

Improving Access to Comprehensive Emergency Obstetric and Neonatal care Services in Underserved Rural Tanzania

Angelo Nyamtema¹, John LeBlanc², Godfrey Mtey¹, Elias Kweyamba¹, Omary Kilume¹, Janet Bulemela¹, Heather Scott², Zabron Abel¹ & Allan Shayo¹

¹Tanzanian Training Centre for International Health, Tanzania
²Dalhousie University, Canada.

Background: To reduce maternal and perinatal deaths, Tanzania targets to expand the number of health centers (HCs) providing comprehensive emergency obstetric and neonatal care (CEmONC) from 12% in 2015 to 50% by 2020. In 2015 the Accessing Safe Deliveries in Tanzania project was designed to study the best approach to improve access to CEmONC services in underserved Tanzania.

Methods: From 2016 – 2019, using a controlled interventional study design, the project introduced CEmONC services in two and reinforced them in three rural HCs in Tanzania. Twenty-two associate clinicians and nurse-midwives were trained in teams for three months in CEmONC and anesthesia. Post-training supportive supervision and mentorship were done every quarter and included an audit of Caesarean sections (CS), maternal deaths, and obstetric referrals.

Results: The mean monthly facility deliveries increased from 178 at baseline to 457 in year 3 in the intervention HCs compared to 42% (237 - 337) in the controls. A total of 2046 CS were performed in the intervention HCs. Of 623 audited CS, 86% (536) were done with justifiable indications. Five women died from complications of CS, and of these two died from complications of anesthesia, making the risks of dying of 2.3/1000 CS and 1.0/1000 CS, respectively. Referral rate in the control HCs increased from 0.8% at baseline to 1.7% in year 3 ($p = 0.00$) and decreased in the intervention HCs from 5.4% to 3.5% ($p = 0.00$).

Conclusions: The three-month training program for associate clinicians and nurse-midwives in CEmONC and anesthesia is a safe, effective, and immediate solution that is currently saving the lives of mothers and babies in rural Tanzania. This education program should meet the demand for CEmONC and anesthesia in underserved rural Africa until longer-term training programs are fully established and meet the needs.

