



International Journal of Advance Research in Nursing

Volume 7; Issue 2; Jul-Dec 2024; Page No. 199-204

Received: 03-09-2024
Accepted: 12-10-2024

Indexed Journal
Peer Reviewed Journal

A study to evaluate the effectiveness of counselling technique regarding the reduction of co-morbid depression among patients with medical illness at selected hospitals, Bangalore

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DOI: <https://doi.org/10.33545/nursing.2024.v7.i2.C.419>

Abstract

Statement of the problem: "A study to evaluate the effectiveness of counselling technique regarding the reduction of co morbid depression among patients with medical illness at selected hospitals, Bangalore."

Background of the study: Depression has been predicted to be the leading cause of disease burden in 2030 by the World Health Organization (WHO). An emerging body of evidence demonstrates that depression and physical disorders are commonly co morbid. This co morbidity is related to a poor quality of life (QoL), worse outcomes of the physical disorders, increased mortality, higher medical costs, greater disability, and a heightened functional impact than when depression or a medical disease is present alone. On the basis of these findings, the co morbidity of depression and a physical disorder has been recognized as an increasingly important clinical and global health issue.

Objectives of the study

- To assess the pre counseling level of co morbid depression among patients with medical illness.
- To evaluate the effectiveness of counselling by comparing pre and post test level of co morbid depression among patients with medical illness.
- To determine the association between level of co morbid depression with their selected demographic variable among patients with medical illness.

Hypothesis: H1: The mean post counseling level of co morbid depression will be significantly lesser than mean pre counseling level of co morbid depression among patients with medical illness

H2: There will be significant association between levels of co morbid depression with their selected demographic variable among patients with medical illness.

Methods: A Quasi-Experimental one group pre-test and post-test design was adapted in the present study. Purposive sampling technique was used to select 40 students. The data was collected using a self-administered knowledge questionnaire and Beck's depression inventory. Content validity of the self-administered questionnaire and Beck's depression inventory was obtained from the experts of related specialties. When the reliability of the tool was determined using test-retest reliability (Pearson) formula, it was found to be $r = 0.93$, which means that the tool is highly reliable. Following this, a pilot study was conducted to test the feasibility and the practicality of the study.

On the first day of the data collection for the main study, the participants' level of co morbid depression was assessed using the tool (Pre-test) following which, the counselling technique was administered. On the seventh day, the participants' level of co morbid depression was reassessed using the same tool (Post-test)

Results: The Pre-test level of co morbid depression scores were assessed, the mean was found to be 21.63 [34.33%] with a standard deviation of 4.65.

However, the Post-test level of co morbid depression scores showed a mean value of 12.13[19.25%] with a S.D. of 4.43. There was a 9.5[15.08%] decreases in the respondents level of co morbid depression.

Interpretation and Conclusion: The effectiveness of the counseling technique was further tested using inferential statistics using the paired 't' test. At 5% level of significance, a significant difference of 28.283 t-values was found between the Pre-test and the Post-test level of co morbid depression scores of the respondents. Hence the counseling technique was found to be effective regarding the reduction of co morbid depression among patients with medical illness at selected hospitals.

Keywords: Counseling technique, co morbid depression

Introduction

Depression refers to a state of low mood, loss of positive affect and a variety of emotional, cognitive, and behavioral symptoms including disrupted sleep and eating, worthlessness, and recurrent thought of death. Depression

has been predicted to be the leading cause of disease burden in 2030 by the World Health Organization (WHO). Thus, the independent disability of depression might indicate an anticipated burden of depression in the context of physical disorders. An emerging body of evidence demonstrates that

depression and physical disorders are commonly co morbid. This co morbidity is related to a poor quality of life (QoL), worse outcomes of the physical disorders, increased mortality, higher medical costs, greater disability, and a heightened functional impact than when depression or a medical disease is present alone. On the basis of these findings, the co-morbidity of depression and a physical disorder has been recognized as an increasingly important clinical and global health issue.

Need of the Study

Depression has been determined by the World Health Organization (WHO) as one of the most disabling disorders in the world. It affects roughly 25% of women and 10% of men at some point in their lifetime. It is thus estimated more than 340 million people worldwide and more than 18 million people in the USA alone suffer from depression at any particular time. In addition to its widespread prevalence, depression has a strong tendency to recur. The overwhelming burden of depression may also be compounded by co morbidity with medical disorders such as diabetes, stroke and cardiovascular disease and other psychiatric disorders such as anxiety disorders, substance abuse and alcoholism. Untreated depression often leads to personal, marital, familial, career and financial difficulties, and is associated with a high rate of suicide, approaching 15% of patients with major depression in some studies. After supervision, researcher was able to found that mostly there was association of co-morbid depression, which was again affecting their health and wellness.

Objectives of the study

- To assess the pre counseling level of co morbid depression among patients with medical illness.
- To evaluate the effectiveness of counseling by comparing pre and post test level of co morbid depression among patients with medical illness.

- To determine the association between level of co morbid depression with their selected demographic variable among patients with medical illness.

Assumptions

The study assumes that:

- Counseling will reduce the level of co morbid depression among patients with medical illness
- Untreated depression will have ill effect on morbidity among patient with medical illness.

Conceptual Framework

The present study was aimed at determining the level of depression among patients with medical illness and evaluating the effectiveness of counseling technique. The conceptual framework that suited for the present study was based on General System theory. It was proposed by Ludwig Bertalanffy. According to him all systems are organized unit with a set of components react mutually. The system act as a whole a dysfunction of input causes a system dysfunction rather than loss of single. In all system activity can be resolved into an aggression of feedback circuit's such as input, throughput and output. The feedback circuits helps in maintenance of an intact system.

Input: In the present study the input refers to the cardiac patients who have co morbid depression and researcher who have different background of function.

Throughput: In this study throughput refers to the counseling regarding ways to reduce the co morbid depression.

Output: In this study output refers to effectiveness of counseling in reducing co morbid depression. Output is assessed by evaluating scores of same Beck's depression inventory on pre test and post- test.

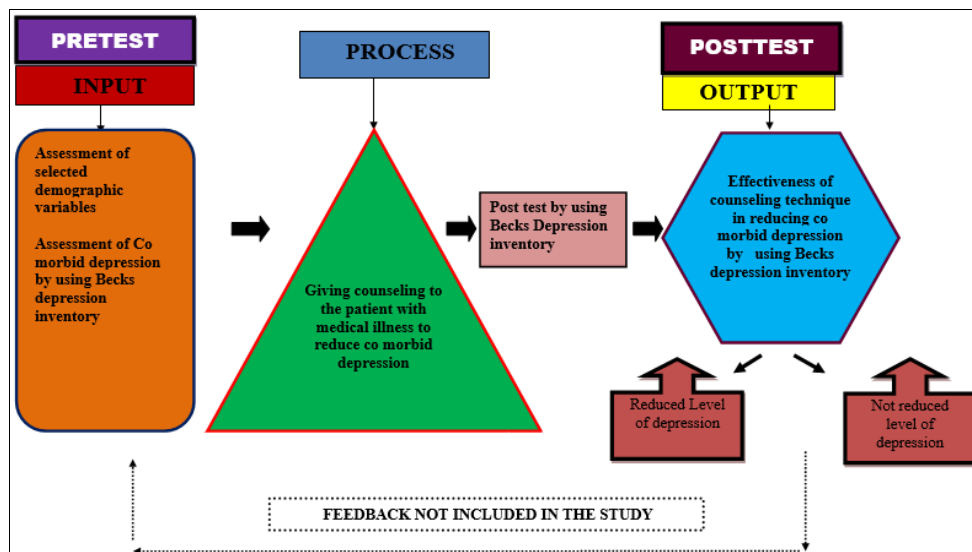


Fig 1: Conceptual Framework of the study based on the System Model

Research Design

The research design refers to the researcher's overall plan for obtaining answer to the research question and it spells out strategies that the researcher adapted to develop

information that is accurate, objective and interpretable. Research design is blue print for conducting the study. It maximizes control over factors that could interfere with validity of the findings. The research design guides the

researcher in planning and implementing the study in a way that is most likely to achieve the intended goal. The research design selected for the study is one group pre test and post test design. The present study tends to describe

the co morbid depression among patients with medical illness and to evaluate the effectiveness of counseling technique.

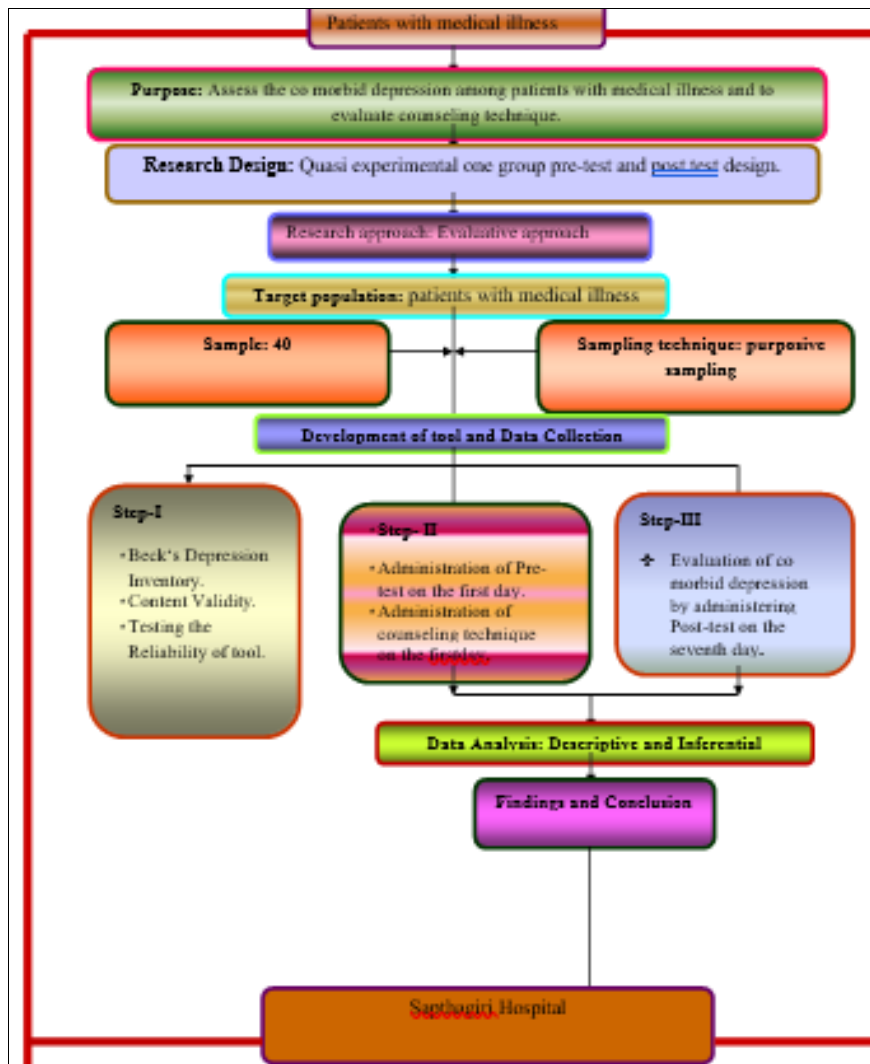


Fig 2: Schematic Representation of Study Design

Setting of the study

This study was conducted in Sapthagiri Hospital. The selection of the setting was done for the present study on the basis of geographical proximity, feasibility of the study and availability of sample.

Population

Population is the entire aggregation of the subjects that meet a designed set of criteria. In the present study, population consists of 40 patients with medical illness admitted in Sapthagiri hospital, Bangalore.

Sample and sampling technique

According to the sampling criteria 40 patients with medical illness were selected by using purposive sampling technique.

Sample size

In the present study, the sample size consists of 40 patients with medical illness.

Inclusion criteria

- Who are willing to participate in study.
- Who are available at the time of data collection.

Exclusion criteria:

- Who are getting psychotropic drugs and psychotherapy
- Patients with mental retardation, Un-conscious.

Data collection techniques and instrument

Method of data collection includes development of tool, testing of validity, reliability and data collection procedure. Tools are the instruments used by the researcher to collect the data. A self administered questionnaire was used by the investigator for the data collection.

Section A: It consists of demographic variable of the patients.

Section B: Level of depression will be assessed by using Beck's Depression Inventory.

Before starting the study, researcher had obtained written

permission from the Medical Officer, Saphthgiri Hospital, Bangalore. The data collection period for the study was 1-10-2020 to 31-10-2020. The samples for the study were identified through purposive sampling technique. The consent was obtained and data collected using Beck’s Depression Inventory. A serene room was arranged in the hospital and the participants were encouraged to ventilate their perception regarding the disease and treatment. The researcher used the following techniques for giving counseling: ventilation, explanation, reassurance, and diversion by physical and mental activity, recreation, improve the problem solving skills, encourage healthy defense mechanism, suggestion, reinforcement, get support from significant others and change of attitudes and life style. The same tool is used to assess the effectiveness of counseling.

Section II: Level of co morbid depression: Overall pre-test and Posttest level of co morbid depression among participants N=40

| Level of Depression | No of Respondents | | | |
|---------------------|-------------------|------------|-----------|------------|
| | Pretest | | Posttest | |
| | Frequency | Percentage | Frequency | Percentage |
| Normal (<16%) | 0 | 0 | 17 | 42.5% |
| Mild (16-25%) | 8 | 20% | 15 | 37.5% |
| Borderline (26-32%) | 12 | 30% | 8 | 20% |
| Moderate (33-48%) | 17 | 42.5% | 0 | 0 |
| Severe (49--64%) | 3 | 7.5% | 0 | 0 |
| Extreme (>64%) | 0 | 0 | 0 | 0 |

The above table shows the pre-test and Post-test level of co morbid depressions were seen into 6 categories; normal, mild, borderline, moderate, severe and extreme depression. Majority of respondent i.e., 17(42.5%) had moderate depression, 3(7.5%) had severe depression, 12(30%) had borderline depression and 8(20%) had mild depression. None of the respondent falls in the category of normal and extreme depression. In the post test level of co morbid depressions, Majority of respondent i.e., 17(42.5%) had normal level, 15(37.5%) had mild depression and 8(20%) had borderline depression. None of the respondent falls in the category of severe and extreme depression after post-test.

Section-III: Comparison between pre and post-test level on co morbid depression among the patients with medical illness

| Knowledge assessment | Max score | Mean | Mean % | SD | Paired ‘t’ test |
|----------------------|-----------|-------|--------|------|-----------------|
| Pre-test | 63 | 21.63 | 34.33% | 4.65 | 28.23* |
| Post-test | 63 | 12.13 | 19.25% | 4.43 | |

***Significant at p<0.001level, t (0.001, 39 df) = 28.283

The data presented in table reveals that the pre-test mean score is 21.63, mean % is 34.33% and SD is 4.65 whereas for the post test, the mean score is 12.13 with mean % of 19.25% and SD of 4.43. The ‘t’ value was 28.283 which was found to be highly significant at the level of 0.001. 39 df

Section IV: Association between pre-test level of co morbid depression with their selected demographic variables This was tested by using Chi square test. Demographic variables namely: sex, occupation and family income shows significant association with the pre-test level of co morbid

Results

Major Findings of the Study

Section I- Socio-demographic data

In the present study, the finding revealed that majority of the sample 15 [37.5%] was in the age group of 36-40 years and only 3 [7.5%] were in the age group of 25-30 years. Majority of the participants 60 percent [24] were females and only 40 percent [16] of the participants were males. Out of the 40 respondents majority of the sample 23[57.5%] belongs to nuclear family whereas only 4[10%] belongs to extended family. Regarding education, majority of the sample 17[42.5%] had post graduate education whereas only 5[12.5%] had primary school education. In respect to occupation, 45% [18] samples were employed and 55% [22] samples were unemployed.

depression whereas the demographic variables namely: age, type of family, education and place of living does not shows significant association with the pre-test level of co morbid depression.

Conclusion

After the detailed analysis, the study leads to the conclusion that shows that majority of the patients with medical illness had various level of co morbid depression before counseling technique. However, the respondents reduced the level of co morbid depression after administration of counseling technique. The counseling technique was significantly effective in the reduction of co morbid depression among patients with medical illness. In order to examine the association between the variables the chi-square test was worked out. Demographic variables namely: sex, occupation and family income shows significant association with the pre-test level of co morbid depression whereas the demographic variables namely: age, type of family, education and place of living does not shows significant association with the pre-test level of co morbid depression.

Nursing Implications

- **Nursing Practice:** Nurses working in the hospital setting will be able to find out the depressive symptoms among the chronically ill cardiac patients who are attending the in-patient or out-patient departments. Good education with appropriate approaches will help the high risk personnel to attempt for life style changes and prevention of co morbid depression.
- **Nursing education:** nurse educators must take initiative to teach students regarding assessment of depression. The health care providers are the key

personnel in imparting education to the clients. There is a need for in-service education program for the health care providers for preparing them to function effectively as a counselor for clients. A knowledgeable nurse has to handle such problem in the country for identifying the high risk patient group who are prone to develop depression and teach them the effective prevention and coping strategies..

- **Nursing research:** This study motivates other investigators to conduct further studies regarding this topic to find out the risk factors which make the patients depressive. This study motivates other researchers to conduct further studies to evaluate the usual coping strategies of patients and their effectiveness.
- **Nursing Administration :** Nurse administrators can arrange in-service education and continuing education programs for students and also for nurses the reduction of co morbid depression among patients with medical illness for assessing and predicting patients in all levels as it is the nurse administrator who supervises and evaluates a nurse's performance and thereby promote quality nursing care.

• **Conflict of Interest**

Not available

• **Financial Support**

Not available

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How to Cite This Article

Nandakumar KT. A study to evaluate the effectiveness of counselling technique regarding the reduction of co-morbid depression among patients with medical illness at selected hospitals, Bangalore. *International Journal of Advance Research in Nursing*. 2024;7(2):199-204.

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