall all the current legal indications for abortion provision of the country.[4] Despite being in favor of legal abortion, many providers can have mixed or negative attitudes towards the service provision.[4] Second trimester abortion service Providers and their teams require thorough training, including values clarification; monitoring and support following training prevents burn-out and ensures quality of care.[1] Shrestha et al have reviewed the progress of abortion services in the country post legalization especially in the context of new federal structure to allocate resources from policy level to helping women make informed decisions and access safe services at all times.[11] Regular on-the-job VCAT orientations, continuous training of support staff, increasing the number of trained providers, dedicated family planning counsellor are some ways to address the issues related to second trimester abortion services.

Conclusion

Women need safe second trimester abortion services due to various reasons. These services raise different issues and challenges to both the woman and the providers. Safe second trimester abortion services need to be supported by favorable policy, trained providers, regular updating of the providers and raising public awareness.

References

1. Alyson G Hyman, Traci L Baird, Indira Basnet: Establishing Second Trimester Abortion Services: Experiences in Nepal, Viet Nam and South Africa: Journal Reproductive Health Matters, 2008;16:135-44.
2. Clinical update in reproductive health –Ipas, https://ipas.azureedge.net/files/CURHE18-march-ClinicalUpdatesinReproductiveHealth.pdf March 2018.
3. Wan-ju Wu,Sheela Maru, Kiran Regmi, Indira Basnett. Abortion care in Nepal 15 years after legalization: Gaps in access, equity and quality: Health and Human Rights Journal. 2017;19:221-30.
4. Mahesh C Puri, Sarah Raifman, Bidhya Khanal, Dev Chandra Maharjan, Diana Greene Foster. Providers' perspectives on denial of abortion care in Nepal: cross sectional study: Reproductive Health. 2018;15:170.
5. World Health Organization. Safe abortion: technical and policy guidance for health systems, Second Edition, 2012.
6. FHD, NHTC, DoHS, MoHP, Government of Nepal. Second trimester safe abortion- Participants Handbook. 2018.
7. FHD, NHTC, DoHS, MoHP, Government of Nepal. Second trimester safe abortion – Reference Manual. 2018.
8. Karki A, Dangal G, Pradhan H, Shrestha R, Bhatttachan. Medical and surgical abortion in second trimester of pregnancy- K:NJOG 2015;19:25-9.

9. Shrivastav V, Bajracharya L, Thapa S. Surgical abortion in second trimester: Initial experiences in Nepal: Kathmandu University Medical Journal 2010;8:169-72.
10. Chrepa, Guttmacher Institute. Abortion and unintended pregnancy in Nepal –Fact Sheet, Feb 2017.
11. Dirgha Raj Shrestha, Sibesh Chandra Regmi, Ganesh Dangal. Abortion: Still Unfinished Agenda in Nepal. J Nepal Health Res Counc 2018;16:93-8.