

Self-Assessment Symptoms and Risk Factors for Chronic Kidney Disease Screening in Primary Care

Chanya Kerdchantuk^{1*}, Aporanee Chaiyakum¹, Nusaraporn Kessomboon¹, Jaturat Kanpittaya², Phisitt Vechakama³ and Dhavee Sirivong⁴

¹Faculty of Pharmaceutical Sciences, Khon Kaen University, Khon Kaen 40002, Thailand

²Department of Radiology, Faculty of Medicine, Khon Kaen University, Khon Kaen 40002, Thailand

³Boontharig Hospital, Ubon Ratchathani 34230, Thailand

⁴Division of Nephrology, Department of Medicine, Faculty of Medicine, Khon Kaen University, Khon Kaen 40002, Thailand

*Corresponding author. E-mail: Chanyakerdchantuk@gmail.com

ABSTRACT

Chronic kidney disease (CKD) is a serious disease that is commonly undetected and for which screening is advocated. Risk factors and symptoms are associated with the prevalence of CKD. To identify symptoms and risk factors that should be used for screening CKD in primary care. Literature review had been performed from 1960-February 2007 to review symptoms and risk factors of the CKD. Only variables that were easy to assess without any laboratory tests or other clinical measurements requiring special skills were selected. The interview was performed in general population volunteers of 1,208 Thai, aged 20-88 years, to collect kidney disease-related symptoms and risk factors. Subsequently, blood samples were collected for serum creatinine test and urinalysis was also carried out. This study found glomerular filtration rate (GFR) < 60 ml/min/1.73 m² in 22.5 percent and proteinuria in 14.1 percent. The people with GFR < 60 ml/min/1.73 m² were significantly older, had a history of stone, diabetes, hypertension, female, hematuria, chronic foaming urine, frequent straining when urinating, frequent dribbling at the end of urination and renal colic (P < 0.05). Predictors of proteinuria were age, smoking, systolic blood pressure, stone, diabetes, hypertension, daily use of NSAIDs ≥ 1 year, female, hematuria, chronic foaming urine, frequent straining when urinating, frequent hesitating when urinating, frequent dribbling at the end of urination, frequent nocturia and edema (P < 0.05). Symptoms and risk factors of CKD can be used as a self-assessment method to identify people with high risk of CKD.

Key words: Chronic kidney disease, Chronic renal disease, Screening, Primary care unit, Symptom, Risk factor