

## ICCN Poster Presentations

### Clinical nutrition: diagnosis and management

#### **Assessment of serum iron and iron deficiency anaemia in sample of pregnant woman at delivery in Iran**

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**Objective:** Iron-deficiency anaemia (IDA) is a public health problem in the developing and even industrialized countries. Pregnant women and children under 5 years of age are among the high-risk populations. Our main objective in this study was to obtain the prevalence of anaemia and IDA at the end of pregnancy.

**Design and Methods:** We analyzed the blood of 378 pregnant mothers in the labor room in Hamadan (west of Iran) hospitals. Haemoglobin concentration (Hb), red blood cells count (RBC), serum iron (SI), total iron binding capacity (TIBC), transferin saturation, SI/TIBC $\times$ 100, and serum ferritin and other haematological indexes were analyzed. Then a questionnaire for epidemiological data, level of education, etc was filled out through interview.

**Results:** The mean values of haematological indexes were as follows: Hb 13.35 $\pm$ 1.36 g/dl; mean corpuscular haemoglobin concentration 32.38  $\pm$  1.45%; mean corpuscular volume 90.3  $\pm$  7.09 fl; mean corpuscular haemoglobin 29.36  $\pm$  2.78 pg; transferin saturation 20.4  $\pm$  9.5 % and serum ferritin 41.74  $\pm$  32.51 ng/ml. Four point eight per cent (18 out of 378) of the mothers were anemic at the time of the study according to low serum hemoglobin (Hb <11 g/dl); 12.2% (46 out of 378) of the subjects had low serum ferritin (SF <12 ng/ml); 11.4% (43 out of 378) were Iron-deficient and 2.4% (9 out of 378) of the mothers had iron deficiency anaemia .

**Conclusions:** The prevalence of IDA was 2.4%, which is not the same as the prevalence found in other areas of Iran and Asia. It was concluded that the prevention programs for Iron-deficiency anaemia in Hamedan have been successful for pregnant women.