



Prevalence of Chronic Kidney Disease in Type 2 Diabetes Patient that Registered in 2 Community Hospitals in Khon Kaen

Dueanchonnee Sribenjalux¹, Natcha Nitiwatthana¹, Nuchanok Khampitak¹, Papangkorn Meekaew¹, Lukkaet Laoprapaipan¹, Athiwat Songsiriphan¹, Kanjana Khaejawat¹, Chularat Noinonthong¹, Pattapong Kessomboon², Amorn Premgamone²

¹ Fifth-year medical student, Faculty of Medicine, Khon Kaen University

² Department of Community Medicine, Faculty of Medicine, Khon Kaen University

Background and Objective: Diabetes is one of the major health problems in Thailand. Many studies show that the number of diabetes patients have been raising as well as the prevalence of its complication, one of which is chronic kidney disease. In 2015, there were no studies about the prevalence of chronic kidney disease in type 2 diabetic patient in Khon Kaen. This study aimed to study the prevalence of chronic kidney disease in type 2 diabetic patient in Khon Kaen and to identify factors that may correlate to chronic kidney disease in type 2 diabetic patient.

Methods: This was a descriptive study at Nampong and Ubolrat hospital. Population: Calculated sample size (by WinPepi) equals 1013. The study subjects were 4,450 type 2 diabetic patients that registered in Nampong and Ubolrat hospitals. Tool: Secondary data. Data Analysis: SPSS PC version 19 and Epi Info v. 3.5.4 were used to calculate the descriptive statistics (*viz.*, frequency, percentage, means, standard deviation and 95% CI) and adjusted odds ratio.

Results: 1,276 type 2 diabetic patients have chronic kidney disease. The prevalence of chronic kidney disease in type 2 diabetic patient was 28.7% (95%CI: 27.4%, 30.0%). Factors that might associate with chronic kidney disease in type 2 diabetic patient were age more than or equal to 65 years old [$OR_{adj} = 3.8$, (95%CI: 3.2, 4.6)], dyslipidemia ($OR_{adj} = 3.1$, (95%CI: 2.3, 4.1)) and duration of diabetes more than 5 years ($OR_{adj} = 1.95$, (95%CI: 1.6, 2.4))

Conclusion: The prevalence of chronic kidney disease in type 2 diabetes patients that registered in community hospitals in Khon Kaen was 28.7%. Factors that might associate with the prevalence of chronic kidney disease in type 2 diabetes patients were age, dyslipidemia and duration of diabetes more than 5 years

Keywords : Chronic kidney disease, Type 2 Diabetes Mellitus, community hospitals, Khon Kaen

