Background: Chronic Kidney Disease (CKD) is a worldwide public health problem with increasing incidence in developing countries. CKD is associated with elevated risk of cardiovascular disease, hyperlipidemia, anemia and metabolic bone disease. Risk factors for CKD include hypertension, diabetes mellitus, HIV, schistosomiasis, leishmaniasis, infectious glomerulonephritis, malaria and obesity. In Rwanda, patients with CKD are often diagnosed with advanced disease and progressive End-stage Renal Disease. Prevention is a strategy to reduce CKD through the management of risk factors and implementation of preventive practices. Limited community knowledge about CKD and associated risk factors is a barrier to prevention. The findings from this study may contribute to the development of focused preventative strategies to reduce the incidence of CKD in Rwanda.

Objective: The aim of this study was to assess the knowledge of CKD risk factors and preventive practices among students attending a university in Byumba, Rwanda.

Methods: A descriptive cross-sectional design was used. Data was collected from 260 participants using a self-administered questionnaire. Descriptive statistics were used to analyze demographic data. Pearson correlation analysis was used to examine the relationship between knowledge and preventive practices.

Results: Findings indicated that the knowledge of CKD and associated risk factors was low with only 10% of participants demonstrating a high level of knowledge. The majority of participants (50.4%) reported a low level of participation in preventive practices to reduce the risk of CKD. The major sources of information about CKD included radio (61.9%), television (58.1%), and the internet (50.4%). Physicians informed only 5% of hypertensive and 6.1% of diabetic participants about their risk for developing CKD. Results indicated a high and significant positive relationship between knowledge and preventive practices (r=.191, p=.002). Increased knowledge of CKD was associated with increased preventive practices.

Conclusions: The findings of this study indicate that knowledge and preventive practices of students attending a university in Byumba, Rwanda are low. Educational programs are needed to improve the knowledge of the Rwandese community of risk factors of CKD and prevention strategies.