Demographics and causes of premature deaths in the Sarawak LIFECARE cohort

Sie Ri Chie¹, Abdul Latif Nur Ariefah Syamimi¹, Lai Wei Hong¹, Tan Shirin Hui¹, Bujang Mohamad Adam¹, Khoo Sing Yee¹, Hamdan Afiq Aiman¹, Parveen Raihana¹, Wee Joe Fu¹, Yap Eileen Pin Pin¹, Tiong Lee Len¹, Fong Alan Yean Yip¹², Tiong Xun Ting¹

¹Clinical Research Centre, Sarawak General Hospital, ²Department of Cardiology, Sarawak Heart Centre

ABSTRACT

Introduction: Premature death is a measure of unfulfilled life expectancy. The average life expectancy in Malaysia is 75.94 years. Death occurring prior to 60 years of age (retirement age in Malaysia) imposes an economic loss on the country. The leading cause of premature death in adults aged 18 and above is non-communicable diseases followed by communicable diseases and injury. This study aimed to examine the demographics and main causes of premature death for subjects in the LIFECARE cohort. Methods: Participants of this study are healthy individuals of 18-50 years from Southern Sarawak, Malaysia. A total of 2543 subjects were recruited at baseline and were followed up between the years 2013 to December 2022, subjects that expired were identified. The causes of death used are based on the final cause of death on the death certificate issued by the National Registration Department (NRD), Malaysia. Results: The total number of deaths recorded was 42 of which 28 were males (66.7%). The mean(SD) age at death was 45.9(8.8) years. Underlying causes of premature death in LIFECARE Sarawak cohorts were unspecified reasons (n=17,40.5%), cancer (n=10,23.8%), infections (n=5,11.9%), cardiovascular disease (n=5,11.9%) and injuries caused by road accidents, fire-related accidents, fall and drowning (n=5,11.9%). Conclusion: Most premature deaths are for unspecified reasons. Aside from unspecified reasons, cancer is the main cause of death. Further verification of the unspecified deaths is needed and initiatives to improve the registration of causes of death by all stakeholders should be considered.