

## **Abstract**

### **Background**

Hypertensive disorders of pregnancy (HDP) are leading causes of maternal mortality worldwide. In South Africa (SA) they account for the second most important cause of maternal mortality. Despite its prevalence and devastating consequences, no progress has been made in reducing deaths due to HDP during the last decade.

### **Objectives**

The aim of this research study is to describe maternal deaths due to complications arising from HDP, in a tertiary hospital, specifically looking at maternal characteristics, management, timing, causes and avoidable factors.

### **Methods**

This is a retrospective cross-sectional study involving a review of patient records at Charlotte Maxeke Johannesburg Academic Hospital (CMJAH) between January 2015 and December 2018. Patient files were retrieved from records, captured onto an Excel Spreadsheet and analysed using basic statistics.

### **Results**

Patients that died were young, booked early and attended antenatal care. Few patients had risk factors for HDP but aspirin prophylaxis was not given. Antihypertensive treatment as well as Magnesium Sulphate (MgSO<sub>4</sub>) was often not initiated appropriately. Eclampsia was the most common cause of death and 87% of patients died in the post-partum period.

### **Conclusions**

Early, quality antenatal care, early detection of disease, referral to the appropriate level of care and adequate treatment as well as timely delivery is necessary to reduce maternal deaths due to HDP. Large scale studies are needed to identify specific quality of care issues at all levels of care in order to implement measures to improve the outcomes.

**Key words**

Eclampsia, Maternal morbidity, Maternal mortality, Pre-eclampsia