

# Parity and its relation with upper body fat in women

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## Abstract

Age, education and parity are interrelated with energy equation and body weight in women, however independent relation of parity with weight and fat distribution is not clear. In this cross sectional study, the relation of parity and level of education were investigated with body mass index (BMI) and waist to hip ratio (WHR) among 403 Iranian women, between 22-45 years old. Findings revealed, by controlling the age, women with higher education (12 years $\geq$ ) in compare with women with lower level of education (12 years $<$ ) had lower BMI ( $24.8\pm4.3$  vs.  $28.3\pm4.9$ ,  $P<0.01$ ), Lower WHR ( $0.83\pm0.06$  vs.  $0.88\pm0.08$ ,  $P<0.01$ ) and Lower Parity ( $0.19\pm0.59$  vs.  $0.59\pm1.03$ ,  $P>0.01$ ). Any significant relation was not observed between parity and body mass index by controlling the age and education, however there was significant relation between parity and WHR by controlling age, education and body mass index ( $P<0.005$ ,  $r=0.14$ ). In multiple regression analysis also, age and education explained 43% of BMI variation and parity, BMI and education explained 51.2% of WHR variation.

Present study indicated that high parity might be as a risk factor in increasing upper body fat, while it was not related to body mass index after controlling the age and education.

**Keywords:** Parity, Education, Body Mass Index and Waist to Hip Ratio.

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