

Original Paper

Relationship between third tri-mester maternal body mass index with maternal and neonatal complications

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Abstract

Background and Objective: Overweight, obesity and ethnicity are effective factors on pregnancy complications. This study was conducted to determine the relationship between third tri-mester body mass index (BMI) with maternal and neonatal complications.

Methods: This descriptive analytic study was conducted on 551 pregnant women in third tri-mester with Fars, Sistani and Turkman ethnicities in Sayad Shirazi teaching hospital in Gorgan, north of Iran during 2012. BMI calculated at the time of labor admission and the subjects categorized into three groups of normal / underweight, overweight and obese.

Results: The mean of maternal age among Fars, Sistani and Turkman ethnic groups were 26.5±5.5, 24.6±5.3 and 26.2±5.2 years, respectively. The mean of gestational age among Fars, Sistani and Turkman ethnic groups were 38.4±2.3, 38.6±2.3 and 37.4±3.2 weeks, respectively. A significant relationship was found between BMI and cesarean section and labor dystocia in Fars and Sistani ethnic groups, respectively (P<0.05), while no relationship was found between BMI and neonatal complications.

Conclusion: Overweight and obesity in Fars ethnicity are at risk of cesarean section and those with Sistani ethnicity are at risk of labor dystocia.

Keywords: Pregnancy, Body Mass Index, Labor dystocia, Cesarean section, Ethnicity

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