

ABSTRACT

Cross-Sectional Study on Knowledge of Chronic Kidney Disease among Patients Attending Hospital Outpatient Clinics in Sabah

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Keywords: chronic kidney disease,
knowledge, questionnaire

Introduction: The number of new dialysis acceptance and dialysis prevalence rate in Malaysia has been increasing steadily for the past 10 years, and forecasting models predict that these numbers will continue to increase. Chronic Kidney Disease (CKD) awareness may slow progression of CKD. As CKD awareness is dependent upon general knowledge of CKD, assessing the knowledge of CKD of the local population is important, to direct future CKD education efforts. **Objective:** This study aims to assess the knowledge of CKD among outpatients attending hospitals in Sabah. **Methodology:** A cross-sectional, self-administered questionnaire study was performed in the outpatient clinic of 6 hospitals in the northwest region of Sabah, Malaysia. The questionnaire is adapted from a similar study from Singapore, and includes basic demographic information and 7 questions assessing the knowledge on CKD. **Results:** Out of 721 respondents, 654 (90.7%) completed the questionnaire. The study respondents originate from Hospital Tuaran ($n = 106, 16.2\%$), Hospital Ranau ($n = 85, 13\%$), Hospital Kota Belud ($n = 157, 24\%$), Hospital Kudat ($n = 134, 20.5\%$), Hospital Kota Marudu ($n = 80, 12.2\%$), and Hospital Queen Elizabeth ($n = 92, 14.1\%$). Most of the respondents are female (58.4%), mean age of 41 years old, attained secondary school education (55.2%), unemployed (43%), and have a family income of <RM1,000 per month (60.7%). The main ethnic group of the respondents is Sabahan *Bumiputera* ($n = 479, 73\%$), with Kadazandusun ($n = 251, 52\%$) as

the majority. The percentage of self-reported at least one medical comorbidity is 39.7%. Out of the 7 questions assessing knowledge, only 24.6% scored 4 or more. Mean score was 2.47 (out of 7). There was no significant difference in scores between centres. Respondents who have higher education status ($p < 0.001$), professional line of work ($p < 0.001$), and high

family income ($p < 0.001$) were significantly associated with higher knowledge score. **Conclusion:** The Sabah cohort being studied has limited knowledge on CKD. Much work needs to be done in CKD education, and effort should be targeted to the public with low income, less educated and non-professional line of work.