# Smoking and its impact on females enrolled in higher education

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#### Abstract

The impact of smoking on females who are enrolled in higher education and staying away from their home has been studied with a sample study conducted in one of the renowned institutions of Mumbai, India. The study was mainly done by a small primary research that substantiated the findings. Women being a vulnerable section of the society, they suffer heavily from the negative effects due to smoking and its addiction. Tobacco is referred to as a drug while smoking is a drug addiction.

The study is based on quantitative method following descriptive research design. Data includes both primary and secondary sources of data; analysis was done in SPSS software by descriptive statistics using the cross-tabulation. The key findings indicate that the females residing away from their family in cities indulge in smoking habit. Various factors like peer and academic pressure, sense of freedom, glamour's lifestyle and exposure of media either motivate or provoke them to take up smoking. Some of the female do face health problems but very few show treatments seeking behavior.

Keywords: Smoking, higher education, female.

## Introduction

'Tobacco is injurious to health' is a caption seen everywhere, be it television, cinema theaters, hoardings, public place and so on but still it fails to prevent tobacco addiction. Cigarette smoking is known as 'smoking' which is the major risk factors of death among developing countries. Smoking becomes a deeply rooted habit among the youths. Tobacco is referred as drug while smoking is a drug addiction which was mostly considered as a taboo in earlier days. Tobacco smoking is a type of disease which is non-bacterial in nature<sup>4</sup>.

Tobacco smoking is one of the major causes for deaths and diseases. Smoking takes place when people are tired, anxious, drinking, driving, happy, sad, stressed, nervous or celebrating. When the daily intake level increases, then this habit of smoking becomes an addiction and the absence of it makes people desperate. Smoking is associated with the number of cigarettes smoked per day. According to Bergen and Caporaso,<sup>1</sup> the prevalence of cigarette smoking has shifted from men to women. Smoking was initially associated with age, lower income, reduced educational

achievement and disadvantaged neighborhood environment along with associated demographics, social factors and genetic factors.

Smoking is injurious to health, always flashes the impact on the health as around three million deaths occurring in a year worldwide which shows that about one third deaths occur in India. It is estimated that the deaths will be nearly ten million in 2020's worldwide, mostly in the developing countries like India<sup>5</sup>.

Tobacco basically comes in two forms, smoke and smokeless. Cigarette is most commonly used followed by beedi, cigar, chewing tobacco, pan and others. Tobacco products like chutta (a handmade cigar), beedi (cheap form of cigarette) snuff, cigarettes and a mixture of tobacco, betel leaf, areca nut and lime are mostly used by people residing in Andhra Pradesh where tobacco is locally cultivated. There are many ways in which smoking can be consumed; one of them is reverse smoking of <u>chutta</u> by putting the burning end inside the mouth. The other types of smoke are cheroots, cigar, pipe, dhumti, hookils and chillum.

The prevalence of reverse smoking habit among women is 6.23 times higher than men. Youth in urban area prefer beedis and cigarettes<sup>2</sup>. Cigarettes are largely used tobacco product in world while beedi being a safer and more natural alternative to cigarettes is less expensive form of smoked product in India. Beedi is the home-made cigarette having smaller amount of flaked tobacco hand wrapped in temburi (*Dio-spyros melonoxylon*) leaf and tied with string<sup>6</sup>.

The use of tobacco increases with age in India and decreases with the increase in education and economic status<sup>3</sup>. There were surveys conducted which includes Global Youth Tobacco Survey (GYTS), Global Tobacco Surveillance System (GTSS), National Family Health Survey (NFHS), National Sample Survey Organization (NSSO), Sample Registration System (SRS) and National Household Survey of Drugs and Alcohol Abuse in India (NHSDAA) studying the prevalence level of tobacco use according to age group, gender and place of residence.

#### **Objectives of the Study**

- 1. To identify the reason that leads to smoking in females enrolled in higher education.
- 2. To understand the effect of smoking on their health.
- 3. To study the awareness level of the impacts of smoking among females enrolled in higher education.
- 4. To study the treatment seeking behavior among females enrolled in higher education.

**Research Design:** The study is based on quantitative research method following the descriptive statistics. The study included both primary and secondary sources of data, primary data was collected from respondents using survey method through questionnaire while secondary data was collected from government documents, journals, referred books, articles and sample survey reports. Data was collected through non-probability sampling through purposive sampling method.

**Population and Sample:** The primary data was collected by the researcher in the year 2015 which was used to study the impact of smoking on the females who are enrolled in higher education. The sample size was 52 respondents and the unit of analysis was females living away from family and enrolled in higher education in one of the renowned institutes of Mumbai, India.

**Research Variables:** The dependent variable which was used in the study includes the health problems including diseases (cancer, tuberculosis (TB), heart attack, reproductive and respiratory problems), frequency of smoking (hourly, daily, weekly and occasionally), types of smoking, health problem faced and treatment seeking behavior (medication taken). Independent variables consist of the background characteristics like age, education, income, employment, duration of migration and factors that lead to smoking (pressure, influence, stress, freedom, media and atmospheric condition).

**Research Instrument:** A closed ended questionnaire was used to collect the data through survey method. Pilot study was conducted to check the reliability of the data.

**Significance of Study:** Education is one of the strongest predicators of smoking and it also shows that education can be one of the effective measures through which smoking can be prevented. This study would help to understand the reasons of smoking behavior, its effect on health, awareness level and treatment seeking behavior among college going females migrated for higher education. It is also to understand the treatment seeking behavior among women due to the side effects of smoking addiction.

#### **Data Analysis**

The quantitative data obtained using the questionnaires was analyzed using SPSS software by descriptive statistics using the cross-tabulation analysis to calculate the disease awareness level, the frequency of smoking along with the factors associated with smoke type and the health problem faced and medication.

## **Results and Discussion**

The major findings of the study comprise of the background characteristic, level of awareness of disease, frequency of smoking, factors of smoking, health problems and treatment seeking behaviour among the females enrolled in higher education. Table 1 shows the distribution of the respondents by background characteristics. The higher proportion of respondents is in the age group of 21-23 as compared with the other youth group. The respondents belonging to age group of 21-23, 24-26 and 27-29 are 44.2, 38.5 and 17.3 per cent respectively. The education attainment of respondents shows that 71.2, 26.9 and 1.9 per cent respectively have attained the education till graduate, post graduate and doctoral. The respondents from the urban location are higher than rural as 92.3 per cent belongs to urban and 7.7 per cent belongs to rural. The distribution of respondents by religion shows that the highest proportion belongs to Hindu religion.

The Hindu, Muslim, Christian, Sikh, Buddhist and other are 69.2, 9.6, 11.5, 1.9, 1.9 and 5.8 per cent respectively. The caste distribution shows that 67.3, 7.7, 9.6 and 15.4 per cent belong to general, ST, SC and OBC categories respectively. The parental employment status shows that government employee is higher than the others. The employment status shows that 50, 19.2, 26.9 and 3.8 per cent work profile belong to government, non-government, self and retired respectively. The income status shows that 26.9, 34.6 and 38.5 percent earn 0 to 2.5, 2.5 to 5 and more than 5 lakh annually respectively. The duration of migration shows that 55.7, 36.5 and 7.7 per cent have stayed away from home for the period of 1-4, 5-8 and 9-12 respectively.

Table 2 shows the percentage distribution of study population by background characteristics and their awareness about various diseases. According to the age distribution among the total of 52 respondents, 46.7 per cent are aware of reproductive health problem among the age group of 21-23, 41.9 per cent are aware of cardiovascular disease among the age group of 24-26 and 18.8 per cent are aware of respiratory problems among the age group of 27-29. 73.3 per cent of graduate know that smoking leads to reproductive problem, 32.4 and 2.7 per cent of postgraduate and doctorate students know that it leads to tuberculosis. 93 per cent of those residing at urban location are aware that smoking leads to cardiovascular disease while 10.8 per cent of those residing at rural location are aware that smoking leads to tuberculosis.

According to different religion, 73, 10.8 and 2.7 per cent of Hindus, Muslims, Sikh and Buddhist are aware that smoking leads to tuberculosis, 12.5 of Christians are aware that smoking leads to respiratory problem while 7 per cent of other religions are aware that smoking leads to cardio vascular disease.

69.8 per cent belonging to general category are aware that smoking leads to cardio vascular disease, 8.3 per cent of ST are aware that smoking leads to respiratory problems, 11.1 and 17.8 per cent of SC and OBC are aware that smoking leads to reproductive problems. 50 per cent of those whose parents works as government employee are aware that smoking can lead to cancer and respiratory problems, 23.3 and 27.9 per cent of those whose parents works as nongovernment employee and are self-employed are aware that smoking can lead to cardio vascular disease and 5.4 per cent of those whose parents are retired are aware that smoking can lead to tuberculosis.

According to the annual income level, 31.1 per cent are aware of smoking which leads to reproductive problem have the annual income level between 0 to 2.5 lakh, 37.8 per cent are aware of smoking which leads to tuberculosis have the annual income level between 2.5 to 5 lakh and 38.5 per cent are aware of smoking which leads to cancer, have the annual income level more than 5 lakh. According to the number of years away from the family, 62.8 per cent are aware that smoking can cause cardio vascular disease, have stayed 1 to 4 years away, 37.8 per cent are aware that smoking can cause reproductive problems have stayed 5 to 8 years away and 8.1 per cent are aware that smoking can cause tuberculosis, have stayed 9 to 12 years away from home. Table 3 shows the percentage distribution of study population by background characteristics and frequency of smoking. According to the age wise distribution, 47.8 per cent smoke daily between the age group of 21-23, 55 per cent smoke daily between the age group of 24-26 and 44.4 per cent smoke daily between the age group of 27-29. The education attainment level shows that 56.8 per cent smoke daily have completed their education till graduation, 35.7 per cent smoke daily and occasionally have completed their education and 100 percent smoke hourly have completed their education till doctoral.

52.1 per cent who smoke daily resides in urban location while 50 per cent who smoke occasionally reside in rural location. According to different religions, 52.8 per cent of Hindus smoke daily, 60 per cent of Muslims smoke daily, 66.7 per cent of Christians smoke occasionally, while 33.3 per cent of other religion smoke daily, hourly and weekly.

Background Cl	naracteristics	Percentage Distribution (%)	N (frequency)
Age (years)	21 to23	44.2	23
	24 to 26	38.5	20
	27 to 29	17.3	9
Education level	Graduate	71.2	37
	Post Graduate	26.9	14
	Doctoral	1.9	1
Residence	Urban	92.3	48
	Rural	7.7	4
Religion	Hindu	69.2	36
	Muslim	9.6	5
	Christian	11.5	6
	Sikh	1.9	1
	Buddhist	1.9	1
	Others	5.8	3
Caste	General	67.3	35
	ST	7.7	4
	SC	9.6	5
	OBC	15.4	8
Employment	Government	50	26
status	Non- Government	19.2	10
	Self	26.9	14
	Retired	3.8	2
Income (lakh)	0 to 2.5	26.9	14
	2.5 to 5	34.6	18
	More than 5	38.5	20
Duration of	1 to 4	55.8	29
Migration (years)	5 to 8	36.5	19
·	9 to 12	7.7	4
Tota	al	100	52

Table 1Background characteristics of the study population.

Background Characteristics		Cancer	ТВ	Cardio vascular Disease	Reproductive Problem	Respiratory Problem
Age	21 to23	44.2	45.9	39.5	46.7	43.8
	24 to 26	38.5	37.8	41.9	35.6	37.5
	27 to 29	17.3	16.2	18.6	17.8	18.8
Education level	Graduate	71.2	64.9	67.4	73.3	70.8
	Post Graduate	26.9	32.4	30.2	24.4	27.1
	Doctoral	1.9	2.7	2.3	2.2	2.1
Residence	Urban	92.3	89.2	93	91.1	91.7
	Rural	7.7	10.8	7	8.9	8.3
Religion	Hindu	69.2	73	69.8	68.9	68.8
C	Muslim	9.6	10.8	9.3	8.9	8.3
	Christian	11.5	8.1	11.6	11.1	12.5
	Sikh	1.9	2.7	0	2.2	2.1
	Buddhist	1.9	2.7	2.3	2.2	2.1
	Others	5.8	2.7	7	6.7	6.2
Caste	General	67.3	67.6	69.8	64.4	66.7
	ST	7.7	5.4	7	6.7	8.3
	SC	9.6	10.8	9.3	11.1	10.4
	OBC	15.4	16.2	14	17.8	14.6
Employment	Government	50	45.9	44.2	48.9	50
status	Non- Government	19.2	21.6	23.3	22.2	20.8
	Self	26.9	27	27.9	24.4	25
	Retired	3.8	5.4	4.7	4.4	4.2
Income (lakh)	0 to 2.5	26.9	24.3	27.9	31.1	27.1
	2.5 to 5	34.6	37.8	37.2	31.1	35.4
	More than 5	38.5	37.8	34.9	37.8	37.5
Duration of	1 to 4	55.8	62.2	62.8	57.8	56.2
Migration	5 to 8	36.5	29.7	32.6	37.8	37.5
	9 to 12	7.7	8.1	4.7	4.4	6.2

 Table 2

 Percentage distribution of study population by background characteristics and their awareness about various diseases.

According to caste distribution 45.7 per cent who belongs to general category smoke daily, 50 per cent who belongs to ST smoke daily, 60 per cent who belongs to SC smoke daily and 62.5 per cent who belongs to OBC smoke daily.

According to the parent's employment status, 43.2 per cent smoke daily and occasionally whose parents work as government employee, 50 per cent smoke daily whose parents work as non-government employee, 64.3 per cent smoke daily whose parents work as self-employee and 50 per cent smoke hourly and daily whose parents are retired.

According to parents' annual income, 50 per cent smoke daily whose income is between 0 to 2.5 lakh, 61.1 per cent smoke daily whose income is between 2.5 to 5 lakh and 45 per cent smoke occasionally whose income is above 5 lakh. According to the duration of migration or years of staying away from home, 44.8 per cent who smoke daily have stayed 1 to 4 years away from their home, 63.2 per cent who smoke daily have stayed 5 to 8 years away from their home and 50 per cent who smoke occasionally have stayed 9 to12 years away from their home.

Table 4 shows the percentage distribution of study population by various reasons of smoking, type of smoked tobacco products and frequency of smoking. According to the table, the influence (family), atmospheric condition and media influence leads the most for smoking cigarette (100 per cent) while influence (family) leads to beedi smoking (60 per cent) and media influences for taking hukka (14.3 per cent). The table further shows that pressure (peer and academic pressure) influence to smoke hourly (31.2 per cent), freedom from home or sense of being free influence in daily smoking (60 per cent), stress (mental stress and depression) leads to smoke weekly (10.5 per cent) and pleasure (curiosity and for fun) influence in occasionally smoking (33.3 per cent).

Table 5 shows the percentage distribution of study population by their age, health problem and treatment

seeking behavior. From the total number of respondents only 26.9 per cent mentioned that they faced problem due to smoking. According to the age wise distribution out of the 26.9 per cent of respondents 34.8, 15 and 33.3 per cent belong to the age group of 21-23, 24-26 and 27-29 respectively.

Among the age group of 21-23, 25 per cent mentioned that they faced ageing (poor quality of hair and early graying) while 75 per cent mentioned that smoking leads to stress (headache, depression and hypertension).

Among the age group of 24-26, 100 per cent of the population mentioned that they faced issues related to skin (poor skin quality and drying of lips) while 27-29 years age group faced ageing. The table further shows that only 8.7 and 10 per cent of the respondent belonging to age group of 21-23 and 27-28 years took medication.

		y background characteristics and frequency of smoking.						
Background Cha	aracteristics	Frequency of Smoking						
		Hourly	Daily	Weekly	Occasionally			
Age	21 to23	17.4	47.8	4.3	30.4			
	24 to 26	5	55	15	25			
	27 to 29	22.2	44.4	0	33.3			
Education level	Graduate	13.5	56.8	2.7	27			
	Post Graduate	7.1	35.7	21.4	35.7			
	Doctoral	100	0	0	0			
Residence	Urban	14.6	52.1	6.2	27.1			
	Rural	0	25	25	50			
Religion	Hindu	13.9	52.8	5.6	27.8			
-	Muslim	0	60	20	20			
	Christian	0	33.3	0	66.7			
	Sikh	0	100	0	0			
	Buddhist	100	0	0	0			
	Others	33.3	33.3	33.3	0			
Caste	General	11.4	45.7	11.4	31.4			
	ST	25	50	0	25			
	SC	20	60	0	20			
	OBC	12.5	62.5	0	25			
Employment status	Government	15.4	42.3	0	42.3			
	Non-Government	10	50	20	20			
	Self	7.1	64.3	14.3	14.3			
	Retired	50	50	0	0			
Annual Income (lakh)	0 to 2.5	7.1	50	14.3	28.6			
	2.5 to 5	16.7	61.1	11.1	11.1			
	More than 5	15	40	0	45			
Duration of Migration	1 to 4	17.2	44.8	13.8	24.1			
C	5 to 8	5.3	63.2	0	31.6			
	9 to 12	25	25	0	50			

Table 3
Percentage distribution of study population by background characteristics and frequency of smoking.

 Table 4

 Percentage distribution of study population by various reasons of smoking, type of smoked tobacco products and frequency of smoking.

und frequency of smoking.								
Reasons	Types	of Sm	oke	Frequency of Smoking				
	Cigarette	Bidi	Hukka	Hourly	Daily	Weekly	Occasionally	
Pressure	93.5	37.5	0	31.2	56.2	0	12.5	
Influence	100	60	0	20	80	0	0	
Stress	94.7	31.6	0	21.1	36.8	10.5	31.6	
Freedom	90	50	0	20	60	0	20	
Pleasure	94.4	19.4	5.6	13.9	47.2	5.6	33.3	
Atmospheric	100	57.1	0	14.3	71.4	0	14.3	
Condition								
Media	100	42.9	14.3	28.6	57.1	0	14.3	

Age	Problem	] ]	Medication		
	Faced	Skin problem	Ageing	Stress	
21 to23	34.8	0	25	75	8.7
24 to 26	15	100	0	0	10
27 to 29	33.3	0	100	0	0

 Table 5

 Percentage distribution of study population by their age, health problem and treatment seeking behavior.

### Conclusion

The study examined the reason and awareness level of the females who smoke and have migrated for higher education. The analysis was to understand the reason for smoking and its negative impact on their health (if any) along with the treatment seeking behavior. In this study the types and frequency of smoking along with reason of smoking were taken as measures of smoking.

The study shows that the awareness of diseases like cancer, tuberculosis, cardio vascular disease, reproductive and respiratory problems is higher among the age group of 21 to 23, those who have attained the education level till graduation and those residing at urban location. The health awareness due to smoking is more among Hindus followed by Christian and Muslims. The respondents belonging to general category are more aware of the impact of smoking on their health. Those having family annual income more than five lakh and whose parents are employed in government are more aware of the disease that occurs due to smoking. Those who have stayed away from home for 1 to 4 years are more aware of the impact of smoking on the health.

The result shows that the daily frequency of smoking is higher. The age group of 24 to 26 smokes more on daily basis. Those who have attained the education qualification till doctoral smoke hourly while those who have completed graduation smoke daily. The location of residence shows that those who reside in urban location smoke daily while those residing on rural location smoke occasionally.

The religion wise result shows that Hindus, Muslims and Sikh smoke daily, Christians smoke occasionally while Buddhist smoke hourly. Those who belong to OBC category smoke more on daily basis as compared to others. The respondents whose parent are self-employed smoke higher on daily basis than others while those having the annual family annual income between 2.5 to 5 lakh smoke more on daily basis. The result further shows that those residing away from home for 5 to 8 years smoke more on daily basis.

The result shows that the cigarette consumption is more due to influence of family and media, also due to atmospheric conditions; beedi consumption is mostly due to family influence while hukka is due to exposure to media and its influence. The result further shows that the frequency of hourly, daily, weekly and occasionally smoking is due to peer and academic pressure, family influence, mental stress and depression, curiosity and fun. The study shows that the age groups of 21 to 23 years have faced more health problems but their treatment seeking behavior is more for the age group of 24 to 26 years.

Thus, the reason that leads to smoking is due to transition in the way of living. The females residing away from their family in cities indulge in smoking habit. The peer and academic pressure either forces or provokes them to smoke. The sense of freedom or independence generates the curiosity among young females to have fun with their friends. The glamour's lifestyle and exposure of media (films and advertisements) also motivate to take up cigarette smoking. Years of staying away from home play a major role for the increase in frequency of smoking along with the increased level of family income as the females spend more to purchase the smoke.

With the increase in education the smoking prevalence decreases as they become aware of the negative effect of smoking while with the increase in age, the smoking prevalence increases as they get more exposed to the outside world.

## Limitation of the Study

The study was conducted among the females who smoke and who have migrated away from their families. Due to the purposive sampling, there is a high chance of bias in educational level of the respondents due to the variance in the number of respondents based on the education level. The responses received from the respondents could be biased as the sample size represents the entire population.

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