



Research Paper

A Study to Assess the Effectiveness of Structured Teaching Program on Warning Signs of COPD Among General Public At Selected Community Area, Puducherry

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ABSTRACT:

Chronic obstructive pulmonary disease (COPD) is a common lung disease causing restricted airflow and breathing problems. It is sometimes called emphysema or chronic bronchitis. The main objective of the study to assess effectiveness of structured teaching program on warning signs of COPD among general public. The research approach used for this study was quantitative research approach. A quasi-experimental research design was adopted for this present study. By using convenient sampling technique, 50 of general public were selected for the present study. The present study reveals that in pre-level of knowledge, majority 43 (86%) of them had inadequate knowledge, 7 (14%) of them had moderately adequate knowledge. In post-level of knowledge, majority 40 (80%) of them had moderately adequate knowledge, 9 (18%) of them had adequate knowledge and 1 (2%) of them had inadequate knowledge on warning signs of COPD. The study findings concluded that there is significance association between age and educational qualification with level of knowledge on warning signs of COPD among general public where $p < 0.05$.

Keywords: Chronic obstructive pulmonary disease, Warning signs, Structured teaching programme

I. INTRODUCTION:

Chronic obstructive pulmonary disease (COPD) is a common lung disease causing restricted airflow and breathing problems. It is sometimes called emphysema or chronic bronchitis. In people with COPD, the lungs can get damaged or clogged with phlegm. Symptoms include cough, sometimes with phlegm, difficulty breathing, wheezing and tiredness. Smoking and air pollution are the most common causes of COPD.

People with COPD are at higher risk of other health problems. COPD is not curable but symptoms can improve if one avoids smoking and exposure to air pollution and gets vaccines to prevent infections. It can also be treated with medicines, oxygen and pulmonary rehabilitation.

Common symptoms of COPD include feeling short of breath while resting or when doing physical activity, cough, wheezing, fatigue, and/or mucus production that does not go away. If you have these symptoms, you should talk to your healthcare provider. Some people with early COPD may not be aware of symptoms. Testing should be done in people who are at risk for COPD.

Healthcare providers diagnose COPD based upon the combination of symptoms and test results. Spirometry is the most important test to determine if a person has COPD. Changes of COPD can also be seen on a chest x-ray or a chest CT scan. Once your healthcare provider has determined that you have COPD, he or she may order other tests to assess how well you are breathing with sleep and with exercise. This includes looking at your oxygen saturation levels. The first and most important treatment of COPD in smokers is to stop smoking. Medications and other therapies are available to help treat nicotine addiction and to help you stop smoking. For more help on stopping smoking, see the ATS Patient information Series fact sheets on Tobacco.

NEED FOR THE STUDY

Chronic obstructive pulmonary disease (COPD) is the third leading cause of death worldwide, causing 3.23 million deaths in 2019. Tobacco smoking accounts for over 70% of COPD cases in high-income countries, with household air pollution being a major risk factor. In the United States, over sixteen million people live with COPD, and over 128,000 people have died from the coronavirus. In India, the prevalence of COPD is 7%, with

risk factors such as active and passive smoking, biomass fuel exposure, environmental tobacco smoke, occupational exposure to dust, indoor and outdoor pollution, and increasing age. In Madurai, COPD prevalence is 22.1%, with males having higher prevalence than females. A study by K. Radha et al. (2016) assessed knowledge on COPD among COPD patients, finding that age, residential, and occupation were associated with knowledge. The study aims to assess the effectiveness of a structured teaching program on COPD warning signs in Puducherry.

STATEMENT OF THE PROBLEM

A study to assess the effectiveness of structured teaching program on warning signs of COPD among general public at selected community area Puducherry.

OBJECTIVES OF THE STUDY

- To assess the knowledge on warning signs of COPD among general public
- To assess the effectiveness of structured teaching program on warning signs of COPD among general public.
- To associate the level of knowledge on warning signs of COPD among general public with selected demographic variables

II. RESEARCH METHODOLOGY:

A quantitative research approach and quasi-experimental research design was selected for the present study. The present study was on 50 of general public in the selected community area, Puducherry who meet the inclusion criteria. Using a convenient sampling technique the samples were selected for the present study. The tool consists of demographic variables and structured questionnaires. The data of the study was evaluated by using descriptive and inferential statistics.

MAJOR FINDING

Regarding the age groups, 19 (38%) were in the age group of 40-60 years and 6 (12%) were above the age group of 30-40 years. In the aspect of religion, the data shows majority 49 (98%) were Hindu and 1 (2%) were Muslims. Regarding education qualification, 11 (22%) completed only school, 39 (78%) were Illiterate. In the aspect of occupation status majority, 32 (64%) were doing agriculture and 18 (36%) were unemployed. With regards to family income majority, 43 (88%) belong to an income of Rs.20,000 and above. With regards to type of family, the data shows that the majority 35 (70%) were in nuclear family and 15 (30%) were in joint family. In aspect of previous knowledge, majority 50 (100%) had no previous knowledge on warning signs of COPD.

III. RESULTS AND DISCUSSION

The study was conducted study to assess the effectiveness of structured teaching program on warning signs of COPD among general public at selected community area Puducherry. The table 1 reveals the distribution of level of knowledge on warning signs of COPD among general public. The finding shows that in pre-level of knowledge, majority 43 (86%) of them had inadequate knowledge, 7 (14%) of them had moderately adequate knowledge. In post-level of knowledge, majority 40 (80%) of them had moderately adequate knowledge, 9 (18%) of them had adequate knowledge and 1 (2%) of them had inadequate knowledge on warning signs of COPD.

The table 2 shows that the pre-test mean score for the level of knowledge was 22.6, SD 14.62 and the post-test mean score for the level of knowledge was 14.62, SD 8.993. The calculated 't' value was 22.27, and the p-value is 0.001. Hence it is highly significant. This clearly shows structured teaching program on warning signs of COPD among general public had significant improvement in their level of knowledge in the post-test.

The table 3 shows that there is there is significance association between age and educational qualification with level of knowledge on warning signs of COPD among general public where $p < 0.05$

Table 1: Distribution of level of knowledge on warning signs of COPD among general public

N=50

S.NO	LEVEL OF KNOWLEDGE	PRE-TEST		POST-TEST	
		Frequency (n)	Percentage %	Frequency (n)	Percentage %
1.	Inadequate	43	86%	1	2%
2.	Moderately adequate	7	14%	40	80%
3.	Adequate	0	0%	9	18%

Figure 1: Percentage wise distribution of the level of knowledge on warning signs of COPD among general public

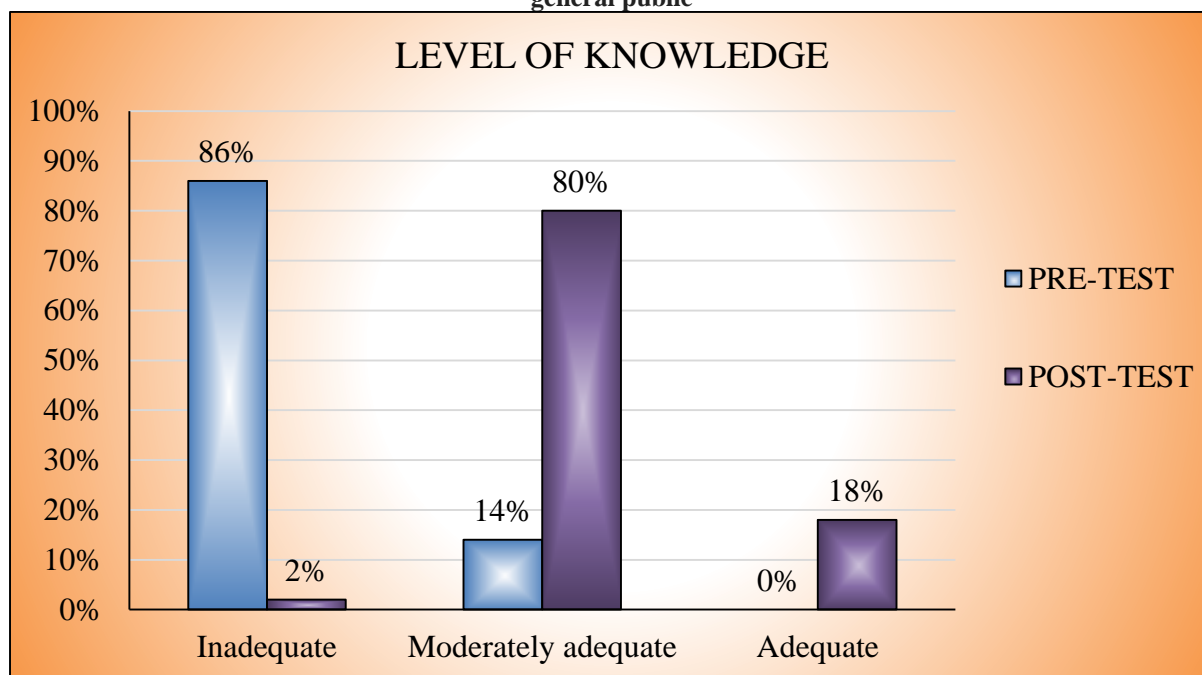


Table 2: Effectiveness of structured teaching program on warning signs of COPD among general public N = 50

S.NO	Level of Knowledge	Mean	SD	Paired 't' value	'p' Value
1.	PRE-TEST	22.6	14.62	t = 22.27	p = 0.001* (HS)
2.	POST-TEST	70.5	8.993		

Table 3: Association of pre-test level of knowledge on warning signs of COPD among general public with their selected demographic variables

N = 50

S.NO	Demographic variables	Level of Perception						X ² value
		Inadequate		Moderate		Adequate		
		N	%	N	%	N	%	
1	Age in years							X ² = 5.703 p = 0.045 (S)*
	a) 18-30 years	0	0	0	0	0	0	
	b) 30-40 years	4	8	2	4	0	0	
	c) 40-60 years	19	38	0	0	0	0	
	d) Above 60 years	20	40	5	10	0	0	
2.	Sex							X ² = 0.032 p = 0.857 (NS)
	a) Male	23	46	4	8	0	0	
	b) Female	20	40	3	6	0	0	
3.	Religion							X ² = 0.166 p = 0.684 (NS)
	a) Hindu	42	84	7	14	0	0	
	b) Muslims	0	0	0	0	0	0	
	c) Christian	1	2	0	0	0	0	
	d) Others	0	0	0	0	0	0	
4.	Education qualification							X ² = 6.282

	a)	Graduate	0	0	0	0	0	0	p = 0.035 (S)*
	b)	Intermediate / diploma	0	0	0	0	0	0	
	c)	School	10	20	1	2	0	0	
	d)	Illiterate	33	66	6	12	0	0	
5.	Occupational status								X ² = 4.578 p = 0.32 (NS)
	a)	Government	0	0	0	0	0	0	
	b)	Private	0	0	0	0	0	0	
	c)	Agriculture	25	50	7	14	0	0	
	d)	Unemployment	18	36	0	0	0	0	
6.	Marital status								X ² = 1.472 p = 0.225 (NS)
	a)	Married	43	86	7	14	0	0	
	b)	Unmarried	0	0	0	0	0	0	
	c)	Widow	0	0	0	0	0	0	
	d)	Divorced	0	0	0	0	0	0	
7.	Family income								X ² = 0.278 p = 0.981 (NS)
	a)	Rs. 20001 & above	37	74	6	12	0	0	
	b)	Rs. 10001-2000	3	6	1	2	0	0	
	c)	Rs. 5001-10000	0	0	0	0	0	0	
	d)	Less than Rs. 5000/-	0	0	0	0	0	0	
8.	Dietary pattern								X ² = 0.152 p = 0.697 (NS)
	a)	Vegetarian	0	0	0	0	0	0	
	b)	Non vegetarian	43	86	7	14	0	0	
9.	Type of family								X ² = 0.008 p = 0.929 (NS)
	a)	nuclear	30	60	5	10	0	0	
	b)	joint	13	26	2	4	0	0	
10.	Previous knowledge on warning signs of COPD								X ² = 2.899 p = 0.089 (NS)
	a)	Yes	0	0	7	14	0	0	
	b)	No	43	86	0	0	0	0	

*p<0.05 - Significant; p<0.01 - Highly Significant

IV. CONCLUSION:

The present study assessed the effectiveness of structured teaching program on warning signs of COPD among general public at selected community area Puducherry. The study findings concluded that there is significance association between age and educational qualification with level of knowledge on warning signs of COPD among general public where p<0.05.

RECOMMENDATIONS:

- Same study can be conducted with large samples.
- Same study to complication and management of COPD can be conducted among the general public.

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