# A STUDY TO ASSESS THE HOSPITAL ANXIETY AND DEPRESSION AMONG CARDIAC CLIENTS AT SELECTED HOSPITAL, COIMBATORE.

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**Abstract**

Coronary artery disease is the most common among cardiac clients. Coronary artery disease is the global threat. Many people are dying due to heart problem. Once the client diagnosed as cardiac problems, they have to continue the medicine for life long. Some of the patients may not have economic stability to continue the medicine lifelong. Some people are unable to cope up the treatment. Cardiac clients develop anxiety and depression due to expenses, limitation of adult daily activity and frequent hospitalization. The mind and body plays an important role for the recovery of the cardiac clients. In order to have a good prognosis, the clients should be free from anxiety and depression. In the present study the researcher would like to assess the anxiety and depression on cardiac clients. **Objectives**: To assess the hospital anxiety and depression among cardiac clients. **Design**: Descriptive research design adopted for the study. **Setting**: The study was conducted in a tertiary care multi-specialty hospital, Coimbatore. **Population**: Cardiac clients who fulfill the inclusion criteria were participated in the study. **Methods**: The study design was Quantitative descriptive research design was used for the study. The non-probability convenient sampling technique was used to select the sample. The data were collected by administering the structured questionnaire of hospital anxiety and depression scale. The structure questionnaire consists of 14 items with four option score. **Results**: The study depicted that 84% of the clients belong to male. 37% of the clients were between 50 and 60 years of age. Majority of the clients were normal. 15%, 8% of clients had abnormal anxiety and depression. **Conclusion**: Coronary artery disease is the major health concern with a leading morbidity, mortality in developed and developing countries. Coronary artery disease is a major burden to the family members because of the medical expenses. It leads to increased stress, anxiety and depression.

**KEYWORDS:** Anxiety, Depression, Hospital, Cardiac, Clients, Coronary artery disease.

## INTRODUCTION

Coronary artery disease (CAD) also known as coronary heart disease or ischemic heart disease, is a condition where the coronary arteries that supply blood to the heart become narrowed, reducing blood flow to the heart. Coronary heart disease is the leading cause of death. According to world health organization, approximately 17.9 million death occur each year. Coronary artery disease is a large burden in low and middle income countries. Coronary artery disease is the most leading cause of death in India.

Hospital and intensive care unit environment create more stress and anxiety. Anxiety and depression is more common on cardiac patients. A substantial number of cardiac client's experience anxiety and depression. This contribute to decreased quality of life and increased morbidity, mortality rate.

Cardiovascular patients often experience psychological problems. Among the psychological problems, the majority of the patients have depression and anxiety. These anxiety and depression interfere with the patient treatment, progress and decrease the quality of life. In order to get recovery from the cardiovascular disease, the clients must avoid stress, anxiety and depression.

## NEED FOR THE STUDY

Cardiovascular disease is the leading cause of death worldwide. Cardiovascular disease is a group of disorders of the heart, blood vessels. Cardiovascular disease includes coronary artery disease, acute coronary syndrome, angina pectoris, myocardial infarction, non ST elevation myocardial infarction etc. once the person is affected with the heart problem, they have to continue the medicine lifelong. Along with the medication their lifestyle pattern also changed a lot. These will make the person more depend on others and they also develop stress. Majority of the patients feel depression and anxiety.

Hospital anxiety and depression scale commonly used to measure the anxiety and depression among cardiac patients. It is a valid and reliable tool used to measure the anxiety and depression in the hospital settings. Rachel Bond, BA conducted a study on measurement characteristics and clinical utility of the hospital anxiety and depression scale among cardiovascular patients. They found that HADS is a valid tool to measure the psychological symptoms.

Mohammad Ashraful Amin et.al, conducted a study on assessment of anxiety and depression among people admitted with heart disease. The study result showed that 15% of the patients had depression. Depression can lead to poor drug compliance and bad prognosis. The number of patients had borderline and abnormal anxiety was 56% and 14% respectively.

There was a study conducted on anxiety and depression among coronary artery disease at a cardiac client, Nepal. The study result revealed that out of 168 clients, 24% had caseness anxiety. 20% had borderline anxiety. Depression caseness was present about 24%. 26% had borderline depression. The investigator interested to assess the anxiety and depression among cardiac clients. This assessment helps to know the cardiac client's compliance and drug adherence to treatment. It will also guide to develop coping mechanisms and develop better mental health status on cardiac clients.

## METHODOLOGY

### Aim of the study
To assess the anxiety and depression among cardiac clients.

### RESEARCH DESIGN
The research design applied for the study was quantitative descriptive research design.

### SETTING OF THE STUDY
The study was conducted in a multi-specialty hospital, Coimbatore.

### POPULATION OF THE STUDY
The study population included were cardiac clients. Cardiac clients were included from the cardiac ward, coronary care unit, and cardiology outpatient department at selected hospital

### SAMPLING SIZE
The sample size was 100 cardiac clients.

### SAMPLING TECHNIQUE
Non probability convenient sampling technique was used to select the sample.

## CRITERIA FOR SAMPLE SELECTION

### Inclusion criteria

Both male and female between the age group of 30-70 years with coronary artery disease.

Clients those who were diagnosed to coronary artery disease, acute coronary syndrome, myocardial infarction.

Clients with other associated disease conditions like diabetes mellitus and hypertension were included.

### Exclusion criteria

Clients those who were hemodynamically unstable.

Clients who were unable to read Tamil

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## DEVELOPMENT AND DESCRIPTION OF THE TOOL

The researcher prepared the tool after intensive review of the related literature and with guidance of experts in the field of nursing, medicine and statistics. It consists of 2 sections.

### Section A Demographic variable

The demographic variables included were sex, age, education, income, religion and occupation.

### Section B Hospital Anxiety and Depression Scale

Zigmond and Snaith (1983), hospital anxiety and depression scale was used to assess the anxiety, depression. The scale consists of 14 items with four option scale. The first seven questions measured anxiety level and last seven questions used to measure depression level. The total score of the tool is from 0 to 21. Normal level is 0 to 7, borderline level is 8 to 10, and abnormal level is 11 to 21.

## PROCEDURE FOR DATA COLLECTION

Prior the data collection permission was obtained from the Medical Officer of the hospital for conducting study. Each cardiac client was assured for the data collection. The data will be utilized only for the purpose of the study and kept as confidential. Data was obtained using structured knowledge questionnaire with four point to assess the anxiety and depression level.

### SECTION: A

**Table: A Distribution of clients according to their demographic variables.**

| S. No. | Demographic variables | Frequency ( N = 100) | Percentage (%) |
|--------|----------------------|----------------------|----------------|
| 1. | **Sex** | | |
| | Male | 84 | 84% |
| | Female | 16 | 16% |
| 2. | **Age** | | |
| | 30 – 40 Years | 5 | 5% |
| | 40 – 50 Years | 24 | 24% |
| | 50 – 60 Years | 37 | 37% |
| | 60 – 70 Years | 34 | 34% |
| 3. | **Education** | | |
| | Primary | 33 | 33% |
| | Secondary | 20 | 20% |
| | Degree | 32 | 32% |
| | Illiterate | 15 | 15% |
| 4 | **Religion** | | |
| | Hindu | 88 | 88% |
| | Muslim | 7 | 7% |
| | Christian | 5 | 5% |
| 5 | **Occupation** | | |
| | Professional | 4 | 4% |
| | Non professional | 75 | 75% |
| | | | 21% |

| | Unemployed | 21 | |
|---|---|---|---|
| 6 | **Monthly income** | | |
| | < Rs.15,000 | 3 | 3% |
| | Rs.15,000 – 20,000 | 40 | 40% |
| | Rs. 20,000 – 25,000 | 19 | 19% |
| | > Rs. 25,000 | 18 | 18% |

The above table shows the distribution of cardiac clients based on their demographic variables. Majority of the clients (84%) were male patients. Whereas 16% of clients were female. 37% of the clients between 50 and 60 years old. 32% of the clients were degree graduate. Majority of the clients (88%) from Hindu religion. 75% of the clients from non-professional. 40% of the clients were earning between 15,000 and 20,000.

**Section B description of hospital anxiety and depression on cardiac clients**

| S.no | Hospital anxiety and depression | Frequency (N=100) | Percentage (%) |
|---|---|---|---|
| 1 | Anxiety | | |
| | Normal | 67 | 67% |
| | Borderline | 18 | 18% |
| | Abnormal | 15 | 15% |
| | Depression | | |
| | Normal | 72 | 72% |
| | Borderline | 20 | 20% |
| | Abnormal | 8 | 8% |

The above table explains that majority of the clients were not showed anxiety, depression respectively 67%, 72%. 18% of the clients expressed borderline anxiety. Whereas 20% of the clients had borderline depression. Some of the clients (15%) were abnormal anxiety. 8% of the clients had abnormal depression.

**DISCUSSION:**

In the present study, Majority of the cardiac clients (84%) were male. Only 16% were female clients. Zujie gao conducted a study to assess the gender difference in cardiovascular disease. The study showed that men were more prone to get cardiac disease than women. According to the demographic variables, cardiac disease more common after 40 years of age.

In the present study showed 18% of the clients had borderline anxiety. Borderline depression was present among 20% of clients. The abnormal anxiety was there for 20% of cardiac clients. 8% of the clients had abnormal depression. Allabadi.H conducted a similar cross sectional study in a Palestinian population. The study results revealed that 42% had severe depression. 19% of the clients had very severe depression.

**IMPLICATIONS FOR NURSING**

**Nursing Practice**
- ✓ The present study provides information about hospital anxiety and depression.
- ✓ To practice planned health education program on coping mechanism, meditation and yoga.
- ✓ Nurses must educate on prevention of anxiety and depression.

**Nursing Education**

✓ Nursing educator can encourage the student nurses to conduct health education program

✓ Nursing educator can teach how to create the awareness among the patients to prevent anxiety and depression.

✓ Nurse educator can organize workshop about depression and anxiety prevention methods.

**Nursing administration**

✓ Nursing administrator can disseminate the research knowledge to the nurses working in the cardiac ward, outpatient department, coronary care unit.

✓ Nursing administrator should play a major role in early detection of anxiety and depression among cardiac clients.

✓ Nursing administrator can encourage students, staff, supervisor to participate in health education program

**Nursing research**

✓ The findings of present study can serve as a foundation to conduct study in larger population to obtain more information.

✓ Further studies can be conducted to find out gender difference on anxiety and depression.

✓ Nursing research provides evidence based clinical practice.

**LIMITATION**

✓ The study is limited to only cardiac clients

✓ Those who were coming to the selected tertiary care hospital.

✓ The study is only limited to 100 cardiac clients.

**RECOMMENDATION**

Based on the research results, the recommendations are given below,

✓ A similar study can be conducted on long term to large sample.

✓ A similar study can be conducted to assess the gender difference on anxiety and depression.

✓ A similar study can be conducted in community.

**CONCLUSION**

The study concluded that 15% and 8% clients had abnormal anxiety and depression respectively. Emotional and psychological issues are more common among cardiac clients. Cardiovascular disease is a major health burden in the world. Majority of the cardiac clients have anxiety and depression. In order to get recovery soon, cardiac clients would be free from mental illness. The integration of mental and physical health plays an important role for better prognosis. There are many studies conducted showed that depression and anxiety is more among cardiac clients. Nurses play a crucial role to implement excellent strategies to reduce anxiety and depression.

**REFERENCE**:

1. Black, J.M., Hawks, J.H., and Keene, A.M. (1997). Medical-surgical Nursing: Clinical Management for Positive Outcomes. Philadelphia: W.B.Saunders Company.

2. Burns, N., &Grove, S.K. (1999).Understanding Nursing Research. Philadelphia: W.B.Saunders Company

3. WHO, Deaths from cardiovascular disease. Retrieved from http://www.int/gho/ncd/mortality_morbidity/cvd/en.

4. Dossey, B.M., Guzzetta, C.E., and Kenner, C.V. (1992). Critical Care Nursing: Body-Mind-Spirit. Philadelphia: Mosby.

5. Kasper, D.L., Braunwald's, E., Fauci, A.S., Hauser, S.L., Longo, L.D, and Jameson, J.L. (2005). Harrison's principles of internal medicine. New York: McGraw Hill Medical publishers.

6.       Lewis, S. M., Heitkemper, M.M., Dirksen, S.R., O'Brien, P.G., & Bucher, L. (2000). Medical-Surgical Nursing: Assessment and Management of Clinical Problems. London: Mosby.

7.       PanelZujie Gao, Zengsheng Chen, Anqiang Sun, Xiaoyan Deng,      Gender      differences      in cardiovascular disease.  Elsevier, Volume 4, 2019,

8.       Rutledge T, Linke SE, Krantz DS, Johnson BD, Bittner V, Eastwood JA, Eteiba W, Pepine CJ, Vaccarino V, Francis J, et al. Comorbid depression and anxiety symptoms as predictors of cardiovascular events: results from the NHLBIsponsored Women's ischemia syndrome evaluation (WISE) study. Psychosom Med. 2009;71:958–64.

9.       Lippi G, Montagnana M, Favaloro EJ, Franchini M. Mental depression and cardiovascular disease: a multifaceted, bidirectional association. Semin Thromb Hemost. 2009;35:325–36.

10.      Rachel Bond,BA, Jennifer Burns, BA, Linda Ehrlich-Jones, Measurement and characteristics and clinical utility of the Hospital Anxiety and Depression Scale among adults with cardiovascular disease, organization news, volume-100,  issuses 11, p2219-2200, November 2019.

11.      Mohammad Ashraful Amin, Mohsin Ahmed, Sabrina Nahin, Nadira Sultana Kakoly, assessment of depression and anxiety among admitted people with Heart Disease Conditions: A cross sectional hospital based study in a bangladeshi population, public mental health, volume 13-2022.

12.      Puja sharma dhital, Kalpana sharma, Pratik poudel, Pankaj raj dhital, Anxiety and depression among patients with coronary artery disease attending at a cardiac center, Kathmandu, Nepal, November, 2018.