Assessment of the associated factors, management and complications of uterine rupture at Mizan-Tepi University Teaching Hospital, Mizan-Aman town, Bench-Maji Zone, (SNNPRS), south west Ethiopia, 2016/17: A case control study

Yayehyirad Yemane and Workineh Gizaw
Mizan-Tepi University, Ethiopia

Background: Uterine rupture is tearing of the uterine wall during labor or delivery and rupture of a previously or already unscarred uterus is more often than not a catastrophic event resulting in death of the baby, extensive damage to the uterus and sometimes even maternal death from blood loss. The overall incidence of uterine rupture is 1 in 2,000 deliveries. In developing countries, uterine rupture is more prevalent or common and is a serious or common problem.

Objective: To assess the associated factors, management and complications of uterine rupture in Mizan-Tepi University Teaching Hospital, Mizan-Aman town, Bench-Maji Zone, SNNPRS, south west Ethiopia, 2016/17.

Methodology: A hospital based unmatched multi-factorial case-control study/consider was employed from 1st October - 30th October 2016. The required sample size gave us a total of 352 delivery charts by considering case to control ratio of 1:4 of these 71 were delivery charts with uterine rupture and 281 were delivery charts without uterine rupture which were selected by using lottery method. Data was retrieved using pre-tested and structured data extraction format from operation notes, delivery registers and patients cards documented from 2013-2015 G.C. Using SPSS version 20 software, descriptive statistics, bivariate and multivariate logistic regression analysis was done and p-value <0.2 and <0.05 were considered as significant during bivariate and multivariate logistic regression analysis respectively. AOR with 95% CI was used to control for possible confounders and to interpret the results.

Result: From 1st January 2013 up to 31st December 2015 there were a total of 9878 deliveries from these 71 cases of uterine rupture were recorded giving an incidence of 1 in 139 deliveries. Predisposing factors for uterine rupture were no antenatal care (AOR 4.08 95% CI 1.924-8.651), labor duration > 18 hrs (OR 2.769; 95% CI 1.231-6.226), parity ≥ 5 (AOR 6.16; 95% CI 2.886-13.148), having obstructed labor (AOR 2.714 95%; CI 1.228-5.720), no use of partograph (AOR 2.248, 95% CI 1.049-4.817). There were 7 maternal deaths due to uterine rupture during the study period giving a mortality rate of ~ 0.07%.

Conclusion: Uterine rupture still remains one of the major causes of maternal and newborn morbidity and mortality. The prenatal mortality for both case and controls is high in Mizan-Tepi University Teaching Hospital.

Biography
Yayehyirad Yemane has completed his primary and secondary education in Jijiga town, Ethiopia. He has completed his Bachelor of Science in Midwifery from University of Gondar, Ethiopia in July 12 -2012, and then started working as Head of the Department in Department of Midwifery College of Health Sciences, Mizan-Tepi University for one year. Then, he joined his Master’s education at Mekelle University in September 2-2013. He graduated from Mekelle University with the specialty of Master’s in Clinical Midwifery in February-03-2016. Currently, he is working as Lecturer at the Department of Midwifery College of Health Sciences, Mizan-Tepi University.

Buchiatoug@gmail.com

Notes: