**“Study of iron status in female medical students”**

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**ABSTRACT:**

**Introduction:** Nutritional anaemia most commonly affects young females due to increased demands, inadequate and improper dietary habbits and menstrual loss, so this study was undertaken in 358 female medical students of age group 17-22 years to assess their iron status.

**Methods:** Blood samples were processed for haemoglobin, Mean corpuscular volume-MCV, Mean corpuscular haemoglobin- MCH, and mean corpuscular haemoglobin concentration-MCHC,Serum iron, total iron binding capacity- TIBC and serum Ferritin.. Transferrin saturation was calculated from the data of serum iron and TIBC. Peripheral smears were studied for RBC morphology. Statistical analysis was done by unpaired t test taking p<0.05 into consideration. The subjects having haemoglobin <12gm% were labeled as anaemic as per WHO cut-off values, those having anaemia with MCV< 78cuµ, transferrinne saturation <16% serum ferritin < 12ngm/ml and microcytic hypochromic RBCs on peripheral smear were labelled as Iron deficiency anaemia and those with Haemoglobin ≥ 12gm%, MCV> 78cuµ, transferrine saturation <16%, ferritin <12ngm/ml and normocytic normochromic RBCs on peripheral smear were categorized as having Latent anaemia.

**Results:** The overall prevalence of anaemia was 22.90%, prevalence of iron deficiency anaemia (IDA) was 18.58 %, that of Latent anaemia (LA) was 16.51% and 5.30% belonged to other anaemias. Normal iron status was seen in 66.75%.

**Conclusion:** Anaemia is mostly due to iron deficiency and is also seen in urban and educated young females.

**Key words :**  haemoglobin,, transferrine saturation, ferritin.

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