ABSTRACT

The present study is hospital based case-control study with both descriptive and analytical components. The objective of the present study is to observe different risk factors of cardiovascular disease (myocardial infraction) and find out association between several risk factors of the disease and their predictive strength. A sample of 347 patients (219 male & 128 female) aged 20 years and old admitted at Punjab Institute of Cardiology Lahore during May-October 2007 is taken of which 196 patients have myocardial infraction & remaining 151 did not have. The information regarding different risk factors of the disease e.g. Age, Hypertension, Lipids, Obesity, Smoking, Lose Temperament, Diabetes and Family History etc was recorded by a questionnaire.

The data regarding risk factors was coded and entered into computer by using SPSS 13.0 for the analysis. In the descriptive section, frequencies and percentages of several risk factors are determined and interpreted. The chi-square test is used to assess the association of risk factors and Cramer's V values are calculated to determine the strength of association. It is found that in overall, male and female patients analysis; Hypertension and Diabetes have the largest Cramer's V value which indicate that these two factors have strong association with the disease.

The Logistic Regression is applied to determine the significant risk factors, predictive model and odds ratio. In overall analysis, risk factors like Age (OR=1 .040, p=0.000), Hypertension (OR=2.289, p=0.002), Diabetes (OR2.260, p=0.002), Family History (OR=2.084, p=O.004), Smoking (OR=2.170, p=0.003) and Lose Temperament (OR are significant. In male patients analysis, Hypertension, Diabetes, Smoking and Lose Temperament are significant risk factors. In female patients analysis, Age, Hypertension, Diabetes Mellitus and Family History are significant risk factors.

It is concluded that the disease is not based on a single risk factor. There are several factors which may increase the risk of the disease. The study also throw the light that Hypertension, Diabetes and Family History are most significant risk factors irrespective of gender.