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Introduction: There has been a paradigm shift in obstetric analgesic practice. Previous focus on simple analgesia for labor has evolved into Methods aimed at minimizing unwanted side effects and improving outcomes. Our previous study has suggested the hallmarks of quality neuraxial analgesia (QNA).[1] This study, done as a part of item generation for tool development, provides additional insight into previous findings.

Methods: Following REB approval, experts (senior anesthesiologists from SOAP, experienced labor and delivery nurses) and parturients participated in an item generation study as a part of instrument development. Parturients in this study generated no new items. Experts generated an additional 13 items to produce a 49 item questionnaire. Each item was rated on a 11 point scale ranging from 0-10. Trained interviewers administered the questionnaire and were not involved in the patient's care. Relationships between parturients experiences of QNA and factors contributing to it were explored using Pearson's correlations

Results: 30 eligible parturients completed the 49 item questionnaire and were of mixed parity, race, social background and delivery mode. Parturients delivered within 72 hours of the interview time. All had received epidural analgesia without a spinal component maintained by infusion with PCEA of either bupivicaine or ropivicaine (0.08%) with 2 mcg/ml fentanyl, 18/30 were primiparous, 20/30 delivered vaginally (6 low-mid forceps or vacuum). Epidural initiation was at a mean (SD) cervical dilatation of 3 cm ± 1.6 cm.

From preliminary analysis quality neuraxial analgesia and the following factors were positively correlated: overall pain relief (r =0.674, p<0.001), overall ability to prevent breakthrough pain (r= 0.589, p=0.001), overall ability to cope (r=0.755, p<0.001), overall ability to focus (r=0.666, p<0.001), ability to relax (r = 0.804, p<0.001), ability to relate to others (r= 0.468, p=0.009), self control (r=0.394, p=0.030) and the overall ability to enjoy the birth (r =0.659, p<0.001). Amount of distress experienced while trying to prevent pain breakthrough (r= -0.615, p<0.001) and overall distress from pain (r= -0.792, p<0.001) were negatively correlated with QNA. Correlations were not demonstrated between QNA and speed of onset of pain relief (r= 0.058, p=0.763), the ability to participate in the birth (r =0.175, p=0.355), satisfaction with the birth (r= 0.361,p=0.05), overall fear (r= -0.161, p=0.396), inability to spontaneously urinate (r= -0.120, p= 0.529), heavy legs (r=0.043, p= 0.820), numbness (r=0.218, p= 0.248) or itching (r= -0.204, p= 0.279).

Discussion: Our findings describe factors associated with positive or negative QNA as well as the impact of high or low quality QNA on women’s perspectives and experiences during childbirth. Study findings have implications for both tool development and clinical care.