JUSTIFICATION OF INNOVATION

Emergency obstetric care (EmOC) has been proven to help avert maternal deaths. Access to Emergency obstetric and newborn care (EmONC) is a primary strategy for the reduction of maternal, and newborn mortality. In an effort to address the critical shortage of health manpower for maternal and newborn health, the Government of Ethiopia implemented a task shifting strategy to improve access to comprehensive EmONC, reduce maternal deaths and ensure that the majority of emergencies and births are attended by appropriately trained and skilled healthcare professionals able to prevent, detect and manage obstetric complications and surgical emergencies.

BACKGROUND

Ethiopia is among the countries with high maternal and neonatal mortality. The 2015 target maternal mortality ratio for Ethiopia is 267/100,000 live births. However, according to Ethiopia Demographic and Health Survey (EDHS) 2011, the maternal mortality ratio stood at 676 maternal deaths per 100,000 live births for the seven years preceding the 2012 Central Statistical Agency survey (CSA); the same level reported in the EDHS 2005 and the CSA (2006).
Skilled care at delivery is low at only ten percent (EDHS 2011) and access to emergency obstetric surgery is hampered by relatively few appropriate facilities available to provide services. There is approximately one facility available to provide obstetric surgery for every 800,000 population and most are concentrated in urban centres. Scarcity of obstetric surgeons and anaesthetists, and limited road access for the largely rural population are also key bottlenecks to access quality care (FMOH, UNICEF, UNFPA, WHO and AMDD, 2008).

Overcoming these challenges requires integrated policies and innovative programmes mandated by the highest level of government. In 2009, the Federal Ministry of Health (FMOH) and the Federal Ministry of Education (FMoE), with support from UNFPA and other development partners, launched an innovative training programme in emergency surgery and obstetrics. This was a key strategy to fill the gaps in rural health services and ultimately improve the chances of women surviving during pregnancy and childbirth.

OBJECTIVES

The innovation intended to address the shortages and inequalities in EmOC, through training health officers to perform life-saving emergency surgery, thereby improving the health and survival of mothers during pregnancy and childbirth. Specific objectives were to:

- Document the context where task shifting was adopted
- Determine the challenges and lessons learned from Integrated Emergency Surgical Officers training programme
- Document outcomes of the training programme

STRATEGY/ IMPLEMENTATION

The Integrated Emergency Surgical Officers (ESO) task shifting, an innovation in the area of human resources, is a recent programme designed to develop a cadre of mid-level health professionals called Emergency Surgical Officers. It is a three-year master of science training launched by the FMoH, with the support of UNFPA, which trains health officers to perform life-saving emergency surgery. The programme is part of the national and sectoral strategies that make maternal health a top priority.

Five Ethiopian universities run the programme: Gondar, Hawassa, Haromaya, Jimma, and Mekelle universities. The programme is being extended to five other training institutions. The programme shifts tasks from physicians to clinicians to address the shortages and inequalities in emergency obstetrics and neonatal care between rural and urban areas, and rich and poor communities.

The Training of Emergency Surgical Officers is a key component of the plan to increase the number and capacity of functional comprehensive emergency obstetric and newborn care facilities. The first graduates completed their training in 2012 and have been deployed with teams of midwives and anaesthetists to more remote areas.
PROGRESS AND RESULTS

Overall, findings from key informant interviews and reviews of health facility records and patient charts indicated that the ESOs were performing most obstetric and emergency surgeries well, and there were no significant intra- or post-operative complications.

A review of the 12-month period prior to and after the deployment of ESOs to 10 primary care hospitals showed a significant increase in the volume of services delivered, while intra-facility maternal deaths reduced by 17 per cent, and referrals to a higher level facility reduced by half (49 per cent) see Figure 1. The majority of deliveries attended in these hospitals were spontaneous vaginal deliveries (82 per cent), while 7 per cent were instrumental deliveries and 11 per cent were caesarean sections.

Similarly, the number of emergency surgical interventions increased significantly while intra-facility patient deaths from surgical emergencies reduced in the 12 months after deployment of ESOs compared with the 12 months prior to their deployment in the 10 hospitals.

Overall hospital based cesarean section rate was 10.7% of all deliveries attended in the ten hospitals. However, there was variation from hospital to hospital with caesarean section rates ranging from 5% in Finoteselam hospital to 25.6% in Abomsa hospital.

Of the 7,768 labor and delivery cases attended in 10 hospitals over a 12-month period preceding the survey, there were only five maternal deaths recorded and only three women were reported to be referred to a higher level facility. The majority of newborns were alive (92.6 per cent).

The surgeon in charge of the operations performed for 2,173 cases in the 10 facilities, the majority (96.5 per cent) of surgical interventions were performed by ESOs, while the rest (3.5 per cent, mostly obstetric emergency surgery) were performed by General Practitioners with short term CEmONC training.

LESSONS LEARNT

- The mid-term competency assessment conducted by FMoH, UNFPA and other development partners was instrumental to identify key factors that affected training quality and areas where students had serious competency gaps (as manifested in ESO’s clinical decision-making skills). This helped to revise the curriculum to beef up students’ clinical decision-making skills.
• The biannual supportive supervision and review meetings held among FMoH, FMOE, RHBs, training universities, UNFPA and other development partners were an instrumental management tool to monitor progress, share good practices, and identify and address challenges, contributing to the quality of training and the pace of training scale-up.

• Gaps were revealed in ESOs’ clinical decision-making skills. For example, a third of cases with obstetric complications where caesarean sections were performed had no clear indication or documentation of clinical data that supported the indication for surgical intervention (caesarean section) in line with FMoH protocol for the management of obstetric complications (FMoH 2010). In addition, there was a high caesarean section rate of above 15 per cent in three of the 10 facilities.

• Deployed ESOs identified a range of challenges in their work environment: lack of medical equipment and supplies in the operation theatre, access to blood banks, diagnostic aids/equipment (ultrasound) and a high turnover of anesthetists and scrub nurses. In addition, some identified a lack of uniform and appropriate incentives (duty hour payment, housing and other allowances) as a challenge.

• Shifting the task of emergency surgery to non-physician providers generated serious resistance from most specialist physicians, who are key stakeholders as trainers. This resistance posed a serious challenge in the programme initiation phase.

• Cases where ESOs performed non-emergency major operations that were not within the scope of tasks/roles of non-physician providers dictates the need to define scope of practice and institute enforcement mechanisms before deployment of the new cadres.

CONCLUSION

This documentation exercise is a valuable instrument believed to provide guidance and lessons to learn from, for countries seeking to replicate the programme. African countries that replicate similar training programmes would benefit if they build on the achievements and lessons learned from this programme’s implementation

RECOMMENDATIONS FOR NEXT STEPS

• FMoH, FMOE, training universities and development partners need to further explore the training curriculum, teaching-learning, clinical mentorship, and student performance assessment mechanism to strengthen student opportunities and their interest in learning clinical decision-making skills.

• Student involvement in initial and follow-up evaluation of patients with emergency obstetric and surgical condition should be a requirement for the practice of surgical skills (attend operation procedures).
• Training universities need to design and implement clear guidelines, schedules and tools of communication for practice hospitals.

• Teaching-learning strategies that strengthen clinical decision-making (case studies and written clinical simulation exercises) need to be taken into consideration.

• Accelerated efforts are required to define the scope of practice of cadres and institute a system for the enforcement of the scope of practice at regional, district and facilities level.

• FMoH needs to develop and communicate the ESO career development ladder as well implement a standardized incentive package for ESOs.

• FMoH needs to mobilize the technical and financial support of partners for infrastructure development and to equip hospitals with functional operating room facilities.

FOR MORE INFORMATION: http://countryoffice.unfpa.org/ethiopia/2012/02/21/4604/health_professionals_graduate_in_an_innovative_programme_to_reduce_maternal_mortality/

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