

Cardiovascular Risk Factors: The Many Few

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The rising epidemic of established modifiable cardiovascular risk factors (CVRF), such as hypertension, dyslipidaemia, diabetes and cigarette smoking, to a large part, are responsible for the clinical events such as acute coronary syndrome (ACS) and cerebrovascular events (strokes, CVE). In our National ACS and percutaneous coronary intervention (PCI) Registries, it has been documented that over 90% of patients have at least one identifiable CVRF^{1,2}.

With a significant proportion of a relatively young, multi-ethnic population in Malaysia having these CVRF³, the absolute risk of them having ACS or CVE becomes non-negligible, particularly in the context of the availability and accessibility of tertiary level centres that can provide leading edge acute treatments for them. It appears much more sensible to be tackling these CVRF at the earlier stages of the cardiovascular disease continuum. There is now early evidence from our Registries that the nature and presentation of acute cardiovascular disease, such as ACS, occurs in a younger population and may appear to be more aggressive.

Specifically, Amplavanar's study has revealed the prevalence of established CVRF comparable to National Data³. In the rapidly growing Cheras district of Greater Kuala Lumpur which possesses both established urban and newly urbanised population, more than 40% of subjects screened had hypercholesterolaemia, and over 30% were current or previous smokers, the majority of the latter being of male gender. Left unchecked, these patients would have been exposed to an elevated lifetime risk of an ACS or CVE event compared to those without these CVRF.

Therefore, well-designed population studies into the Malaysian population should be undertaken on a more regular basis, and perhaps study other potentially relevant factors that can contribute to the risk of ACS and CVE. Already, studies such as the INTERHEART have gone beyond looking at these established CVRF, and have identified elements such as psychosocial stress and a lack of regular exercise being predictors of myocardial infarction⁴. In a society that is rapidly evolving, with accelerated socio-economic development, new CVRF may emerge as even more significant than the established ones.

The rising number of medical graduates in Malaysia also provides us with additional human resources to undertake such direction. There remains a significant number of the population served by the Primary Care and Rural clinics, many who have not yet accessed tertiary level care. Yet, for many of them, having an ACS or CVE significantly impacts their, and their carers', quality of lives. This effect is more pronounced in the more sparsely distributed states of the country. Given more doctors within the Primary Care services will enable greater medical input into public access medical services, and have more positive effect on the management of CVRF.

Finally, data from the Malaysian National Health and Morbidity Survey III has demonstrated that the control of established CVRF remains an issue. With more epidemiology studies at hand, new opportunities exist to study the very nature of both new and established CVRF. New research into pathophysiology, clinical management strategies and health policies can be undertaken with greater confidence. With more accurate diagnosis and control of these CVRF, it is anticipated that we can see the plateau of the currently rising incidence of ACS and CVE, and perhaps even successfully achieve an improvement of these figures.

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