

# Study of knowledge, attitude and practice of tobacco consumption among 1<sup>st</sup> year medical students of S. Nijalingappa medical college in Bagalkot city

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## Abstract

**Background:** Tobacco is the leading preventable cause of cancer worldwide. The World Health Organization (WHO) estimates that there are currently 6 million deaths every year due to tobacco use and second hand smoke which unchecked may rise to more than 8 million per year by 2030. During the 21st century, tobacco could kill 1 billion people. Smoking is estimated to cause about 71% of lung cancer, 42% of chronic respiratory diseases and nearly 10% of cardiovascular disease.

**Objectives:** 1. To study the knowledge, attitude & practice of all forms of tobacco & its consumption in 1<sup>st</sup> year medical students. 2. To assess the need of health education about the adverse effects of tobacco consumption to the students participating in the study.

**Methodology:** This cross-sectional study was conducted in S. Nijalingappa Medical college in Bagalkot city between July - September 2013. The 1<sup>st</sup> year medical students answered a pre-structural, close ended questionnaire on Knowledge, Attitude & Practice regarding tobacco & its consumption. 114 1<sup>st</sup> year medical students participated in the study. The data was tabulated by using Microsoft Excel 2010 and analyzed by using OPENEPI software.

**Results:** In the present study, of total 114 students participated, 24% were using the tobacco products. Most of them (75%) were using tobacco occasionally. Among tobacco users, 57% used only cigarettes, 25% used only chewing products and 18% used both the products. Among the smokers, 71% of them were smoking 1-2 cigarettes, and remaining 29% of them smoked half pack per day. Among tobacco chewers, 66% of them used 1-2 sachets, 34% of them used about 3-4sachets per day. Situations which increased the frequency of usage were mainly (64%) examination stress, friends company (28%) and out of city (8%). 53% of the users tried to quit after being motivated by their parents and teachers but only 4% were successful.

**Conclusions:** About 24% of the students in the present study had consumed some form of tobacco. Cigarette is major tobacco product consumed. Majority of the current consumers (53.57%) had attempted to quit but only 4% were succeeded in quitting the tobacco consumption. Addiction was the cause for not quitting the habit among of current consumers. These future health professionals, who play a major role in tobacco use control and cessation and it becomes their duty to promote oral and general health and healthy life styles among their patients.

**Key words:** Tobacco consumption, 1<sup>st</sup> year Medical College students, Knowledge Attitude & Practice.

## Introduction

History of tobacco: In the late 15<sup>th</sup> century Columbus while discovering America brought back tobacco with him and introduced it in Europe. King James of

England in the 16<sup>th</sup> century commented regarding smoking: "A custom loathsome to the eye, hateful to the nose, harmful to the brain and dangerous to the lungs," The Portuguese brought it to India about four

centuries ago. Some used it as a medicine, while still others used it to drive away evil spirits [1].

Tobacco leaves are the main products used. Tobacco is used in the form of –  
SMOKING – Beedies, Cigarettes, Hukka, etc.

CHEWING – Ghutka, Mava, Zarda Pan masala containing tobacco, etc.

INHALING – Snuff.

Tobacco is the leading preventable cause of cancer worldwide. The World Health Organization (WHO) estimates that there are currently 6 million deaths every year due to tobacco use and second hand smoke which unchecked may rise to more than 8 million per year by 2030. During the 21st century, tobacco could kill 1 billion people. Smoking is estimated to cause about 71% of lung cancer, 42% of chronic respiratory diseases and nearly 10% of cardiovascular disease [2].

#### **SCENARIO IN INDIA**

India is the 2<sup>nd</sup> largest producer and consumer of tobacco in the world after China. There are about 275 million tobacco users. 16% of all deaths among 30 years and above is due to tobacco. 14.6% of school going children use tobacco in any form. Every day 2500 students initiate tobacco use. Every 8 seconds 1 Indian dies due to Tobacco related diseases. 40% of cancer cases are tobacco related. Maximum number of Oral cancer in the world occurs in India (approx 80%) and most of them are caused by tobacco.. 50% of cancer deaths, majority of cardiovascular & Lung disorders, 40% of all TB, other related diseases are attributed to tobacco consumption [3].

As per report of the Tobacco Control in India (2004), more than 8 lakh people die due to tobacco consumption every year in India. As per Global Adult Tobacco Survey, India (GATS), 2009-10, conducted in the age group of 15 years and above, 47.8% men and 20.3% women consume tobacco in some form or the other, translating to more than 27.5 crores in absolute numbers. The Global Youth Tobacco Survey (GYTS), 2009 indicates that nearly 15% children in the age group of 13-15 years are consuming tobacco in some form. There is also evidence that each day 5,500 new youth are getting addicted to tobacco use [4].

By considering all the above facts it was decided to undertake this type of study among 1<sup>st</sup> year medical students at Bagalkot city with the following **objectives:**

1. To know the tobacco consumption pattern among above group.
2. To assess the need of health education about the adverse effects of tobacco consumption to the students participating in the study.

#### **METHODOLOGY:**

This Cross-sectional study was conducted among 1<sup>st</sup> year medical college students (2013 batch) of S. Nijalingappa Medical College and HSK Hospital & Research center in Bagalkot city. The study period was between July 2013 and September 2013 for three months. To get the correct information from the study subjects confidentiality was maintained. After obtaining informed consent, data was collected from the 1<sup>st</sup> year medical

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students using a pre-structured, close ended questionnaire regarding general information, knowledge, attitude & practice about the tobacco products and tobacco consumption pattern among them. Out of the 125 students, who were admitted during the period of data collection, 114 students were taken for the study. The remaining 11 students could not be taken because of non response,

incompletely filled proforma and not traced even after three visits.

The data was analysed and results are presented in the form of proportions and appropriate statistical tests were applied.

**RESULTS:**

There were a total of 125 first year medical students of which, 114 students participated in this study.

**Table-1: Socio-demographic profile of study subjects.**

Parameter	Number (N= 114)	Percentage
<b>AGE</b>		
17 years	15	13.1
18 years	65	57.0
19 years	24	21.0
20 years	10	08.9
<b>GENDER</b>		
Male	70	61.4
Female	44	38.6
<b>RESIDENCE</b>		
Urban	88	77.2
Rural	26	22.8
<b>TYPE OF FAMILY</b>		
Joint	44	38.6
Nuclear	70	61.4

The mean age of the study participants was 18.25 years. Majority were males (61.4%). Most of the study participants were from

urban (77.2%) background and majority of them came from nuclear family (61.4%).

**Table2: Distribution of study subjects based on knowledge.**

	Number (N=114)	Percentage
<b>Knowledge about poisonous content in tobacco.</b>		
Acid	0	00
Alkali	0	00
Nicotine	97	85
Tar	17	15
Don't know	0	00
<b>Knowledge about type of cancer among smokers.</b>		
Stomach	0	00.0
Lung	110	96.5
Intestine	4	03.5
Bladder	0	00.0
Oral	0	00.0
<b>Knowledge about type of cancer among Tobacco chewers.</b>		
Stomach	1	00.8
Lung	21	19.0
Intestine	3	02.2
Bladder	1	00.8
Oral	88	77.2
<b>Knowledge about the hazards from cigarette smoking depends on</b>		
Number of cigarettes smoked	02	01.8
Number of years a person	02	01.8
Amount of smoke inhaled	10	08.7
All	96	84.2
None	04	03.5
<b>Knowledge about giving up of tobacco habit depends upon</b>		
Will power	104	90.0
Parent's motivation	0	00.0
Friend's motivation	5	04.5
Teacher's motivation	0	00.0
Doctor's motivation	5	04.5
<b>Knowledge about the observation of International "No Tobacco Day" is on</b>		
31 <sup>st</sup> May	51	44.7
1 <sup>st</sup> January	03	02.6
31 <sup>st</sup> December	12	10.5
15 <sup>th</sup> August	02	01.7
Do not know	46	40.5

Majority of the study subjects (85%) had correct knowledge regarding the poisonous content in tobacco was nicotine, majority

of them (96.5%) answered correctly regarding the commonest type of cancer among smokers was lung cancer, 77.2%

had correct knowledge about type of cancer among tobacco chewers was oral cancer and 84.2% of them had correct knowledge about hazards of smoking depends upon quantity and duration of smoking.

Knowledge regarding the reason for logo of warning signal on tobacco products was rightly answered by 77% of the subjects as for awareness of harmful

effects of tobacco. Majority of them (70%) had learnt the harmful effects of tobacco in their school days. Nearly 90% of them were of the opinion that, will power is very much essential to quit the tobacco habits. Most of them (82%), knew that de-addiction centre was the place available for helping the people for quitting the tobacco products. Less than half of the study subjects (44.7%), knew regarding when is no tobacco day celebrated.

**Table 3: Distribution of study subjects based on Attitude**

	<b>Number (N=114)</b>	<b>Percentage</b>
<b>Smoking helps them in relieving stress</b>		
Strongly disagree	32	28.1
Disagree	28	24.5
Neutral	09	07.9
Agree	28	24.5
Strongly agree	17	15.0
<b>They may start smoking if their best friends insist.</b>		
Strongly disagree	42	36.8
Disagree	21	18.4
Neutral	06	05.3
Agree	18	15.8
Strongly agree	13	11.4
<b>Smoking makes one confident &amp; makes one look mature.</b>		
Strongly disagree	10	08.8
Disagree	21	18.4
Neutral	29	25.4
Agree	34	29.8
Strongly agree	20	17.6
<b>Implementation of strict law not to sale tobacco products to People under 18 years of</b>		
Strongly disagree	14	12.2
Disagree	13	11.4
Neutral	10	08.8
Agree	38	33.3
Strongly agree	39	34.3

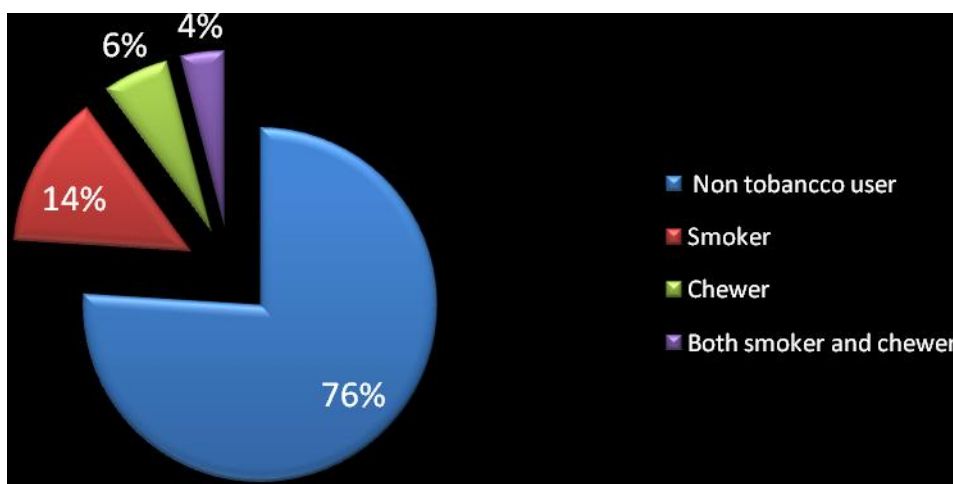
More than half of them (52.6%) had the attitude that smoking doesn't relieves stress and majority of them (72.2%)

believed that smoking causes addiction. Nearly 28% of the study subjects had the attitude that they may start smoking, if

offered by their best friends. Nearly half of them (47.4%), had the attitude that smoking makes one confident and mature. Majority of the study subjects (67.6%),

agreed that a strict law has to be implemented to not to sale tobacco products to persons less than 18 years.

**Figure-1: Distribution of students according to practice of Tobacco use.**



In the present study, of the total 114 students participated, 28 students (24%) were using the tobacco products. Most of them (21 students, 75%) were using tobacco occasionally. Among 28 students, 57% (16) used only cigarettes, 25% (7) were only chewing tobacco products and 18% (5) students used both the products. Among the smokers, 71% (15) members were smoking 1-2 cigarettes, 29% (6) of them half pack per day. Among tobacco chewers, 66% (8) of them use 1-2 sachets, 34% (4) of them used about 3-4 sachets per day. Situations which increase the frequency of usage are mainly 64% (18) during exams stress, friend's company 28% (8) and out of city 8% (2). More than of the subjects (53%) of the users tried to

quit after being motivated by their parents and teachers but only 4% was successful.

## **DISCUSSION**

To the best of our knowledge, there are very few studies are conducted regarding tobacco use among Medical students in Karnataka or other parts of India.

The Global Youth Tobacco Survey (GYTS), 2009 indicates that nearly 15% children in the age group of 13-15 years are consuming tobacco in some form. There is also evidence that each day 5,500 new youth are getting addicted to tobacco use [4].

The current study showed a prevalence of tobacco consumption of 24%, which is slightly higher than in the

study conducted by Priya M H et.al, where the prevalence rate was 18.65% [5].

Almost all of the tobacco users (96%), were current tobacco user, which is higher than in the study conducted by Singh G in Bihar where the current tobacco users were one third [6].

Most of the study subjects (80%) knew about the harmful effects due to tobacco consumption which was similar to the study conducted in rural Kerala by Rajnarayan Thiwari [7].

In the current study, situations which increased the frequency of usage were mainly 64% during exams stress, 28% during friends company and 8% when they were out of city. In comparison the study done by Shah VN, among the College Students of Bhavnagar City (Gujarat) showed that the most common situation in which frequency of tobacco consumption increased was when they were in groups (54.4%), followed by examination time (32.4%), loneliness (14.9%) and family problems (1.7%) [8].

In the present study, more than half of the study subjects (53%) of the users, tried to quit after being motivated by their parents and teachers but only 4% was successful. In the similar study conducted on among young medical professionals, by Singh S, showed that 32% were ready to quit, 39% were thinking about quitting within the next six months, and 29% were not ready to quit within the next six months [9].

**Limitation:**

One of the major limitation of the study is the data were collected by questionnaires, i.e., self-reporting, the possibility of recall/memory bias and masking of

information is always there. Second, the results cannot be generalized as the students studying in the college were from different part of India.

**Conclusion:**

About 24% of the students in the present study had consumed some form of tobacco. Cigarette was major tobacco product consumed. Majority of the current consumers (53.57%) had attempted to quit but only 4% were succeeded in quitting the tobacco consumption. Addiction was the cause for not quitting the habit among of current consumers. These future health professionals, who play a major role in tobacco use control and cessation and it becomes their duty to promote oral and general health and healthy life styles among their patients.

**Recommendations:**

1. Promote effective cessation programs to reduce tobacco use among health professionals.
2. Improve curriculum and introduce health institution based training programmes on tobacco use cessation approaches.
3. Strengthen knowledge of harmful effects of tobacco and also cessation aids among health professionals which will help.

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