



Effect of Video Assisted Teaching Program on Home Management in Reduction of Anxiety among Patients Undergoing Hemodialysis in SIMS Hospital Kollam

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ABSTRACT

Introduction

Chronic kidney disease or end stage renal disease is a life threatening condition affecting many people all over world. Any disruption in renal function impairs the body's ability to maintain fluid and electrolyte and acid balance. The renal system is an important regulator of the body's internal environment and is essential for the maintenance of life. The prevalence of chronic kidney disease is higher in developing countries than in the developed world. The renal failure patients require dialysis. For this patients need to strictly control their diet so as to help control the waste products and fluid accumulated between dialysis treatments. These patients experienced anxiety, and it may lead to reduced quality of life and subjective well being.

Objectives

1. Assess the level of anxiety and knowledge on home management before intervention.
2. Assess the level of anxiety and knowledge on home management after intervention
3. Compare the level of anxiety and knowledge on home management before and after intervention
4. Find out the association of the level of anxiety and knowledge after intervention with demographic variables of samples.

Method

The present study was conducted in haemodialysis unit of SIMS Hospital Kollam District. Samples were selected through purposive sampling. The research design chosen for this study was pre experimental one group pretest post test design. Sixty samples were selected for this study. To assess the anxiety and knowledge level of patients the researcher provide 15 questions of knowledge and 21 questions of anxiety level were given. In the pretest, the researcher noticed that, there is inadequate knowledge and moderate anxiety. After my nursing intervention that is the video teaching, the samples attained moderate level of knowledge and mild anxiety.

Results

The study covered 60 samples of patients undergoing haemodialysis in SIMS hospital. The study revealed that 66.6% of patients had inadequate knowledge and 70% of patients had moderate anxiety before intervention and 66.6% of patients had moderate knowledge and 68.4% of patients had mild anxiety after intervention.

Summary

The finding suggests that the haemodialysis patients need more knowledge about the home care management regarding dietary management, infection prevention, fistula care. Therefore the researcher found that, continuing research and health education will make the public and general professional to understand about home management.

KEYWORDS

Haemodialysis, Homemanagement, Anxiety, Video Assisted Teaching

INTRODUCTION

Recognizing that we have the kind of blood we have because we have the kind of

kidneys we have, we must acknowledge that our kidneys constitute the major foundation of our philosophical freedom.



Only because they work the way they do has it becomes possible for us to have bones, muscles, glands and brains. Superficially, it might be said that the function of kidneys is to make urine, but in a more considered view, one can say that the kidneys make the stuff of philosophy itself.

Chronic renal failure or end stage renal disease is a life threatening condition affecting many people world over (Lewis, 2005). Any disruption in renal function impairs the body's ability to maintain fluid electrolyte and acid base balance².

Kidneys are a pair of vital organs that perform many functions to keep the blood clean and chemically balanced. Understanding how the kidneys works can help a person keep them healthy. The kidneys are bean shaped organs, each about the size of the fist. The kidneys are sophisticated reprocessing machine³. Twenty millions have chronic kidney disease, where they experience a gradual deterioration of kidney function, the end result of which is kidney failure.

BACKGROUND OF THE STUDY

Chronic kidney failure afflicts all communities worldwide, the burden of disease impinges on the lives of tens of million annually. Based on the most recent incidence and mortality data available, there were 378,862 people were being

treated for end stage renal disease, of these 4.7% had a functioning transplant, 64.5% received haemodialysis and 61% were on Peritoneal Dialysis in the year 2006. Chronic kidney Disease is a major public health problem in many countries especially in developing countries⁵.

Globally 8 million individuals have chronic kidney disease and about 60,000 persons die each year as a result of chronic kidney disease. Chronic Kidney Disease is a major health problem in the world. According to the US data system, at the end of 2001, a total of 378,862 people were being treated for end stage renal disease, of these 4.7% had a functioning transplant, 64.5% received haemodialysis and 61% were on peritoneal dialysis. Co morbid conditions that develop during chronic renal insufficiency contribute to the high morbidity and mortality among patients with End stage renal disease (Burrows, 2005).

Table 1.1 Year wise distribution of Chronic Kidney Disease patients undergoing Haemodialysis in SIMS Hospital, Kollam.

Year	Number
2007	2400
2008	4438
2009	7200
2010	7256
2011	7000

NEED AND SIGNIFICANCE OF THE STUDY

End stage kidney disease patients on haemodialysis have a lot of anxiety. Anxiety and coping are associated with the



locus of control. Cause and effects of depression in End stage kidney Disease patients with or without dialysis support have been addressed but anxiety somehow has not received that much attention. Anxiety is a physiological and psychological state characterized by cognitive, somatic, emotional and behavioral components. Anxiety is abnormal reaction to stress but extreme anxiety is a problem in itself as it leads to mental health problems and reduced quality of life and subjective well being⁶. A great deal of emotional support is needed by the patient and family because of the numerous changes experienced. Use of haemodialysis has become a highly specialized and increasingly effective means of treating Chronic Kidney Disease (Kimmel, 2006).

STATEMENT OF THE PROBLEM

“A study to assess the effect of video assisted teaching program on home management in reduction of anxiety among patients undergoing haemodialysis in SIMS Hospital, Kollam”.

OBJECTIVES

1. Assess the level of anxiety and knowledge before intervention.
2. Assess the level of anxiety and knowledge after intervention

3. Compare the level of anxiety and knowledge before and after intervention
4. Find out the association of anxiety and knowledge after intervention with demographic variables

OPERATIONAL DEFINITIONS

Effect: - In this study effect refers to the outcome of anxiety after intervention.

Video assisted teaching: - Video show related to dietary management, fluid management, vascular access site care and its exercises in local language.

Home management: - It refers to the knowledge on dietary management, fluid management and care of vascular access site, and is assessed by structured questionnaire.

Anxiety: - In this study it refers physiological or psychological state that may create an unpleasant feeling, fear, uneasiness, and worry, which is measured by Becks Inventory Scale.

Haemodialysis: - It is the process of separating substances from a liquid, especially for taking waste substances out of the blood of people with damaged kidneys.

HYPOTHESES

H1: There will be a high level of anxiety and knowledge score before intervention at 0.05 level of significance. **H2:** There will be a low level of anxiety and improvement



in knowledge score after intervention at 0.05 level of significance.

H3: There will be a significant difference between the level of anxiety and knowledge score before and after intervention.

H4: There will be an association of the level of anxiety and knowledge score after intervention with selected demographic variables.

CONCEPTUAL FRAMEWORK

A theory is defined as an integrated set of defined concepts and statement that present a view of a phenomenon and can be used to describe, explain, predict and control that phenomenon. Theories have been developed in nursing to explain phenomena important to clinical practice (Groove, 2005).

A conceptual frame work or model is made up of concepts that are mental image of a phenomenon. These concepts are linked together to express their relationship between them.

The conceptual framework is based on J.W.Kenny's General System Model.

METHODOLOGY

RESEARCH APPROACH

In view of the nature of the problem and to accomplish the objectives of the study a quantitative approach was considered to be most appropriate.

RESEARCH DESIGN

The research design chosen for this study was pre experimental one group pretest posttest design

SETTING

The study was conducted in Haemodialysis unit of SIMS Hospital, Kollam. The haemodialysis unit of SIMS Hospital was started in the year 2007 with bed strength of two. Now it is increased to seven and 600-700 patients are undergoing haemodialysis each month.

POPULATION

The target population of the study was the patients undergoing Haemodialysis in SIMS Hospital, Kollam.

SAMPLING

A. **Sample:** Samples selected from the population who meets the inclusion criteria

B. **Sample Size:** In this study sixty samples were selected

C. **Sampling technique:** The sampling technique used for the study was Purposive sampling

Inclusion criteria

Patients who can read and speak Malayalam and English

Patients between 20-80 years of age
oth male and female

Exclusion criteria

Patients undergoing haemodialysis for the first time

Patients who are not willing to participate



Patients who are health professionals

DEVELOPMENT AND DESCRIPTION OF TOOL

The methods and procedures employed for the collection of data are called techniques.

The instruments or devices utilized to collect data are called tools.

Section A

Structured Interview Schedule on Demographic data

Structured questionnaire to assess the knowledge level

Modified Becks Anxiety scale to assess the anxiety level.

Section A

Structured Interview Schedule on Demographic data. It consists of age, gender, education, income, and family, source of information regarding present health problem, meal pattern and habits.

Structured questionnaire to assess the knowledge level of haemodialysis patients home management, about dietary management, fluid management and care of vascular access site.

Interpretation:

Inadequate knowledge	<33%
Moderate knowledge	34-67%
Adequate knowledge	68-100%

Part 3:- Inventory Checklist was constructed after extensive review of literature, and consultation with medical, nursing experts and with personal

experience. The check list was the modified Becks Anxiety Inventory checklist. Investigator modified the tool for assessing the anxiety.

Scoring

Minimum anxiety	0-7
Mild anxiety	8-21
Moderate anxiety	21-42
Severe anxiety	42-63

SECTION B

VIDEO ASSISTED TEACHING PROGRAM

Video assisted teaching program on home management of haemodialysis patient regarding dietary management, fluid management and vascular access site care and exercise.

ETHICAL CONSIDERATION

After obtaining permission from the institutional review board and ethical committee, the researcher proceeded for the pilot study. Then the permission from the institution and informed consent was taken from the participants. Researcher maintained strict confidentiality, right for privacy and justice throughout the study.

PLAN FOR DATA ANALYSIS

Data analysis was done in accordance with the objective of study. Descriptive and inferential statistics were used to analyse and interpret the data.

Descriptive Statistics and Inferential Statistics



SUMMARY

The present study was intended to assess the effect of video assisted teaching program on home management in reduction of anxiety among haemodialysis patients. The objectives of the study were

1. Assess the level of anxiety and knowledge before intervention
2. Assess the level of anxiety and knowledge after intervention
3. Compare the level of anxiety and knowledge before and after intervention
4. Find out the association of level of anxiety and knowledge after intervention with demographic variables.

Theoretical frame work of the present study was based on J.W.Kenneys General System Model. Review of relevant related literature helped the investigator to prepare tools for the study.

The investigator used quantitative approach with pre experimental one group pre test-post test design. The present study was conducted among haemodialysis patients in SIMS Hospital, Kollam. The sample consisted of 6 patients. A pilot study was conducted to establish validity and reliability of the tool and also feasibility and practicability of the research design. Questionnaire to collect demographic data and standardized anxiety scales to assess the level of anxiety among

samples were the tools used for data collection.

The data were analyzed using appropriate statistical tests. The association of demographic variables with the level of knowledge and anxiety was tested by Chi square test. The effects of selected interventions was found out by paired 't' test and 'Z' test or normality test.

RESULTS

The study covered 60 samples of patients undergoing haemodialysis in SIMS hospital. The study revealed that 66.6% of patients had inadequate knowledge and 70% of patients had moderate anxiety before intervention and 66.6% of patients had moderate knowledge and 68.4% of patients had mild anxiety after intervention.

CONCLUSION

The study concludes that there was a significant difference observed between pretest and posttest knowledge and anxiety. The study has an impact on haemodialysis patient's anxiety and knowledge level.

IMPLICATIONS

The investigator derived the following implications from the study which are of vital concern in the field of nursing service, nursing administration, nursing education and nursing research.



Nursing practice

The findings will install the knowledge of haemodialysis patient and the importance of updating their knowledge. Present study should emphasize on health for all demands that every individual should be self sufficient and self reliant. The study should throw the light on the assessment of learning needs as an essential step towards developing knowledge of haemodialysis patients.

Nursing education

Nursing curriculum should consist of knowledge related health information by using different methods of teaching in the care of haemodialysis patient. The student's knowledge of learning experience should emphasize preventive and promotive health practices. Nurses at post graduate levels needs to develop their skills in preparing health teaching materials in inservice education for haemodialysis patients with the advance knowledge according to the understanding level of patients in a hospital.

Nursing Administration

Nurse as an administrator should plan and organize health education program in the hospital for every haemodialysis patient visiting the hospital for check up. It can be imparted through individual, small group,

large group, teaching and distribution of printed materials.

Nursing Research

Formal and informal teaching should be made available for nursing professionals in clinical and community area inorder to increase the knowledge of haemodialysis patient. Continuing research and health education will make the public and general professionals to understand about home management.

Dissemination of findings through conferences, seminars, publications in professional, national, and international journals and in web will make the application of research findings to be effective.

RECOMMENDATIONS

The study recommends the following for further research.

1. A similar study can be conducted in a large sample for wider generalization.
2. A follow up study may be conducted to evaluate the effectiveness of Video assisted teaching program on home management of patient undergoing haemodialysis.
3. Research design can be made different to highlight the effectiveness of knowledge and reduction of anxiety among haemodialysis patient.

LIMITATIONS

1. Generalization could be better if larger samples are included.



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