

Capstone for Impact Submission | GY2019

Project Title: Outcomes of Second Trimester Surgical Abortion: The Experience of a Tertiary Health Facility in Ethiopia

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Branch: Patients & Populations

Path of Excellence: Global Health and Disparities

Handover/Transition:

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Summary:

Abortion is defined as expulsion or extraction of a fetus before fetal viability. It is a very common occurrence globally (40-50 million per annum). There is increasing evidence to suggest that dilation and evacuation (D&E) leads to fewer complications than medical abortion for second trimester termination of pregnancy.

However, there is no recent documentation of the outcome of such a method in Ethiopia, as this procedure has only been recently allowed in the country. Hence the aim of this study is to document the clinical characteristics and short term outcomes of second trimester D&E performed at St Paul Hospital and Millennium Medical College (SPHMMC).

METHODS: A retrospective cross-sectional study design was employed to review all cases of dilation and evacuation performed in the six months period from January 1, 2018- July 30, 2018.

A structured questionnaire was used to collect selected socio-demographic data, clinical characteristics and acute complications. Data was entered and analyzed using IBM SPSS Statistics, version 20.0

RESULT: A total of 43 client records were reviewed and used for this analysis. The median (IQR) age of the study participants was 24 (20,26), with age range of 16 to 34 years old. The average gestational age is 16 weeks + 2 days (ranging from 13 weeks + 1 day to 20 weeks + 6 days). All women received doxycycline prior to performing D&E. No ultrasound was used during all the procedures. Over all complication rate is 2.3%, with 1 case of uterine perforation. The contraceptive uptake rate was 88.4% (38/43).

The most common post abortion family planning method was long acting reversible contraceptives (LARC). Our review demonstrated that D&E is safe after applying recommended procedures in a tertiary health facility in Ethiopia. Further analysis using a larger sample should be undertaken and comparison should be made with medical induction in order to establish the safety and effectiveness of second trimester surgical abortion.

Methodology:

The study was conducted at SPHMMC, which is the second largest hospital in Ethiopia, located in Addis Ababa. The analysis was performed on cases of D & E procedures carried out for termination of pregnancy in the six-month period from January 1, 2018- June 30, 2018.

Study design and sample: Retrospective cross-sectional study design was used to evaluate the outcomes and acute complications of D&E among clients who were admitted to procedure room for D&E procedure. All women who were managed with D&E during the study period were included in the study while excluding those with lost records.

Variables and measurement: Structured questionnaire prepared in English was used to collect data. Selected socio-demographic, reproductive and medical history related variables were extracted from the medical records of clients for whom D&E was performed between January 1, 2018 and June 30, 2018. The variables include various socio-demographic characteristics, obstetric profile (parity, gestational age), reasons for second trimester D&E, type of abortion care (safe abortion, post abortion care), type of cervical preparation for the procedure, and procedure complications (hemorrhage, uterine perforation, failed D&E). The collected data was checked for completeness and consistency and coded. The data was then analyzed using IBM SPSS Statistics for Windows, Version 22.0 ((IBM Corp, Released 2011). Descriptive statistics were performed to generate the mean (\pm SD), median (IQR), and frequency tables.

Results/Conclusion:

The pre-operative and peri-operative care provided for patients undergoing dilation and evacuation at our institution met international standards for all patients. All patients in our study received a pre- operative antibiotic. Regarding peri-operative pain control, the WHO recommends an analgesia regimen of a paracervical block plus non-steroidal drugs or conscious sedation, which was provided for 97.7% of our patients. General anesthesia was not used on any patients in this study, as the WHO reports that this can increase rates of complications²³. Mifepristone is used in all patients 24 hours prior to the D&E at all gestational ages.

Furthermore, cervical preparation, which is known to reduce complication rates of D&E, was performed for all women undergoing safe termination and all but one woman who underwent post-abortion care. Multiple studies indicate that laminaria or a combination of laminaria with misoprostol is recommended for patients at higher gestational ages, as this can improve cervical dilation and lower complication rates. Similarly, misoprostol alone is acceptable for patients at gestational ages <16-17 weeks. Our data reflected these recommendations, with the majority (81.3%) of patients at gestational age \geq 17 weeks receiving a combination of laminaria and misoprostol, whereas the majority of patients below 16.6 weeks of gestation received misoprostol alone. Our methods of cervical preparation proved to be effective, as only 1 patient in the study was noted to have inadequate cervical dilation, which led to an extra 10 minutes of procedure time.

Our overall complication rate was very low (2.3%), which is consistent with recent studies demonstrating complication rates of D&E ranging from 1.5 to 7% across different international institutions that have been

providing the procedure as regular practice for many years. The only patient who had a complication was admitted for post abortion care for inevitable septic abortion. The finding underscores the safety and effectiveness of D&E as there was no complication documented for the elective induced procedures.

Provision of post abortion contraception is an important part of comprehensive abortion care and helps to reduce unintended pregnancy and subsequent abortions. In our study, 100% of women who underwent D&E were counseled on family planning, with 88% women provided with various options of contraception post-procedure. This rate is higher than previous studies demonstrating that 77-86% of women in Ethiopia received contraception following abortion services.

This analysis is the first attempt to document the clinical characteristics of patients, procedure, outcomes and complications of D&E in Ethiopia which largely has not been offered to Ethiopian women. A 2014 study concluded that safe abortion care interventions in Ethiopia should prioritize training of providers in D&E, in order to improve women's access to second trimester abortion services⁸. Despite the fewer number of second trimester D&E used for this analysis, we were able to document all aspects of the procedure and outcomes. More accurate rates of complications and procedure characteristics could be obtained by having a higher sample size.

In conclusion, there were a total of 46 D&E procedures performed in the study period from which we analyzed 43 of them. The cervical preparation method employed was found to be effective. The study also demonstrated the clinical safety and effectiveness of D&E for second trimester surgical induction when performed by trained providers. Only one complication was documented, and it was on a patient who underwent post abortion care for a septic abortion. Our model for second trimester D&E can be used to inform other local institutions on the benefit and safety of offering the procedure to women seeking second trimester termination.

Reflection/Lessons Learned:

I learned more about the Ethiopian healthcare system and a lot about the social and political aspects surrounding abortion services in Ethiopia. I also learned more about the impact of sustainable global health training programs.