

ABSTRACT

Background:

Trauma is one of the leading causes of morbidity and mortality in pregnancy and remains the most common cause of fetal mortality worldwide. The severity of injury as well as early and aggressive management of injuries are significant factors that determine maternal and fetal outcomes.

Objectives:

The aim of this study was to describe the characteristics, mechanisms of injury, clinical interventions performed as well as maternal and fetal outcomes of obstetric trauma admissions to our institution.

Methods:

This was a retrospective review of data of all pregnant patients admitted to Chris Hani Baragwanath Academic Hospital from 01 January 2015 to 31 December 2019 with trauma. Patients were identified from admission registries from the departments of obstetrics and gynaecology, emergency medicine, general surgery, orthopaedics and intensive care. Data collected included demographic data, mechanisms of injury, clinical interventions, as well as maternal and fetal outcomes.

Results:

Data of 800 patients was included in the study during the five-year period. The median age and gestational ages were 31.00 years and 26.00 weeks respectively. The majority of pregnant trauma patients self-identified as black Africans (n= 713; 89.1%). Five hundred and sixty-two patients were of single marital status (70.3%) and 484 identified as unemployed (60.5%). Assaults were the most frequent cause of trauma (n= 330; 41.3%), followed by falls (n= 265; 33.1%) and motor vehicle accidents (n= 204; 25.5%). Hundred and forty-one patients (18.0%) were documented to have consumed alcohol on the day of the injury. Four patients (0.5%) were admitted to ICU, of these one died in ICU. Ten fetal deaths were recorded, of these three were delivered by patients admitted to ICU. Eleven neonates were delivered before 37 weeks.

Conclusion:

Trauma in pregnancy is associated with significant morbidity and negative pregnancy outcomes. We identified unemployed pregnant patients of single marital status as being at increased risk of obstetric trauma. Assaults followed by falls and motor vehicle accidents were the commonest

causes of maternal trauma in our population. The implementation of strategies aimed at detecting and preventing intimate partner violence as well as road safety may contribute significantly to a reduction of maternal and fetal mortality.