

**TOBACCO SMOKING IN ADULTS: A CROSS SECTIONAL STUDY FROM A RURAL AREA OF KASHMIR J&K**Yasmeen Jan<sup>1</sup>, Rafiq Mir<sup>2</sup>, Najami Arshid<sup>3</sup>, Ashfaq Bhat<sup>4</sup>, Beenish Mushtaq<sup>5</sup>, Javid Ahamd<sup>6</sup>**HOW TO CITE THIS ARTICLE:**

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**ABSTRACT: INTRODUCTION:** Tobacco is a major risk factor of numerous adult chronic non-communicable diseases. In India, the GATS Survey revealed that the prevalence of smoking is more than one-third in the adults (35%), the overall prevalence in males being 48% and among females it is 20%. **AIM:** The aim of our study was to determine the socio-demography of tobacco use in rural setting and to assess the knowledge, attitude & practices of tobacco use in the rural area. **METHODS:** All patients aged 18 years or above attending subcentre at village Panzinara of Block Sumbal. The data was collected on a semi-structured questionnaire. **RESULTS:** 71 patients attending the sub center for various health states were taken up for the study. Majority of the patients were in the age group of 58-68 years (23.9%). Males comprised 56.3%. 63.4% gave positive response to ever any tobacco use & amongst the tobacco users 80% were daily users. Tobacco use was significantly associated with male sex. 51.1% of the patients had started tobacco use in adolescent age of 10-19 years. 62.2% were Hookah smokers, 24.4% cigarette smokers. Tobacco being injurious to health was known by 39.4% patients, 21.1% knew it lead to some cancers, 4.2% were aware that it can cause hypertension, diabetes & cancers. 35.3% were aware that it is to be avoided. **CONCLUSION:** In spite of awareness about hazards of tobacco use & knowledge of non-communicable diseases, this high prevalence calls for more active psychological, social & medical interventions for tobacco users. Targeting the adolescent population for raising awareness would be additionally beneficial.

**KEYWORDS:** tobacco use, smoking, awareness.

**INTRODUCTION:** Tobacco is a known risk factor for major adult chronic non-communicable diseases. It forms an important pre-determinant of adult morbidity & mortality accounting for one in six of all deaths due to non-communicable diseases.<sup>(1)</sup> It is for this reason, that two health parameters of deaths due to tuberculosis & Maternal & Child Health issues included in Millenium Development Goals are related to tobacco use.<sup>(2)</sup>

Currently a billion adults use tobacco everyday & about 15,000 die from tobacco related diseases everyday<sup>(3)</sup> The WHO predicts that tobacco deaths in may exceed 8.9 million annually by 2020 & 70% of them in developing countries<sup>(4)</sup> In SEAR, tobacco use & its pattern have been linked to age, sex, social class, education & income.<sup>(5)</sup> The GATS Survey has revealed that the prevalence of smoking is more than one-third of the adults (35%), the overall prevalence in males being 48% and among females it is 20%. Nearly 2 in 5 adults (38%) in rural areas and 1 in 4 adults (25%) in urban areas use tobacco in some form. The extent of use of smokeless tobacco products among males (33%) is higher than females (18%)<sup>(6)</sup> The prevalence of smoking in rural India has been seen to be 34.6%.<sup>(7)</sup>

The prevalence of current tobacco use, particularly smoking is quite low among women compared with men in most of the countries. Smokeless tobacco use is also very common and amongst the users of smokeless tobacco, knowledge of causation of stroke, heart attack and cancer of mouth was lowest.<sup>(8)</sup>

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The age of initiation of tobacco use varies but in majority of studies it starts at an early age of 8-15 years. The determinants of this possibly could be the childhood influences by parents, siblings or friends (Peer group). A study from Jaipur among school going Children has revealed a significant influence of smoking or tobacco use in family members on its prevalence in children.<sup>(9)</sup>

Study from Jammu Region of Jammu & Kashmir has shown that adult smoking prevalence is 20%.<sup>(10)</sup> Till date no such study has been conducted in Kashmir division. With GATS study India,<sup>(6)</sup> showing 40% prevalence in rural areas, this study attempts to see for the pattern of tobacco use in rural area of Kashmir Division.

Tobacco is an established risk factor for major Non-communicable diseases. <sup>(11)</sup>For this purpose India launched the National Programme for Prevention & Control of Cancer, Diabetes, Cardiovascular Diseases & Stroke in year 2010. One of the components of this programme is to raise awareness of the risk factors as tobacco use in chronic non-communicable disease causation through mass media. The study aims to determine the socio-demography of tobacco smokers in rural setting, to see for the knowledge, attitude & practices of smoking in the rural areas.

### **METHODOLOGY:**

- Population: All patients aged  $\geq 18$  years attending outpatient department of sub center.
- Catchment Area: Rural village Panzinara of Block Sumbal which is the field practice area of SKIMS, Medical College.
- Study Period: One month from 1st May 2012 to 31st May 2012.

### **METHODS:**

- The data was collected on a semi-structured questionnaire that included variables for socio-demography & Knowledge, Attitude & practices of tobacco use, by way of inter-personal communication.
- All the patients aged  $\geq 18$  years attending the outpatient department of subcentre Panzinara were included in the study.

**RESULTS:** 71 patients attending the subcenter for various health states were taken up for the study. Majority of the patients were in the age group of 58-68 years (23.9%) followed by age group of 48-58 years (22.5%), 68-78 years (19.7%), 38-48 years (12.7%), and 5.6% each in age groups of 28-38 & 18-28 years. Males comprised 56.3%.

Of all the patients 63.4% gave positive response to ever any tobacco use & amongst the tobacco users 80% were daily users. Only 20% were occasional users. Tobacco use was significantly associated with male sex. 51.1% of the patients had started tobacco use in adolescent age of 10-19 years whereas 46.6% had started it in  $\geq 20$  years. Some 2.2% patients were unsure of the age at which they had started using tobacco. 62.2% were Hookah smokers, 24.4% cigarette smokers whereas 13.3% smoked both Hookah & Cigarette. (TABLE 1)

Amongst the ever tobacco users 20% had quit smoking whereas 80% were current smokers. Those who had quit smoking, 55.5% had left for  $\geq 3$  years. Snuff was another commonest addiction after tobacco use was seen in 4.44% of the patients.

Knowledge regarding non-communicable diseases as hypertension, diabetes, cancers, coronary artery diseases, stroke was seen in 80.3% patients & source of such knowledge were

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multiple in 43.7% cases (Included television, radio, doctor, family member & posters. (TABLE 2) Mass media as a source of awareness as television was seen in 23.9%, radio in 2.8%, posters in 2.8%. Doctors & family members as source of information was seen in 4.2% & 1.4% respectively.

Tobacco being injurious to health was known by 39.4% patients, 21.1% knew it lead to some cancers, 4.2% were aware that it can cause hypertension, diabetes & cancers. 35.3% were aware that it is to be avoided & were not sure what its hazards were. (TABLE 3)

**DISCUSSION:** Tobacco is the leading cause of preventable death world-wide & more-so in developing countries like India. GATS India 2009-2010<sup>(6)</sup> reported that the current Tobacco user prevalence in adult subjects aged 15 & above was 34.6% at the national level & that for the State of Jammu & Kashmir it was 18.9%. The point prevalence of ever tobacco use in our study from the rural setting was higher at 63.4%. This discrepancy could possibly be due to the fact that all subjects in our study were patients & confidentiality with the addressing physician is more felt than with random public surveys as was the case with GATS. Similar findings have been shown by Sinha DN et al wherein the tobacco prevalence in rural areas was shown at 79%.<sup>(7)</sup>

Our study has shown that tobacco use as a habit had got established in early age of 10-19 years (51.1%) and similar findings have been portrayed by Raj Narain, sarita Sardana et all in their study where they have shown 31% of the tobacco users had started the habit before 11 years of age.<sup>(12)</sup> The various Indian Studies have revealed that the mean age of initiation of tobacco use is 8-15 years.<sup>(13,14)</sup> This finding may be a reflection to need for strengthening of measures to stop tobacco use especially the need for the target population which is the school going children in adolescence.

The male gender was significantly associated with higher tobacco use & similar findings have been shown by GATS survey<sup>(6)</sup> in which the adult male tobacco use was higher at 41.6% as compared from adult female tobacco use at 10.3%. Educational status in our study was non-significantly associated with tobacco use. Sarkar BK, Arora M et al<sup>(15)</sup> have shown similar findings in their study from Andhra Pradesh. Prakash C Gupta, Dhirender N Sinha et al<sup>(8)</sup> have discussed that, although inequality in education and wealth are correlated with increased tobacco use, exceptions in certain countries as in case of Mexico occur, where increased wealth and education were not associated with decreased tobacco use and China wherein lowest rates of tobacco use occur in poorest & wealthiest.

These pave way for further studies to see for the actual social determinants of tobacco use.

Hookah smoking, the traditional way in which tobacco is kept in an earthen pot (chillum) along with the burning coal & smoked through a water container with the help of a long pipe was the commonest smoking (2.2% ever tobacco users) product in this study. Hookah smoking as a predominant method of tobacco use as has been cited by Bilal et al<sup>(10)</sup> from his study from Jammu division of Jammu & Kashmir.

The chronic diseases in our study were non-significantly associated with tobacco use. This can be explained because of the fact that most smoking related deaths in India are due to tuberculosis, heart disease & lung cancer.<sup>(16)</sup> Our study lacked any case of tuberculosis, coronary artery disease & specifically that of lung cancer.

Of the ever-tobacco users 20% had quit smoking. Jha et al 2006 has shown that the prevalence of ex-smokers in India at 2-5%.<sup>(17)</sup>

Increase in tobacco tax, IEC about health hazards of smoking in public & work places, advertising 7 promotional bans & increased access to cessation therapies have proved as effective

ways of reducing tobacco use.<sup>(17)</sup> Our study reveals significant association between the knowledge of hazards of tobacco users. This could be a reflection of the fact that awareness was not present earlier at the time of initiation but as the addiction grew awareness increased. One study from the International Tobacco Control Policy Evaluation India, has also made similar findings wherein the overall awareness amongst smokers in India of the specific health risks was seen to be low as compared from other ITC countries.<sup>(18)</sup>

Sinha DN, Palipudi KM et al in their study have concluded with the fact that an agenda to improve health outcomes among the poor in India must include periodical surveys using more consistent definitions of tobacco use and eliciting information on different types of tobacco consumed in addition to estimation of prevalence based on household information.<sup>(19)</sup>

**CONCLUSION:** Tobacco use is quite high in rural settings & this in wake of other life style changes that are apart of current transition of societies becomes a high risk for the non-communicable disease. If the similar trend continues an epidemic of non-communicable diseases is inevitable. In spite of awareness about hazards of tobacco use & knowledge of non-communicable diseases, this high prevalence calls for more active psychological, social & medical interventions for tobacco users. Targeting the adolescent population for raising awareness would be additionally beneficial since most of the people start using tobacco in adolescence.

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Educational status	Tobacco user	Non- Tobacco user	Total
Literate	16	10	26
Illiterate	29	16	45
<b>Total</b>	<b>45</b>	<b>26</b>	<b>71</b>

**TABLE I: EDUCATIONAL STATUS IN RELATION TO TOBACCO USE**

Education was having an in-significant (p value= 0.807) association with tobacco use

Disease Profile of patients	Tobacco user	Non- Tobacco user	Total
Diabetes	6	6	12
Chronic Obstructive Pulmonary Disease	6	3	9
Hypertension	13	8	21
Cancers	3	2	5
Diabetes & hypertension	5	3	8
Others (headache, PUO, UTI)	12	4	16
<b>TOTAL</b>	<b>45</b>	<b>26</b>	<b>71</b>

**TABLE II: DISEASE PROFILE OF PATIENTS IN RELATION TO SMOKING**

Diseases afflicting the patients had an insignificant (p value= 0.857) association with the tobacco use

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Knowledge of ill-effects of smoking	Tobacco user	Non- Tobacco user	Total
Injurious to general health	22	6	28
Causes cancers	8	7	15
Causes hypertension, diabetes & cancers	3	0	3
Avoidance necessary not knowing what it lead to	12	13	52
<b>Total</b>	<b>45</b>	<b>26</b>	<b>71</b>

**TABLE III: KNOWLEDGE OF ILL-EFFECTS OF TOBACCO IN RELATION TO TOBACCO USE**

Knowledge regarding the ill-effects of smoking was seen significantly (p value=0.026) more in smokers than in non-smokers.

### AUTHORS:

1. Yasmeen Jan
2. Rafiq Mir
3. Najami Arshid
4. Ashfaq Bhat
5. Beenish Mushtaq
6. Javid Ahamd

### PARTICULARS OF CONTRIBUTORS:

1. Lecturer, Department of Community Medicine, SKIMS Medical College, Bemina, Srinagar, J & K, India.
2. Associate Professor, Department of Community Medicine, SKIMS Medical College, Bemina, Srinagar, J & K, India.
3. Assistant Professor, Department of Radiation Oncology, SKIMS, Soura.
4. Assistant Professor, Department of Community Medicine, SKIMS Medical College, Bemina, Srinagar, J & K, India.

5. Senior Resident, Department of Community Medicine, SKIMS Medical College, Bemina, Srinagar, J & K, India.
6. Senior Resident, Department of Community Medicine, SKIMS Medical College, Bemina, Srinagar, J & K, India.

### NAME ADDRESS EMAIL ID OF THE CORRESPONDING AUTHOR:

Dr. Rafiq Mir,  
Associate Professor/Incharge Head,  
Department of Community Medicine,  
SKIMS Medical College,  
Bemina-190018.  
E-mail: dr.mmrafiq@gmail.com

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