

## KSN 2017 Abstract

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### VALIDATION OF HANDGRIP STRENGTH AS A NUTRITIONAL ASSESSMENT TOOL FOR MAINTENANCE HEMODIALYSIS PATIENTS IN DR. SARDJITO HOSPITAL INDONESIA

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**Objectives** : This study aimed to evaluate the ability of HGS test in assessing the nutritional status in hemodialysis patients.

**Methods** : Data were collected from 104 patients with CKD who undergoing routine HD in Dr. Sardjito Hospital, Yogyakarta, Indonesia and selected using purposive sampling method. All subject were assessed using HGS, then compared with subjective global assessment (SGA), dialysis malnutrition score (DMS), nutritional risk screening 2002 (NRS 2002), and simple nutrition screening tool (SNST). Correlation test was also conducted to determine the association between HGS and SGA, DMS, NRS 2002, SNST, body mass index, and mid-upper arm circumference (MUAC).

**Results** : Sensitivity value of HGS on the male is the highest when compared to SGA (76.9%) but has a low value of specificity, accuracy, positive predictive value, and area under the curve. HGS also has a low result when compared to other tools. Whereas on the female group, HGS has the highest specificity when compared to SGA (79.2%) but has a low value of sensitivity, positive and negative predictive value, and area under the curve. When compared to other tools, HGS gave an even lower result. HGS has a negative correlation with the other four nutritional assessment tools but has a positive correlation with MUAC.

**Conclusions** : HGS test appeared to be not accurate to assess nutritional status in male and female CKD patients who undergoing hemodialysis.

**Keywords** : Handgrip strength, nutritional assessment tool, maintenance hemodialysis