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## **Sex Disparities and Risk of Chronic Kidney Disease: A Nationwide Cohort Study of Seven Million Adults in Korea**

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**Objectives:** There are substantial differences in public health issues between men and women. However, longitudinal studies of the relationship between sex disparities and incident chronic kidney disease (CKD) are scarce. In this study, we aimed to evaluate the association between sex disparities and incident CKD in healthy adults with normal baseline kidney function.

**Methods:** We analyzed a total of 10.8 million adults who underwent National Health Insurance Service health examinations between 2009–2015. The outcome of interest was incident CKD, defined as *de novo* development of eGFR <60 mL/min per 1.73m<sup>2</sup> or ≥25% decline in eGFR from the baseline values accompanied by eGFR <60 mL/min/1.73m<sup>2</sup>.

**Results:** In this large national cohort comprised of 10.8 million healthy Korean adults who had eGFR ≥60 ml/min per 1.73 m<sup>2</sup>, there were a total of 178,966 (1.66%) incident CKD events during a median follow-up of 4.8 years. Multivariable-adjusted Cox model showed that women were associated with significantly lower risk of incident CKD compared with men. These associations were robust irrespective of comorbid conditions, residential area, health behaviors, and use of antihypertensive drugs or statins. However, in elderly people aged ≥60 years, the risk of CKD was comparable between men and women.

**Conclusions:** In this large nationwide cohort, women had lower risk of CKD than men among healthy Korean adults.