

## A study to assess the level of Stress and Coping strategies among patients subjected to angioplasty in selected referral hospital, Tamil Nadu, India

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### ABSTRACT

In the Global Burden disease study, reported that a total of 9.4 million deaths in India in 1990, cardio vascular diseases caused 2.3 million deaths (25%). 1.2 million deaths were due to coronary heart disease and 0.5 million due to stroke. Developing countries contributed 3.5 million of the 6.2 million global deaths from coronary heart disease in 1990. The projection estimate that these countries will account for 7.8 million of the 11.1 million deaths due to coronary heart disease by 2030.

Most of the people have died from coronary artery diseases and continues to be the world's top killer disease. Coronary artery disease is on the rise and has become a true pandemic that respects no borders. Cardiovascular diseases account for a large proportion of all deaths and disability worldwide. Global burden of disease (GBD) study reported that 1990 there were 5.2 million deaths from cardiovascular diseases in economically developed countries and 9.1 million deaths from the same causes in developing countries. It has been predicted that by the year 2020 there will be an increase by almost 75% in the global cardiovascular disease burden. All most all of this increase will occur in developing countries.

Psychological predictors of psychological and medical outcomes in patients undergoing coronary angioplasty", the relationship between psychological variables and medical complications, re-stenosis, and psychosocial adjustment was studied in 97 patients undergoing percutaneous transluminal coronary angioplasty (PTCA) for treatment of narrowed coronary arteries. Thus, psychological, information, and medical factors are important in predicting 6-month outcomes in patients undergoing PTCA.

The main objective of the study is to find out the associate and correlate the level of stress and coping strategies. using purposive sampling technique 60 samples were selected from Global Hospitals, Tamilnadu, India. The tool used were Depression Anxiety Stress Scale and Miller behavioural cope scale. The collected data was analyzed using descriptive and inferential statistics. The result shows that 95% had severe stress and 5% had experienced moderate level of stress. The level of coping strategies shows that 80% had poor coping strategy and 20% had moderate level of coping strategies. The findings of the association between the level of stress and coping strategies with the demographic variables revealed that there was a significant association between the level of stress and Sex ( $p=0.001$ ). So the hypothesis was rejected for this variable. There was no significant association between the levels of stress and other demographic variables and there was no significant association between the coping strategies and the demographic variables. So the hypothesis was accepted. The findings of the study show that there was a significant positive correlation (0.115) between the level of stress and coping strategies  $p$  value was 0.37. So the hypothesis was rejected.

**Keywords:** Assess, level of Stress, Coping strategies, Subjected to, Angioplasty

### 1. INTRODUCTION

Heart disease is claimed to be the most frequent killer in the world. Coronary artery disease is one of the leading disease, which possess greater risk among ethnic groups like Indians. The management for each patient depends on the severity of the disease condition. Coronary angioplasty is one of the treatment procedures of coronary heart disease. The maintenance and promotion of health is achieved through different combination of physical, mental and social well being. Stress is a stimulus or demand that has the potential to generate disruption in homeostasis or produce a reaction. Coping is an effort to reduce tension by minimizing replacing and resolving uncomfortable feeling such as anxiety, anger, anger, frustration and grief. Stress is a feeling that's created when you react to certain events. It's the body's way of rising to a challenge and preparing to meet a tough situation with focus, strength, stamina, and heightened alertness. Stress becomes a problem when you become over-stressed and it starts to affect how you cope with day to day stuff.

Everyone has stress in their lives. Stress can range from mild to severe. If we let the stress build up without doing anything to relax, our health can be affected. When people feel stressed by something going on around them, their bodies react by releasing chemicals into the blood. These chemicals give people more energy and strength, which can be a good thing if their stress is caused by physical danger. But this can also be a bad thing, if their stress is in response to something emotional and there is no outlet for this extra energy and strength.

As investigator was posted in the cardiac ICU observed that many patients with cardiac disorders admitted for the procedure of angioplasty were looking very restless and asking many questions regarding angioplasty. They were in stressful condition. Their blood pressure increased and they were in the state of tachycardia. Each individual patients were act up the situation differently towards the procedure. Their coping level was different. So the investigator developed the interest to assess the level of stress and coping strategies of patients subjected to angioplasty

### OBJECTIVES:

To assess the level of stress and coping strategies among patients subjected to angioplasty.

To find out the association between the level of stress and coping strategies among patients subjected to angioplasty with selected demographic variables

To correlate the level of stress and the coping strategies among patients subjected to angioplasty

### 2. MATERIALS AND METHODS:

This study was conducted in cardiac ICU, Global hospital. This hospital has 1500 beds with all the specialities. . The study was conducted in Cardiac ICU. purposive sampling technique was used for this study.Total sample size was 60.sampling criteria included patients who willing to participate and who can understand English and Tamil.The stress and coping strategy scales were used to measure stress levels of the patient.The part I is the instruments used to collect the data were demographic variables. PART II consist of Depression anxiety stress scale was used to assess the stress level. This is a 4 point likert scale consist of 21 questions regarding the stress assessment. The maximum score for each question was 8 marks and the minimum score was 2 marks.PART-III consist of Miller behavioural cope scale was used to assess the coping strategy level. This is a 5 point likert scale consists of 30 questions. The maximum score for each question was 5 and the minimum score was 1.

### 3. STATISTICAL ANALYSIS

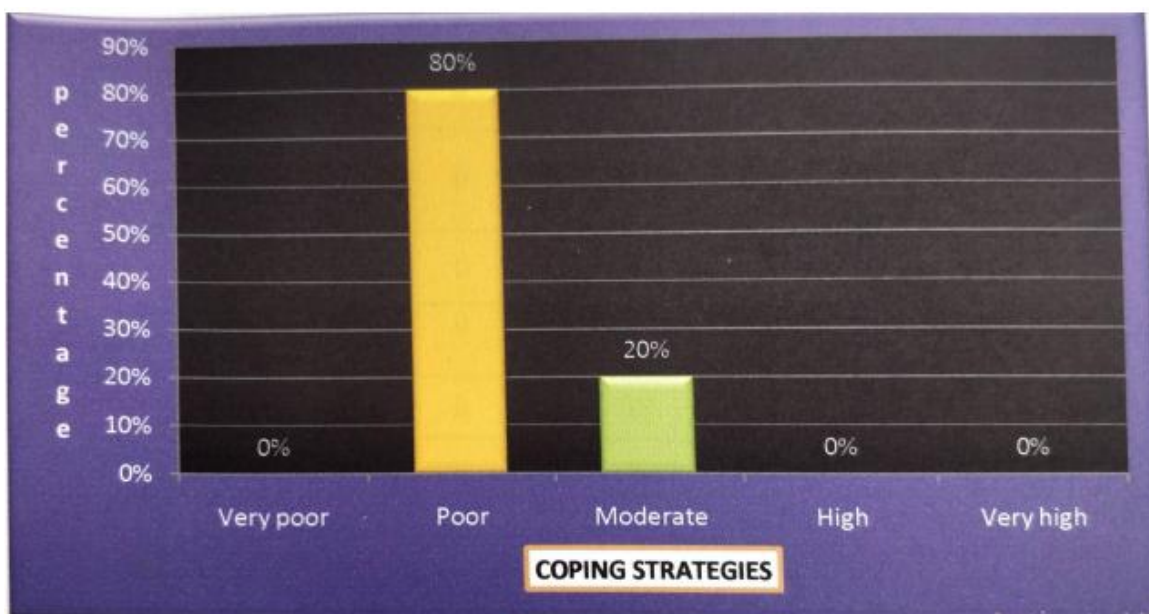
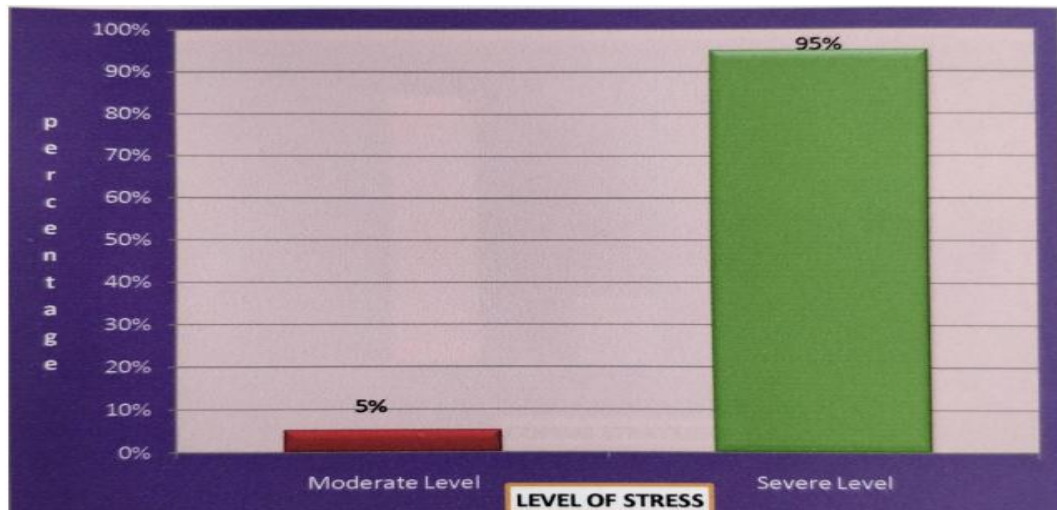
The data obtained would be analyzed in terms of the objective of the study using descriptive and inferential statistics. The collected data was tabulated and analyzed using descriptive statistics, inferential statistics as follows:

Descriptive statistical method such as frequency, percentage used to describe the demographic variables of the patients subjected to angioplasty and to assess the stress and coping strategy among patients subjected to angioplasty.

Inferential statistical method was used to find out the find out the association and correlation between stress and coping strategy among patients subjected to angioplasty. Chi square test was used to find out the association between the stress and coping strategies among patients subjected to angioplasty.

**The correlation between stress and coping strategies of the patients subjected to angioplasty.**

		COPING STRATEGIES				TOTAL		Correlation	P value
		Poor coping strategies		Moderate coping strategies					
		No	%	No	%	No	%		
Stress	Moderate Stress	3	5%	0	.0%	3	5%	0.115*	0.37
	Severe Stress	45	75%	12	20%	57	95%		
Total		48	80%	12	20%	60	100%		



#### 4. RESULTS

The result shows that 95% had severe stress and 5% had experienced moderate level of stress and the level of coping strategies shows that 80% had poor coping strategy and 20% had moderate level of coping strategies. The association between the level of stress and coping strategies with the demographic variables revealed that there was a significant association between the level of stress and Sex ( $p=0.001$ ). So the hypothesis was rejected for this variable and the findings of the study show that there was a significant positive correlation (0.115) between the level of stress and coping strategies  $p$  value was 0.37. So the hypothesis was rejected.

The study results conclude that the patients subjected to angioplasty were having severe to moderate level of stress. The level of stress associated with certain demographic variables like sex. And there was a positive correlation between level of stress and coping strategies. So the hypothesis was rejected.

#### 5. CONCLUSION

The study revealed that the majority of the samples were having severe stress and there was a significant association between the sex and the level of stress. There was no significant association between the stress and other demographic variables. So the hypothesis was accepted. There was no significant association between the coping strategies and the demographic variables. So the hypothesis was accepted. There was a positive correlation between the level of stress and coping strategies. So, the hypothesis was rejected. It is the role of the nurse to find out the stress and give the patients pleasant environment.

The findings of this study will help the nurses to know the level of stress and coping strategies among patients subjected to angioplasty.

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