

## TACSM Abstract

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### Differences in Heart Disease Risk Perception and Actual Cardiac Risk in Male vs. Female Cardiac Patients

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#### ABSTRACT

**PURPOSE:** To describe gender differences in both risk perception and actual coronary risk in patients with coronary artery disease (CAD). **METHODS:** 33 females and 67 males 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 others of your own age and gender, 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  $p \leq 0.05$ . To further assess risk perception accuracy, Chi-square analysis with pre-determined expected cell count percentages was used. **RESULTS:** Likert responses for perceived risk between genders were not significantly different but showed perception inaccuracies of the entire cohort. Only 41% of the subjects perceived their risk as "higher" or "much higher" than their peers while 27% perceived their risk as lower or much lower. 32% of the subjects perceived their risk to be the same as their peers. Comparison of risk marker number between genders was significantly different (Fisher's exact test,  $p = .046$ ) with males having 33% more markers than females. Chi-square analysis using an expected cell percentage of 75% in the "higher" Likert category, 25% in the "much higher" Likert category, and fractions of 1 in the other categories revealed significance ( $p < .0001$ ) with only 29.8% of subject responses in the "higher" category and 11.9% in the "much higher" category. The female cohort showed similar results with test percentages of 73% in the "higher" category and 27% in the "much higher" category. Responses were significantly different ( $p < .0001$ ) with only 30% choosing the "higher" category and 10% choosing the "much higher" category. **CONCLUSIONS:** Although significant differences in actual cardiac risk exist between genders in a cohort of cardiac patients, perceived risks are not significantly different. Both genders greatly underestimate their risk.