

A STUDY ON ATTITUDE TOWARDS SMOKING AND ITS RELATION WITH LUNG CANCER

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Abstract: Knowledge about the harms of smoking is a key element for smoking cessation and prevention. According to the knowledge–attitude–practice model, change in behaviour involves acquiring relevant knowledge, changing related attitudes and, finally, altering practices. Despite numerous advances in recent years in terms of diagnostic methods, molecular changes, and therapeutic interventions, the outcomes of the lung cancer patients remain poor; hence, a better understanding of the risk factors may impact the preventive measures to be implemented at the community level.

Index Terms - Lung cancer, Smokers , Knowledge, Attitude, Practice.

I. INTRODUCTION

Cigarette smoking is the burning global problem of preventable diseases and premature death. Prevention is better than cure. Smoking can increase the risk of coronary heart disease and upper and lower respiratory tract infection and different forms of cancer of different organs related to respiratory system. Lung cancer is a type of cancer that arises in the lungs. It is one of the commonest malignant neoplasms all over the world. It accounts for more cancer deaths than any other. It is usually grouped into two main types, non-small cell lung cancer (NSCLC) and small cell lung cancers (SCLC) based on appearance of tumor cells under the microscope. Non-small cell lung cancer (75-80 % of cases) is more common than small cell lung cancer (15-20%).

More than 5 million deaths occur every year due to lung cancer. It was estimated that men smoked nearly five times as much as women in the world. With increasing prevalence of smoking, lung cancer has reached epidemic proportions in India. About 14% of all new cancers in India are lung cancers. Lung cancer mainly occurs in older people. Most people diagnosed with lung cancer are 65 or older, while a very small number of people diagnosed are younger than 45. Upto 40 years of age small cell type predominates and has less association with smoking. After the age of 40 years squamous cell type is commonest in smokers and adenocarcinoma in non-smokers. The average age at the time of diagnosis is about 70. It has been estimated that active smoking is responsible for close to 90 percent of lung cancer cases; radon causes 10 percent, occupational exposures to carcinogens account for approximately 9 to 15 percent and outdoor air pollution 1 to 2 percent.

BURDEN OF DISEASES

Table 1 : Lung cancer in India (Globocan, 2018)

	Incidence	Mortality
Lung cancer (Male)	48698	45 363
Lung cancer(Female)	19 097	18 112
Both male &female	67 795	63 475

In view of our large population, the burden of lung cancer will be quite enormous in India. Drastic measures aimed at discouraging people from smoking must be taken to reduce the morbidity and mortality due to lung cancer. One million of the current 5 million deaths in world, and 2.41 million in developing countries is contributed by India^{2,10} and, in 2020, this figure is projected at 1.5 million. On average smokers increase their risk of lung cancer between 5&10 fold &24% of male who smoke can expect to develop cancer during their expected life time.

II. LUNG CANCER IN INDIA

Lung cancer was initially thought to be infrequent in India. Lung cancer constituted 14.4% of all cancers in a review of 9210 consecutive autopsies by Banker . Sirsat reported that lung cancer formed one per cent of all cancers in Tata Cancer Hospital. Viswanathan et al collected information from different hospitals of the country and found that the incidence of lung cancer in hospital population was 27.4 per million in 1950 and in 78.6 per million in 1959. They also found an increase in the incidence of bronchogenic carcinoma (16.1 in 1950 to 26.9 in 1961 per 1000 malignancies), following analysis of the records of 15 teaching institutions in India over a period of 10 years. According to Wig et al, lung carcinoma was a frequent diagnosis amongst all types of chest diseases. The survey conducted in Uttar Pradesh in 1966 by Misra and others showed that the incidence was 4.2 per 10,000 hospital admissions and 2.1 per cent of all malignancies. The National Cancer Registry Programme of the Indian Council of Medical Research, which collected data from six different parts of the country, both rural and urban areas, showed varying figures in different areas . While cancer of the trachea, bronchus and lungs was the most common form of malignancy in males in 1989 from Bombay, Delhi, and Bhopal, it was the second most common in Madras and third in Bangalore, and was most unusual in Barshi, a rural area. The disease was uncommon in females and only in Bombay it was the sixth common malignancy while in Bhopal, it was the seventh in rank. International comparison of incidence rates of lung cancer with that seen in India showed a low figure (age adjusted rates of 66.5-100.4 in Europe and USA versus 2.0 to 14.6 per 105 in India males; the same is 16.1 to 33.3 vs 0 to 3.7 in females). However because of the overall population size, the absolute number should be large. Hospital data from different parts of the country has also shown different patterns. Behera and Kashyap analyzed the pattern of malignancy in patients admitted to PGIMER, Chandigarh from 1973 to 1982 and found that of the 223,930 hospital admissions, there were 863 lung cancer cases (0.38%). Lung cancer was the fifth common cancer after lympho-reticular malignancy carcinoma cervix, oropharyngeal cancer and carcinoma of breast. The total number of lung cancer admissions steadily rose from 1973. As of 1st July 2002 a total of 41,000 cases of lung cancer would have been diagnosed for that year in India as per the ICMR data from its Cancer Registry.

III. STUDIES RELATED TO THE EFFECT OF SMOKING

According to WHO, Indian Express reports by 2030, tobacco will kill 10 million people a year and the toll will be still higher than the total member of deaths due to Malaria, Maternal And Child conditions and tuberculosis school. Subjects were assessed using a 20 item questionnaire. A majority of the students had adequate knowledge. Incorrect responses were common regarding the following items: alcohol dependence is a disease, alcohol ensures good sleep and quitting, smoking is impossible. Substance use was reported by 38 out of 964 students (3.9%) and it was limited to smoking, smokeless tobacco, alcohol and cannabis.

A Cross Sectional Community based survey on Knowledge and Practices regarding cigarette smoking” by Sajid Ali, Naseem Ara, Beena Ali, Masood kadic among adult women in a rural district of sindh, Pakistan.A two stage cluster sampling design followed. 502 women were interviewed for this study. Approximately 71% of women were illiterate and 44% of women were in the age group of 18 to 24 years. A high number 10% of adult women were smokers. Age at initiation among women (18-24 years) was 42%.A significant difference for questions regarding smoking effects on health($p=0.02$) .This study concluded that, young age at initiation is an important finding that needs to be addressed.

A descriptive-correlative survey regarding “knowledge, Attitude And Practice among auto rickshaw drivers by Suja karkada in Manipal, Karnataka. Attitude Scale and Practice Questionnaire were used. 100 members were taken as sample for this study. Majority of the auto rickshaw drivers had very good knowledge 62.6% about tobacco and its ill effects. The prevalence of consumption of tobacco products was 35.2 for every 100 auto rickshaw drivers. To summarize 100% of them had a favorable attitude.

A study was conducted to assess “The knowledge Regarding Smoking Status and Health Effects Of Tobacco” by Shatey O, D.S Guindon among adult smokers. The data collected from 2238 adult samples by means of an interviewer-administered questionnaire among them 34% of adults are smokers and 60% of the adults try to quit at least once for reason such as health protection because of medical doctors advice.

IV. OBJECTIVES

1. To find out the basic knowledge of lung carcinoma and its relation with smoking.
2. Attitude towards lung cancer (sex, area and stream wise)

V. HYPOTHESIS

H1: There would be a significant relationship between attitude towards lung carcinoma and smoking among boys and girls students.

H2: There would be a significant relationship between attitude towards lung carcinoma and smoking among urban and rural students.

H3 : There would be a significant relationship between attitude towards lung carcinoma and smoking among science and other than science students.

VI. DELIMITATIONS OF STUDY

1. Area: The study was delimited to rural & urban areas of North 24 Parganas of West Bengal.
2. Sample: 400 students (boys & girls, rural & urban, science & other than science) of govt. aided colleges were taken as sample by stratified random sampling method.

VII. TOOL

Likert type of attitude scale consisting of 50 items prepared by the researcher was administered to collect the data about attitude towards lung carcinoma and its relation to smoking.

VIII. ANALYSIS OF DATA

The result of the study is as follows:

Table 2

The value of r and conversion of r into corresponding Fisher's Z coefficient showing the correlation between lung carcinoma and attitude towards smoking :

Statistics	r	z	N	$N-3$	$Z(N-3)$	Mean Z	Equivalent r
Ind. Variables							
Sex	Boys	0.57	0.65	200	197	0.58	0.52*
	Girls	0.46	0.50	200	197		
Area	Urban	0.61	0.71	200	197	0.61	0.55*
	Rural	0.64	0.50	200	197		

Subjects	Science	0.48	0.52	200	197	0.48	0.45
	Other than Science	0.42	0.45	200	197		

*significant at .01 level

a) The value of r was calculated from 200 boys and 200 girls separately. Table-1 shows the value of r is 0.57 for boys and 0.45 for girls. The mean Z score was 0.58. The equivalent r value was 0.52 which is significant at both .05 and .01 level at 398df. The attitude towards lung carcinoma is positively and significantly related to smoking (in case of boys and girls). Therefore H_1 was retained.

b) From Table 1 we found that the r between attitude towards smoking and lung cancer is .61 and .64 respectively among rural and urban learners. The mean z value is 0.61. The equivalent r value is 0.55 which is significant at .05 level. The attitude towards lung carcinoma is positively and significantly related to smoking (in case of rural and urban learners). Therefore H_2 was retained.

c) The value of r between attitude towards smoking and lung cancer is .48 and .42 respectively among science and other than science learners. The mean z value is 0.48. The equivalent r value is 0.45 which is significant at both .05 level and .01 level. The attitude towards lung carcinoma is positively and significantly related to smoking (in case of science and other than science learners). Therefore H_3 was retained.

IX. CONCLUSION

Smoking is the leading cause of unavoidable mortality and the strongest risk factor for a number of diseases. Many smokers initially become addicted to nicotine during adolescence, making it critical to understand smoking trends in this population.

Boys were also more likely to be smokers compared to girls. The male predominance in smoking habit may be a reflection of socio-cultural acceptability of smoking. This could be due to the fact that majority of smokers in this study were from the financially independent younger age groups. Our observation that majority of the tobacco users started using tobacco at the age of 16–24 years, also supports the fact the attainment of financial independence in this age group may lead to getting addicted to this habit.

Rural-to-urban migrants are thought to increase their cigarette smoking after migration, not only because they usually migrate from low to high consumption settings, but also because they often suffer from high levels of stress and strain and poor mental health, which are related with greater smoking. While in certain rural areas people not only consume more cigarette products but also consume less, probably due to a protective effect of rural backgrounds or economic limitations that prevent substance purchase.

Science students are more curious to know the unknown facts. To quench their thirst they are more prone to know the effect of tobacco on cellular organisms and tries to use it as a facilitating factor of their divergent thinking which in turn help in learning. In an institutional situation science students (16-24 years) with their peer started smoking as an experiment which becomes addiction to them. Sometimes they are guided by pleasure principle otherwise by reality.

Based on this finding, it is suggested that the school experience should be enriched with education. It is suggested that the school should take more steps to reduce the tobacco use among students.

RECOMMENDATION

- Tobacco control programs should be designed to cover all types of tobacco products and in such a way that all subpopulations have equal access to policy interventions and information.
- Periodic monitoring of tobacco use should be conducted to track the implementation of the MPOWER policy package.

- Implement 100% smoke-free policies that cover all public places and workplaces to fully protect non smokers from exposure to second-hand smoke.
- Utilize effective media messages and pictorial health warnings on all tobacco products to change social norms.
- Implement advertising restrictions with effective enforcement which is shown to have a significant impact on reducing tobacco use.
- Raise the price of tobacco products to make them less affordable for the majority of people.
- Build capacity among health-care providers and create cessation facilities in health care settings as well as in local communities.

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