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**Haemoglobin levels in chronic kidney disease patients attending medical and nephrology clinic, Teaching Hospital, Jaffna: A demographic and duration perspective study**

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**Background:** Chronic Kidney Disease (CKD) is a worldwide health issue causing adverse health effects and, anaemia is a frequent complication.

**Objective:** To assess the association between Haemoglobin (Hb) levels, age, gender & CKD duration in the CKD patients attending Nephrology and Medical Clinic, Teaching Hospital Jaffna.

**Methods:** This is a descriptive cross-sectional study using convenience sampling method. Patients (137nos.) diagnosed with CKD (recommended Diagnostic Criteria) were included. Patients on renal replacement and erythropoietin therapy were excluded. Blood Hb level was estimated (Cyanmethemoglobin method). Other information from the patients were recorded (data collection sheets). Pearson correlation, chi-square and independent t-tests using SPSS software of the data were analyzed.

**Results:** Mean Hb levels of the females and males respectively were 12.25 ( $\pm 1.80$ ) and 12.89 ( $\pm 2.03$ ) g/dl. The mean Hb levels of the patients decreased from 13.31 ( $\pm 1.99$ ) ( $\leq 30$  years) to 11.77 ( $\pm 1.52$ ) g/dl ( $\geq 61$  years). Based on the Hb level, 66nos. were anaemic. Males of age group  $\geq 61$  years had mean Hb level of 11.99 ( $\pm 1.52$ ) g/dl. Female patients of age group 51- 60 and  $\geq 61$  years had almost same Hb levels. Hb levels showed significant negative correlation with age ( $p < 0.001$ ,  $r = -0.327$ ). The mean Hb levels of the patients having CKD duration of  $< 1$  to  $> 10$  years ranged from 13.47 ( $\pm 1.70$ ) to 11.99 ( $\pm 0.45$ ) g/dl. Females with 6-10 years of CKD history had the mean Hb level of 11.38 ( $\pm 2.26$ ) g/dl while the males with the history of 1-5, 6-10,  $> 10$  years had almost same Hb levels. Hb levels showed significant negative correlation with CKD duration ( $p = 0.001$ ,  $r = -0.271$ ). The association between Hb levels and gender was not significant ( $p = 0.052$ ,  $t = -1.961$ ).

**Conclusions:** A progressive decline in haemoglobin levels with increase in the age and prolonged disease history was evidenced. These findings emphasized the need for close monitoring and management of anaemia in CKD patients for health improvements.