PREVALENCE, FACTORS ASSOCIATED, AND ADVERSE MATERNAL OUTCOMES OF SPINAL INDUCED HYPOTENSION AMONG MOTHERS UNDERGOING CAESAREAN SECTION AT MBARARA REGIONAL REFERRAL HOSPITAL

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ABSTRACT

Background:

Hypotension after spinal anesthesia for caesarean section remains common and is a serious complication which may lead to serious outcomes like cardiac arrest, morbidity and mortality.

Objectives: The study aimed to determine the prevalence, factors associated, and adverse maternal outcomes of spinal-induced hypotension following caesarean section at Mbarara Regional Referral Hospital**.**

Methods: A hospital based cross-sectional study at Mbarara Regional Referral Hospital for the period of August 2022 to October 2022 was conducted on 394 mothers who underwent spinal anaesthesia during caesarean section. Systematic random sampling was used where we enrolled each second woman who had been delivered by caesarean section under spinal anaesthesia. Participant socio-demographic, baseline clinical, obstetric characteristics, intraoperative data and anaesthetic characteristics were obtained from the participant's medical record. The prevalence of spinal-induced hypotension was the proportion of women with spinal-induced hypotension. Logistic regression analysis was used to determine the factors associated with spinal-induced hypotension. The adverse maternal outcomes of spinal-induced hypotension were reported as proportions and frequencies.

Results: Participants had a mean age of 26.71±5.7 years and most women were multigravid (II-IV). The prevalence of spinal-induced hypotension was 67.5% (95% CI 62.7-71.9). At multivariable logistic regression, having a spinal block height proximal to T6 [aOR 1.92 95% C.I (1.09-3.39), p= 0.024] , being given intrathecal bupivacaine dose above 10mg [aOR 1.74 95% C.I (1.04-2.89), p=0.034], emergency caesarean section [aOR 2.32 95% C.I (1.20-4.46), p=0.012], and not receiving a prophylactic vasopressor [aOR 1.66 95% C.I (1.02-2.68), p=0.039]were independently associated with Spinal-induced hypotension. Seven of our participants got high spinal.

Conclusion: The prevalence of spinal-induced hypotension among mothers undergoing caesarean section at MRRH is high. We recommend routine administration of prophylactic vasopressor during all caesarean sections and clinicians to recognize these factors associated with spinal induced hypotension.