

The pattern of acute coronary syndrome and the association of known risk factors among post- acute coronary syndrome patients of 20 years or older attending the Cardiology Clinic, Teaching Hospital Jaffna

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Introduction: Acute coronary syndromes (ACS) refer to myocardial ischemia or infarction resulting from unstable atherosclerotic plaque or endothelial disruption associated transient or permanent thrombotic occlusion of the coronary vascular tree. ACS includes unstable angina (UA), ST elevation myocardial infarction (STEMI) and non ST elevation myocardial infarction (NSTEMI). This study aimed to assess the pattern of acute coronary syndrome and associated risk factors among post-ACS patients of 20 years or older attending the Cardiology Clinic, Teaching Hospital Jaffna.

Methods: A descriptive cross-sectional hospital-based study was carried out among post-ACS patients at the Cardiology Clinic, Teaching Hospital Jaffna. An interviewer administered questionnaire adapted from the World Health Organization STEPS instrument was used to record age, sex, dietary pattern, physical activity, smoking habit, alcohol consumption, presence of hypertension (HT), diabetes mellitus (DM) and/or hyperlipidemia and family history of ischemic heart disease (IHD). The presence of HT, DM, and hyperlipidemia was confirmed from clinical records. Perceived stress, weight and height were measured.

Results: 427 post-ACS patients participated in the study. The mean age was 63 years with the majority being male 312 (73.1%). In the sample, 317 (74.2%) had STEMI, 61 (14.3%) NSTEMI and 49 (11.5%) UA. HT was the most prevalent risk factor (72.8%) followed by hyperlipidemia (70.7%) and DM (51.1%). Over half (56.7%) had a family history of IHD. Less than 5% reported current smoking and alcohol consumption. Levels of overweight/obesity were high at 47.3% (overweight 42.6%, obesity 4.7%). Dietary pattern showed that 40.7%, 54.3% and 34.7% consumed high levels of salt, sugar and fatty food. Physical activity levels were low with only 24.1% and 8% reporting moderate and vigorous activity. Stress levels were relatively high with 45.7% reporting moderate stress and 0.2% high stress. The pattern of ACS was not significantly associated with risk factors except hyperlipidemia ($P \leq 0.023$) and BMI ($P \leq 0.013$).

Conclusion: Most patients had STEMI followed by NSTEMI and UA. The majority were middle aged men. HT and hyperlipidemia were the major ACS risk factors identified. Prevention efforts should focus on reducing unhealthy dietary practices, physical inactivity and stress levels.

Key words: Acute Coronary Syndrome, risk factors, Jaffna