

# Letters

Sir,

## Averting Maternal Deaths

Deborah Maine and her colleagues recently published a Research note in the International Journal of Gynecology and Obstetrics, in which she proposed a field-based methodology for estimating maternal deaths averted by using the UN process indicators on Emergency Obstetric Care (EmOC). The author thus showed a direct link between progress in programmes to progress in reducing the number of maternal deaths in a short period of time.<sup>1,2</sup>

I have adapted the table the authors used to estimate maternal deaths averted to the situation in the Southern region of Malawi in 2001. Table 1 shows facility data obtained from the health information system of the Safe Motherhood Project and available estimates. Deborah Maine and her colleagues focus on the met need for EmOC, and the case fatality rate (CFR) in EmOC health facilities to estimate maternal deaths averted.<sup>1,2</sup>

Met need is calculated using actual service data on women with serious, direct obstetric complications who are treated in health facilities (Table 1, row d). In our study we have included all public and mission health facilities offering maternity services even if they were not able to perform the full range of “signal functions”. The numerator is the number of women with complications treated and the denominator is the estimated number of women in the Southern region who need EmOC (row c). Met need for EmOC is shown in row (e). Row (f) shows the number of women with direct obstetric complications who are reported to have died in the facilities where they were treated and row (g) the CFR in these facilities.

Row (i) shows the estimated number of direct obstetric deaths in the Southern region and row (j) the deaths that occurred outside the facilities. Row (k) shows the number of women with complications who are outside the health facilities and row (l) the CFR outside health facilities, which is very high at 7.7%. Row (m) shows an estimated number of 1017 maternal deaths averted in the Southern region of Malawi in 2001 by treating women with complications in health facilities. With an estimated MMR of 1120/100,000 live births, 2543 maternal deaths would have been expected in the Southern region of Malawi. For the project to have averted 1017 of these deaths of precious women is a remarkable achievement.

More lives must be saved in the future by increasing skilled attendance at birth and ensuring access to basic and comprehensive EmOC, which will increase our met need for EmOC, and by improving the quality of obstetric care in our health facilities, which will decrease the Facility CFR.

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## References

1. Maine D, Paxton A, Bailey P, Patterson G. Estimating maternal deaths averted: A field-based methodology. International Journal of Gynecology and Obstetrics 2005; 89: 218-220.
2. UNICEF, WHO, UNFPA. Guidelines for monitoring the availability and use of obstetric services; 1997.

*Table Calculation of maternal deaths averted using facility data and available estimates*

Indicators	Malawi (2001)
a. Population of Southern Region	4,990,277
b. Expected births ( $a \times \text{crude birth rate}$ )	227,058 (if CBR = 45.5)
c. Expected complications ( $b \times 0.15$ )	34,059
d. Complications treated in EmOC facilities (actual)	15,768 (in all health facilities)
e. Met need for EmOC ( $d/c$ )	46%
f. Direct obstetric deaths in EmOC facilities (actual)	197 (63% of 312)
g. CFR (“Facility CFR”) ( $f/d$ )	1.25%
h. MMR (maternal deaths per 100,000 live births)	1120
i. Total direct obstetric deaths $0.63[b(h/100,000)]$	1602
j. Maternal deaths outside EmOC facilities ( $i-f$ )	1405
k. Expected complications outside EmOC facilities (Unmet need) ( $c-d$ )	18,291
l. CFR for women not treated in EmOC facilities (“CFR without EmOC”) ( $j/k$ )	7.7%
m. Deaths averted through EmOC $[(l \times d) - f]$	1214-197=1017