The effects of sleep quality and duration in late pregnancy on labor and fetal outcome.

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Abstract

BACKGROUND: Sleep disturbance is common during pregnancy. The aim of this study was to assess the effects of sleep duration and its quality on labor and fetal outcome.

METHOD: In a cross sectional study, primiparous women with singleton pregnancy (gestational age > 37 weeks) were recruited. Women with hypertension, diabetes mellitus, or those who needed emergency cesarean section were excluded. Data regarding the type and length of delivery, the quality of sleep as well as the neonates' weight and Apgar scores were recorded.

RESULTS: Totally, 457 participants were recruited. There was a significant correlation between the sleep duration and length of delivery stages. In most participants with more than 8 hours sleep, the first stage of delivery lasted between 6 and 10 hours. They had normal vaginal delivery with induction, and their neonates' Apgar score was > 9 (p = 0.029, p = 0.018, and p = 0.001, respectively). Most mothers with refreshing sleep had normal vaginal delivery with induction, their neonates weighted ≥ 2500 g and with Apgar score > 9 (p = 0.010, p < 0.001, and p = 0.005 respectively).

CONCLUSION: Sleep duration and quality of sleep can affect the type of delivery, length of labor stages, as well as neonates' Apgar score and birth weight. Such predictors of labor and fetal outcome should be assessed during prenatal evaluations.

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