

## ABSTRACT

### Background

Chronic kidney disease is becoming a major public health impact globally as well as in Sri Lanka, more than thousand entering into the diseased group annually.

### Objective

To assess the tooth loss, dental hygiene practices, dental service utilization and the denture wearing pattern of patients with Chronic Kidney Disease (CKD) visited to the nephrology clinic in the National Hospital, Sri Lanka (NHSL) during the study period.

### Method

A descriptive cross-sectional study conducted during the period of August 21<sup>st</sup> to September 20<sup>th</sup> 2017 at the nephrology clinic NHSL. Sample consisted of 300 Chronic Kidney Disease (CKD) patients. The clinical CKD stages ranges from CKD stage III to stage V within the selected sample. Systematic sampling method was applied in clinic setting. An interviewer administered pre-tested questionnaire and clinical oral examination were used as study instruments. The sociodemographic characteristics, tooth loss, the association between tooth loss and selected sociodemographic characteristics, dental service utilization, the association between tooth loss and dental service utilization, denture wearing pattern and the relationship of tooth loss with different CKD stages were analyzed.

### Results

More than 60% of the participants were males and more than 40% of study participants had monthly household income less than 10,000 rupees. There were 280(93.33%) participants with tooth loss and 20 were edentulous. There was statistical significant association between tooth loss and categorized age ( $p=0.010$ ). More than 98% of participants with teeth used tooth brushes. There were 37 participants never visited a dental clinic. More than 45% of participants had a dental extraction during their last dental visit. There was statistical significant association between tooth loss and the time since last dental visit ( $p=0.005$ ) and reason for last dental visit ( $p= 0.000$ ). Only 41 participants had dentures out of 280 with tooth loss. There was no statistical significant association( $p=0.205$ ) between tooth loss and different stages of CKD.

## **Conclusion**

The tooth loss was high in all age groups (93.33%). The oral hygiene practices were satisfactory but dental service utilization was poor and symptomatic utilization pattern was seen with more than 45% of the participants had dental extractions and 12.67% treated for dental pain during the last dental visit. There were 37 participants never visited a dental clinic. Poor denture wearing pattern. Only 14.64% with tooth loss had dentures.

## **Key words**

**Chronic kidney disease, tooth loss, dental hygiene, dental service utilization, dentures.**