Can Doctors Estimate Cardiovascular Risk Accurately?

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Aim: To determine if doctors could accurately estimate patients' CVD risk.

Methods: A cross sectional study was conducted in nine primary care clinics in Malaysia in 2014. All patients aged 35 years and above without known CVD were eligible. Face-to-face interview was conducted using structured questionnaire. The 2008 Framingham risk score (FRS) was used to calculate the 10-year CVD risk. High CVD risk group was defined as FRS >20% and/or diabetes mellitus (DM). Doctors were asked to assess patients' CVD risk using their usual practice.

Result: There were 57 doctors and 1,094 patients. For doctors, mean age was 32.3 years (SD 5.5), 63.4% females, mean duration of experience was 6.5 years (SD 3.8). For patients, mean age was 57.2 years (SD 9.8), 62.6% females, 60.8% had diabetes and 76.9% had hypertension. There were 70.9% in the high risk group. Doctors estimated only 314 (40.3%) as being high risk. Doctors' underestimated 462 (59.5%) patients. Using regression, doctors underestimated CVD risk in patients who were younger, female gender, had higher HDL level, lower SBP, non-smoker, with hypertension and diabetes.

Conclusion: Doctors underestimated patients' actual CVD risk. They place emphasis on certain risk factors in their assessment. Doctors should use validated methods to assess patients' global CVD risk.