

Background: Sepsis in the obstetric population is a significant problem in South Africa and around the world, accounting for 11% of maternal deaths annually. Early identification of sepsis in pregnancy is challenging and there is a need to validate early warning scores and biomarkers that could potentially be used to detect sepsis. The quick Sepsis Related Organ Failure Assessment (qSOFA) score has not yet been validated in the obstetric population and normal reference ranges for Procalcitonin (PCT) have yet to be determined for obstetric patients.

Aim: We designed a prospective study to correlate PCT levels and the qSOFA score in 100 high risk obstetric patients admitted to labour ward high care at Chris Hani Baragwanath Academic Hospital (CHBAH).

Results: A significant (p value <0.001), positive correlation was found between PCT and qSOFA scores, all patients in the study scored in the same category for PCT and the qSOFA score.

Discussion: PCT levels below 0.5 ng/mL correlated significantly with a qSOFA score of 0 and these patients were unlikely to have bacterial sepsis.

Conclusion: Our data indicates the potential utility of the qSOFA score to predict PCT levels in the obstetric population studied. This may be especially useful outside of the ICU setting where PCT testing may not be available, as the qSOFA score can be easily and repeatedly calculated by clinicians, at the bedside. This simple scoring system can prompt the clinician to rapidly identify those patients who may need additional investigations like PCT levels and possible escalation to a higher level of care. This can help curb potential morbidity and mortality from sepsis.