

Oral Communication Abstract

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Behavioral characteristics and related factors among chronic kidney disease patients of South Korea during COVID-19 pandemic

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Objectives: The recent novel coronavirus disease (COVID-19) pandemic has led to unprecedented changes in behavior. We evaluated the current status of precautionary behavior and physical activity in chronic kidney disease (CKD) patients during the COVID-19 pandemic.

Methods: A population of CKD patients (n=306) registered in a SKETCH (Study on Kidney disease and EnvironmentTal Chemicals, Clinical Trial No. NCT04679168) cohort recruited from June 2020 to October 2020 was included in the study. We conducted a questionnaire survey related to (1) risk perception of COVID-19, (2) hygienic behavior, (3) social distancing, and (4) physical activity during the past year (before the pandemic) and during the pandemic. To compare behaviors before and during the COVID-19 pandemic, the Wilcoxon-signed rank test was used. Logistic regression analysis was conducted to identify the relative factors related to risk recognition or behavior changes.

Results: There were 187 (61.1%) patients with eGFR <45 mL/min/1.73 m². This population showed a higher degree of risk perception for COVID-19 than the general population. During the pandemic, social distancing and hygiene-related behavior was significantly increased (P <0.001). The frequency of exercise was decreased only among those with regular exercise, without diabetes, or with a lower Charlson comorbidity index (CCI) (P <0.001), with no change among the other groups. Socioeconomic status and comorbidities significantly affected behavioral characteristics regardless of the category. Age was the most significant determinant of risk perception among CKD patients. Education and income were significantly associated with precautionary behaviors such as staying at home and hand sanitizer use. Also, patients with higher CCI status significantly increased their frequency of exercise (adjusted OR 2.10, 95% CI 1.01-4.38).

Conclusions: CKD patients showed higher risk-perception with active precautionary behavioral changes than the general population. Healthcare providers should be aware of the characteristics to comprise precautionary behavior without reducing the physical activity.