

**Factors affecting risk modification in patients with established coronary heart disease.
MD (Community Medicine) - 2007**

D 1770

Among the 330 incident cases of MI studied, there was preponderance of males. The mean age at presentation was 57.4 (SD 12.0). Among the males, 75 percent belonged to the ever smoker category and 41 percent were current smokers at the time of developing the index cardiac event. Lipid abnormalities were common among acute MI cases with two thirds of the cases having a serum LDL cholesterol concentration > 100 mg/dl. Some form of lipid abnormality persisted at the time of developing the acute MI in nearly half of those already on lipid lowering drug. The prevalence of diabetes mellitus among incident MI cases was clearly in excess of the population prevalence of the disease, with a self reported prevalence of 28 percent among males and 49 percent among females. Blood glucose control was poor (> 125 mg/dl) in 65 percent of those who reported having diabetes mellitus prior to the index event. The prevalence of overweight ranged from 25 percent to 87 percent depending on the indicator used. The majority of the incident MI cases were physically active prior to the index event with only 26 percent of cases reporting low physical activity levels. In the second component of the study, a cardiac rehabilitation programme was implemented on a selected group of patients. At six months following the index major cardiac event, risk modification in this group was compared with another group of patients who did not undergo rehabilitation. A quasi-experimental study design using a pre-test post-test design was used to evaluate the CRP. Ninety one percent of those who participated in the CRP and 75 percent of the controls were followed up at six months. Those who were lost to follow up at six months. Those who were similar in socio-demographic and baseline clinical risk profiles in both groups except for marital status and plasma glucose concentrations among the control group. There were significant changes in the risk profiles at six months in both groups when each group was taken separately. However, the absolute changes in risk modification were seen only with regard to serum LDL cholesterol, quality of diet, physical activity levels and smoking status. In multivariate models, attending the CRP was a significant independent predictor of absolute change in serum LDL cholesterol, quality of diet and physical activity levels, irrespective of the individual's socio-demographic milieu. Smoking cessation, better control of lipid and glucose levels in those who already have high levels, controlling the increasing trends in obesity and empowering the females who are at high risk are recommended in controlling the epidemic of CHD. Implementing CRPs in other settings and strengthening "usual" care received at clinics, as at present, are recommended in the secondary prevention of CHD through behaviour risk modification.