FREQUENCY OF LOW HEMATIMETRIC LEVELS IN ROUTINE LABORATORY BLOOD COUNTS

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Background: Anemia, the most common blood disorder, is a condition in which there is a reduced number of red blood cells or the hemoglobin concentration within the red blood cells is lower than normal. Globally, anemia affects 1.62 billion people, which corresponds to 24.8% of the population. WHO estimates that 42% of children less than 5 years of age and 40% of pregnant women worldwide are anaemic and the lowest prevalence is in men (12.7%). **Aim:** To evaluate the frequency of anemia in blood tests performed in a clinical analysis laboratory from Brazil. **Method:** We analyzed retrospectively hemogram data blood counts performed in the AFIP laboratory, during the period of November and December 2018.**Results:** 604201 hemograms were analyzed, of which 113106 (18.7%) had Hemoglobin (Hb) less than or equal to 11.5 g / dL (59.90% women and 40.10% men). Most of the samples (40.5%) with Hb less than or equal to 11.5 g / dL were between 19 and 59 years old, being 68.6% female. The mean and standard deviation were: RBC 3.32 ± 0.63x10^9/L; Hb 9.35 ± 1.48 g/L; Ht 29.35 ± 4.69%; MCH 28.44 ±3.22 pg; MCV 89.02 ±7.63 ±fl; MCHC 31.90±2.16 g/L, RDW 14.91 ±2.63%.**Discussion:** Anemia affects a large part of the world population and contributes to increased morbidity and mortality, impaired neurological development, decreased work productivity and socio-economic impact. In the present study, a reduction in hematimetric levels was observed in adults than in children and adolescents, but this fact can be attributed to the profile of the studied population. There was a higher frequency of anemia in women and normocytosis as described in the literature. Understanding anemia's varied and complex etiology is crucial for developing effective interventions that address the context-specific causes of anemia and for monitoring anemia control programs. **Conclusions:** Further research is needed to explore the role of nutritional deficiencies, the contribution of chronic disease, as well as the importance of genetic hemoglobin disorders in certain populations.