

Predictors of maternal mortality in severe preeclampsia, Mpilo Central Hospital, Bulawayo, Zimbabwe.

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Objective: The objective of the study was to determine predictors of maternal mortality amongst women who had severe preeclampsia. **Design:** Institution-based, retrospective cross-sectional study. **Method:** The main study covered the period from January 1, 2016 to December 31, 2018. The Ethics Committee approved the study. A maternal death was defined as death of a pregnant woman who died from complications of severe preeclampsia within 42 days post-delivery. Women were included in this study if they had a diagnosis of severe preeclampsia after 20 weeks of gestation. Severe preeclampsia was defined as systolic blood pressure ≥ 160 mmHg, diastolic blood pressure ≥ 110 mmHg and/or abnormal biochemical or haematological blood indices. The data included the socio-demographic information, maternal signs and symptoms, maternal complications, and maternal mortality using a paper data tool from hospital records. The main outcome measures were predictors of maternal mortality. The data were cleaned, coded and entered into a Microsoft Excel Inc. spreadsheet, then exported to SPSS Version 20 for analysis. Univariable logistic regression was performed between the independent variables and the dependent variable, with the Hosmer-Lemeshow goodness of fit, and 95% confidence interval used to calculate Odds Ratios. Those variables that had a p -value < 0.2 from the univariable logistic regression were considered for multivariable logistic regression to identify predictors of maternal mortality. A p -value < 0.05 was taken as statistically significant. **Results:** There were 549 women available for analysis. Women who had a prior history of a hypertensive disorder in pregnancy were 2 times more likely to die compared to women without a prior history (AOR 2.30, 95% CI 1.23-4.31, $p=0.01$). Mothers who had renal failure were 8 times more likely to be associated with maternal mortality compared to those mothers who had no renal failure (AOR 8.23, 95% CI 1.39-48.76, $p=0.001$). Women who had hepatic rupture were 13 times more likely to be associated with maternal mortality compared to mothers who did not suffer hepatic rupture (AOR 13.53, 95% CI 1.55-111.34, $p<0.0001$). **Conclusions:** The predictors of maternal mortality were women that had a prior history of hypertensive disorders in pregnancy, women who had renal failure, and women who had hepatic rupture.