Determinants and Outcome of Safe Second Trimester Medical Abortion at Jimma University Medical Center, South West Ethiopia

Ahadu Workineh[1], Yibeltal Siraneh[2]

1. Department of Obstetric and gynecology, faculty of medical sciences, institute of health, Jimma University, Ethiopia (MD, Assistant professor of Obstetric and gynecology, Fellow Urogynecology & Pelvic Reconstructive Surgery, JU/Lyon University)
2. Department of Health Economics, Management and Policy, faculty of public health, institute of health, Jimma University, Ethiopia (Lecturer of health services management, MPH/HSM, Managing editor of EJHS, accademic quality assurance coordinator)

Corresponding Author

Name:-Yibeltal Siraneh Belete

Email adress:- yibeltal_siraneh@yahoo.com or yibeltalsiraneh@gmail.com

Cell Phone:-+251917017092

Abstract

Background; although the vast majority of abortions are performed in the first trimester, still 10–15% of terminations of pregnancies have taken place in the second trimester globally. As compared to first trimester, second trimester abortions are disproportionately contribute for maternal morbidity and mortality especially in low-income countries where access to safe second trimester abortion is limited. The objective of this study was to identify factors affecting and outcome of induced safe second trimester medical abortion in Jimma University medical center, South West Ethiopia.

Methods; Institution based cross-sectional study design was used to conduct a study among women who seek safe second trimester medical abortion services and admitted at gynecology ward. All (201) eligible study subjects were included who come for the safe medical abortion service during data collection period. Data collected using pretested structured questionnaire through exit-interviewing and abstracted from their chart. The data was entered into EpData version 3.1 then exported to SPSS version 21.0 for analysis. Variables with P-value less than 0.25 in bivariate analysis were entered into the final model of multivariable logistic regressions to identify determinants with 95% CI and P-value < 0.05. Hosmer and Lemeshow Test were used to check model fitness at P-value of 0.05. Ethical clearance was obtained and confidentiality kept using codes and patient's chart number.

Results In this study the response was 98.05%. Out of 201 women participated in the study and addmitted for safe second trimester medical abortion, 154 (76.6%) of them had favorable outcome while the remaining 47 (23.4%) had unfavorable outcome. Previous experience of abortion [AOR= 6.001, 95% CI= (3.766, 8.885)], gestational age [AOR=0.902, 95% CI= (0.074, 0.986)], parity

[AOR=2.384, 95% CI= (1.040, 3.693)], cervical status [AOR=8.001, 95% CI= (5.715, 10.015)], overall waiting time for more than two weeks [AOR=0.531, 95% CI= (0.504, 0.963)], overall waiting time for two weeks [AOR=0.054, 95% CI= (0.006, 0.453)] and moderate anemia -(Hgb:7-10g/dl)-[AOR=0.071,95% CI= (0.004, 0.163)] were independent predictors for outcome of safe second trimester medical abortion.

Conclusion This finding implied that favorable outcome of induced safe second trimester medical abortion overweigh its unfavorable outcome which strongly determined by gestational age, cervical status, previous experience of abortion, parity, moderate anemia and overall waiting time. Induced second trimester medical abortion is an effective and safe method. However, much should be done to reduce unfavorable outcome by minimizing overall waiting time through intervening at low gestational age. Therefore, it is recommended that safe second trimester medical abortion services should be continued under a certain legal circumstances so as to reduce maternal morbidity and mortality.

Key words; determinants, outcome of safe medical abortion, Second trimester

References

1. World Health Organization. Trends in Maternal Mortality: 1990 to 2010 WHO, UNICEF, UNFPA and the World Bank Estimates. Geneva: WHO; 2012.
2. Yong, A Kale, R Mary. A retrospective study of the outcomes of second trimester pregnancy termination using vaginal misoprostol. The Internet Journal of Gynecology and Obstetrics. 2007 Volume 9 Number 2
3. Shah I, Ahman E. Unsafe abortion: global and regional incidence, trends, consequences, and challenges. J Obstet Gynaecol Can. 2009;31(12):1149–1158.
4. Marcia de Toledo Blake, Jefferson Drezett, Gilzane Santos Machi, et al, Factors associated to late-term abortion after rape, literature review, r e p r o d c l i m . 2 0 1 4;2 9(2):60–65
5. Zeba Sathar, Susheela Singh, Gul Rashida, Zakir Shah, and Rehan Niazi, Induced Abortions and Unintended Pregnancies in Pakistan, PMC,Stud Fam Plann. 2014 Dec; 45(4): 471–491.
6. Rasch V. safe abortion and postabortion care – an overview. Acta Obstet Gynecol Scand. 2011;90(7):692–700.
7. Patrick GC Ilboudo, Serge MA Somda, Johanne Sundby, Key determinants of induced abortion in women seeking postabortion care in hospital facilities in Ouagadougou, Burkina Faso, International Journal of Women's Health 2014:6 565–572
8. Ethiopian Abortion law-declaration-2005-Article 551 of the Penal Code of the FDRE allows termination of pregnancy under a certain conditions
9. Gezahegn , Induced Abortion and Associated Factors in Health Facilities of Guraghe Zone, Southern Ethiopia, journal of pregnancy,2014, Volume 2014, Article ID 295732,8 page
10. Roger Ingham, Ellie Lee, Steve Clements and Nicole Stone, Second-trimester abortions in England and Wales, Centre for Sexual Health Research,University of Southampton,2012. www.psychology.soton.ac.uk/cshr
11. Amlaku Mulat.et al,2014, Induced Second Trimester Abortion and Associated Factors in Amhara Region Referral Hospitals, Journal of Pregnancy, Volume 2014 (2014), Article ID 295732, 8 pages
12. Kristine Ivalu Bonnen, Dereje Negussie Tuijje and Vibeke Rasch, Determinants of first and second trimester induced abortion - results from a cross-sectional study taken place 7 years after abortion law revisions in Ethiopia, Bonnen et al. BMC Pregnancy and Childbirth (2014) 14:416
13. Jane Harries, Phyllis Orner, Mosotho Gabriel and Ellen Mitchell, Delays in seeking an abortion until the second trimester: a qualitative study in South Africa, BMC, Reproductive Health 2010, 4:7 doi:10.1186/1742-4755-4-7
14. Grimes DA, Benson J, Singh S, et al. safe abortion: the preventable pandemic. Lancet.2006; 368(9550):1908–1919.
15. Hord C, Wolf M. Breaking the cycle of unsafe abortion in Africa. Afr J Reprod Health. 2004; 8 (1):29–36.
16. Daniel Grossman, Deborah Constant et al.: Surgical and medical second trimester abortion in South Africa: A cross-sectional study. BMC Health Services Research201111:224.

Yibeltal Siraneh

Yibeltal designed a lot of research project and community service programs such as leading Shoe-shining in Organized and Equipped System (SHOES) and movable toilet for Jimma town street children who had no any source of income, and the project was successful till now since 2016. He took TOT on Innovation/Design thinking and Business Modeling by Mekerer University/ HoARILab.team and HoARILAB Office of JU including Need finding training with online system and by HoARILAB Office of JU staff. He also took training on entrepreneurship. More over he had **the following experiences;**

1) HoARILab.Youth spark innovation grant winner, JU, Ethiopia in 2016--Co-Innovator
2) Sexual and reproductive health services project, HAPCCO, in 2014-2016.—Co-PI
3) Maternal and child health: implication to SDG project, JU, in 2016---PI
4) Outcome and determinants of safe 2nd TM medical abortion, JU, CIRHT, 2015-2016…Co-PI
5) KOFIH-JU-JZHD project on maternal and child health as an internal consultant for BCC/educational material development and radio program script/audio content preparation, 2016/17 –Coordinator
6) Investigator for the innovative project "phone based maternal and child health services (hello doctor)" funded by Grand challenge Ethiopia/FMoH with Canada gov't-Co- lead
7) Community based newborn and infant caring practice using positive deviance approach funded by International institute for primary health care, John Hobkin Univeristy and iifphc-Ethiopia-PI
8) Leading Constraction of movable public toilet project by DTTP team-Coordinator
9) Managing editor of Ethiopian Journal of health sciences based in Jimma University.

Full Name:Yibeltal Siraneh Belete

Email:yibeltal_siraneh@yahoo.com

Contact no: +251917017092

LinkedIn account: https://www.linkedin.com/in/yibeltal-siraneh

Twitter account: https://twitter.com/EJHS_Journal

Session name/ number: Determinants of Abortion

Category: Oral (or) Poster: Oral

Date of Birth: October 11, 1989