

## ABSTRACT

Submitted for presentation in Session S202  
on “Maternal Health and Mortality” (Org. Fariyal Fikree)  
IUSSP General Conference, Tours, July 2005

### *Does the Emergency Obstetric Care approach contribute to maternal mortality reduction?*

*An evaluation 5 years after the start of the UNFPA-AMDD Project*

by Vincent Fauveau\*

#### LONG ABSTRACT

According to recent WHO-UNICEF-UNFPA estimates, 529,000 women die each year from complications of pregnancy and childbirth, and millions are disabled, the vast majority in developing countries. Seventy percent of all maternal deaths are due to five major obstetric complications: hemorrhage, sepsis, unsafe abortion, hypertensive disorders of pregnancy, and obstructed labour. It is now well established that the majority of severe obstetric complications cannot be predicted nor prevented, but can be treated if Emergency Obstetric Care (EmOC) is available, accessible, and of good quality. Therefore skilled attendance at all births and round the clock readiness in appropriate facilities are keys to providing EmOC to all those women with obstetric complications, and to preventing death and life long disabilities (such as obstetric fistula).

In 1999, the Columbia University's Mailman School of Public Health, New York, launched an initiative called) aiming at reducing maternal mortality and morbidity by implementing large scale EmOC projects. Based on the model of the three delays, and focusig on the third delay, the objective was to improve availability, access, use, and quality of EmOC in selected facilities capable of performing a number of basic or comprehensive life-saving EmOC functions. For reasons of sample size, excessive cost and logistical difficulties, it is impossible to assess the impact of such a programme by measuring maternal mortality ratio. To monitor the progress of this programme, it is proposed to use the UN EmOC process indicators assessing whether women who develop serious obstetric complications receive the appropriate services. These indicators include the number of facilities offering basic and comprehensive EmOC functions, their geographic distribution, the proportion of all births occurring in EmOC facilities, the percentage of women with complications treated in those facilities (met need), the Cesarean - section rate, and the obstetric case fatality rate (OCFR, an indicator of the quality of care).

The objective of the present study is to assess the effect of the EmOC approach implemented in project areas by following the trends of the process indicators from the baseline assessment. EmOC was implemented using the same strategy and the same indicators (collected from regular admission registers of the maternities) in selected districts/provinces of five countries where UNFPA has a partnership with AMDD: Morocco, Mozambique, India (Rajasthan), Nicaragua, and Senegal. The inputs included physical upgrading of maternities, improved equipment, provision of appropriate supplies and drugs, proper staffing, and competency-based training of providers. Emphasis was put on the provision of EmOC by non OB-GYN specialists. The study covers five years, from the baseline in 2000 till 2004, a period long enough to assess trends over time.

In India and Nicaragua, the upgrading of facilities to enable the treatment of obstetric complications led to an increase of 50% of met need and a decrease in OFCR. In Mozambique and in Senegal, the proportion of births in EmOC facilities doubled, while met need increased by 130%. In Morocco, the C-section rate increased by one third. Other indicators either remained stable or did not show significant changes, but none deteriorated.

The paper discusses methodological constraints, including consistency of definitions, comparability, continuity, quality of data (admission registers). It concludes with an assessment of an additional benefit: ownership by national health systems, leading to decisions to extend the EmOC approach in the whole country as part of the national maternal mortality reduction strategy.

\* Dr Vincent Fauveau, Senior Maternal Health Adviser, Technical Support Division, UNFPA Office in Geneva, email: [fauveau@unfpa.org](mailto:fauveau@unfpa.org)

## SHORT ABSTRACT (150 words)

It is now well established that the majority of severe obstetric complications cannot be predicted nor prevented, but can be treated if Emergency Obstetric Care (EmOC) is available, accessible, and of good quality. Focusig on institutional deliveries, the objective of the study was to improve the provision and quality of basic and comprehensive life-saving EmOC functions. To monitor progress, six UN EmOC process indicators were used, assessing whether women who develop serious obstetric complications receive the appropriate services. Indicators were followed for 4 years after baseline in selected areas of Morocco, Mozambique, India (Rajasthan), Nicaragua, and Senegal, where UNFPA has a partnership with *Averting Maternal Death and Disability* (AMDD, Columbia University).

The paper presents trends and discusses methodological constraints. It concludes with an additional benefit: ownership by national health systems, and decision to extend the EmOC approach in the whole country as part of the maternal mortality reduction strategy.