Abstract
One of the most common side effects of spinal anesthesia is the development of hypotension. Data collected has determined that 80% of parturients that undergo spinal anesthesia for this mode of delivery experience hypotension (Chestnut et al., 2014). Hypotension, if sustained and severe, can lead to fetal hypoxia, neonatal depression or injury, and decreased uteroplacental perfusion. Hypotension can also cause severe health issues for the parturient including apnea, altered level of consciousness, cardiac arrest, and pulmonary aspiration. This systematic review of the literature was conducted to determine whether the administration of phenylephrine or ephedrine was safer for the neonate to administer to a hypotensive parturient during cesarean delivery while undergoing a spinal anesthetic. Inclusion criteria included parturients that were classified as an American Society of Anesthesiologists physical status score of II that experienced hypotension after undergoing spinal anesthesia for elective cesarean section. Exclusion criteria included any parturient classified as an ASA physical status score > 2, any cesarean section classified as emergent, or those parturients that received an epidural as the method of anesthesia for elective cesarean section. A systematic review of the literature was performed and the results of randomized control trials and other studies were analyzed that measured neonatal outcomes following the administration of ephedrine and phenylephrine to the hypotensive parturient. The results of these studies were disseminated and the conclusions reached were implemented into a white paper change proposal.