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A STUDY TO ASSESS THE KNOWLEDGE ON PULMONARY REHABILITATION AMONG PATIENTS WITH CHRONIC RESPIRATORY DISEASE IN TERRITORY HOSPITAL, UTTAR PRADESH, INDIA.

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Abstract:

A descriptive study was conducted for a period of four weeks. The data for knowledge on pulmonary rehabilitation were analyzed and tabulated. The findings showed that 50 (83.3%) patients have in-adequate knowledge; 10 (16.7%) patients have moderate knowledge and none of the patients have adequate knowledge. There is a significant association between the knowledge and the demographic variables of education and marital status. There is no association with respect to other demographic variables.

Based on the objectives of this study, the level of knowledge score on patients with chronic respiratory disease shows that 50 (83.3%) patients have in-adequate knowledge; 10 (16.7%) patients have moderate knowledge and none of the patients have adequate knowledge. There is significant association between the knowledge and the demographic variables of education, and marital status. There is no association with respect to other demographic variables. These types of associations are statistically significant and it was calculated using Pearson chi square test. The major findings drawn from the study are, the majority of people have inadequate knowledge and none of the have adequate knowledge There is no association between the knowledge and selected demographic variables except the educational qualification and marital status (P=0.003). The majority of illness identified is Chronic obstructive pulmonary disease.

Finally, a booklet on pulmonary rehabilitation for patients with chronic respiratory disease on the aspects of Exercise training, breathing techniques and Maintenance of adequate nutrition has been given to all the patients who participated in the study.

STATEMENT OF THE PROBLEM

A study to assess the knowledge on pulmonary rehabilitation among patients with chronic respiratory disease in Territory hospital, Uttar Pradesh, India.

OBJECTIVES

- To assess the knowledge on pulmonary rehabilitation among patients with chronic respiratory disease.
- To associate the findings with the selected demographic variables.

ASSUMPTIONS

➢ Patients with chronic respiratory disease have inadequate knowledge regarding pulmonary rehabilitation.

➢ Pulmonary rehabilitation improves quality of life of patients with chronic respiratory disease.

➢ There will be individual differences on knowledge about pulmonary rehabilitation among patients with chronic respiratory disease.

➢ Information booklet regarding pulmonary rehabilitation will improve the knowledge on pulmonary rehabilitation in patients with chronic respiratory disease.

METHODOLOGY

This chapter deals with description of research method adopted by investigator to study and analyze the outcome of descriptive research Programme. Methodology is most important part of any research study, which enables the researcher to form a blue print for the study undertaken. Research methodology refers to the controlled investigations related to the ways of obtaining; organizing and analyzing data. Methodological studies address the development, validation and evaluation of research instrument and technique.

The steps which were undertaken to conduct the study research approach, research design, research setting, population, sample and sampling technique, development and description of tool, procedure and technique of data collection, pilot study and a plan for data analysis.

RESEARCH APPROACH

In view of the nature of the problem selected for the present study and the objectives to be accomplished, a quantitative research approach was considered appropriate for the present study.

RESEARCH DESIGN

A non-experimental descriptive research design was used to assess the level of knowledge on pulmonary rehabilitation among patients with chronic respiratory disease.

VARIABLES UNDER INVESTIGATION

Thedependent variable in the study is the knowledge on pulmonary rehabilitation. The independent variable is the patients with chronic respiratory disease. The extraneous variables are the age, sex, marital status, occupation, educational qualification, type and the duration of illness.

SETTING OF THE STUDY

The setting of the study is at pulmonology outpatient department, Territory hospital, Uttar Pradesh.It is a private hospital. It has three floors, 5 blocks, and is 1200 bedded hospital. It consists of all the specialties including medicine, surgery, ENT, Cardiology, Pediatrics, Nephrology, Neurology, Oncology and Obstetrics and Gynecology. It has the services like outpatient department, inpatient department, emergency and intensive care unit. It has medical ward, surgical ward, ICU, specialty and deluxe ward. The hospital is well equipped with modern techniques, competent and complex equipment. The present study was conducted in medical outpatient department.

POPULATION

The target population of the present study includes the patient's coming to pulmonary outpatient department, Territory health and research institute.

SAMPLE AND SAMPLING TECHNIQUE

Sample

Samples are the patients with respiratory diseases for more than 3years and persistent with symptoms.

Sample size

The sample used for the study is 60 patients with chronic respiratory disease.

Sample technique

The method of sampling technique applied in this research is non probability purposive sampling technique.

CRITERIA FOR SELECTION OF SAMPLE

Inclusion Criteria

➤ Only patient with chronic respiratory disease (respiratory diseases more than 3 years and persistent with symptoms) are included.
➤ Only adults age group of 25 years and above.
➤ Both male and female patients are included.
➤ Only patients who are coming to OPD with chronic respiratory disease at hospital in Uttar Pradesh.

Exclusion Criteria

➤ The age group below 25 years
➤ Patients with disease other than respiratory diseases are not included
➤ Medical professional people are not included

DESCRIPTION OF TOOL

Structured questionnaire consists of 2 sections,

Section A – demographic data consist of family health history, duration of illness and etc.

Section B – knowledge questionnaire regarding pulmonary rehabilitation consists of exercise

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DATA COLLECTION PROCEDURE

Total 60 samples were selected by inclusion and exclusion criteria and the investigator met each participant, established good rapport with them. The investigator gives questionnaire to the selected participant and allowed them to read the questions and answer for it. The time taken for one candidate was at least half an hour.

SECTION A: ANALYSIS OF DEMOGRAPHIC VARIABLES

Table I: Frequency and percentage distribution of sample with type of illnessN = 60

DEMOGRAPHIC VARIABLES		FREQUENCY	PERCENTAGE %
Disease	COPD	26	43.3
	BA	22	36.7
	ILD	12	20

Table 1 and Figure 8 based on type of illness shows that 43.3% of respondents were affected with COPD, 36.7% were affected with Bronchial asthma and 20% were had interstitial lung disease.

Table II: Frequency and percentage distribution of sample with duration of illness

DEMOGRAPHIC VARIABLES		FREQUENCY	PERCENTAGE %
Duration of illness	<3 Years	4	6.7
	3-5 Years	15	25
	5-7 Years	21	35
	>7 Years	20	33.3
	<3 Years	4	6.7

Table 2 based on duration of illness shows that 7% were having less than 3 years, 25% were having 3 – 5 years of duration, 35% were having 5 – 7 years of duration and 33% were having more than 7 years of duration.

Table III: Frequency and percentage distribution of sample with reference to family History

DEMOGRAPHIC VARIABLES		FREQUENCY	PERCENTAGE %
Family History	Yes	20	33.3
	No	40	66.7

Table 3: 10 based on family history shows that 33.3% of respondents were with history family illness and 66.7% were without family history of illness.

SECTIONB: LEVEL OF KNOWLEDGE ON PULMONARYREHABILITATION AMONG PATIENTS WITH CHRONICRESPIRATORY DISEASE

Table IV: Analysis of knowledge on pulmonary rehabilitation among patientswith chronic respiratory disease N = 60

LEVEL OF KNOWLEDGE	FREQUENCY	PERCENTAGE (%)
In adequate	50	83.3
Moderate	10	16.7
Adequate	0	0

Table 4: Represents frequency and percentage of knowledge on pulmonary rehabilitation.

The analysis depicted that 50 (83.3%) patients have in-adequate knowledge; 10 (16.7%) patients have moderate knowledge and none of the patients have adequate knowledge.

SECTION C: Association between knowledge on pulmonaryrehabilitation among patients with chronic respiratory disease and with the selected demographic variables

Table V: Association between knowledge on pulmonary rehabilitation of patients with chronic respiratory disease and with their selected demographic variables

Demographic variables		In Adequate		Moderately Adequate		Adequate		Chi square test
		N	%	N	%	N	%	
Family History	Yes	15	25	5	8.3	0	0	X² =2.42
	No	35	58.4	5	8.3	0	0	P = 0.30 **NS**
Affected persons	Fathers	1	1.7	3	5	0	0	X² = 2.44
	Mothers	7	11.6	0	0	0	0	P = 0.30
	Parental grand parents	3	5	0	0	0	0	NS
	Maternal Grand parents	2	3.3	1	1.7	0	0	
	Siblings	3	5	1	1.7	0	0	
Disease	COPD	21	35	5	8.3	0	0	X² = 1.63
	BA	19	31.7	3	5	0	0	P = 0.44
	ILD	0	0	12	20	0	0	NS
Duration of illness	<3 Years	2	3.3	2	3.3	0	0	X² = 1.63
	3-5 years	13	21.7	2	3.3	0	0	P = 0.44
	5-7 Years	13	21.7	8	13.3	0	0	NS
	>7 Years	12	21.7	8	13.3	0	0	

Table 5reveals that there is significant association between the knowledge and the demographic variables of education, and marital status. There is no association with respect to other demographic variables. These types of associations are statistically significant and it was calculated using Pearson chi square test.

DISCUSSION

In this study the patients with chronic respiratory disease like Bronchial asthma, interstitial lung disease, chronic obstructive pulmonary disease and other chronic lung diseases were included. Among the 60 samples 43.3 % of patients had a history of chronic obstructive pulmonary disease, 36.7 % of patients had a history of Bronchial asthma, and 20% of patients had a history of interstitial lung disease.The analysis depicted that 50 (83.3%) patients have in adequate knowledge; 10 (16.7%) patients have moderate knowledge and none of the patients have adequate knowledge.

SUMMARY

The sample consisted of 60 patients with chronic respiratory disease who fulfilled the study criteria. The tools used for data collection where structured questionnaire consists of knowledge on pulmonary rehabilitation in regards to exercise training, breathing techniques and nutritional management. A booklet on pulmonary rehabilitation was given to all the patients.The data were collected for a period of four weeks.

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