Influencing Facility Delivery through Upgraded Health Centres

Authors: Mbuyita, S., Kweka, H., Kitumbo, A., Makemba, A. and Mbaruku G.
Ifakara Health Institute and Development Centre

Introduction

While developing countries are struggling to reach MDG goals 4 and 5, most have realized that the time remaining might not be enough to do so. The latest Tanzania DHS report indicated that maternal mortality ratio in Tanzania is still as high as 454 per 100,000 live births (NBS and IRC-Micro, 2010). The three years remaining to the target year for MDGs (2015) are definitely not enough to take the current ratio down to 133 per 100 000 live births as targeted by MDG 5 (Hogan *et al.*, 2010).
To accelerate attainment of MDGs 4 and 5, internationally, regionally and locally designed interventions have been proposed, piloted and some scaled up within and across countries. Among them are task shifting and upgrading of health centres or clinics (AMDD, 2003) to provide Comprehensive Emergency Obstetric Care (CEmOC) instead of the designated Basic Emergency Obstetric Care (BEmOC).
This paper presents the experience of implementing these two interventions in 4 districts of Tanzania namely Kigoma Ujjiji, Kilombero, Ulanga and Rufiji

Aims and Objectives

Aim

To implement a minimum package for maternal, newborn and child health interventions including upgrading of health centres for CEmOC and use of non-professional health providers to accelerate maternal and newborn deaths reductions in three rural and one urban districts

Objectives

- To equip health centres with appropriate infrastructure and supplies for provision of CEmOC
- To build the capacity of mid-level providers to be able to provide CEmOC in a rural setting

Methods

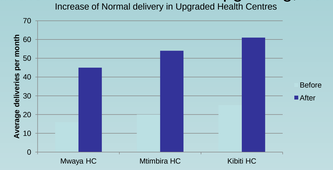
In collaboration with CHMT and district council executives from the four districts

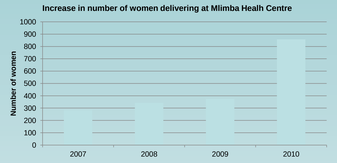
- Criteria were set for selection of health centres to be upgraded
- Criteria included distance from facility providing CEmOC, population density in the facility catchment area, easy of geographical access to the nearest facility with CEmOC and availability of space for extension
- Identification and selection of health providers to be trained on anaesthesia and CEmOC package including Caesarean Section.
- Construction of operating theatres and installation of necessary services such as water and electricity
- Rehabilitation of maternity wards
- Provision of equipment and supplies for providing CEmOC
- Improving record keeping through HMIS and addition designed forms to track important information

Findings

Increase in institutional delivery

Within the first six months after upgrading, normal deliveries in upgraded health centres increased.





Improved access to CEmOC

Average number of women per month receiving C-section increased

- 0 to 22 per month at Kibiti HC
- 0 to 17 per month at Mlimba HC
- 0 to 4 at Mwaya HC
- 0 to 7 at Mtimbira HC
- Decrease of C-section in hospitals were noted

Decrease in Referrals

Average number of referrals decreased significantly

- 61 to 19 referrals per month in Rufiji district
- 45 to 20 referrals per month in Ulanga district

Cost saving

Assuming all C-sections that took place in upgraded centres would have resulted to referrals, significant cost saving has been achieved.
Example. In 2010/11 total of 104 women received C-section from upgraded health centre.
The table below provides projected cost saving in Kilombero district
At a family level, cost saving by family per episode is estimated at Tshs 150,000.

Estimated Cost Saved from Reduced Number of Referrals in Kilombero District

Item	Quantity	Unit Cost	No of Possible Referrals	Total Cost
Diesel	60 litres	1,800	104	11,232,000.00
Allowance	1 Driver	25000	104	2,600,000.00
	1 Nurse	35000	104	3,640,000.00
Repair	Ambulance repairs			2,378,500.00
Total				**19,850,500.00**

Discussion

This study has shown that, increase in demand for maternal health services can be influenced by availability of quality care and assurance of proper management in case complications arise. Improved management of maternal complications at lower levels through upgrading of health centres and hence reduced needs for referrals, has an effect to attract women to deliver I health facilities.

Studies from other countries demonstrated the same. Increased preparedness to handle obstetric emergencies, improved quality of care in primary care units, improved accessibility of emergency obstetric care by rural women which ultimately led to increased demand of maternal health services (Kayongo *et al.*, 2006a) was possible through this intervention. Other studies have correlated this to reduction in case fatality rates and increased met need for EmOC (Dogba and Fournier, 2009).

The reduced numbers of referrals to higher levels have a socio-economic benefits since they have reduced cost of transportation of women with obstetric complications to both the health systems and families of these women (Casey *et al.*, 2009)

Conclusions and Recommendations

when upgraded health centre intervention is coupled with training of mid-level providers to provide CEmOC they will increase in demand for maternal health services, improve management of maternal complications at lower levels, reduce needs for referrals, increase preparedness to handle obstetric emergencies in primary care units, improve accessibility of emergency obstetric care by rural women, reduce numbers of referrals to higher levels and ultimately reduced cost of transportation of women with obstetric complications.

We recommend for scaling up of the intervention with careful planning for increased resources to meet the increased workload and needs of these health centres.

References

AMDD. 2003. Using the UN Process Indicators of Emergency Obstetric Services: Questions and Answers. PAXTON, A., MAINE, D. andHIJAB, N. (eds.). New York: Columbia University.

Casey, S. E., K. T. Mitchell, I. M. Amisi, M. M. Haliza, B. Aveledi, P. Kalenga andJ. Austin1 2009. Use of facility assessment data to improve reproductive health service delivery in the Democratic Republic of the Congo. *BioMedical Central,* 3

Dogba, M. andP. Fournier 2009. Human resources and the quality of emergency obstetric care in developing countries: a systematic review of the literature. *BioMedical Journal,* 7.

Hogan, M. C., K. Foreman andM. Naghavi 2010. Maternal mortality for 181 countries, 1980–2008: a systematic analysis of progress towards Millennium Development Goal 5. *Lancent,* 375**,** 1609-23.

Kayongo, M., M. Rubardt, J. Butera, M. Abdullah, D. Mboninyibuka andM. Madili 2006b. Making EmOC a reality—CARE's experiences in areas of high maternal mortality in Africa. *International Journal of Gynecology and Obstetrics* 92

NBS andIRC-Micro. 2010. Tanzania Demographic Health Survey. STATISTICS, N. B. O. (ed.). Dar es Salaam: United Republic of Tanzania