

# A Study to Assess the Level of Knowledge on Lung Cancer among College Students at SIMATS, Thandalam, Kanchipuram District

K. Karpagam<sup>1</sup>, S. Arunkumar<sup>2</sup>

<sup>1</sup>MSC (N), Clinical Instructor, Saveetha Institute of Medical and Technical Science, Chennai, India-602 105

<sup>1</sup>BSC(N) IVTH Year Students, Saveetha College of Nursing, Saveetha Institute of Medical and Technical Science, Chennai, India-602 105

Email address: <sup>1</sup>karpagaraja1982@gmail.com, <sup>2</sup>annanyadebathan@gmail.com

**Abstract**— Lung cancer is a leading cause of cancer related to death commonly for men. There are many cause for lung cancer like inhalation of carcinogenic pollutants by susceptible host. Out of all the risk factors, cigarette smoking is the most important risk factors in the development of lung cancer in men. To assess the knowledge about lung cancer among college students. Non-experimental descriptive research design was employed. 30 samples were selected by using convenient sampling technique at SIMATS. Knowledge about lung cancer was assessed by structured questionnaire and data were analyzed by descriptive and inferential statistics. The findings of the study shows that 15(50%) had Inadequate knowledge, 14(46.6%) had a moderate knowledge, 1(3.33%) had a adequate knowledge about lung cancer. It is to be concluded that the study participants may get benefitted by self instructional module about lung cancer.

**Keywords**— Knowledge, Lung cancer.

## I. INTRODUCTION

Lung cancer is the leading cause of cancer related death commonly for men. There are many cause for lung cancer like inhalation of carcinogenic pollutants by susceptible host. Out of all risk factor, cigarette smoking is the most important risk factors in the development of lung cancer in men.

Lung cancer is the uncontrolled growth of abnormal cell in one or both of lungs. While normal cell reproduce and develop into healthy lung tissue, this abnormal cells produces faster and never grow into normal lung tissue. The cancer cells can spread from the tumor into the blood stream are lymphatic system where they can spread to the organs. Cigarette smoking is by far the most important cause of lung cancer and the risk from smoking increases with a number of cigarettes smoked and the length of time spent smoking. Some occupational chemicals and air pollution like benzene, formaldehyde and disseat at air pollution asbestos also is an important cause of lung cancer. Preventing young people from smoking and improved smoking strategies are therefore extremely important. This topic have been recently well reviewed and will not be further in the serious.

Lung carcinoma is the leading causes of cancer related death worldwide. About 85% of cases are related to cigarette smoking. Symptoms of lung carcinoma include cough, cestpain, weight loss and less commonly hemoptysis. Cough, dyspnea, hemoptysis and chest discomfort are potentially associated with primary lung cancer. Cough is found more frequently with earlier than latest stage disease. Hemoptysis and dyspnea can be present at least 180 days before diagnosis. Early diagnosis could be made on the basis of these symptoms, and therefore possibly earlier on in the development of the disease. Knowing that a symptoms is

associated with a cancer is associated with a intention to see medical help promptly. The value of rising symptom awareness has been supported by the results by a recent social marketing intervention including symptom information which indicated an increase in the number of people presenting at primary care and being given a Cest X-Ray and diagnosis.

Various factors have been associated with the development of lung cancer including tobacco, smoke, second-hand smoke, environmental and occupational exposure, gender, genetics, and dietary factors also leads to lung cancer. Lung cancer is the leading cancer killer among men. Tobacco smoking is the died list and the most dangerous habit.

## II. MATERIALS AND METHOD

**Research approach:**

Quantitative research approach.

**Research design:**

Descriptive design

**Settings:**

The study was conducted at SIMATS Thandalam, Kanchipuram district.

**Population:**

The population in all the students studying in SIMATS.

**Sample:**

The students who studying at SIMATS at the age group of below 20-25.

**Sample size:**

30 college students from SIMATS.

**Sampling technique:**

Non-probability convenient sampling technique used for the present study.

**Sampling criteria:**

**Inclusion criteria**

- Students who were willing to participate.
- Students who know Tamil and English.
- Students who were absent during the study.

**Exclusive criteria**

- Students who were not willing to participate.
- Students who were absent during the study.

**Description of the instrument:**

The tool consist of two section

Section 1: demographic variables

Section 2: Multiple Choice Questionnaire.

1-questionnaire is used to assess the information based on the demographic variables such as age, education, religion, type of family.

2-questionnaire was used to assess the knowledge about lung cancer. The question were related to the cancer, causes, risk factors, symptoms, diagnosis of lung cancer.

**Results:**

The findings of the study shows that 15(50%) had frequate knowledge, 14(46.6%) had a moderate knowledge, 1(3.33%) had a adequate knowledge about lung cancer.

TABLE I. Frequenty and percentage distribution of socio demographic variables among college student

Demographicaal variables	Frequency (f)	Percentage %
1. Age years		
a. Below 20	6	20
b. 21 to 23	14	46.67
c. 23 to 25	10	33.33
2. Education		
a. Undergradute	18	60
b. Postgraduate	12	40
3. Religion		
a. Hindu	15	50
b. Muslim	6	20
c. Christian	9	30
d. others	-	-
4. Types of family		
a. Nuclear	22	73.34
b. Joint	8	26.66
5. Smoking habits in family		
a. Grandfather	11	36.66
b. Father	10	33.34
c. Brother	3	10
d. None	6	20
6. Habits of using smoke tobacco in the form of		
a. cigar	-	-
b. Cigarette	-	-
c. Pipes	-	-
d. None	30	100
7. Source of information on the lung cancer		
a. TV and radio	10	33.33
b. Newspaper	8	26.67
c. Health professionals	11	36.67
d. others	1	3.33
8. How long have you been smoking		
a. < 1 year	-	-
b. 2-3 years	-	-
c. 4-5 years	-	-
d. None	30	100

Table I shows that among 30 students out of 6 samples 9 (20%) were in the age group below 20. 14 sample (46.67%) were in the age group 21 to 23, 30 sample (30.33%) were in the age group, 18 (60%) are undergraduate. 12 (40%) are postgraduate, 15 (50%) are Hindu, 6 (20%) are Muslim, 9 (30%) are Christian, 22 (77.34%) are nuclear family, 8 (26.66%) are joint family, 11(36.66%) are grandfather, 10 (33.34%) are father, 3 (10%) are brother, 6 (20%) are no one, 6 (20%) are cigar, 0 (0%) are cigarette, 0 (0%) are pipe, 0 (0%) are none, 30 (100%) are TV and radio 8 (26.67%) are newspaper, 11(36.67%) are health profession, 1(3.33%) are others, 7(23,33%) are <1 year, 0(0%) are 2 to 3 years, 0(0%) are 4 to 5 years, 0 (0%) are none 30 (100%)

TABLE II. Frequency and percentage distribution of knowledge assessment among college students

S.No	Knowledge assessment	Inadequate Knowledge		Moderated Knowledge		Adequate Knowledge	
		No	%	No	%	No	%
1.	Level of knowledge on lung cancer	15	50	14	46.6	1	3.33

Table II shows that 15 (50%) had inadequate knowledge, 14(46.6%) had moderate knowledge, 1(3.33%) had a adequate knowledge about lung cancer

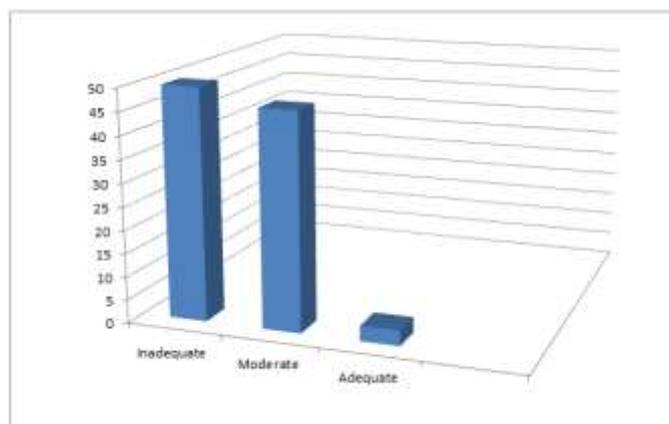


TABLE III. Mean and Standard deviation of level of knowledge about lung cancer among college students

S.NO	Level of knowdge	Mean	Standard deviation
1.	Level of knowledge on lung cancer	1.8	1.2

Table III show that mean score of 1.8 with 1.2 standard deviation.

Table IV Shows that there is a association between the demographical variable with the selected low demographic variables of Education, Religion, Type of family, Sources of information on lung cancer, How many year have you smoking the level of <0.05.

TABLE IV. Association between demographic variable and level of knowledge on lung cancer among college students

S.NO	Demographical variable	Inadequate knowledge		Moderate knowledge		Adequate knowledge		CHI square
		No	%	No	%	No	%	
1.	Age years							X <sup>2</sup> = 3.118 Df = 4 P = 9.49 Significant
	a.Below 20	3	10	3	10	-	-	
	b.21 to 23	6	20	8	26.67	-	-	
2.	c.23 to 25	6	20	3	10	1	3.33	X <sup>2</sup> = 1.207 Df = 3 P = 7.82 Significant
	Education							
	a.Undergraduate	10	33.33	8	26.67	-	-	
3.	b.Postgraduate	5	16.67	6	20	1	3.33	X <sup>2</sup> = 0.87 Df = 4 P = 9.49 Significant
	Religion							
	a.Hindu	8	26.67	7	20	1	3.33	
	b.Muslim	3	10	3	10	-	-	
4.	c.Christian	5	16.67	4	13.33	-	-	X <sup>2</sup> = 1.055 Df = 3 P = 7.82 Significant
	d.others	-	-	-	-	-	-	
	Types of family							
	a.Nuclear	11	36.67	11	36.47	-	-	
5.	b.Joint	4	13.33	3	10	1	3.33	X <sup>2</sup> = 18.041 Df = 5 P = 11.07 Non Significant
	Smoking habits in family							
	a.Grandfather	7	23.33	3	10	1	3.33	
	b.Father	5	16.67	5	16.57	-	-	
6.	c.Brother	1	3.33	2	6.67	-	-	X <sup>2</sup> = 16.43 Df = 5 P = 11.07 Non Significant
	d.None	2	6.67	4	13.33	-	-	
	Habits of using smoke tobacco in the form of							
	a.cigar	-	-	-	-	-	-	
7.	b.Cigarette	-	-	-	-	-	-	X <sup>2</sup> = 2.23 Df = 5 P = 11.07 Significant
	c.Pipes	-	-	-	-	-	-	
	d.None	15	50	14	46.66	1	3.33	
	Source of information on the lung cancer							
8.	a.TV and radio	4	13.33	5	16.57	1	3.33	X <sup>2</sup> = 5.95 Df = 5 P = 11.07 Significant
	b. Newspaper	5	16.67	3	10	-	-	
	c.Health professionals	6	20	5	16.67	-	-	
	d.other	-	-	1	3.33	-	-	
9.	How long have you been smoking							X <sup>2</sup> = 5.95 Df = 5 P = 11.07 Significant
	a.< 1 year	-	-	-	-	-	-	
	b.2-3 years	-	-	-	-	-	-	
	c.4-5 years	-	-	-	-	-	-	
10.	d.None	15	50	14	46.66	1	3.33	

### III. DISCUSSION

The study to the first objective of the study was to assess the knowledge regarding the lung cancer among the college students. Shows that among 30 students out of 6 samples 9 (20%) were in the age group below 20. 14 sample (4.67%) were in the age group 21 to 23, 30 sample (30.33%) were in the age group, 18 (60%) are undergraduate. 12 (40%) are postgraduate, 15 (50%) are Hindu, 6 (20%) are Muslim, 9 (30%) are Christian, 22 (77.34%) are nuclear family, 8 (26.66%) are joint family, 11(36.66%) are grandfather, 10 (33.34%) are father, 3 (10%) are brother, 6 (20%) are no one, 6 (20%) are cigar, 0 (0%) are cigarette, 0 (0%) are pipe, 0 (0%) are none, 30 (100%) are TV and radio 8 (26.67%) are newspaper, 11(36.67%) are health profession, 1(3.33%) are others, 7(23,33%) are <1 year, 0(0%) are 2 to 3 years, 0(0%) are 4 to 5 years, 0 (0%) are none 30 (100%) The second objective of the study to associate level of knowledge on lung cancer with the selected demographical variable. shows that 15 (50%) had inadequate knowledge, 14(46.6%) had moderate knowledge, 1(3.33%) had a adequate knowledge about lung cancer. The third objective of the study was association between selected demographical variable with knowledge

about lung cancer among college students. Shows that there is a association between the demographical variable with the selected low demographic variables of Education, Religion, Type of family, Sources of information on lung cancer, Years of smoking the level of <0.05.

### REFERENCE

- [1] R. A. Al-Naggar, "Knowledge and practice towards lung cancer among university students," *J Community Med Health Edu.*, vol. 2, issue 3, pp. 1-5, 2012.
- [2] A. E. Simon, D. Juszczak, N. Smyth, E. Power, S. Hiom, M. D. Peake, and J. Wardle, "Knowledge of lung cancer symptoms and risk factors in the UK: Development of a measure and results from a population-based survey," *Thorax*, vol. 67, issue 5, pp. 426-432, 2012.
- [3] S. Percac-Lima, J. M. Ashburner, S. J. Atlas, N. Rigotti, E. Poles, and E. R. Park, "Beliefs about lung cancer, knowledge, and interest in lung screening among community health center patients," *Journal of Clinical Oncology*, vol. 34, no. 15 suppl, 2017.
- [4] M. Crane, N. Scott, B. J. O'Hara, S. Aranda, M. Lafontaine, I. Stacey, M. Varlow, and D. Currow, "Knowledge of the signs and symptoms and risk factors of lung cancer in Australia: Mixed methods study," *BMC Public Health*, vol. 16, 508, pp. 1-12, 2016.
- [5] S. K. Jindal, A. N. Aggarwal, K. Chaudhry, S. K. Chhabra, G. A. D'Souza, D. Gupta, S. K. Katiyar, R. Kumar, B. Shah, and V. K. Vijayan "Tobacco smoking in India: Prevalence, quit-rates and respiratory morbidity," *Indian Journal of Chest Diseases and Allied Sciences*, vol. 48, issue 1, pp. 37-42, 2006.



- [6] J. M. Samet, C. L. Wiggins, C. G. Humble, and D. R. Pathak, "Cigarette smoking and lung cancer in New Mexico1-3," *Am Rev Respir Dis.*, vol. 137, issue 5, pp. 1110-1113, 1988.
- [7] G. Pelaez Mena "Tobacco and cancer of the lung. A case-control study," *Rev Clin Esp.*, vol. 185, pp. 298-302, 1989.
- [8] V. Gajalakshmi, R. Peto, T. S. Kanaka, and P. Jha, "Smoking and mortality from tuberculosis and other diseases in India: Retrospective study of 43 000 adult male deaths and 35 000 controls," *The Lancet*, vol. 362, pp. 507-515, 2003.
- [9] D. J. Jussawalla and D. K. Jain, "Lung cancer in Greater Bombay: Correlations with religion and smoking habits," *British Journal of Cancer*, vol. 40, issue 3, pp. 437-448, 1979.
- [10] L. S. Brunner, *Brunner & Suddarth's Textbook of Medical-Surgical Nursing*, Lippincott Williams & Wilkins; 2010.
- [11] B. T. Basavanthappa, *Fundamentals of Nursing*, Jaypee Brothers; 2004.