

Profiles of Coronary Artery Disease Risk in Cardiac Patients: Actual versus Perceived

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ABSTRACT

PURPOSE: To describe interrelations and differences between actual vs. perceived cardiac risk in a cohort of coronary artery disease (CAD) patients. **METHODS:** 33 females (HT: 164 cm, WT: 80kg) and 67 males (HT: 179 cm, WT: 93kg) with documented CAD completed a questionnaire designed to assess CAD risk perception. They also underwent assessments for all ACSM risk factors. Five-point Likert scale responses to the question "Compared to other persons of your own age and sex, how would you rate your risk of ever having a heart attack?" were used to quantify CAD risk perception. To quantify actual risk, the number of ACSM risk markers for each subject was tabulated. It should be noted that, since all of the subjects had active CAD, they were all at high risk. Tabulations and Likert scale responses were compared using Chi-square analysis or Fisher's Exact test with significance accepted at $p < 0.05$. To assess risk perception accuracy, Chi-square analysis with pre-determined expected cell count percentages was used. **RESULTS:** When compared to diagnosis driven expected frequencies of risk perception being higher or much higher (75% and 25% respectively), patients responses were only 30% and 11% respectively (Chi-square=19696.9, $p < .0001$). Also, as the number of actual ACSM risk markers increased for each patient, no increase in patient risk perception was found (Chi-square=40.2, $p = 0.29$). Factors associated with accurate perception include age, resting ECG status, and number of bypass grafts. Factors that were not accurately included in risk perception include family history, waist circumference, number and type of angioplasties, smoking, having had a heart attack, number of additional structural cardiac abnormalities present, the presence of arrhythmias, elevated blood lipids and blood glucose, and elevated systolic and diastolic blood pressures. **CONCLUSION:** Although substantial differences in number and type of actual cardiac risk exist in a cohort of cardiac patients, individual perception of these risks is not accurate in the majority of cases.

