

A Study To Evaluate The Effectiveness of Video Assisted Teaching Programme on Knowledge Regarding Pulmonary Therapy Among Patients With Chronic Respiratory Diseases At Teerthanker Mahaveer Hospital And Research Centre Moradabad, UP

Mrs. Agnes Chinta Singh, Mr. M. Raghavendran, Ms. Sarita Baghel, Mr. Satheesh A, Ms. Shahin Usmani

Faculty of Nursing, Rama University, Mandhana, Kanpur, U.P. India
Email Id : dean.nursing@ramauniversity.ac.in

Abstract

Chronic respiratory disease affects people of all ages This study was conducted to evaluate the effectiveness of video assisted teaching programme on knowledge regarding pulmonary therapy among patients with chronic respiratory diseases. The research design adopted for the present study was Pre-experimental one group pre-post test design with the help of questionnaire on knowledge of pulmonary therapy for chronic respiratory diseases. The samples for the study consisted the patients who meet the eligibility criteria at Teerthankar Mahaveer Medical Hospital and Research Centre, Moradabad, sample size was 50 and sampling technique used for this study was non-probability purposive sampling. As per the study findings, the level of knowledge was adequate only in 12% in the pre test, whereas during post test; the level of knowledge of study subjects was adequate among 44% and none of them was inadequate level of knowledge. There was a significant difference in the mean scores between pretest and post test in relation to knowledge of chronic respiratory disease patients, regarding pulmonary therapy. There is significant association between the knowledge and demographic variable education, types of occupation of the chronic respiratory disease patient at $p < 0.05$ level. Video assisting programme was effective to increase the knowledge regarding pulmonary therapy among chronic respiratory disease patients.

Key words: - Effectiveness, Video Assisted Teaching, Knowledge, Pulmonary therapy

Introduction

Chronic respiratory disease affects people of all ages. To find out association between knowledge of pulmonary therapy with their selected worldly, & the incidence of chronic respiratory disease in women than men in higher industrialized sectors and nations¹. chronic respiratory disease refers to several disorders that affect the movement of air in and out of the Lungs although, the most important of these obstructive, bronchitis, emphysema, and asthma-may occur in pure form, they most commonly coexist, with overlapping clinical manifestations². The term chronic respiratory problems are commonly used, but some pulmonologist think it is not completely accurate and the term chronic air flow limitations may be used in its place.³

Objectives

1. To assess the pre-test and post test knowledge on pulmonary therapy among patient with chronic respiratory diseases.
2. To evaluate the effectiveness of video assisted teaching programme regarding pulmonary therapy among patient with chronic respiratory diseases.
3. To find out association between knowledge of pulmonary therapy with their selected demographic variables.

Hypothesis

H1: There is significant difference between pre-test and post test knowledge of pulmonary therapy.

H2: There is a significant association between knowledge of pulmonary therapy with selected demographic variables.

Materials and methods used:

Research approach: In view of the nature of problem selected for the study and the objectives to be accomplished, quantitative approach was used for this study.

Research design: Pre-experimental one group pre & post test design was adopted in this study

Population: The population for the study includes all respiratory problem patients at Teerthankar Mahaveer Medical Hospital and Research Centre, Moradabad.

Sample size: The sample size consisted of 50 patients with chronic respiratory diseases based on the selection criteria.

Sampling technique: The sampling technique used for selecting the sample was non-probability purposive sampling technique.

Setting: The setting for the study is Teerthankar Mahaveer Medical Hospital and Research Centre, Moradabad.

Inclusion Criteria

1. Patient who have chronic respiratory diseases.
2. Patients who are available at the time of data collection.
3. Patients who knows Hindi

Exclusion Criteria

1. The patient who are under processes of diagnosis.
2. Patient who are not willing to participate

Independent variables: In this study the independent variable refers to video assisting teaching programme regarding pulmonary therapy for chronic respiratory diseases.

Dependent Variable: In this study the dependent variable refers to the knowledge of patients regarding pulmonary therapy for chronic respiratory diseases.

Delimitations:-

1. The study was limited to 6 weeks period only
2. The study was not generalized
3. The study was conducted in selected hospital only.

Method of data collection: - The proposed study was carried out after the acceptance of consolation committee of the college and permission was obtained from the concern authority. Self report method was used for data collection. The data collection was done for 6 weeks at Teerthankar Mahaveer Medical College and hospital, District- Moradabad. Data was collected from 50 samples that fulfilled inclusion and exclusion criteria. The written consent of the participant was obtained before data collection and assurance was given to study participants the confidentiality of data collection. The data obtained was planned to be analyzed on the basis of object of the study using expressive and inferential statistics.

- Master data sheet was organized.
- Demographic variables are to be analyzed in terms of frequencies and percentages
- Knowledge regarding pulmonary therapy among patients with chronic respiratory diseases in form of mean, median and standard deviation.
- Chi-square test is used to determine the relation between demographic variables and knowledge level.

Description of tools: The tool consists of 2 Sections:

Section I: Demographic Data: It includes items for obtaining information regarding age, sex, marital status, occupation, income, education, for pulmonary therapy for chronic respiratory diseases.

Section II: Structured questionnaire schedule to assess the knowledge of pulmonary therapy for chronic respiratory diseases: It consist 30 multiple choice questions. The related literature was reviewed for the construction of the structured questionnaire on knowledge. There were 30 questions for knowledge. The questions were in dichotomous form with answers

Yes or No A score value of 1(one) was allotted to each correct response and for wrong response 0(zero) was awarded. Thus there were 30 maximum obtainable scores. The level of knowledge was categorized based on the percentage of scores obtained. The resulting score ranged as follows:

Inadequate <50% 1-10

Moderate 51%-75% 11-20

Adequate > 75% 21-30

Results: - Descriptive and Inferential statistics used in this study. The data was organized, analyzed and presented under following heading.

Section – I: Frequency and percentage of distribution of selected demographic variables.

Section – II: The effectiveness of Video Assisting teaching programme regarding pulmonary therapy among patient with chronic respiratory disease.

Section – III: Comparison of mean scores between pretest and posttest on knowledge of pulmonary therapy for chronic respiratory disease patients.

Section – IV: - Association between the knowledge and the demographic variables of chronic respiratory disease patients.

Section II: The effectiveness of Video Assisting programme regarding pulmonary therapy among patient with chronic respiratory disease.

Table 1: Frequency And Percentage Distribution Of Pre-test And Post-test Knowledge regarding pulmonary therapy among patient with chronic respiratory diseases. N=50

Knowledge level	Pre Test	%	Post Test	%
	Knowledge score		Knowledge score	
Adequate knowledge	0	0	44	88
Moderate knowledge	30	60	06	12
Inadequate knowledge	20	40	0	0

Section III: Comparison between Mean and Standard Deviation of Pre-test and Post-test Knowledge Scores and ‘t’ value of pre-test and post-test knowledge scores

Table 2: Comparison between Mean and Standard Deviation of Pre-test and Post-test Knowledge Scores and ‘t’ value of pre-test and post-test knowledge scores N-50

Group	Mean	S D	‘t’ Value
Pre Test	11.2	2.161	
Post Test	22.24	1.505	31.2*

t = 31.2 at 0.05 level of significance=1.96

***at 0.05 level of significance**

Discussion: - The purpose of the study was to evaluate the effectiveness of video assisted teaching programme on knowledge regarding pulmonary therapy among patients with chronic respiratory diseases at Teerthankar Mahaveer hospital and research centre Moradabad, UP.” Pre-experimental one group pre test – post test design was used in the study. The conceptual frame work of this study was based on Neumann’s model. The instrument used for data collection was knowledge questionnaire regarding pulmonary therapy. Non probability purposive sampling technique was used for this study to select the samples. Descriptive statistics (frequency, percentage, mean and standard deviation) and inferential statistics (chi – square, paired “t” test) were used to analyze the data and to test hypothesis. **The major study findings were as follows:**

Section – I: Frequency and percentage of distribution of selected demographic variables: Study reveal that respectively 20%, 34%, 20% and 26% patients belongs to age group 20-30 years, 31-40 years, 41-50 years and above 50 years respectively, male are 70% and females are 30%, on the basis of their educational qualification nearly 32% are illiterate, 46% having Secondary educational status and 22% having graduate status, on the basis of their monthly income 60% samples having income of 5000/month, 26% having income of 5001 to 10000 and nearly 14% having income of more than 10000/ month, 74% are married and 26% are unmarried, 44% samples are unemployed, 36% are working in private employee, 8% are government employee and 12% are nongovernmental employees.

Section – II: The effectiveness of Video Assisting teaching programme regarding pulmonary therapy among patient with chronic respiratory disease: Regarding the percentage of knowledge score in pre-test majority of chronic respiratory disease patients had moderate(60%) , inadequate (40%) and in post-test greater strength of chronic respiratory disease patients had adequate knowledge (88%) and moderate knowledge (12%).

Section – III: Comparison of mean scores between pretest and posttest on knowledge of pulmonary therapy for chronic respiratory disease patients: Mean and standard deviation of the pre-test and post-test knowledge scores were:11.2, 2.161 and 22.24, 1.505 respectively. The mean post test knowledge sores was (22.24) which was significantly higher than mean pre test knowledge scores (11.2). The “t” test value i.e. 31.2* was found to be significant at 0.05 level of df 49, Suggesting the effectiveness of video assisting programme in

increasing the knowledge regarding pulmonary therapy among patients with chronic respiratory diseases.

Section – IV: - Association between the knowledge and the demographic variables of chronic respiratory disease patients: There was no significant aassociation between the knowledge and the demographic variables of chronic respiratory disease patients such as age, sex, education, socio- economic status, marital status, occupation.

Recommendations: - Based on the findings of present study the following recommendation was made:

- The study can be replicated using a large sample to validate the findings on the generalization.
- A similar study can be conducted to compare for the new and old diagnosed chronic respiratory diseases patient.
- The study can be done on the quality of life on chronic respiratory disease patient.

Conclusion:

As per the study findings, the level of knowledge was adequate only in 12% in the pre test, whereas during post test; the level of knowledge of study subjects was adequate among 44% and none of them was inadequate level of knowledge. There was a significant difference in the mean scores between pretest and posttest in relation to knowledge of chronic respiratory disease patients, regarding pulmonary therapy. There is significant association between the knowledge and demographic variable education, types of occupation of the chronic respiratory disease patient .

Reference:-

1. Alberthas, (2000), “Pulmonary and rehabilitation”, 1st edition, Lippincott Williams Publication, Pp: 143, 158.
2. Craig L, Scanion, Charles B, Spearman, Richard L. Sheldon (1990) “Egan’s Fundamentals of Respiratory Care” (6thedition) North California. Mosby Company. .Pp: 21-45
3. David H.E, Roger C & Bone, (1995) “Comprehensive Respiratory Care, A learning System” The 856 illustration, U.S.A. The Vc Mosby company.
4. Dr. David Bellary, (2004), “COPD Primary care”, 3rd edition, British Library, Pp: 220-235
5. James, (2005), “Principles of exercise testing”, 4th edition, Library of congress cataloging, Pp: 585, 230
6. John.R., (1996), “Pulmonary Rehabilitation”, 1st edition, Philadelphia Mosby Company, Pp: 173.
7. Kothari.C.R., (2002), “Research Methodology methods and technique”, 3rd edition, K.K. Gupta of

Newage International (P) Ltd Publication, Pp: 277-299

8. Krausel, (2000), "Food, nutrition and diet therapy", W.B.Saunders company Publisher, Pp:815-832.
9. Lewis, S.M. Heit Kemper M.L. & Derikson, S.R. (2000) "Medical Surgical Nursing, Assessment and Management of Clinical problems" (5th edition) Philadelphia Mosby Company
10. Madame C & Vincent (1998) "Pulmonary Function Testing and Cardio Pulmonary stress testing", (2nd. edition,) Washington : Thomson publishing company. Pp 845-85