



STATS BRIEF

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BOTSWANA – MATERNAL MORTALITY RATIO (MMR) 2005 - 2007

This Stats Brief provides for the first time, information on Maternal Mortality Ratio (MMR) in Botswana. As part of a collaborative effort to enable and improve the availability and quality of maternal mortality information, Central Statistics Office through its Health Statistics Unit and Sexual and Reproductive Health Unit of the Ministry of Health, are jointly ensuring the availability of number of live births and maternal deaths data respectively.

Health Data Coverage

The high level of access to health services in Botswana, with 96% of Botswana population within 15 kilometer radius from the nearest health facility enabled the production of information for the provision of MMR. This coverage affirms surveys which showed that in Botswana, over 98% of deliveries have been assisted by skilled birth attendants, suggesting correct identification and classification of maternal death cases, as well as certification of

causes of maternal deaths. The special investigation system into identification of cases of maternal deaths done by the Ministry of Health further affirms the accuracy in the classification of maternal death cases. The health information system which covers administrative health records from referral hospitals in cities, district hospitals, clinics and health posts in rural areas to mobile clinics in remote areas around the Country, assures high coverage of reporting of births as shown by the less than 2 percent to less than one percent of the proportion of non institutional birth to institutional births respectively during the period.

Botswana Maternal Mortality Ratio for 2005 – 2007 is given on table 1. The MMR seem to have been fluctuating between 158 and 193 per 100 000 thousands live-births during the period. The improvement in reporting system should be considered as it may contribute to the increase in recorded maternal deaths.

Table 1: Botswana Maternal Mortality Ratio 2005 – 2007

	2005	2006	2007
Institutional live births	44 223	44, 050	42,149
Non-Institutional live births	753	302	247
Total Live Births	44, 976	44, 352	42,396
Maternal deaths	71	62	82
Maternal Mortality Ratio (per 100 000 live births)	157.9	139.79	193.41

Causes of maternal deaths summarized on table 2 below show that HIV related complication accounted for about 30 percent of total maternal death during 2005 and 2006 and dropped to 9.8 percent in 2007. Pregnancy, childbirth and the

puerperium accounted for about 38% during 2005 and 2006 and increased to 58% in 2007. Other diseases accounted for about 32 percent of all maternal deaths.

Table 2: Summary of Causes of Maternal Deaths

Major causes of Maternal Deaths	2005		2006		2007	
	Number	%	Number	%	Number	%
HIV related	21	29.6	19	30.6	8	9.8
Pregnancy, childbirth and puerperium	27	38.0	23	37.1	48	58.5
Other causes	23	32.4	20	32.3	26	31.7
Total	71	100.0	62	100.0	82	100.0

The age distribution show more maternal deaths (31%) among mothers of age group 30 – 34 during 2005; 32.3 % among 20 – 24 age group in 2006 and 29% among 25-29 age group in 2007.

Institutional Births

Institutional births data show that birth occurring in clinics account for about 20% of all health facilities (institutional) births. The average length of stay of patients in maternity clinics is less than a day (0.8 day). It should be noted that pregnancies with complications are referred to

hospitals for appropriate assistance during delivery.

Non –Institutional Births

Data on non institutional births show more births reported from Gantsi, Bobirwa, Mahalapye and Tutume Districts. The most affected mothers are those of age group 20 – 24 in these districts. The information does not include reasons for non institutional births as yet but will be shown in future reports.

MMR Definition: The following World Health Organisation (WHO) maternal death definitions were used for classification and calculation of MMR. The classification of causes of maternal deaths is also according to WHO International Classification of Diseases volume 10 (ICD 10).

<i>Maternal Death</i>	<i>A death of a woman while pregnant or within 42 days of termination of pregnancy, irrespective of the duration and the site of the pregnancy, from any cause related to or aggravated by the pregnancy or its management but not from accidental or incidental causes.</i>
<i>Direct Maternal Death</i>	<i>A death resulting from complications of pregnancy, labour or delivery or their management</i>
<i>Indirect Maternal Death</i>	<i>A death in which pregnancy exacerbated a preexisting health problem</i>
<i>Non-Maternal Death</i>	<i>A death that occurred during pregnancy or within 42 days of termination of pregnancy, but was considered unrelated to pregnancy (e.g. due to injury, homicide, or suicide).</i>
<i>Maternal Mortality ratio (Commonly abbreviated as MMR)</i>	<i>Number of maternal deaths during a given period per 100 000 live births during the same time-period.</i>
<i>Maternal Mortality Rate (Commonly abbreviated as MMRate)</i>	<i>Number of maternal deaths in a given period per 100 000 women of reproductive age during the same time-period.</i>



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