Maternal Perception of Using Epidural Anesthesia and the Childbirth Outcomes

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Abstract: Labor pain is one of the most common concerns of pregnant women, thus women are in need of possible options they could take to control the pain. So, this study aimed to explore maternal perception of epidural anesthesia and to compare the childbirth outcomes according to the use of epidural anesthesia. For this descriptive study, women who were over 36 weeks of pregnancy were recruited from an out-patient obstetric clinic in a public hospital in Seoul. Women were included in the study if agreed to participate, were pregnant singleton, without pregnancy complication, and expecting a natural birth. Data collection was done twice, the first one at the prenatal care visit and the second one at an in-patient ward on 2nd day postpartum. The instrument of the beliefs about epidural anesthesia, one item of asking intention to use epidural anesthesia, demographics, and obstetrical characteristics were incorporated into a questionnaire. One nurse researcher performed data collection with the structured questionnaire after the approval of the institutional review board. At the initial data collection 133 women were included, while 117 were retained at the second point after excluded 13 women due to the occurrence of complications. Analyses were done by chi-square, t-test, and ANOVA using the SPSS program. Women were aged 32.5 years old, 22.2% were over 35 years old. The average gestational age was 38.5 weeks, and 67.5% were nulliparous. Out of 38 multiparous women, 20 women (52.6%) had received epidural anesthesia in the previous delivery. At the initial interview, 62.6% (n=73) of women wanted to receive epidural anesthesia while 22.4% answered not decided and 15.4% did not want to take the procedure. However, there were changes in proportions between women's intention to take it and actual procedures done, particularly, two-thirds of women (n=26) who had been undecided were found to receive epidural anesthesia during labor. There was a significant difference in the perception of epidural anesthesia measured before delivery between women who received and not received it (t=3.68, p < .001). Delivery outcomes were statistically different between the two groups in delivery mode (chi-square=8.64, p=.01), O₂ supply during labor (chi-square =5.01, p=.03), duration of 2nd stage of labor (t=3.70, p < .001), and arterial cord blood pH (t=2.64, p=.01). Interestingly, there was no difference in labor pain perceived between women with and without epidural anesthesia. Considering the preference and use of epidural anesthesia, health professionals need to assess coping ability of women undergoing delivery and to provide accurate information about pain control to support their decision making and eventually to enhance delivery outcomes for mothers and neonates.

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