

Identifying risk factors and treatment approaches for iron deficiency anaemia: A cross-sectional study at Hospital Sultan Idris Shah, Serdang

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ABSTRACT

Introduction: Iron deficiency anaemia (IDA) is the most prevalent type of nutritional anaemia globally, impacting people in both developed and developing nations, including Malaysia. In a previous local study in Kudat, Sabah¹, it has been found that household income, daily iron consumption and level of practice of sanitation had significant ($p < 0.05$) association with IDA. This study aimed to identify the clinical characteristics, risk factors, and treatments of patients admitted to HSIS Serdang, an urban area. **Materials and Methods:** The study included 40 patients who received intravenous iron in a daycare setting from January 1 to November 15, 2022. Patients' ages ranged from 15 to 77, with a mean age of 50 (SD: 17). **Results:** The majority were female ($n = 29, 72.5\%$). Among the patients, Malays had the highest number of IDA (52.5%), followed by Indians (30%) and Chinese (17.5%). Key IDA causes identified include menorrhagia, affecting 55% of female patients ($n=16$), and gastrointestinal bleeding, detected in 12 patients through OGDS. Most patients ($n=9, 75\%$) with gastrointestinal bleeding were over 50 years old, and 7 had severe anaemia ($Hb < 6.5$ g/dl). Blood transfusions were administered to 23 patients, predominantly symptomatic (87%, $n=20$), with 13 (56.5%) experiencing severe anaemia ($Hb < 6.5$ g/dl). Additionally, 70% of patients had very low ferritin levels (< 30 ng/mL). All patients received intravenous iron as outpatients without complications. Notably, 62.5% of patients responded well to IV iron, achieving Hb level over 11 g/dL after 3 months of therapy. In conclusion, addressing the underlying causes of IDA is essential for effective treatment. **Conclusion:** Intravenous iron therapy is both safe and effective for outpatient management, whereas blood transfusions should be utilised judiciously and only be given if clinically indicated.