
Prevalence of abnormal maternal body mass index and its association with adverse maternal and prenatal outcomes

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OBJECTIVE AND AIMS: women with abnormal body mass index before pregnancy are at increased risk for pregnancy complications and adverse neonatal outcomes. The present study aimed to determine association between abnormal maternal body mass index and adverse maternal/ prenatal outcomes

Methods: In a retrospective correlational study 8270 pregnant women referred to rural and urban health centers of Ardabil district (from Mar 2009 to Dec 2010) were selected. Data were collected from prenatal healthcare records using a self designed questionnaire. Women with twin pregnancy, fewer than 18 and above 35 of age, and women with systemic or chronic disease were excluded from the study. The variables examined in this study include, demographic information (e.g. age, social and economy status, and literacy), present pregnancy information (e.g. parity, hemoglobin level, Gestational diabetes, Preeclampsia) and prenatal information (e.g. preterm delivery, low birth weight, and congenital malformation). Data were analyzed through Kruskal wallis, chi-square, and logistic regression using SPSS version 16.

RESULTS: There was significant difference in the overall mean time to first void between the reflexology ($257/23 \pm 59/76$ minutes) and control ($498/03 \pm 75/10$ minutes) groups ($p=0/001$). The time to first void did not correlate with intravenous fluid use, length of procedure, body mass index, age, or estimated blood loss. There was significant difference in the overall mean volume of first void between the reflexology ($165/66 \pm 36/45$ ml) and control ($406/45 \pm 88/56$ ml) groups ($p<0/001$).

CONCLUSION: 8.2, 25 and 15.4 % pregnant women were underweight, overweight, and obese, respectively. Obese women were at increased risk for macrosomia (OR= 1/820, CI: 1/345-2/447, $p=0/000$), unwanted pregnancy (OR= 1/436, CI: 1/198-1/720, $p=0/000$), pregnancy induced hypertension (OR= 1/633, CI: 1/072-2/486, $p=0/022$), preeclampsia (OR= 4/666, CI: 2/353-9/2550, $p=0/000$), and still birth (OR= 2/602, CI: 1/306-5/184, $p=0/007$). However, the risk of low birth weight delivery in underweight women were 1.6 times higher than the normal cases (OR= 1/674, CI: 0/962-2/912, $p=0/068$).

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