Ethnic differences in glycaemic control and complications: the adult diabetes control and management (ADCM), Malaysia.

ABSTRACT

INTRODUCTION: Ethnicity is an important factor in diabetes care. The understanding of its effect in this country may help to improve diabetes care, glycaemic control and diabetic complication rates. This study was to determine the diabetes control profile in relation to complication rates between the three main ethnics group in Malaysia. METHODS: This nested cross-sectional study was part of the Audit of Diabetes Control and Management (ADCM), an ongoing cohort patient registry focused on diabetes control and management in the primary care setting in Malaysia. This registry registers all diabetes patients aged 18 years old and above. Demographic data, diabetes duration, treatment modalities, as well as various risk factors and diabetes complications are reported. Data was handled by statisticians using STATA version 9. RESULTS: A total of 20330 patients from 54 health centers were registered at the time of this report. The majority were type 2 diabetics (99.1%) of whom 56.6% were female. The mean age was 57.9 years (SD 11.58). Malay accounted for 56.3%, Chinese 19.5% and Indian 22.5%. There were 30.3% who attained HbA1c < 7%. Among three main races more Chinese had HbA1c < 6.5% (Chi-square: $X2 = 71.64$, $p < 0.001$), but did not show less complications of nephropathy (Indian suffered significantly more nephropathy, Chi-square: $X2 = 168.76$, $p < 0.001$), ischaemic heart disease (Chi-square: $X2 = 5.67$, $p = 0.532$) and stroke (Chi-square: $X2 = 15.38$, $p = 0.078$). CONCLUSION: This study has again emphasized the existence of ethnic differences in glycaemic control and complication profiles. The Chinese diabetics suffer as many diabetes-related complications despite better glycaemic control. Further studies will need to look into other socio-genetic factors in order to provide a more personalized effective diabetes care.

Keyword: Primary care; Registries; Ethnic groups; Glycaemic control; Diabetic complications.