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POOR INDICATORS OF EMERGENCY OBSTETRICS CARE IN AN URBAN SETTING WITH VERY HIGH ACCESS TO INSTITUTIONAL DELIVERY: A HEALTH FACILITY SURVEY

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INTRODUCTION

Despite recent improvements in maternal and child health indicators in Mozambique, maternal mortality ratio remains high in the country at 408 per 100,000 live births. Skilled attendance at delivery is arguably the single most important factor in preventing maternal deaths. However, high institutional delivery coverage may not reduce maternal mortality if health facilities are providing poor quality and insufficient life-saving obstetric care services. Access to quality emergency Obstetric care (EmOC) is fundamental to saving the lives of mothers and their newborns when complications occur: three quarters of maternal deaths can be averted if women have access EmOC. Access to EmOC is thus the most effective way of achieving the target of the fifth Millennium Development Goal of reducing maternal mortality.

Objective: To establish the availability, use, and quality of EmOC services in Beira District, Mozambique.

METHODS

We conducted a cross sectional study of health facilities providing delivery care services in Beira District in May 2013. The facilities comprised of one hospital and ten health centers. Data were collected through interviewing staff and reviewing registers using tools developed by Columbia University's Averting Maternal Deaths and Disability program. We calculated EmOC indicators using the standard United Nations (UN) methodology.

RESULTS

Figure 1 shows the distribution of all health facilities in Beira. Only the hospital had performed all the nine EmOC signal functions in the past three months prior to the survey (**Figure 2**). None of the health centres had performed all the six basic EmOC signal functions. Assisted vaginal delivery and manual removal of placenta were the most frequently missing signal functions; having been performed by only 2 and 3 of the health centres, respectively. Four health centres missed only one basic EmOC signal function. The number of EmOC facilities per 500,000 population was 1 compared to the UN-recommended level of 5 (**Table**). Direct obstetric case fatality rate was 3.1%, the proportion of all births in EmOC facility was 27%, the met need for EmOC was 35.6%, and 11.3% of expected deliveries were by caesarean. The proportion of maternal deaths due to indirect causes in EmOC facility was 34.4%. There were 78 maternal deaths in all health facilities: the facility-based maternal mortality ratio was 426/100,000 live births; which is higher than the national estimate. Data in registers could not allow for estimation of intrapartum and very early neonatal death rate. Institutional delivery was virtually universal (97.9%).

CONCLUSION

Beira District has a very high institutional delivery coverage but low availability, use, and quality of EmOC. Our results show that high institutional delivery coverage does not necessarily reduce maternal mortality if women with obstetric complications have poor access to quality EmOC services. There is need to improve the availability and quality of EmOC, with particular attention to basic EmOC, in the district. There is also need to address indirect obstetric complications in this setting. Delivery registers should be modified to capture data on fresh still births and very early neonatal deaths for monitoring the quality of intrapartum and immediate newborn care.

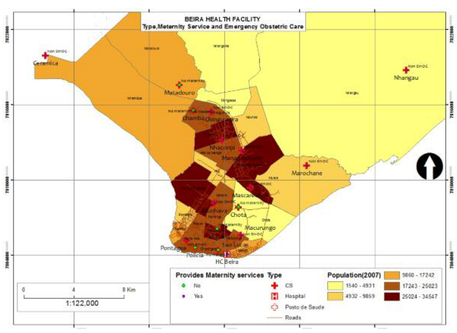

Figure 1: Spatial distribution of health facilities in Beira District

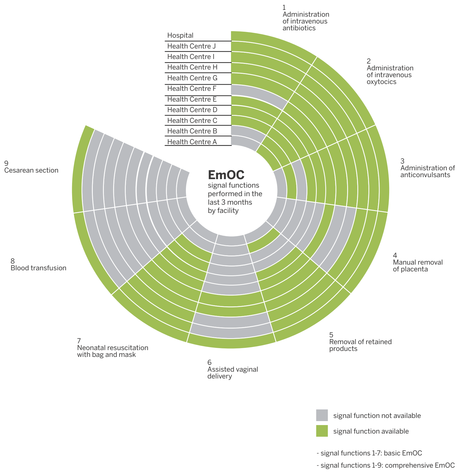

Figure 2: EmOC signal functions performed in the last 3 months by facility

Table: Emergency obstetric care indicators, Beira District

Indicator	United Nations standard	Beira District
1a: Number of comprehensive EmOC facilities per 500,000 population	1	1
1b: Number of basic EmOC facilities per 500,000 population	4	0
2: Proportion of all births in EmOC facility	To be set locally	27.0%
3: Met need for EmOC services	100%	35.6%
4: Caesarean sections as a proportion of all births	5-15%	11.3%
5: Direct obstetric case fatality rate in EmOC facility	<1%	3.1%
6: Intrapartum and very early neonatal death rate in EmOC facility	None set	not calculated*
7: Proportion of maternal deaths due to indirect causes in EmOC facility	Cannot be set	34%
*due to lack of distinction between fresh and macerated stillbirths		

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Doctors with Africa CUAMM is the largest Italian non-governmental organization working to improve the health of African populations.

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