



Shaping Tomorrow's Nephrology: Insight-Driven Kidney Care

KSN SEOUL, KOREA
2026

The 46th Annual Meeting of the Korean Society of Nephrology

 THE KOREAN SOCIETY
OF NEPHROLOGY

Jun 11 (Thu) – 14 (Sun), 2026

COEX, Seoul, Korea

Abstract Type : Poster exhibition

Abstract Submission No.: A-0753

Abstract Topic : Non-dialysis CKD

Hemoglobin Decline Across Chronic Kidney Disease Severity Prior To Dialysis Initiation: A Hospital-Based Study From Indonesia

Jenny Khayla Zahirani, Eka Maulana Zainul Muttaqin, Lutfi Lafil Cahya Putra, Kanina Listyowati, Evi Nurhayatun

Department of Internal Medicine, Sebelas Maret University, Indonesia

Objectives : Anemia is a frequent and clinically significant complication of chronic kidney disease, with prevalence and severity increasing as kidney function declines. Advanced kidney impairment is associated with reduced erythropoietin production and greater anemia burden. Evaluating hemoglobin decline across chronic kidney disease severity may provide insight into optimal timing for anemia surveillance prior to dialysis initiation.

Methods : This cross-sectional study was conducted at Universitas Sebelas Maret Hospital, Indonesia, between January and December 2025. A total of 122 adult patients with chronic kidney disease were identified from electronic medical records. After excluding patients with acute bleeding, erythropoiesis-stimulating agent therapy, recent transfusion, or ongoing dialysis, 73 patients were included. Chronic kidney disease severity was classified according to Kidney Disease: Improving Global Outcomes guidelines. Due to imbalance across individual stages, patients were grouped into early (stage 1–3) and advanced (stage 4–5) disease. Hemoglobin levels were compared using the Mann–Whitney U test. Effect size was calculated using r .

Results : Among 73 patients, 13 (17.8%) had early disease and 60 (82.2%) had advanced disease. The mean hemoglobin level was 8.64 ± 2.47 g/dL. Hemoglobin distribution was non-normal ($p = 0.011$). Advanced disease was associated with significantly lower hemoglobin levels compared with early disease ($U = 8.000$, $Z = -5.510$, $p < 0.001$), with a large effect size ($r = 0.65$).

Conclusions : Advanced chronic kidney disease is strongly associated with marked hemoglobin reduction prior to dialysis initiation. These findings highlight the substantial anemia burden in late-stage disease and support earlier anemia surveillance strategies in clinical practice.