



A STUDY TO ASSESS THE IMPACT OF PSYCHOTHERAPEUTIC INTERVENTION ON DEPRESSION, ANXIETY, AND STRESS AMONG CHRONIC KIDNEY DISEASE

Nursing

Diana Patel	IV year BSc Nursing Dinsha Patel College of Nursing, Nadiad, Gujarat, India
Riddhi Patel*	IV year BSc Nursing Dinsha Patel College of Nursing, Nadiad, Gujarat, India *Corresponding Author
Shivani Patel	IV year BSc Nursing Dinsha Patel College of Nursing, Nadiad, Gujarat, India
Miral Patel	IV year BSc Nursing Dinsha Patel College of Nursing, Nadiad, Gujarat, India
Meet Patel	IV year BSc Nursing Dinsha Patel College of Nursing, Nadiad, Gujarat, India
Sagar Patel	IV year BSc Nursing Dinsha Patel College of Nursing, Nadiad, Gujarat, India
Umang Macwan	IV year BSc Nursing Dinsha Patel College of Nursing, Nadiad, Gujarat, India
Mrs. Arpita Vaidya	Vice Principle, MSc Nursing, Dinsha Patel College of Nursing, Nadiad, Gujarat, India

ABSTRACT

The research approach was adopted in the study was Quantitative Research Approach with pre experimental pre-test post –test design. The study was conducted in selected hospital of Nadiad city by use of DASS-42 Tool. The samples were selected by non- probability purposive sampling technique 30 samples were selected for the study. Study instrument used by the researcher consisted of two sections i.e. sociodemographic profile and DASS-42 Tool to assess the impact of depression, anxiety, and stress through providing psycho education for 5min , deep breathing for 5 min , progressive muscles relaxation for 10 min for two cycle. This tool was validated by 8 experts from different fields. Reliability of the tool was 0.93 with the help of spearman's rank correlation formula. Pilot study was conducted among 3 samples and the study was found feasible. After 1 week of pilot study, final study was conducted. Descriptive and inferential statistics was used to analyze the data. The data obtained was tabulated analyzed and interpreted in terms of objectives of the study. Researcher applied T-test for comparison of pre and post assessment of impact of depression, anxiety, and stress patients undergoing hemodialysis. Calculated T test values corresponding to pretest-posttest comparison were 27.02 and corresponding Table value was 2.05. There was a significant association between depression, anxiety and stress (family type χ^2 value is 12.51 and p value is 9.49, year of chronic kidney disease χ^2 value is 56.86 and p value is 15.51) among chronic kidney disease in selected hospital at Nadiad city.

KEYWORDS

Depression, Anxiety, Stress, Chronic kidney diseases, Deep breathing, Progressive muscles relaxation.

INTRODUCTION

Kidney is the vital organ plays a main role in the maintenance of homeostasis mechanisms in human body. Healthy kidney is sophisticated reprocessing machine that cleans the blood by removing fluid, salt and waste is from the body. Deficit in blood supply to the kidney will lead to decreased function. Prolonged decrease in blood supply or in the blood pressure will lead to acute or sudden kidney failure. Hemodialysis is the most common type of dialysis. It is uses an artificial kidney, known as hemodialysis, to remove the waste, and chemicals from your blood. To get the blood to flow to the artificial kidney, your doctor will surgically create a vascular access into your blood vessels. This vascular access will allows a large amount of blood to flow through your body during hemodialysis treatment. This means more blood can be filtered and purified.

Depression is the most common psychological complication which has serious impact on the quality of life of hemodialysis patients and their caregivers, affecting negatively their social, economic and psychological well-being. Depression is associated with important aspects of the clinical course, including mortality, increased number of hospital admissions, reduced compliance with drugs and reduced quality of life. Extreme anxiety and somatic symptoms such as breathlessness, palpitations, chest pain, sweating and fear of dying may occur in kidney disease cases. Many a times, these symptoms are not associated with any triggers and may occur unexpectedly.

Adequacy of dialysis means the delivery of a treatment dose that is considered efficient to promote optimum long term outcome. This is usually measure by urea removal and known as urea reduction ratio or by the treatment index. Progressive muscles relaxation is also used therapeutically to reduce the impact of depression anxiety and stress in hemodialysis patient.

Statement of the problem

"A study to assess impact of psychotherapeutic intervention on depression, anxiety, and stress among chronic kidney disease in civil hospital at Nadiad."

OBJECTIVES:

- 1) To assess the level of Depression of the Chronic Kidney disease patients before and after administration of Psychotherapeutic Intervention in civil hospitals of Nadiad city.
- 2) To assess the level of Anxiety of the Chronic Kidney disease patients before and after administration of Psychotherapeutic Intervention in civil hospitals of Nadiad city.
- 3) To assess the level of Stress of Chronic Kidney disease patients before and after administration of Psychotherapeutic Intervention in civil hospitals of Nadiad city.
- 4) To find association between selected demographic variables and Depression among patients with Chronic Kidney disease in civil hospitals of Nadiad city.
- 5) To find association between selected demographic variables and Anxiety among patients with Chronic Kidney disease in civil hospitals of Nadiad city.
- 6) To find association between selected demographic variables and Stress among patients with Chronic Kidney disease in civil hospitals of Nadiad city.

Hypothesis:

HO: There will be no significant difference between the mean score of depression, anxiety, and stress before & after administration of a Psychotherapeutic Intervention as evidenced by DASS-42 at 0.05 level of significance.

H1: The mean posttest Depression score of Chronic Kidney disease patients will be significantly lower than the mean pre-test Depression score after administration of a Psychotherapeutic Intervention as evidenced by DASS-42 at 0.05 level of significance.

H2: The mean posttest Anxiety score of Chronic Kidney disease patients will be significantly lower than the mean pre-test Anxiety score after administration of a Psychotherapeutic Intervention as evidenced by DASS-42 at 0.05 level of significance.

H3: The mean posttest Stress score of Chronic Kidney disease patients

will be significantly lower than the mean pre-test Stress cores after administration of a Psychotherapeutic Intervention as evidenced by DASS-42 at 0.05 level of significance.

METHODOLOGY:

Research approach: A quantitative Approach was used in this study.

Research design: Pre experimental- pre- test post-test research design was chosen for analyzing the impact of psycho therapeutic intervention through DASS-42 Tool.

Variables:

- Independent variable:** In this study the independent variable is Psycho education and relaxation technique
- Dependent variable:** In this study the dependent variable is depression, anxiety, and stress.

Setting of the study: Dialysis unit of civil hospital, Nadiad

Population: Target population for the study was Patient undergoing hemodialysis in Dialysis unit of civil Hospital, Nadiad

Sample: The samples selected for the present study were patients with chronic kidney disease patient. Undergoing hemodialysis in civil hospital, Nadiad.

Sample size: Sample size for the study comprised of 30 hemodialysis patients at selected hospital in Nadiad city.

Criteria for sample selection:

INCLUSIVE CRITERIA:

- Patients who will give consent to participate in the study.
- Male and female both who receives hemodialysis at least twice in a week.
- Patients who are diagnosed with chronic kidney disease more than 2 years and undergoing hemodialysis treatment.
- Stress score on DAAS-42 should be more than 14.
- Depression score on DAAS-42 should be more than 9.
- Anxiety score on DAAS-42 should be more than 7.

EXCLUSIVE CRITERIA:

- Patients who will not be available at the time of data collection.
- Patients who are not willing to participate.
- Patients below 30 years and above 50 years.
- Patients who are critically ill.

Sampling technique: Non probability purposive sampling technique was used to select the sample.

Description of the tool:

In this study, tool consists of two sessions to assess the impact of psycho therapeutic intervention on depression, anxiety and stress among patients through DASS -42 Tools before and after undergoing hemodialysis.

Section A: Demographic Variables

This consists of twelve items for obtaining information about the selected demographic data such as age, gender,

The researcher collected the information using questioner method.

Section B: Subjective assessment

DASS-42 Tool which is standardized tool

SCORING SYSTEM:

VARIABLE	NORMAL	MILD	MODRATE	SEVERE	VERY SEVERE
Depression	0-9	10-13	14-20	21-27	28+
Anxiety	0-7	8-9	10-14	15-19	20+
Stress	0-14	15-18	19-25	26-33	34+

Intervention: certain intervention are provided to reduce the depression, anxiety, and stress which includes (psycho education deep breathing exercise and progressive muscles relaxation).

RELIABILITY:

The DASS questionnaire is public domain, and so permission is not needed to use it.

$$r = \frac{\sum(x-\bar{x})(y-\bar{y})}{\sqrt{\sum(x-\bar{x})^2 \sum(y-\bar{y})^2}} \quad \text{And} \quad r' = \frac{2r}{1+r}$$

The reliability found by the Karl Pearson formula. The co relation coefficient of r value is 0.93 if R value is greater than 0.93 tests is reliable, hence the tool was found reliable.

VALIDITY:

DAAS-42 tool is standardized tool no need to be validation. Psychotherapeutic intervention vaulted exerted. They were requested to give their opinion on the appropriateness and the relevance of item in the tool. The experts were selected on basis of their clinical expertise, experiences interest in the problem under the study. To ensure content validity of tool was given to experts along with scoring system.

Pilot study: A pilot study was conducted among 03 samples from civil Hospital, Nadiad.

Procedure for data collection: The data was collected through a DASS-42 Tool for the data collection as per the availability of the sample Pre-test was administered. Post test1 was taken after the administration of psycho-therapeutic intervention. After completion of pre-test, psycho-education, deep breathing and progressive muscles relaxation was given to the group. Post -test 2 was done after 02 days of administration psycho-education, deep breathing and progressive muscles relaxation was given to the group.

Plan for data analysis: The analysis was made on basis of objectives. The data analysis was planned to include both descriptive and inferential statistics. Descriptive statistics such as frequency and percentage were used for demographic variables. Inferential statistics such as Mean, SD, Paired t- test were used to see the correlation between the selected demographic variables and score of assessment. All this findings were documented and depicted tabulation, graphs and diagrams.

RESULT:

Section I: Description of samples (patients undergoing hemodialysis) in terms of their demographic variables.

Majority i.e., 60% samples belongs between the age group 30-40 years, 73.33% samples are the male, 86.66% samples having the hypertension, 40% samples have the education up to secondary, 73.34% samples belongs to joint family, 40% samples have suffering from 2-4 years of chronic kidney disease, 66.66% was Hindu, 86.66% samples have other habits, 56.66% samples were unemployed, 53.34% samples have their monthly income less than 5000, 93.34% samples are married 63.34% samples undergoes hemodialysis twice in a week.

Section II: Analysis of data related to assess the level of depression, anxiety and stress patient undergoing hemodialysis before providing deep breathing exercise, progressive muscles relaxation technique and psycho education. The average pre-test score before providing deep breathing exercise, progressive muscles relaxation technique and psycho education the standard deviation 0.940.

Section III: Analysis of data to find out effectiveness of depression, anxiety and stress among the patient undergoing Hemodialysis after providing deep breathing exercise, progressive muscles relaxation technique and psycho education. Researcher applied paired T-test for comparison of pre and post assessment of effectiveness of providing deep breathing exercise, progressive muscles relaxation technique and psycho education on reducing muscle cramps among the patients undergoing Hemodialysis. Calculated T test values corresponding 27.02, table value were 2.05 T table value.

CONCLUSION:

The purpose of the present study is to assess depression, anxiety and stress among the patient undergoing hemodialysis in hemodialysis department of Civil Hospital, Nadiad.

After providing the psychotherapeutic intervention the level of depression, anxiety stress was decrease and DAAS-42 tool score was also reduced.

The study findings brought out the following conclusion: there was a significant difference between mean pre-test and mean post-test depression scores among chronic kidney disease in general hospital

nadiad at $p < (0.005)$ level of significance. There was a significant association between depression, anxiety and stress (family type χ^2 value is 12.51 and p value is 9.49, year of chronic kidney disease χ^2 value is 56.86 and p value is 15.51) among chronic kidney disease in selected hospital at nadiad city. The study conclusion that chronic kidney disease in the selected hospital had family type and year of CKD. The daily intervention with psycho therapeutic intervention for 15 to 20 minutes consecutive days among CKD had shown statistically significant difference in pretest and posttest level of depression anxiety and stress. Thus psycho therapeutic intervention was effective in terms of reducing the level of depression, anxiety and stress among chronic kidney disease in the selected hospital at nadiad. it indicates that psycho therapeutic intervention can be used to all groups of patients in terms of improving their quality of life. so the intervention of progressive muscles relaxation deep breathing is cost effective, noninvasive, no pharmacological, free from side effects and highly feasible. the researcher concluded that it can be used as an effective intervention to improve the quality of life among CKD patient. The findings of the study have several implications on nursing practice, nursing administration, nursing education and nursing research.

Nursing implication of study:

The findings of the study have implication for nursing practice, nursing education, nursing administration and nursing research.

Nursing curriculum should stress upon psychotherapeutic intervention (psycho education and relaxation techniques) that would help the samples. Thus it can help in providing quality of psychotherapeutic intervention of CKD samples.

Nursing practice:

1. Deep breathing exercise adapted to the patient undergoing hemodialysis.
2. Progressive muscles relaxation technique emphasis the patients comfort during hemodialysis thus helps to reduce the muscles cramp by experience of patients.
3. Performance of deep breathing exercise and progressive muscles relaxation are a safe and better modality which has no side effect.

Nursing education:

The nursing curriculum should include learning experience for the students to assess, plan, implement and evaluate nursing intervention based on reducing depression, anxiety and stress among the patient undergoing hemodialysis by providing the psychotherapeutic intervention.

Nursing administration:

Nurse administrator plays vital role in nursing practice and education. To bring about any changes in nursing, administrator should take the responsibilities and take up the challenges, which will improve, standard of nursing care. Nursing administrator can depute nurses for various workshop, conference and special courses and also plan and carry out in-service education programmed can be aware of recent research, finding, and professional conferences and in-service education opportunities. So through nursing administration provide knowledge and information related to psychotherapeutic intervention which helps in reducing depression, anxiety and stress among the patient undergoing hemodialysis.

Nursing research:

Nursing research is an essential part of nursing as it uplifts the profession and develops effectiveness psychotherapeutic intervention to reduce the depression, anxiety and stress among the patient undergoing hemodialysis. Few studies have been done on a similar basis. The research design, findings and the tool can be used as avenues for further research. By conducting research studies on the different modalities will help to develop effectiveness of psychotherapeutic intervention. Further studies can be done on bigger groups. The present research findings may be used as guide for further studies.

Recommendation:

Keeping in view that the finding of the present study, the following recommendations were made:

- A similar study can be replicated in different setting to strengthen the findings.
- The same study can be replicated on large samples for better generalization.
- Study can be conducted with the hospital of kidney diseases.

- The study can be done for peritoneal dialysis patients.
- A study can be done to develop awareness regarding depression, anxiety and stress among CKD patients.
- A study can be conducted to reduce the level of depression, anxiety and stress in CKD patients.
- An experimental research study may be carried out the plan teaching program.
- A study can be conducted by using other teaching methods.
- A study can be conducted to identifying factors affecting the depression, anxiety and stress.
- A study can be conducted to identify the factor responsible for poor health status.

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