Evaluation of the Impact of an Emergency Obstetric and Neonatal Care (EMONC) Training Program at a Referral Centre in Kenya

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Objective(s): Maternal morbidity and mortality are of paramount concern in resource poor settings. Although current initiatives focus on improving professionals’ skills, there is a lack of evaluation of programs and of outcome benefit. The objective of this study was to determine the impact of introducing an EmONC training program developed by the SOGC on maternal and perinatal morbidity and mortality at Moi Teaching and Referral Hospital (MTRH) in Eldoret, Kenya.

Study Methods: The study was a prospective chart review of all deliveries at MTRH for the three months prior to institution of the ALARM International Program (AIP) and at one year after 80% of staff were trained. Inclusion criteria were all deliveries during the study time periods greater than 28 weeks gestation. The primary outcome was maternal case fatality rate with secondary outcomes of maternal and neonatal morbidity.

Results: There were 1741 and 1812 deliveries before and after introduction of the AIP respectively. Demographic, obstetrical and delivery characteristics were similar between the two time periods. PPH rates decreased significantly, from 3.5% to 2.3%. Oxytocin use for AMTSL increased significantly, from 47.6% to 92.1% oxytocin at all; 91.7% to 99.7% preplacental delivery and 6.5% to 98.4% post-placental delivery. APGARs less than 5 at 5 minutes were significantly reduced, from 7.7% to 5.4%.

Conclusions: We have shown in this study that the introduction of the AIP in a tertiary care centre can improve maternal outcomes. The primary outcome did not show a difference due to the low number of maternal deaths. There were significant differences related to use of oxytocin, AMTSL and postpartum hemorrhage.