

KSN 2017 Abstract

KNOW-CKD : Design and Overview to Major Findings

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The KoreaN Cohort Study for Outcomes in Patients With Chronic Kidney Disease (KNOW-CKD) was developed to investigate various clinical courses and risk factors for progression of Korean chronic kidney disease (CKD). The KNOW-CKD study consists of nine clinical centers in Korea, and patients aged between 20 and 75 years with CKD from stage 1 to 5 (predialysis) were recruited. At baseline, blood and urine samples were obtained and demographic data including comorbidities, drugs, quality of life, and health behaviors were collected. Estimated glomerular filtration rate (eGFR) was calculated by four-variable Modification of Diet in Renal Disease (MDRD) equation using isotope dilution mass spectrometry (IDMS)-calibrated serum creatinine measured at a central laboratory.

As a dynamic cohort, a total of 2,341 patients were enrolled during the enrollment period from 2011 until 2015, among whom 2,238 subjects were finally analyzed for baseline profiles. The mean age of the cohort was 53.7 ± 12.2 year and 61.2% were men. Mean eGFR was 50.5 ± 30.3 mL/min/1.73m². The participants with lower eGFR had a tendency to be older, with more comorbidities, to have higher systolic blood pressure and pulse pressure, with lower income level and education attainment. The patients categorized as glomerulonephritis were 36.2% followed by diabetic nephropathy (23.2%), hypertensive nephropathy (18.3%), polycystic kidney disease (16.3%), and other unclassified disease (6.1%). The KNOW-CKD participants will be longitudinally followed for ~10 years. The study will provide better understanding for physicians regarding clinical outcomes, especially renal and cardiovascular outcomes in CKD patients.