

Investigation of the prevalence of thyroid disorders in pregnant women referring to health centers in Ardabil city in the first 6 months of 2019

Abstract

Background: In Iran, thyroid diseases are very common, especially in women. Women who suffer from severe hypothyroidism or hyperthyroidism face infertility, frequent miscarriages and adverse pregnancy complications.

Aim: To determine the prevalence of thyroid disorders in pregnant women referring to health centers in Ardabil city in the first half of 2019.

Materials and Methods: This cross-sectional study was conducted based on census during the first 6 months of 2019. The participants were all pregnant mothers who referred to the health and treatment centers of Ardabil city during the same period of time, when they the first pregnancy visit. TSH levels of mothers were extracted through the Sib system. Based on a predetermined questionnaire, mothers' demographic information (age, education, occupation, BMI) and pregnancy information (gestational age, gravidity, parity, miscarriage, live births, death) were extracted from the mother's file through this system and for each Pregnant mother information completed. The data of thyroid disorders were analyzed according to the Harrison reference and the instructions of the Ministry of Health. The information was entered into SPSS software version 25 and descriptive statistics were used, and the chi-square test was used to compare the frequency of variables.

Results: The total number of pregnant mothers studied was 6108. According to Harrison's reference, 2547 people (41.7%) had hypothyroid and 71 people (1.2%) had hyperthyroid mothers. According to the reference of the Ministry of Health, 1135 people (18.6 %) had hypothyroid mothers and 71 people (1.2 %) had hyperthyroid. Hypothyroidism had a significant relationship with age ($P<0.001$), education ($P<0.001$), occupation ($P<0.001$), BMI ($P=0.036$), number of pregnancies ($P<0.001$), number of deliveries ($P<0.001$) and the number of abortions ($P<0.001$) so that with the increase in BMI, the number of pregnancies, the number of births and abortions, the prevalence of hypothyroidism increased, as well as hyperthyroidism had a significant relationship with age and type of job.

Conclusion: The prevalence of hypothyroidism in referred pregnant women to health centers in Ardabil city in the first 6 months of 2019 according to Harrison's reference is 41.7% and the Ministry of Health is 18.6% and the prevalence of hyperthyroidism is 1.2 % according to Harrison's reference and the Ministry of Health. Accurate screening of TSH is necessary for pregnant women, especially in women with low education, high gravidity, a history of abortion, and old age.

Keywords: thyroid disorders, pregnancy, hypothyroidism, hyperthyroidism, Ardabil