International Journal of Recent Advances in Multidisciplinary Topics Volume 6, Issue 11, November 2025

www.ijramt.com | E-ISSN: 2582-7839 | RESAIM Publishing (www.resaim.com)

A Descriptive Study to Assess the Knowledge Regarding Prevention of COPD Among Staff Nurses Working at Selected Hospital, Rajpura, District Patiala, Punjab

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Abstract: The term chronic obstructive pulmonary disease (COPD) refers to a medical condition marked by chronic obstruction in the peripheral bronchus. The disease is disabling with symptoms such as chronic cough, wheezing, dyspnoea, and increase infection of respiratory passage resulting in a progressive and irreversible reduction of airflow. The prevalence of COPD is closely linked to tobacco use, and variations exist in its incidence, morbidity, and death between nations and demographic groups. Methodology: Descriptive Univarient research design will be adopted. Research study was conducted at Neelam Hospital, Rajpura, District Patiala, Punjab. Sample were selected by using non probability convenient sampling technique and self structured knowledge questionnaire will be used to assess the level of knowledge. The data was analyzed using descriptive and inferential statistics Result: Mean and standard deviation knowledge score regarding COPD among staff nurses revealed that the mean knowledge score of staff nurses was (16.93) and standard deviation was 2.94. The frequency and percentage distribution of knowledge regarding COPD among staff nurses shows that majority of staff nurses 48 (80%) had average knowledge regarding COPD followed by 11 (18%) had good knowledge and 1 (2%) had poor knowledge regarding COPD.

Keywords: Descriptive study, Knowledge, Nurse, COPD.

1. Introduction

The term chronic obstructive pulmonary disease (COPD) refers to a medical condition marked by chronic obstruction in the peripheral bronchus. Person with COPD are greatly underestimated because the disease is usually not diagnosed until it is moderately advanced. Patients usually seek medical help when they have an acute respiratory infection, with dyspnea being the main concern. The risk factors for COPD include smoking, occupational aerosols, indoor and outdoor air pollution, socioeconomic status, food and family history. Despite the fact that smoking is one of the main risk factors for COPD, not all cases of the disease are caused by smokers. The two most prevalent and concerning symptoms of chronic obstructive lung disorders are dyspnea and airway blockage.

More patients are admitted to hospitals due to dyspnea than any other symptom. Acc. to WHO between 2020 and 2050, India is estimated to have 37.8 million COPD cases and there will be a 23% increase in the number of COPD cases worldwide among people 25 years of age and older. Emphysema, bronchiectasis, and chronic bronchitis are the three main forms of COPD that are known to cause progressive restriction of airflow. So staff nurses should have proper knowledge to help COPD patients and to improve their physical and mental well-being.

2. Objectives

- 1. To assess the level of knowledge among Staff Nurses.
- 2. To find out the association between knowledge score with their selected socio demographic variables.

A. Hypothesis

 $H_{0.}$ There will be no significant association between knowledge score with the socio demographic variable

H₁. There will be significant association between knowledge score with the socio demographic variable at 0.05 level.

B. Assumption

 Good level of knowledge help COPD patient to improve their physical and mental wellbeing.

3. Methods and Materials

A quantitative descriptive research approach with Univariant Descriptive Research Design was used for the study. Study was conducted in Neelam Hospital, Rajpura, Dist. Patiyala. A study sample of 60 staff nurses were selected by non- probability convenient sampling technique. Tool consists of socio demographic data and self structured knowledge questionnaire was administered to the sample for assessing their knowledge. The data was analysed in the terms of descriptive and inferential statistics.

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A. Inclusion Criteria

- Staff nurses working at Neelam Hospital.
- Staff nurses who are available during the course of study.

B. Exclusive Criteria

Staff nurses who are not willing to participate in study.

4. Result and Discussion

1) Section-I: Distribution (Frequency and Percentage) of Sample According to Socio Demographic Variables

In relation to age maximum number of staff nurses (35%) in the age group of 26-29 years. Maximum staff nurses (87%) were females. Majority of staff nurses (35%) were from GNM. Acc to working experience, maximum staff nurses (35%) had 2-3 years. Acc to working area and department (28.1%) were from other area, (18.3%) were from general, gynae, and pediatric wards and (16.6%) were from emergency department. Majority of staff nurses (47%) had gained information from mass media

2) Section-II

Objective-1: To assess the knowledge regarding COPD among staff nurses.

Table 1 To assess the knowledge regarding COPD among staff nurses (N = 60) Sample Mean Staff nurses 16.93

Table 1 depicted the mean and standard deviation knowledge score regarding COPD among staff nurses working at hospital Rajpura, Distt. Patiyala. The data revealed that the mean knowledge score of staff nurses was (16.93) and standard deviation was 2.94.

Table 2 depicted the frequency and percentage distribution of knowledge regarding COPD among staff nurses working at hospital Rajpura, Dist. Patiyala. It shows that majority of staff nurses 48 (80%) had average knowledge regarding COPD followed by 11 (18%) had good knowledge and 1 (2%) had poor knowledge regarding COPD.

Table 2 Frequency and percentage distribution of knowledge regarding COPD among staff nurses

Level of knowledge score regarding COPD	Frequency (f)	Percentage (%age)
Good (20-30)	11	18%
Average (11 -20)	48	80%
Poor (0-10)	1	2%

Maximum score – 30, Minimum score – 0

Table 3 Chi square values showing the association between knowledge among staff nurses regarding COPD with their socio demographic variables (N=60)

Demographic Variables	Level of knowledge			df	X^2	Table value	
	Poor	Average	Good				
Age in years							
a. 22-25	0	19	1	6	7.74 ^{NS}	12.59	
b. 26-29	0	16	5				
c. 30-33	1	9	3				
d. Above 34	0	4	2				
Gender							
a. Male	0	08	0	2	2.14 ^{NS}	5.99	
b. Female	1	40	11				
c. Non-Binary	0	0	0				
Education							
a. ANM	0	0	0	8	9.33 ^{NS}	15.51	
b. GNM	0	15	6				
c. B.Sc. Nursing	0	19	2				
d. Post basic B.Sc. Nursing	2	14	2				
e. M.Sc. Nursing	0	0	0	6	10.48^{NS}	12.59	
Work experience							
a. 0-1 year	1	18	1				
b. 2-3 years	0	18	3				
c. 4-5 years	1	5	3				
d. More than 5 years	0	7	3				
Work area and department							
a. Emergency	0	9	1	8	5.39 ^{NS}	15.51	
b. General	1	8	2				
c. Gynae	0	9	2				
d. Pediatrics	1	8	2				
e. Any other specify	0	14	3				
Source of information							
a. Mass media	0	22	6	6	4.12 ^{NS}	12.59	
b. Friends and family	1	10	3				
c. Newspaper or magazines	0	12	2				
d. Any otherspecify	0	4	0				
					(NS= Non-Significant)		

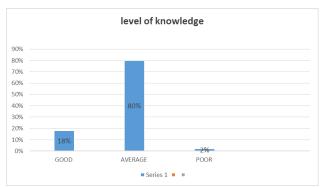


Fig. 1. The knowledge score regarding COPD among staff nurses

3) Section-III

Objective-2: To determine the association between knowledge among staff nurses with their socio demographic variables.

Table 3 depicted that the association between knowledge among staff nurses with their socio demographic variables.

There was no association between knowledge among staff nurses with their socio demographic variables.

5. Nursing Implications

A. Nursing Practice

- Nurses are the key persons of health team, who play a
 major role in health promotion and maintenance.
 Nursing care is an art and science in providing quality
 care. This study implies a basis for developing
 standards of care in the hospitals.
- The nursing personnel need to instruct the COPD patient through health education regarding prevention of COPD.
- Nurses' personnel need to prepare self instructional materials which can be provided to people to enhance their knowledge regarding COPD. self instructional material must be simple, clear and understandable.

B. Nursing Education

- As a nurse educator, there are abundant opportunities for nursing professional to educate COPD patient regarding the COPD that help to increase awareness and relief its significance of short-term in-service education programs for nurses, health workers related to health education regarding COPD.
- Nursing personnel working in different areas should be given in service education and help them to update

- with recent trends.
- Through the mass media information can be given to COPD patient. About COPD.

C. Nursing Administration

- Nurse administrator can take part in conducting health education programs, in-service education programmes to provide knowledge to COPD patient about the COPD.
- Nurse administrator should initiate or develop framework to improve COPD symptoms and set standards for care.
- Nurse administrator should be able to make judgment as to which intervention helps in increasing awareness regarding COPD.

D. Nursing Research

- The researcher can develop appropriate health education tools for educating the patients.
- The study will motivate beginning researcher to conduct the same study with different variables on long scale.

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