

## Original Research Article

**A retrospective cross sectional study conducted in Veer Chandra Singh Garwali Government Medical Science And Research Institute, Srinagar to assess the prevalence of tobacco usage and awareness about the harmful effects of tobacco among the sample population**

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**Received: 25-05-2021 / Revised: 24-06-2021 / Accepted: 21-07-2021**

**Abstract**

**Aim:** Present study aimed to assess the prevalence of tobacco usage among the sample population and to find out the awareness of the participant on the harmful effects of tobacco products. **Materials and method:** A retrospective cross-sectional study regarding the prevalence of tobacco usage among the population visiting out patient department of dentistry at Veer Chandra Singh Garwali Government Medical Science And Research Institute Srinagar and Garhwal. A total of 480 subjects were tobacco user out of which 260 were males and 220 were females. They were divided into 4 age groups namely 15-30 years, 31-45 years and 46-60 years and 61-75 years. Data regarding the usage of tobacco and its harmful effects was collected from the subjects by giving a self designed questionnaire with both English & Hindi options. **Results:** The overall prevalence rate of tobacco usage was found to be 60%, males accounted for 65% and females accounted for 55%, the M:F ratio being 1.18 :1. Among the males the prevalence of using tobacco in the age group of 15-30 years is 46.15 %, 31-45 years is 28.8 %, 46-60 yrs is 17.3% & 61-75 years is 7.6%. Among the males maximum percentage of people using tobacco was seen in the age group of 15-30 yrs followed 31-45 yrs, 46-60 yrs & 61-75 yrs. **Conclusion:** Srinagar is rural district of India most of the subjects were of lower middle and lower socioeconomic strata. Majority of population were unaware of the harmful effects of tobacco usage we have to conduct more tobacco eradication programmes , school and colleges school health programmes , street play n use of media to increase awareness among the population.

**Key words:** tobacco users, smokeless tobacco, questionnaire study.

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**Introduction**

India has one of the highest tobacco users in the world both in number and relative share. India is one of the fewer countries in the world where prevalence of smoking and smokeless tobacco usage are high and is characterised by dual use of tobacco (ie both smoking and smokeless tobacco products) also contributes to a noticeable proportion. Smoking of cigarettes and beedis is one form of tobacco use. Smokeless tobacco use consists of chewing pan, chewing gutkha or paan masala and mishri (a kind of toothpaste used for rubbing on gums)[1]. Using data from the National Family Health Survey second round (NFHS II, 1998-99), prevalence of tobacco use in India was estimated to be 37 percent among the population of 15 years and above .

High prevalence of tobacco use in any form is also reported among school going adolescents aged 13-15 years . This high burden of tobacco use is associated with a high mortality burden. According to the World Health Organization (WHO), nearly 6 million deaths occur every year due to tobacco use, which may escalate to 8 million deaths a year by 2030 .

The majority of smoking related deaths in India occur in the prime working age group of 15-59 years . Smokeless tobacco use is also associated with the increasing risk of oral cancer , cancer of the head and neck, oesophagus and pancreas, besides many oral diseases.

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Tobacco use is a part of the consumer behaviour component of the National Sample Survey (NSS), held every five years.

The National Family Health Survey (NFHS)[2], in its second and third rounds, collected some data on tobacco use in India. The second round collected information on tobacco use for the household members aged 15 years and above, and estimated that the prevalence among males was 46.5% and that among females was 13.8% . The third round, held in 2005- 2006, collected data on tobacco use from a sample of 124,385 females aged 15-49 years and 74,369 males aged 15-54 years from all 29 states in India. The survey estimated that the prevalence of tobacco use among males was 57.6% and among females 10.8% . The recently conducted Global Youth Tobacco Survey in 2006 and 2009 in India includes data on cigarette and other forms of tobacco use as well as information on five determinants of tobacco use among adults aged 13-15 years. The survey estimated that the prevalence of current tobacco use increased from 13.7% in 2006 to 14.6% in 2009[3]. India's tobacco problem is very complex, with a large use of a variety of smoking forms and an array of smokeless tobacco products. The aim of the current study which was done in the department of dentistry on the patients visiting the out patient department in Government Medical College Srinagar from january 2018 to june 2018 was to assess the prevalence of tobacco usage among the sample population and to find out the awareness of the participant on the harmful effects of tobacco products.

**Aims**

1. To find out the prevalence of tobacco usage among the sample of population.
- 2 To find out the awareness about the harmful effects of tobacco products among the sample of population.

**Objectives**

To promote awareness among the patients visiting OPD of GMC Srinagar and Garwal about the harmful effects of Smoking and oral tobacco usage.

#### Material and Method

A retrospective cross-sectional study regarding the prevalence of tobacco usage among the population visiting out patient department of dentistry at Veer Chandra Singh Garwali Government Medical Science and Research Institute Srinagar and Garhwal. The study was conducted from January 2018 to June 2018. A self designed questionnaire with questions regarding tobacco consumption and awareness was designed in English & Hindi options. Patients were explained in simple layman language regarding the study and their consent is taken. A total of 800 Indian subjects of 15-75 years of age were selected from the patient visiting the out patient department of dentistry, in Veer Chandra Singh Garwali Government Medical Science and Research Institute Srinagar and Garhwals, for the study. A total of 480 subjects were tobacco user out of which 260 were males and 220 were females. They were divided into 4 age groups

**Table 1: Prevalence of tobacco usage among males and females**

Age	male	Percentage	female	Percentage
15 – 30	120	46.15%	36	16.3%
31 – 45	75	28.8%	88	40.0%
46 – 60	45	17.3%	66	30%
61 - 75	20	7.6%	30	13.6%
Total	260		220	

**Table 2: Distribution of Types of Tobacco Usage among Males and females**

Male				Female			
Age group	Chewing	Smoking	Both	Age group	Chewing	Smoking	Both
15 – 30	63	38	28	15 – 30	38	10	6
31 – 45	48	27	19	31 – 45	66	34	20
46 – 60	33	16	10	46 – 60	30	18	18
61-75	22	13	8	61-75	15	9	7
Total %	41.5%	23.5%	16.25%	Total %	37.25%	17.75%	12.75%

Among the males (all the age groups together) habit of chewing tobacco is seen in 41.5%, smoking in 23.5%, both habits in 16.25%.

Among the females (all the age groups together) habit of chewing tobacco is seen in 37.25%, smoking in 17.75%, both habits in 12.75%.

In males habit of chewing tobacco and smoking is more in 15-30 yrs age group when compared with other three age groups. Males having both chewing and smoking habits are also more in 15-30 yrs age group. In females habit of chewing tobacco is more in 31-45 yrs age group when compared with other three age groups whereas smoking is more in 31-45 yrs age group. Females having both chewing and smoking habits are also more in 31-45 yrs age group. (Table II).

**Table 3: Awareness among Males and Female Regarding Harmful effects of Tobacco Usage**

Age	Male	Percentage	Female	Percentage
15 - 30	47	39.16%	23	27.05%
31 – 45	33	27.5%	43	50.5%
46 – 60	29	24.1%	17	20%
61-75	11	9.1%	5	5.8%
Total %	120	30%	85	21.25%

In case of awareness about the harmful effects of tobacco usage in male the awareness was more in 15-30 yrs age group which is 39.16% followed by 31-45 years age group (27.5%) followed by 46-60 years age group (24.1%) & 61-75 (9.1%).

Among females the awareness was more in 31-45 yrs age group (50.5%) followed by 15-30 years (27.05%) and 46-60 years (20%) & 61-75 (5.8%) (Table III).

**Table 4: Educational status of the sample population**

Education status	No of subjects	Percentage
Upto 10 <sup>th</sup>	223	46.4%
12 <sup>th</sup>	157	32.7%
Undergraduate	69	14.3%
Postgraduate	31	8.5%
Total	480	

#### Discussion

The continued popularity of tobacco smoking appears to defy rational explanation. Smokers mostly acknowledge the harm they are doing to themselves and many report that they do not enjoy it – yet they continue to smoke [4]. The reason is that nicotine from cigarettes generates strong urges to smoke that undermine and overwhelm concerns about the negative consequences of smoking, and the

namely 15-30 years, 31-45 years and 46-60 years and 61-75 years. Data regarding the usage of tobacco and its harmful effects was collected from the subjects by giving a self designed questionnaire with both English & Hindi options.

#### Results

The overall prevalence rate of tobacco usage was found to be 60%, males accounted for 65% and females accounted for 55%, the M:F ratio being 1.18 : 1 (Table I).

Among the males the prevalence of using tobacco in the age group of 15-30 years is 46.15%, 31-45 yrs is 28.8%, 46-60 yrs is 17.3% & 61-75 years is 7.6% (Table I). Among the males maximum percentage of people using tobacco was seen in the age group of 15-30 yrs followed 31-45 yrs, 46-60 yrs & 61-75 yrs (Table I).

Among the females the percentage increases from the age group 31-45 yrs through 46-60 yrs, 15-30 yrs, 61-75 yrs as 40%, 30% & 16.3% & 13.6% respectively (Table I).

which figures are available at the time of writing: slightly lower in women than men (Office of National Statistics, 2016). Smoking in Great Britain has declined by 0.7 percentage points per year since 2001 (from 26.9% of adults in 2001). In Australia, daily cigarette smoking has declined by 0.6 percentage points per year over a similar time period (from 22.4% of adults aged 18 + years in 2001 to 14.5% in 2015) (Australian Bureau of Statistics, 2015)[7]. However, international comparisons are confused by different countries using a different definition of what counts as being a smoker, and different methods for assessing prevalence. Australia only counts daily smokers in their headline figures. The situation in the US is even more misleading. The headline prevalence figure for the US is below 16%, but this does not include occasional smokers and people who smoke cigarillos which are essentially cigarettes in all but name and which have become increasingly popular in recent years. So the figure for prevalence that is most comparable to the figure for Great Britain is 20%[8]. In India, the National Sample Survey Organization (NSSO) has been conducting surveys since 1950- 51. The age of the subjects was 15 years and above. The major findings were: 51.3% males and 10.3% females were regular tobacco users. The National Family Health Survey (NFHS), in its second survey (1998-99), showed the following results, 46.5% males and 13.8% females were regular tobacco users. In the present study the prevalence of tobacco usage among males is 65% and among females is 55% showing wider difference with the above studies. The difference among males and females may be due to small sample size and also the study was confined to one locality. Tobacco usage may vary in percentage from one population to other. Another survey conducted by NSSO, 35.3% Males and 2.6% of females are regular smokers. According to NFHS survey 29.3% of males and 2.4% females are regular smokers. In the present study smoking is prevalent among 23.5% of males and 17.75% of females, male and female prevalence is not coinciding with the studies by NSSO and NFHS while coinciding with other studies[4]. In the present study the prevalence of tobacco chewing among males and females is 41.5% and 37.25%. Here also the percentage of male tobacco chewers is more than the previous studies, whereas the females using smokeless tobacco is coinciding with the previous studies, but which is more than the studies of NSSO. National sample survey revealed that tobacco use prevalence increase with increasing age. In the present study the above mentioned points did not coincides with the females population. The prevalence of chewing tobacco use was in 17.27% in 15-30 years age group increased to 30% in 31-45 years age group and than decreased to 13.6% in 46-60 years age groups and 6.8% in 61-75 years age group. Whereas in males the prevalence of tobacco usage in the age group 15-30 years is 24.23%, reduced to 18.46% in 31-45 years followed by 12.39% in 46-60 years and 8.46% in 61-75 years which is not coinciding with previous studies. But the national Survey by NSSO shows 24% of males and 8.6% of females were regular user of chewing tobacco. Survey by NFHS showed 28.1% of males and 12% of females were regular users of chewing tobacco. Majority of them have strong opinion about banning tobacco and tobacco product's sale, advertisement and use in public places. Most of the studies had highlighted the high level of awareness among responders about the

harmful effects of Smoking i.e. Smokeless tobacco use causes oral cancer, oesophageal cancer (if chewed with betel quid), and contributes to cardiovascular diseases. In the present study both chewing and smoking tobacco usage among male is 16.25% which is coinciding with the other studies. In the present study the prevalence of tobacco usage among males is 65% and among females is 55%, the M:F ratio being 1.18 :1 is slightly less than the other studies. 30% of males and 21.25 % of females were aware of the harmful effects of tobacco i.e. males were slightly more aware than the females which is slightly less than the other studies who find out 46.67 % males and 43.33% females were aware of the harmful effects of tobacco[9]. Some stressful life style and unfortunate events in the life might have made them continuous use of tobacco inspite of their awareness. Further counseling and reassurance may help them to quit the habit. Srinagaris rural district of India most of the subjects were of lower middle and lower socioeconomic strata. Majority of population were unaware of the harmful effects of tobacco usage we have to conduct more tobacco eradication programmes, school and colleges school health programmes, street play n use of media to increase awareness among the population.

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**Conflict of Interest: Nil**

**Source of support:Nil**