ABSTRACT

AIM:

To evaluate the oral health status and treatment needs of Chronic Kidney Disease patients.

MATERIALS AND METHODS:

A cross sectional study was carried out among the chronic kidney disease patients attending the government hospital, Madurai district to evaluate the oral health status of chronic kidney disease patients. A total of 124 participants (62 cases and 62 controls) were examined for the assessment of oral health status using modified WHO oral health assessment form 1997. The study population (n=62) was selected randomly from Chronic Kidney Disease patients regularly attending Department of Nephrology and the Control group (n=62) was recruited from the dental out-patients Government Rajaji Medical College, Madurai. Salivary urea levels were then analyzed to determine its relationship with the oral health status of the participants.

RESULTS:

Sociodemographic data revealed that the mean age of the CKD patients was 43.11 years and that of the control group was 47.11. With respect to the gender, about 34.4% (n=42) were males and 65.6 % (n=82) were females. Majority of the participants were in upper lower class (82.0%), followed by the lower middle class. About 71.9 % of CKD patients exhibit some kind of oral manifestations. Halitosis is the most common oral sign present. The presence of both shallow and deep periodontal pockets was found more in the chronic kidney disease patients when compared with the controls. The loss of attachment of 4-5 mm was found more in the

CKD patients than in the controls and is statistically significant ($p < 0.001$). The presence of decayed tooth was found more in the healthy controls (4.47±3.47) than in the CKD patients (3.27±3.04) and this difference is found to be statistically significant ($p=0.035$). The mean salivary urea levels were higher in the CKD patients (136.75±54.036) than in the control group (59.56 ± 27.822).

CONCLUSION:

The oral health status of patients with Chronic Kidney Disease was found to have less dental caries and a worse periodontal health when compared to the systemically healthy subjects.

Keywords:

Chronic Kidney Disease, Oral health status, Salivary urea, Glomerular Filtration Rate.