

## **Abstract**

### **Background**

South Africa has an increasing caesarean delivery (CD) rate and as such anaesthesia for CD has become a fundamental skill for all levels of anaesthetists. The Essential Steps in the Management of Obstetric Emergencies (ESMOE) guidelines provide a framework for practitioners with specific focus on dosage in neuraxial anaesthesia, perioperative fluids and management of hypotension.

### **Aims**

The aim of this study was to describe the current practices of anaesthesia for patients requiring CD, including the management practices of common complications, within the University of the Witwatersrand Department of Anaesthesiology.

### **Methods**

A prospective, contextual and descriptive study design was followed using an anonymous, self-administered online questionnaire. Descriptive statistics were used to assess adherence to guidelines and comparison made between senior and junior anaesthetist's practices.

### **Results**

Junior anaesthetists performed significantly more CD anaesthetics per month and had more training in ESMOE guidelines compared to senior anaesthetists. Senior anaesthetists were more likely to use a higher dose of bupivacaine. Phenylephrine as a first line anti-hypotensive agent was used by 99.4% of participants. The considered safe minimum platelet count for spinal anaesthesia was  $75 \times 10^9/l$  by 61.3% of participants. A significant difference between junior and senior anaesthetists was found where senior anaesthetists were more likely to accept a lower platelet count. A sensory level post administration of spinal anaesthetic was assessed by all participants with 53.1% using an ice brick and 35.0% requesting the surgeon to pinch the patient.

### **Conclusion**

In the Witwatersrand Department of Anaesthesiology anaesthetists do follow the ESMOE guidelines of clinical practice for CD. While there are some differences in practice approaches, these were found to be within internationally accepted practice. There would be a benefit of improved awareness of the ESMOE guidelines within the department as well as further training on the different approaches to CD anaesthesia.