

DIABETES MELLITUS IN CKD: KEEP AND NHANES 1999-2004. A Whaley-Connell¹ JR Sowers¹ SI McFarlane² K Norris^{3,4} SC Chen⁵ S Li⁵ Y Qiu⁵ C Wang⁵ LA Stevens⁶ JAVassalotti^{7,8} A Collins⁵ and KEEP Investigators. ¹University of Missouri-Columbia School of Medicine, Columbia, Missouri, ²SUNY Downstate, Brooklyn, New York, ³Charles R. Drew University of Medicine and Science, ⁴David Geffen School of Medicine, University of California Los Angeles, California, ⁵Chronic Disease Research Group, Minneapolis Medical Research Foundation, Minneapolis, Minnesota, ⁶Tufts-New England Medical Center, Boston, Massachusetts, ⁷National Kidney Foundation, New York, New York, ⁸Division of Nephrology, Department of Medicine, Mount Sinai School of Medicine, New York, New York

Diabetes is the leading cause of CKD and early identification through targeted screening is important for development of preventive strategies. This is a cross-sectional analysis of Kidney Early Evaluation Program (KEEP) data and National Health and Nutrition and Examination Survey (NHANES) 1999-2004 data. KEEP is a community-based health screening program enrolling individuals aged ≥ 18 years with diabetes, hypertension, or family history of CKD, diabetes, or hypertension. Participants who had received kidney transplants or were currently receiving dialysis therapy were excluded. Of 73,460 KEEP participants, 20,562 (28.0%) had diabetes, compared with 1545 (6.7%) of 17,049 NHANES participants. Age, obesity, high cholesterol, hypertension, and cardiovascular disease distributions were similar for diabetic patients in both populations. Proportions of diabetic women and African Americans were higher in KEEP. There was a graded relationship between CKD stage and diabetes prevalence among participants, including those aged >46 years, and across sex, race, and other CKD risk factors: current tobacco use, obesity, hypertension, cardiovascular disease, elevated cholesterol. KEEP participants with CKD who reported being diabetic were unlikely to have met target blood glucose (odds ratio 0.71, 95% confidence interval 0.66-0.77, $p < 0.001$); reporting being non-diabetic was associated with likelihood of elevated blood glucose (1.28[1.16-1.41] $p < 0.001$). KEEP is congruent with NHANES regarding higher prevalence of diabetes in CKD. As a targeted screening program, KEEP may represent a higher risk and more motivated patient population.