

## Abstract

**Introduction:** Drug compliance among chronic kidney disease patients is a very important factor in patient management. Knowing the prevalence of compliance, contributing and associated factors can be used to provide a quality care and finally a better outcome for the patients.

**Objective:** To determine the prevalence of drug compliance, knowledge regarding the disease and associated factors among chronic kidney disease (CKD) patients attending to nephrology clinic of Colombo South Teaching Hospital, Kalubowila.

**Methods:** A hospital based descriptive cross-sectional study was carried out among CKD patients, belonging to all five stages, diagnosed for more than six months period, who were aged more than 18 years. Patients were given a clinic number and, a sample frame was prepared for each clinic. Consecutive patients who fulfill the inclusion criteria were recruited until the sample size achieved. Data were obtained using a pre-tested interviewer administered questionnaire. Significance level was taken as  $p < 0.05$ .

**Results:** The mean age of the study participants was 61.75 years (SD=12.64) and ranged between 22 to 89 years. Among the participants 50.6 % (n=177) were male and 49.4% (n=173) were females. Among 350 participants, the prevalence of good drug compliance was 50.9 % (n=178). The knowledge regarding the disease, drugs and the indications was assessed and 42.3% (n=148) had good knowledge according to the knowledge score. Among socioeconomic and disease related factors, having a nuclear family (OR=1.8; 95% CI: 1.7-2.8;p=0.012), presence of comorbidities(OR=3.2;95%CI:1.0-10.3;p=0.034) and stage of the disease(p=0.003) were significant with drug compliance. . Having drugs side effects(OR=0.613;95%CI:0.30.9;p=0.045), complex drug regimen (OR=0.56;95%CI:0.3-0.9;p=0.045), cost per a clinic visit (OR=2.0;95%CI:1.2-3.2;p=0.002), knowing the names of the drugs(OR=0.4;95%CI:0.2-0.9;p=0.025) were identified as management related significant factors. Knowledge on increased risk of death in CKD (OR=0.42;95%CI:0.20.6;p<0.001) shortness of breath (OR=2.0;95%CI:1.1-3.4;p=0.008) and nausea/vomiting (OR=1.6;95%CI:1.0-2.5;p=0.019) as symptoms showed statistically significant associations with drug compliance among CKD patients. No association was observed between number of pills per day and overall knowledge of the participants with drug compliance.

**Conclusions and recommendations:** The prevalence of good drug compliance among participants was not satisfactory. Majority of the participants had poor knowledge regarding the drugs and the disease. Hence, education programs should be done targeting CKD patients and periodic assessment of drug compliance should be encouraged.

**Keywords:** Chronic kidney disease, drug compliance, knowledge