Coronary Risk Assessment in Diabetic Population in Primary Care Setting in Bahrain Using the UKPDS Risk Engine

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Background: Cardiovascular morbidity and mortality are more prevalent in the diabetic population.

Objective: To estimate the 10-year risk rate for cardiovascular mortality and morbidity in a diabetic population.

Setting: Primary Health Center, Bahrain.

Design: Cross sectional study.

Method: Two hundred thirty patients were recruited. Cross sectional study measuring the cardiovascular morbidity and mortality in a diabetic population using the UKPDS risk engine software.

Result: Two hundred thirty patients were enrolled in the study. The cardiovascular risk rate calculated by the UKPDS risk engine was comparable to other risk rates. Association of risk rates with majority of risk factors was significant though total cholesterol and HbA1c showed selective significance. Dividing the population into low and high risk yielded a significant relation of all risk factors to risk rates.

Conclusion: Risk rates for cardiovascular endpoint events in our diabetic population are comparable to other diabetic populations. Risk factors for fatal and non-fatal cardiovascular and stroke are either non-modifiable, such as age, sex and genetics or modifiable such as hypertension, hypercholesterolemia, diabetes mellitus and smoking. Reduction of the modifiable risk factors would reduce cardiovascular and stroke risks. Coronary risk assessment is an essential part in the assessment of diabetic population showed.