

## SUMMARY/ABSTRACT

The main aim of this research was to take a perspective over the factors which are significantly responsible for Coronary Artery Disease and then to model them to estimate the chance of Coronary Artery Disease in the presence/ absence of these risk factors. For the fulfillment of the objectives, a hospital based cross-sectional study was designed comprised of both descriptive and analytical components at four randomly selected public sector hospitals of Punjab. A sample of 450 patients, who come for their first angiography, was selected by a face-to-face survey method. Data comprising of 300 cases and 150 controls aged 20 years and above with mean age of  $52.95 \pm 11.39$  years of which 281 were males and 169 were females was collected by a well-designed questionnaire. A pre-test survey based on a sample of 25 subjects was carried out to check the reliability of the questionnaire through Cronbach's alpha. Data collected against 17 risk factors age, gender, family income, chest pain, hormonal status, hypertension, diabetes, dietary habits, obesity, Lipoproteins, smoking, life style, family history, diet, depression and anxiety, sleeping habit, Peripheral Vascular Disease, Intermittent Claudication. Percentages and counts on each risk factor were used as descriptive analysis whereas for bivariate analysis Pearson's chi-square test and deviance test were used for Coronary Artery Disease status. To test the main effects and the interaction effects of risk factors, multiple logistic regression was used for overall risk factors and odds ratios for each risk factor were calculated. Finally it was found that age, chest pain, Diabetes Mellitus, Hypertension, Smoking, Lipoproteins, Obesity, Life style, Family History, Diet, D.A were the significant risk factors of Coronary Artery Disease. These factors play a major role in the development of the disease.