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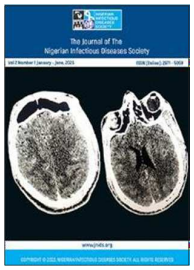

NIDS 2022 Conference Abstracts

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The Effects of Moringa oleifera Supplementation on the Renal Function of HIV-infected Patients on HAART in the University of Port-Harcourt Teaching Hospital

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ABSTRACT

Background: Renal disease is a common complication of HIV infection with an estimated prevalence of 7-33% for chronic kidney disease (CKD). M. *oleifera* is becoming increasingly popular in Africa, for various therapeutic purposes, especially among HIV-infected patients.

Methods: This was a prospective longitudinal study, designed to establish the effect of M. *oleifera* supplementation, on the kidney function of 150 HIV-infected patients on HAART at the HIV clinic in the University of Port Harcourt Teaching Hospital. The study population was randomly split into groups, with one group made up of participants who were on HAART only, while the other on HAART and M. *oleifera* supplementation. They were followed up at 0, 4 and 12 weeks when blood samples were evaluated for serum creatinine, eGFR, uric acid, phosphate and proteinuria variables.

Results: The results showed significant difference in the prevalence of patients with high serum creatinine levels which dropped from 60% to 31.3% in the intervention group. There was also a significant difference in the mean eGFR values and staging with the intervention group having a higher sustained mean eGFR (103ml/min/73m3) compared with the HAART only group which had a drop in the mean eGFR from 106ml/min/73m3 to 87.12ml/min/73m3. An improvement in the eGFR staging in the intervention group was noted, with stage 1 (optimal) eGFR increase from 58.7% to 87.5%. There was a significant increase in the prevalence of hyperphosphatemia in the intervention group ($p<0.01$). The serum uric acid and proteinuria variables were not significantly different between both groups.

Conclusions: The intervention group showed a better outcome in renal function which was time dependent and steady. M. *oleifera* appears to have a synergistic effect with the current antiretroviral therapy (HAART) and it may have a potential beneficial role in kidney disease progression, which is prevalent among HIV-infected patients. Further studies are needed to validate our findings.

Key words: Nigeria, eGFR, HIV, Moringa.