Title:
Prevalence of iron deficiency anemia and its complications in pregnant women referred to medical-health centers in Semnan

Author(s):
Nahid Rahbar, Raheb Gorbani, Fariba Rezaei Ahvanei

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Abstract:
Introduction: Iron deficiency anemia in pregnancy has adverse effects on pregnant women, fetus and neonate. With regard to the high prevalence of iron deficiency anemia, this study was performed with the aim to evaluate the frequency of iron deficiency anemia in pregnant women at the beginning and end of pregnancy and also its effect on the mother, fetus and infant.

Methods: This cross-sectional study was performed on 546 pregnant women who referred to all clinics and clinics of gynecologists in Semnan from 2007 to 2010. CBC and serum ferritin were performed for all the patients. Hemoglobin level less than 11 gr/dL accompanied by mild to severe reduced iron stores was defined as iron deficiency anemia. Test results and demographic data were recorded in the questionnaire and the Fisher exact test, chi-square and t-test at 5% significance level were used.
Results: iron deficiency anemia was observed at the beginning of pregnancy in 169 women (31%) and at 36th week of pregnancy in 86 (27.2%). statistically significant relation was found between iron deficiency anemia At the beginning of pregnancy with maternal parity (P<0.001) • infection during pregnancy (P=0.009) • and IUFD (P=0.002) • but at 36th week of pregnancy • none of the variables had significant relation (P>0.05). Weight of preterm (P=0.008) and term neonates (P=0.001) was lower in iron deficiency anemic patients at the beginning of pregnancy.

Conclusions: Iron deficiency anemia has high prevalence in Semnan and has noticeable adverse effects on pregnancy outcomes • so it is suggested to introduce diagnostic and therapeutic protocols based on regional policies in accordance with the prevalence of iron deficiency anemia in order to take necessary steps towards improvement of maternal and neonatal health.

Keywords:
Anemia; Iron deficiency; Pregnancy complications