Investigating Anthropometric Indices of Termed Newborns in Torbat Heydarieh as compared to the global Standards within 2017-2018

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Abstract

Background & Aim: The study of anthropometric measurements at birth leads to the identification of neonates with abnormal intrauterine growths and provides desirable care for the neonates who are at risk of postpartum complications. This study aimed to determine the anthropometric measurements among full term neonates in Torbat Heydariyeh city compared to the global standards reported by the World Health Organization and the Center for Disease Control within 2017-2018.

Methods: In this cross sectional study, a number of 200 healthy full term born the 9-Day Teaching Hospital of Torbat Heydariyeh were evaluated. Maternal fundal height and abdominal circumference before birth and neonates' anthropometric parameters such as birth weights, crown-heel length, head and chest circumferences were taken within 24 hours of birth using standard techniques. Data analysis was performed using Statistical Package for Social Sciences version 16.0.

Results: Based on the findings, the female birth weight mean was lower than the average of WHO and CDC. In males, the mean weight was significantly less than the 50th CDC percentile (p=0.001). Inconsistently, the average height of male and female neonates were significantly higher than the WHO and CDC values (P<0.05). The males and females head circumference mean did not differ from the WHO values (p>0.05), but it was significantly less than CDC values (p=0.001). There was a positive correlation between all anthropometric measurements with gestational age, fundal height and maternal abdominal circumference (p <0.05). The mean distance from the previous birth was inversely related to the height (p=0.021) and head circumference (p=0.037) of the neonates.

Conclusion: The males and females birth weight and head circumference mean was lower from the values reported by CDC and the female birth weight mean and the males and females head circumference mean was lower from the values reported by WHO. Further studies are suggested to be performed in other regions of the country to assess other probable factors associated with these indicators.