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ASSESSMENT OF THE LEVEL OF ANXIETY AND STRESS AMONG PATIENTS IN CARDIOLOGY WARDS OF SELECTED HOSPITALS, MANGALORE

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ABSTRACT

Cardiovascular diseases are the largest cause of mortality; accounting for around half of all deaths resulting from non communicable diseases. The development of cardiac disease has a profound effect on a person's psychological state and quality of life. Stress and anxiety are thought to be the worse psychologic response in cardiac patients. The stresses of life have long been thought to increase a person's risk of cardiovascular disease or a serious coronary or cerebral event.Unrelieved anxiety can produce an increase in sympathetic nervous system activity leading to an increase in cardiac workload and imbalance in homeostasis that impair or impede recovery. This study assessed the level of anxiety and stress among patients in the cardiology ward. A descriptive survey approach was used for the study. The study was conducted among 30 cardiac patients admitted in the selected hospitals at Mangalore. Hamilton anxiety rating scale and Perceived stress scale was used to assess the anxiety and stress. The results revealed that majority (60%) of the patients had moderate level of anxiety, and least (16.67%) had mild level of anxiety. Majority (56.67%) of patients had moderate level of stress and least (20%) had mild level of stress. There was a positive correlation between level of anxiety and stress among patients in the cardiology ward(r=0.627).

Key words: Anxiety, Stress, Cardiac patients.

INTRODUCTION

Cardiovascular disorders are a generic term for disorders of heart and blood vessels. They are the leading cause of illness and death for people 65 years of age and older, the second leading cause of death for people 25-64 years of age [1].

Cardiovascular diseases comprise the most prevalent serious disorders in industrialized nations and are a rapidly growing problem in developing nations. Overall cardiovascular deaths accounted for around one-fourth of all deaths in India in 2008. According to the World Health Report 2002, cardiovascular diseases (CVD) will be the largest cause of death and disability in India by 2020 [2]. Cardiovascular diseases are responsible for about 25% of Disability Adjusted Life Years (DALYS) in South East Asia Region countries [3].

The development of cardiac disease has a profound effect on a person's psychological state and quality of life. Emotions, in general, exist on a continuum from normal to pathological. As a response to a changing environment, emotions allow flexibility in human behaviour responses [4].

What goes on in one's mind influences every part of the body. Stress has a powerful effect on the mind and therefore a significant effect on one's health and well-

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being. Stress occurs when individuals perceive that they cannot adequately cope with the demands being made on them or with the threats to their well-being. . Chronic stress can double a person's risk of having a myocardial infarction [5].

The burden of risk attributable to psychological stress is difficult to quantify. However, increased stress at work, lack of social support, hostile personality type, anxiety, and depression are consistently associated with increased risk of atherosclerosis and acute coronary events [6]. Anxiety is an emotional signal or an "alarm reaction" to indicate that the person perceives something negative as occurring either externally in the environment or internally within his or her body [7].

The stresses of life have long been thought to increase a person's risk of cardiovascular disease or a serious coronary or cerebral event.Being stressed can alter the way the body behaves and this can bring about changes to the blood and nervous system, which can have negative effects on heart [8].

Unrelieved anxiety can produce an increase in sympathetic nervous system activity leading to an increase in cardiac workload and imbalance in homeostasis that impairs or impedes recovery [1]. Anxiety is a negative affective state resulting from a perceived threat. This extremely distressing emotion is characterized by a perceived ability to predict, control, or mitigates a given situation. Anxiety is common in those who have coronary artery disease and among those recovering from acute cardiac events. The prevalence of anxiety is about 70 to 80% among patients suffering an acute cardiac event and persist chronically in about 20 to 25% of those with coronary heart disease [9].

STATEMENT OF THE PROBLEM
Assessment of the level of anxiety and stress among patients in cardiology wards of selected hospitals, Mangalore.

OBJECTIVES
1. To measure the level of anxiety and stress among patients in cardiology ward.
2. To find the relationship between the level of anxiety and stress among patients in cardiology ward.

HYPOTHESIS
The hypothesis will be tested at 0.05 level of significance.H_1: There is a significant relationship between the level of anxiety and stress among patients admitted in the cardiology ward.

MATERIALS AND METHODS
Descriptive correlational research design was used in the study. Purposive sampling technique was used to select the sample. After getting the ethical clearance,

the study was conducted in A.J Hospital and Research Centre and City Hospital Research and Diagnostic Centre, Mangalore. Subjects were selected according to the selection criteria. Informed consent was obtained from the sample. Demographic proforma and the Hamilton anxiety rating scale [10] and Perceived stress scale [11] were administered to 30 patients getting admitted in the cardiology ward. Both descriptive and inferential statistics were used for data analysis.

RESULTS
Section 1: Description of Demographic Characteristics of the Sample
Highest percentage (43.33%) of cardiac patients were in the age group of 46-55 years. Majority of the participants (60%) were males. Highest percentage (46.67%) of the subjects werehindus. Majority (50%) of the subjects had high school education. and (86.67%) were married. Highest percentage (36.67%) of subjects had previous hospitalization twice and coronary artery disease (43.34%) as the diagnosis.

Section II. Description of the level of anxiety among patients admitted in the cardiology ward.
Datain Figure 1 shows that majority (60%) of the patients had moderate level of anxiety, (23.33%) of the patients had severe level of anxiety and (16.67%) had mild level of anxiety.

Data in the table 1 show that the range of score was in between 11-27 and mean anxiety score was 18 ± 4.4.

Section III. Description of Level of Stress among Patients Admitted in the Cardiology Ward
Datain Figure 2 shows that majority (56.67%) of patients had moderate level of stress and least (20%) had mild level of stress.

Data in the table 2 shows that the range of score was in between 9-29 and mean stress score was 19.5±5.95.

Section IV. Correlation between Level of Anxiety and Stress among Patients Admitted inthe Cardiology Ward
Data in the table 3 shows that there is positive correlation between level of anxiety and stress among patients in the cardiology ward. The calculated 'r' value were more than the table value r $_{(28)}$= 0.361, p< 0.05, which shows that correlation between level of anxiety and stress was statistically significant.

LIMITATIONS
o Since the sample size was relatively small, generalization of the findings is also limited.
o Study was confined to the patients getting

admitted in the cardiology ward

RECOMMENDATIONS

Keeping in view the present research study findings, the following recommendations have been made.

➢ A similar study can be undertaken on a larger sample

of cardiac patients.

➢ Longitudinal studies can be undertaken to assess the anxiety and stress in cardiac patients

➢ An experimental study using pretestpost test and control group design can be planned to find strategies to reduce the stress among the cardiac patients.

Table 1. Range, Mean, Median and Standard Deviation of Level of Anxiety among Cardiac Patients

N=30

Parameter	Obtained range	Mean	Median	Standard deviation
Level of anxiety	11-27	18	17	4.4

Maximum score-56

Table 2. Range, Mean, Median and Standard Deviation of Level of Stress among Cardiac Patients

N=30

Parameter	Obtained range	Mean	Median	Standard deviation
Level of stress	9-29	19.5	19	5.95

Maximum score-40

Table 3. Correlation between Level of Anxiety and Stress among Patients Admitted in the Cardiology Ward

N=30

Parameters	Pearson correlation	df	table value	Level of significance	Inference
Level of anxiety and stress	0.627	28	0.361	<0.05	significant

$r_{(28)} = 0.361 P < 0.05$

Fig 1. Cone diagram Representing the Percentage Distribution of Cardiac Patients According to the Level of Anxiety
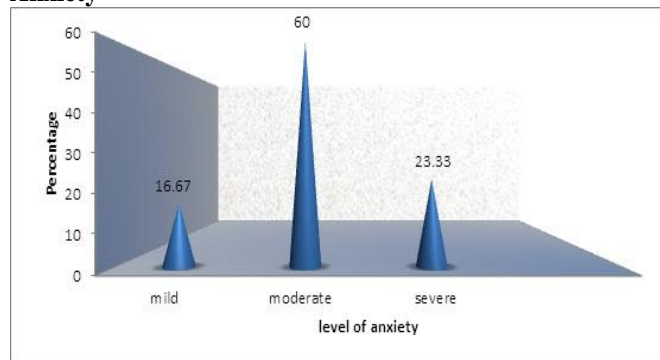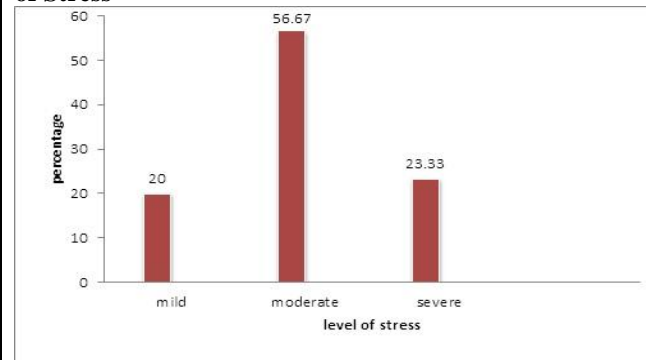

Fig 2. Bar diagram Showing the Percentage Distribution of Cardiac Patients Accordingto the Level of Stress

CONCLUSION

The prevalence of anxiety is high in the cardiac patients. Hence identification of co morbid disorders in patients admitted in medical services is essential in understanding the cause and in optimizing the management of somatic symptom burden. The findings of the study concluded that cardiac patients had moderate level of anxiety and stress which indicated the need for practicing relaxation techniques and coping strategies.

CONFLICT OF INTEREST

There were no conflicts of interest reported.

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