

ABSTRACT

Background: Reducing maternal mortality is a global health priority. The World Health Organization's Sustainable Development Goals (SDGs) have set all countries a target of reducing the maternal mortality ratio (MMR) to below 70 per 100 000 live births by 2030. This study aimed to calculate the MMR for the Greater Harare Maternity Unit (GHMU), identify hospital-specific trends in the MMR over time, determine immediate and underlying causes for maternal deaths, and assess the occurrence and value of post-mortems.

Methods: A retrospective record review of all maternal deaths in the GHMU from January 2013 to December 2018 was undertaken. It involved two central hospitals and referral units in the district. Maternal characteristics associated with death and causes of maternal death were evaluated.

Results: A total of 377 deaths were recorded. The GHMU MMR (95% confidence intervals) was 137 (107, 173) per 100 000 live births in 2013, peaked at 168 (133, 211) in 2017 before decreasing to 103 (77, 136) in 2018. Hypertensive disorders were the most common cause of death (21.0%), followed by obstetric haemorrhage (19.6%), pregnancy with abortive outcomes (18.8%) and non-obstetric complications (18.6%). The MMR for Sally Mugabe Central Hospital (SMCH) declined from 334 (280, 396) in the first triennium (2013-2015) to 295 (247, 349) in the second triennium (2016-2018). The MMR at Parirenyatwa Central Hospital increased from 150 (108, 202) to 290 (221, 373) during the first triennium and from 123 (106, 142) to 138 (119, 158) over the entire six-year period. Differences in maternal death patterns at the two hospitals were significantly associated with religious affiliation, level of education, parity and the number of antenatal visits. The majority of the GHMU deaths (85%) had post-mortems conducted. About three-quarter (77%) of the post-mortems done at SMCH had a diagnosis identical to the clinical diagnosis, whilst a further 18% had a similar cause of death.

Conclusion: The MMR in the GHMU, and the iMMR at both SMCH and PCH, are high and not dissimilar to those in other low-resourced settings. The primary causes of maternal mortality are also similar to these settings. The clinically assigned cause

of death did not differ much from the post-mortem established cause of death in most instances. Sizeable changes are needed to attain the 2030 SDG MMR target.

Keywords: maternal mortality, Greater Harare Maternity Unit, Zimbabwe