# A Study to Assess the Effectiveness of Planned Teaching Programme on Knowledge Regarding Pulmonary Rehabilitation among Patients with COPD in Selected Community Area at Bangalore

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Abstract: The research design, one group pre-test, post-test quasi experimental design to "assess the effectiveness of planned teaching programme on knowledge regarding pulmonary rehabilitation among patients with COPD in a selected community area at Bangalore". The finding showed that 36(60%) of the respondent have inadequate knowledge regarding pulmonary rehabilitation among patients with COPD. The overall mean score was 12.9 with percentage of 43%; the data analysis shows that the patients with COPD had less knowledge regarding pulmonary rehabilitation. The finding showed that 11(18.33%) of the respondent have adequate knowledge and 49 (81.67%) have moderate knowledge Pulmonary rehabilitation among patients with COPD. The overall mean score was 19.7 with percentage of 65.67%; The analysis shows that pre-test mean percentage knowledge score is 43% (SD 5.3), post-test mean percentage knowledge score is 65.67% (SD 3.8). The calculated 't' (14.23) value was greater than table value (2.6). The result showed that there was a significant relationship between selected demographic variables such as type of family calculated  $x^2$  value is 4.4, education calculated  $x^2$  value is  $10 H_3$  is accepted at P<0.05 level.

Keywords: Assess, Effectiveness, Planned Teaching Programme, Knowledge, Pulmonary Rehabilitation, COPD

## 1. Objectives of the Study

- To assess the pre-existing knowledge regarding pulmonary rehabilitation among the COPD patients.
- To assess the effectiveness of planned teaching programme regarding knowledge on pulmonary rehabilitation among the COPD patients.
- To find out the association between the post-test level of knowledge regarding pulmonary rehabilitation among the COPD patients with their selected demographic variables.

## 2. Methodology

1) *Research approach-* The research approach adapted for this study is Quantitative

Evaluative approach.

2) Research Design-

- The research design used for this study is one group pre-test and post-test quasi experimental design.
- 3) *Setting of the Study-* The present study was conducted in Heganahalli community area, Bangalore.
- 4) *Population-* In the present study the sample population consists of patients with COPD.
- 5) *Sample Size-* In the present study the sample consists of 60 patients withCOPD.
- 6) *Sampling Technique* In this study simple random sampling technique was adopted for selecting samples.
- 7) *Description of the tool-* The tool was organized into two parts:
  - Section A: Demographic Data
  - Section B: Structured Questionnaire

#### **Pilot Study**

The pilot study is a small scale version of trial seen before the main study. This study is conducted to obtain information for improving the main project or for assessing the validity or reliability of the tool.

The pilot study was conducted in Makali, Bangalore among COPD patients in order to assess the feasibility of the study. The formal permission was obtained from the PHC authorities to conduct the pilot study. The structured questionnaire administered to ten patients who were selected by simple random sampling technique who met the inclusion criteria for this study. The data analyzed showed that the study is having feasibility. The investigator does not face any difficulty to conduct the study and patients had inadequate knowledge regarding pulmonary rehabilitation among patients with COPD. The investigator then proceeded for the main study.

## 3. Results

#### **Presentation of the Data**

The analyzed data has been arranged under the following section

**Section-I:** Distribution of demographic variables of patient with COPD.

**Section II:** Assess the pre and post –test level of knowledge regarding pulmonary rehabilitation among patient with COPD.

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#### Section III:

Assess the effectiveness of planned teaching programme on knowledge pulmonary rehabilitation among patient with COPD.

**Section IV:** Association between the post-test levels of knowledge is regarding pulmonary rehabilitation among patient with COPD with their demographic variables.

Table 1: Frequency and percentage distribution of pre-test level of knowledge among patient with COPD



Table-1: Depicts the frequency and percentage distribution of pre-test level of knowledge among patients. It was evident that majority 36(60%) had inadequate, 21(35%) had moderate and three (5%) were having adequate Knowledge regarding pulmonary rehabilitation





Table 2: Depicts the frequency and percentage distribution of post level of knowledge among patients. It was evident that majority 49(81.67%) had moderate and 11(18.33%) had adequate knowledge regarding pulmonary rehabilitation.

**Table 3:** Mean, SD and Mean percentage of pre and posttest knowledge regarding pulmonary rehabilitation among patient with COPD

| patient with COLD |                   |              |       |      |     |       |
|-------------------|-------------------|--------------|-------|------|-----|-------|
| Domain            | Max<br>Statements | Max<br>Score | Range | Mean | SD  | Mean% |
| Pre test          | 30                | 30           | 426   | 12.9 | 5.3 | 43    |
| Post test         | 30                | 30           | 1629  | 19.7 | 3.8 | 65.67 |

Table 3: Shows the mean, standard deviation, mean percentage of level of knowledge regarding pulmonary rehabilitation among patient with COPD in terms of pre and post test score. It was evident that pre-test had mean score 12.9 (43%) with SD of 5.3. In post –test had mean score 19.7(65.67%) with SD of 3.8

# 4. Conclusion

The study was taken to assess the effectiveness of planned teaching programme on knowledge regarding pulmonary rehabilitation among patient with COPD in selected community area at Bangalore. In the present study 60

patients were selected using simple random sampling technique.

The following conclusion were drawn from the findings of the study,

In this present study, the pre-test level of knowledge revealed that majority 36(60%) had inadequate, 21(35%) had moderate and 3(5%) were adequateknowledge. The post-test knowledge revealed that 49(81.67%) had moderate knowledge and 11(18.33%) had adequateknowledge.

In the aspect of comparison of the pre-test and post-test level of knowledge among patient's reveals that in pre-test had mean score 12.9, SD of 5.3 and mean percentage 43% It indicates that patient's with COPD had low knowledge regarding pulmonary rehabilitation. In post-test mean score 19.7, SD of 3.8 and mean percentage 65.67%. It indicates that patient's with COPD had high knowledge regarding pulmonary rehabilitation.

Chi-square test was used to find out the association between knowledge and selected demographic variables. The result showed that there was a significant relationship between selected demographic variable such as type of family calculated  $x^2$  value is 4.4, education calculated  $*x^2$  value is 9.9, and the occupation calculated  $*x^2$  value is 10<sup>°</sup>. H<sub>3</sub> is

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accepted at P<0.05 level.

It is also found that there is no relation between age, sex, religion and family income and duration of illness.

The above findings strongly suggest that nurses should inform and educate the patients about prevention of COPD.

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