Improving Diabetic Retinopathy Screening Coverage in Malaysia

Feisul Idzwan Mustapha, Arunah Chandran

Disease Control Division, Ministry of Health Malaysia

ABSTRACT

INTRODUCTION: Guidelines for regular diabetic retinopathy (DR) have been published in Malaysia, and screening for DR were strengthened in the year 2000 with the provision of fundus cameras in selected Ministry of Health (MOH) health clinics throughout Malaysia. This study aims to describe the coverage of DR screening among type-2 diabetes patients receiving treatment at MOH health clinics, and factors influencing the coverage. METHODS: Data on rates of DR screening was extracted from the National Diabetes Registry for year 2015 to 2018. Comments on the screening coverage were elicited from each State Health Department using a standardised format. **RESULTS:** Overall, DR screening coverage in Malaysia was low at 55.9% for 2018, but with an increasing trend from 50.0% in 2015. There are huge variations between states, however most states showed an increasing trend. For 2018, Putrajaya showed the highest coverage, while Pahang showed the lowest. For most states, there are huge variations of screening coverage between districts as well. Several factors were identified to contribute to an increasing trend of coverage within the domains of healthcare facilities and systems, healthcare provider factors and patient-related factors. Likewise, several factors were also identified that negatively influenced DR screening coverage. **DISCUSSION:** This study highlighted the huge variations of DR screening between states and districts over the time period of 2015 to 2018. Improving and narrowing the variations in DR screening coverage would require addressing the multiple factors, and solutions have to be customised for each specific setting.

KEYWORDS: diabetes, fundus screening, primary care, retinopathy

Incidence and Predictors of Mortality Among Elderly Population in Malaysia: A Community-Based Longitudinal Study

Norlela Binti Mohd Hussin, Suzana Shahar, Hanis Mastura Yahya, Normah Che Din, Chin Ai-Vyrn, Devinder Kaur Ajit Singh, Mohd Azahadi Omar, Arimi Fitri

Putrajaya Health Office, Health Department of Federal Territory Kuala Lumpur & Putrajaya, Ministry of Health, Malaysia, Centre of Healthy Aging and Wellness, Faculty of Health Sciences, Universiti Kebangsaan Malaysia (UKM), Kuala Lumpur, Malaysia, Centre of Rehabilitation Science, Faculty of Health Sciences, UKM, Kuala Lumpur, Malaysia, Ageing and Age-Associated Disorders Research Group, Division of Geriatric Medicine, Faculty of Medicine, University of Malaya, Kuala Lumpur, Malaysia, Institute of Public Health, Ministry of Health, Kuala Lumpur, Malaysia, Faculty of Health Sciences, Center of Diagnostic and Applied Science, UKM, Kuala Lumpur, Malaysia

ABSTRACT

INTRODUCTION: In general, factors such as old age, male and other illnesses have shown to be associated with an increased risk of mortality among elderly population. However, limited information is available from longitudinal studies regarding the incidence and predictors of mortality in older Malaysian adults. Thus, a community based longitudinal study was conducted to determine the incidence and predictors of mortality among older adults in Malaysia. METHODS: Subjects were chosen using multi-stage random sampling **METHODS:** from four states in Malaysia (Perak, Selangor, Kelantan and Johor). Analysis of data obtained from the Towards Useful Aging (TUA) study (2014-2016), wave 1 (baseline) and wave 2 $(1\Omega \text{ years of follow-up})$ was conducted. Parameters investigated were cognition, lifestyle, nutrient intake, physical performance and medical conditions. For the baseline, comprehensive interview-based questionnaires were administered to 2,322 subjects (≥ 60 years old). The study then performed a logistic regression analysis to examine the effect of each possible predictor of mortality. Binary logistic analyses followed hereafter. **RESULTS:** During the follow-up after 1Ω years, 55 of the 2,322 subjects have died. The incidence rates of mortality were 1.6 per 100 person-years. Low physical performance (chair stand test) (OR: 0.826; 95%CI: 0.746, 0.913) and multimorbidity (OR: 3.076; 95%CI: 1.541, 6.138) were predictors of mortality. Conclusion: Low physical performance and multimorbidity were possible predictors in the incidence of mortality. There is a need to formulate effective preventive management strategies to decelerate mortality among older adults through healthy lifestyle and optimal fitness level.

KEYWORDS: incidence, predictors, older adults, mortality