

Abstract

Objectives: Coronary vascular disease and clinical depression are projected to be the top two contributors of the global burden of diseases by the year 2020. Past studies revealed that the prevalence of depressive disorder is high in patients with recent MI. This study was implemented to determine the prevalence of depressive disorder in patients recently diagnosed of myocardial infarction (MI). Simultaneously the associations of the socio demographic characteristics of post MI depression were looked in to. In addition, two diagnostic scales (Beck Depression Inventory and Zung Self Rated Depression Scale) were validated for the MI population.

Methodology: The study was conducted in a cardiology unit of a tertiary care centre located in the central province of Sri Lanka. Every consecutive out patient with a diagnosis of MI between 1st to 3rd month were selected. Two hundred and eleven eligible participants consented for the study was clinically interviewed with the DCR-10. Two hundred and three completed the self rated questionnaires. Since July 2007 up until January 2008 data was collected and subsequently analyzed by using a computer soft ware (SPSS for Windows 13th version). SDS and BDI were compared with the structured clinical interview for the validation. A multi variate regression analysis was done for the socio demographic variables that showed a significant association with post MI depression.

Results: Hundred and sixty nine men and forty two women participated in the study. The mean age of the participants was 58.3 years (SD = 10.32). The prevalence of depressive disorder following MI according to the (DCR-10) structured clinical interview was 38.5%. The BDI gave the highest value (47.4%) whereas the SDS gave the lowest value (33.2%) for the prevalence of depression. The sensitivity, specificity, NPV and PPV of the BDI with the cut off score at or above 10 were 98%, 82%, 99%, and 78% respectively. The sensitivity, specificity, NPV and PPV of the SDS with the cut off index at or above 50 were 82.27%, 95.96%, 89.46%, and 92.86% respectively. The ratio of post MI depression

between men and women was 1 to 1.5 ($P = 0.05$). Patients at or above 61 years were marginally over represented in the post MI depressed group than those less than 61 years old (40% and 36%). Compared to the married, depression was clinically more common among the unmarried, divorced or widowed group ($P = 0.01$). The rate of post MI depression reduced with the rising monthly income ($P = 0.000$). Post MI depression was more common in the patients with the lowest level education ($P = 0.036$). The multivariate regression analysis revealed the degree of risk associated with the monthly income for post MI depression was the highest among all the other factors (sex, civil status, level of education).

Conclusion: The prevalence of depressive disorder following a recent MI is 38.4%. Female sex, lack of social support, poor socio economic state and lowest level of education are vulnerable factors for clinical depression after a MI. The socio economic state is a strong predictor of post MI depression. BDI and SDS are acceptable as efficient and useful diagnostic instruments to screen depression in patients with recent MI.

Key words: Prevalence, Depressive disorder, Myocardial infarction, Sri Lanka, Socio demographic factors, Vulnerable factors, Screening instruments

