# Sale and Consumption on Smokeless Tobacco in Jammu and Kashmir, India: Attitude and Views of Jammu Adult Population

Paramjeet Singh¹, Prateek Jain², Gaurav Agarwal², Sandeep Kumar Swarnkar³, Astha Chauhan⁴, Bhupendra Singh Rathore⁵

<sup>1</sup>Dental Surgeon, Directorate of Health Services, Jammu, Jammu and Kashmir, India, <sup>2</sup>Senior Lecturer, Department of Public Health Dentistry, Maharana Pratap College of Dentistry and Research Centre, Gwalior, Madhya Pradesh, India, <sup>3</sup>Senior Lecturer, Department of Pedodontics and Preventive Dentistry, Maharana Pratap College of Dentistry and Research Centre, Gwalior, Madhya Pradesh, India, <sup>4</sup>Senior Lecturer, Department of Public Health Dentistry, Index Institute of Dental Sciences, Indore, Madhya Pradesh, India, <sup>5</sup>Dental Surgeon, Department of Orthodontics, College of Dental Sciences, Indore, Madhya Pradesh, India

#### **Abstract**

**Background:** Concerned over increasing cases of mouth cancer in the state, the Jammu and Kashmir Government has banned the smokeless tobacco (ST) products like gutkha and also increased the taxes in other tobacco-related products. Despite legislation, the effectiveness of this step is a matter of concern. The gutka users are able to get their regular supply and shopkeepers are still seen selling gutka pouches.

**Objective:** The objective of this study was to assess the attitude and views of Jammu adult population toward the sale and consumption on ST by Jammu and Kashmir Government.

**Materials and Methods:** A cross-sectional survey was carried out among the general adult population of Jammu city. 400 respondents completed a questionnaire on tobacco use, knowledge of existence of law, health warning, cost increase, and hazards related to ST.

**Results:** Half of the current users (51.6%) surveyed compared to the past users (61.4%) and non-users (69.7%) had knowledge about laws on gutka products. Significantly higher percentage of the current users (52.1%) and past users (57.9%) indicated that the actions against tobacco products would be slightly effective (P < 0.05). 52.5–68.4% of respondents were aware of health warning signs printed on the tobacco packet. 59.1% of the current users reported easy availability of gutka. The past users (54.4%) reported an increase in black marketing of ST gutka.

**Conclusion:** The sale and consumption ban and increased taxes by the government are an effective measure for the improvement of health and reduce consumption. They demonstrate that there is a need for greater public education and the policy has been lagging behind to curb the black market sale.

Key words: Health, Legislation, Policy, Smokeless tobacco, Tobacco control

## INTRODUCTION

Today, tobacco is the foremost cause of preventable deaths in world. [1] Tobacco use has assumed the dimension of an

Month of Subm
Month of Peer F
Month of Accep
Month of Publis

www.ijss-sn.com

Month of Submission: 03-2019
Month of Peer Review: 04-2019
Month of Acceptance: 04-2019
Month of Publishing: 05-2019

epidemic resulting in about 1.3 million deaths each year in the Southeast Asia region. India is among the top 10 tobacco producing and consuming countries in the world.<sup>[2]</sup>

Global Adult Tobacco Survey (GATS) India (GATS 2009–2010) revealed that more than one-third of adults in India use tobacco in some form or the other. Among them, 21% of adults use only smokeless tobacco (ST), 9% only smoke, and 5% smoke as well as use ST. The prevalence of tobacco use is highest in Mizoram (67%) and lowest in Goa (9%). Jammu and Kashmir tobacco consumption is higher than the national average. 32% of

Corresponding Author: Dr. Astha Chauhan, Department of Public Health Dentistry, Index Institute of Dental Sciences, Nemawar Road, NH - 59A, Indore, Madhya Pradesh, India.

ST users purchased tobacco products from kiosks, which included roadside pan shops.<sup>[3]</sup>

ST is a blanket term that refers to a number of tobacco products that are used by means other than smoking. Gutka in India is one example. It is a generic name for a product that contains tobacco, areca nut, and several other substances in powdered or granulated form and is sold in small aluminum foil sachets.<sup>[4]</sup>

ST contains more nicotine than smoked. Danger of ST may go beyond the mouth. It might also play a role in other cancers, heart disease, and stroke. [5] Food and Safety Standards Authority of India under its Food Safety and Standards (Prohibition and Restriction on Sales) Regulations 2011 restricts the use of products that contain any substance which may be injurious to health, and according to them, tobacco and nicotine should not be used as ingredients in any food products. [6-8]

There have been some attempts to curb and regulate gutka promotion and use. In response to a public interest litigation filed in a state high court, the Central Committee on Food Standards duly conducted hearings and investigations and concluded that gutka was a dangerous food product. <sup>[4]</sup> The committee recommended an outright ban.

Concerned over increasing cases of mouth cancer in the state, the Jammu and Kashmir Government has banned all ST products like gutka and also increased the taxes on other tobacco products. [6-8,15] The ST Association has been questioning the health ministry notification as to why the ban is imposed only on gutka and not on cigarette. [9,10] The lobby claims that 4 crore farmers would lose their livelihood due to gutka ban. [11]

Despite legislation, the effectiveness of this action was a matter of concern. According to many reports in print media, ban on gutka will not create problem for gutka users as they have their own chain of getting them. Majority of pan shopkeepers are still seen selling gutka pouches.<sup>[11,12]</sup> Some believe that only gutka pouches are banned, and it can be prepared mixing pan masala with tobacco.

Jammu and Kashmir Government banned chewable tobacco products in the state. Minister for Finance, Abdul Rahim Rather while presenting his 13<sup>th</sup> budget in the state Assembly said, "the use of products containing chewable tobacco is much more dangerous. Many deaths in very miserable circumstances are caused every year due to consumption of these products.<sup>[13,14]</sup>"

The Minister said, "to save the society from the dangerous consequences of use of chewable tobacco, I propose

to impose a total ban on import, manufacturing, transportation, stocking, and sale of chewable tobacco and products like pan masala, gutka, khanini, and other similar products which contain chewable tobacco as one of its ingredients."

He further said with a view to discourage the hazardous habit of smoking; taxation has been used as a tool from time to time. "I have proposed to increase the existing rate of value-added tax (VAT) from 30% to 40% on raw tobacco and in the rates of VAT on cigarettes and other related products," Mr. Rather added. [15]

Hence, the present study was conducted with the objective to assess the attitude and views of Jammu adult population toward the sale and consumption ban on ST and increases tax on other tobacco products.

### **MATERIALS AND METHODS**

A cross-sectional survey was carried out among the general population of Jammu city. A two-stage random sampling was employed. First, five wards were randomly selected from the list of 75 wards obtained from the Municipal Authority. In the second stage, one major market place was randomly selected in each of the five wards. The survey was conducted from the center place of the market in any one direction. General adult population was randomly invited to complete a 16-item questionnaire. Only those subjects aged >15 years, willing to participate and providing consent were included. The response rate was 70%.

A sample size of 384 was calculated based on 50% prevalence of ST use among Jammu and Kashmir state and 95% confidence interval with a standard error of 5%. Assuming lower response rate, a final study sample of 400 was included in the study.

The study was approved by the Institutional Ethics Committee of Indira Gandhi Government Dental College. The 18-item survey instrument was developed and pretested on similar study subjects, keeping the study objective in mind. Reliability testing (Cronbach's alpha 0.7), construct and face validity were eliminated two questions. Finally, the questionnaire consisted of 16 questions that covered demographic variables, tobacco use, and knowledge of existence of law, health warning, cost increase, and hazards related to ST. They were also asked about their attitude toward the sales ban of ST and gutka.

Respondents were classified as non-tobacco user, smoker, and current and past ST user. Non-tobacco users were

those who had never smoked or chewed tobacco or gutka in their lifetime. Smokers were those who had smoked more than 100 cigarettes in their lifetime and who still smoked daily or occasionally. Respondents consuming ST or gutka daily or occasionally were classified as the current ST user and who had quit ST or gutka for minimum of the past 6 months were considered as the past users.

The data collected were entered into Microsoft Excel and subjected to statistical analysis using SPSS version 16. Data compilation showed response to one item was missing in each of two current smokers. The value of these missing responses was calculated by taking the average of response for that particular item in that group. Descriptive statistics and analytical test like Chi-square test were used to compare the responses.

# **RESULTS**

A total of 400 subjects participated in this cross-sectional study. Among these, 88.25% of respondents were men (n = 353). The mean age was 36.7 (standard deviation  $\pm$  12.2) years. 23.5% of sample was uneducated, 40.5% had education level of schooling, and remaining 36% were college graduate and professionals [Table 1].

Most of the tobacco users were consuming 2–5 packets of tobacco product (45.8%) per day. Heavy consumers of tobacco of more than 10 packets accounted for only 11% [Table 2]. About two-third of the past ST users (66.7%) have reported to have experienced some health effects during the tobacco use compared to only 28.4% of the

Table 1: Descriptive profile of the study sample

Variables	Current ST user n=215	Past ST user <i>n</i> =57	Never a tobacco user <i>n</i> =99	Tobacco user in smoke form <i>n</i> =29	Total n=400
	n (%)	n (%)	n (%)	n (%)	
Gender					
Male	189 (87.9)	54 (94.7)	81 (81.8)	29 (100)	353 (88.2)
Female	26 (12.1)	3 (5.3)	18 (18.2)	0 (0)	47 (11.8)
Age (years)	,	, ,	, ,	, ,	, ,
15–20	8 (3.7)	3 (5.3)	7 (7.2)	0 (0)	18 (4.5)
21–30	70 (32.5)	10 (17.5)	48 (48.2)	8 (27.5)	136 (34)
31–40	61 (28.5)	15 (26.3)	28 (28.2)	10 (34.5)	114 (28.5)
41–50	39 (18.1)	23 (40.4)	7 (7.2)	9 (31)	78 (19.5)
51 above	37 (17.2)	6 (10.5)	9 (9.2)	2 (7)	54 (13.5)
Educational qualific	cation				
Uneducated	67 (31.2)	6 (10.5)	10 (10.1)	11 (38)	94 (23.5)
Schooling	84 (39.1)	21 (36.9)	45 (45.4)	12 (41.4)	162 (40.5)
College	40 (18.6)	19 (33.3)	19 (19.2)	5 (17.2)	83 (20.8)
Professional	24 (11.1)	11 (19.3)	25 (25.3)	1 (3.4)	61 (15.2)

ST: Smokeless tobacco

Table 2: Tobacco consumption among the study sample

Variables	Current ST user n=215	Past ST user n=57	Tobacco user in smoke form n=29	Total <i>n</i> =400	
	n (%)	n (%)	n (%)		
Duration of the use of toba	acco products (years)				
<2	34 (15.8)	13 (22.8)	5 (17.2)	52 (17.3)	
2–5	64 (29.8)	6 (10.5)	7 (24.3)	77 (25.6)	
5–10	66 (30.7)	21 (36.9)	9 (31)	96 (31.9)	
>10	51 (23.7)	17 (29.8)	8 (27.5)	76 (25.2)	
Daily tobacco consumptio	n				
One packet or less	47 (21.9)	8 (14)	11 (38)	66 (21.9)	
2-5 packets	98 (45.6)	29 (50.9)	11 (38)	138 (45.8)	
5-10 packets	50 (23.2)	11 (19.3)	3 (10.3)	64 (21.3)	
>10 packets	20 (9.3)	9 (15.8)	4 (13.7)	33 (11)	
Experienced any health et	ffect during tobacco use				
Yes	61 (28.4)	38 (66.7)	11 (38)	110 (36.5)	
No	115 (53.5)	10 (17.5)	9 (31)	134 (44.5)	
Do not know	39 (18.1)	9 (15.8)	9 (31)	57 (19)	
Ever thought of quitting to	bacco				
Yes	80 (37.2)	48 (84.2)	13 (44.8)	141 (46.8)	
No	135 (62.8)	9 (15.8)	16 (55.2)	160 (53.2)	

ST: Smokeless tobacco

current users. Among the current users, only 37.2% have ever thought about quitting the habit.

The responses of different group of tobacco users and non-users were compared [Table 3] and it was found that significantly more respondents (52.5–68.4%) were aware of health warning signs printed on the tobacco packet (P < 0.05). The respondents believed that pictorial warning signs such as "Tobacco kills" and "Tobacco causes cancer" on tobacco product were significantly effective in reducing tobacco use.

In comparison to non-users, the current users (25.1%) and past users (40.4%) always had a feeling that there is too much increase in cost of tobacco product by the government. The current users of ST (46%) and smokers (58.6%) have sometimes similar feeling (P < 0.05). The tobacco users and non-users also indicated that the reason for government imposing heavy taxes on tobacco product is to reduce consumption and sale (44.8–59.7%).

In response to question relating to awareness about ST sale ban in Jammu and Kashmir, only half of the current users (51.6%) reported to be aware compared to the past users (61.4%) and non-users (69.7%). These differences were statistically significant (P < 0.05).

When asked about the reason for government to bring this ban on ST/gutka sale, majority of the tobacco users and non-users had the feeling that it was to improve their health (77.1–94%). The attitude toward effectiveness of tobacco sales ban in Jammu showed statistically significant results

[Table 4]. Significantly higher ST current users (52.1%) and past users (57.9%) responded that it would be only slightly effective (P < 0.05).

To assess the trend in market sales of ST or gutka, the respondents were asked about their availability in the shops and whether sales in black market with the knowledge of authority have increased. Many current ST users (59.1%) reported that ST or gutka was easily available. However, some 22.3% also reported that they have sometimes difficulty in getting it (P < 0.05). The past users of ST (54.4%) reported that there was increase in sale of ST or gutka in black market. However, majority of the current users (53%) did not like to comment on this.

A significantly positive attitude was found among ST past users (82.5%) and non-users (80.8%) compared to the current users (54.3%) toward bringing out similar sales and consumption ban on smoking (P < 0.05).

## **DISCUSSION**

This study reports knowledge and attitudes toward ST ban and increased taxes on other tobacco products in a representative sample of the Jammu population, Jammu and Kashmir. In April 2012, Jammu and Kashmir has increased the VAT on tobacco, magnesium carbonate, and nicotine-based gutka products following provisions of the Food Safety and Standards (Prohibition and Restriction on sales) Regulation 2013.<sup>[7,15]</sup>

Table 3: Comparison of responses about awareness on tobacco-related legislation among tobacco users and non-users

Variables	Current ST user n=215	Past ST user <i>n</i> =57	Never a tobacco user n=99	Tobacco user in smoke form <i>n</i> =29	Chi-square test <i>P</i> value
Have you noticed any healt	h hazard message o	n tobacco produc	ts?		
Yes	116 (54)	39 (68.4)	52 (52.5)	17 (58.6)	$\chi^2$ =47.86 <i>P</i> =0.00 (S)
No	62 (28.8)	14 (24.6)	5 (5.1)	8 (27.6)	
Not aware	37 (17.2)	4 (7)	42 (42.4)	4 (13.8)	
Is pictorial warning "tobacco	kills" or "tobacco ca	uses cancer" on t	tobacco product effective	e?	
Definitely yes	18 (8.4)	22 (38.6)	21 (21.2)	2 (6.9)	$\chi^2$ =44.14 <i>P</i> =0.00 (S)
Yes	99 (46)	20 (35.1)	29 (29.3)	12 (41.4)	, ,
Do not know	65 (30.2)	7 (12.3)	35 (35.3)	8 (27.6)	
No	16 (7.4)	3 (5.2)	7 (7.1)	4 (13.8)	
Definitely no	17 (8)	5 (8.8)	7 (7.1)	3 (10.3)	
Have you ever felt that gove	ernment is increasing	the cost of tobac	cco product too much		
Always	54 (25.1)	23 (40.4)	11 (11.1)	8 (27.6)	$\chi^2$ =89.25 <i>P</i> =0.00 (S)
Sometimes	99 (46)	21 (36.8)	17 (17.2)	17 (58.6)	
Do not know	11 (5.1)	6 (10.5)	5 (5.1)	0 (0)	
No	50 (23.3)	7 (12.3)	66 (66.6)	4 (13.8)	
Never	1 (0.5)	0 (0)	0 (0)	0 (0)	
Reasons that government in	n imposing heavy tax	ces on tobacco pr	oduct	• ,	
Increase revenue	30 (13.9)	9 (15.8)	20 (20.2)	3 (10.3)	χ²=18.91 <i>P</i> =0.02 (S)
Reduce consumption	104 (48.4)	34 (59.7)	57 (57.6)	13 (44.8)	
Discourage addict	37 (17.2)	4 (7)	4 (4.0)	3 (10.3)	
Burden people	44 (20.5)	10 (17.5)	18 (18.2)	10 (34.6)	

(S): Statistically significant, ST: Smokeless tobacco

Table 4: Comparison of responses about awareness and attitude toward ST-gutka ban among tobacco users and non-users

Variables	Current ST user n=215	Past ST user <i>n</i> =57	Never a tobacco user <i>n</i> =99	Tobacco user in smoke form <i>n</i> =29	Chi-square test P value
Are you aware of sale and	d consumption of ST	√gutka ban in you	r state		
Yes	111 (51.6)	35 (61.4)	69 (69.7)	17 (58.6)	$\chi^2$ =24.9 <i>P</i> =0.00 (S)
No	55 (25.6)	20 (35.1)	11 (11.1)	9 (31.1)	
Do not know	49 (22.8)	2 (3.5)	19 (19.2)	3 (10.3)	
Reason for government to	o impose this ban or	n ST/gutka			
Improve health	173 (80.5)	44 (77.1)	93 (94)	24 (82.8)	χ <sup>2</sup> =22.31 P=0.008 (S)
Increase sale	24 (11.2)	3 (5.3)	0 (0)	2 (6.9)	
Reduce burden	4 (1.8)	3 (5.3)	4 (4.0)	1 (3.4)	
Tobacco company	14 (6.5)	7 (12.3)	2 (2.0)	2 (6.9)	
Do you think this complet	e ban on sale or cor	nsumption is effect	tive	, ,	
Definitely effective	17 (7.9)	13 (22.8)	30 (30.3)	0 (0)	$\chi^2$ =51.6 <i>P</i> =0.00 (S)
Slightly effective	112 (52.1)	33 (57.9)	34 (34.3)	14 (48.3)	,,
Cannot say	37 (17.2)	5 (8.8)	24 (24.3)	6 (20.7)	
Slightly ineffective	10 (4.7)	1 (1.7)	1 (1.0)	3 (10.3)	
Definitely ineffective	39 (18.1)	5 (8.8)	10 (10.1)	6 (20.7)	
Are you finding difficulty in	n getting ST/gutka p		, ,	, ,	
Very difficult	9 (4.2)	6 (10.5)	7 (7.1)	1 (3.4)	$\chi^2$ =100.7 P=0.00 (S)
Sometimes difficult	48 (22.3)	11 (19.3)	4 (4.0)	6 (20.7)	,,
Cannot say	25 (11.6)	16 (28.1)	54 (54.5)	2 (6.9)	
Available	6 (2.8)	4 (7)	10 (10.1)	3 (10.3)	
Easily available	127 (59.1)	20 (35.1)	24 (24.3)	17 (58.7)	
Do you think sale of ST/g		in black market wi	th or without the knowled	lge of authority	
Definitely yes	35 (16.3)	18 (31.6)	24 (24.2)	5 (17.2)	$\chi^2$ =22.2 <i>P</i> =0.03 (S)
Yes	55 (25.6)	13 (22.8)	10 (10.1)	7 (24.2)	,
Do not know	114 (53)	21 (36.8)	57 (57.6)	15 (51.7)	
No	6 (2.8)	2 (3.5)	6 (6.1)	2 (6.9)	
Definitely no	5 (2.3)	3 (5.3)	2 (2.0)	0 (0)	
Do you think that similar b	oan on sale and con	sumption should b		, ,	
Definitely yes	30 (13.9)	22 (38.6)	38 (38.4)	2 (6.9)	$\chi^2$ =68.94 <i>P</i> =0.00 (S)
Yes	87 (40.4)	25 (43.9)	42 (42.4)	8 (27.6)	.,
Do not know	81 (37.7)	8 (14)	18 (18.2)	11 (37.9)	
No	10 (4.7)	2 (3.5)	1 (1.0)	6 (20.7)	
Definitely no	7 (3.3)	0 (0)	0 (0)	2 (6.9)	
Definitely no		0 (0)	0 (0)	2 (6.9)	

(S): Statistically significant, ST: Smokeless tobacco

According to GATS India,<sup>[3]</sup> there are an estimated 275 million tobacco users in India, of whom 25.9% are ST users, while 5.7% smoke cigarettes and 9.2% smoke beedis. The present study reports daily ST consumption of 2–5 packets in 45% of the current users. This finding is higher compared to the percentage of the current users (15 years and above) daily consumption of ST in Jammu and Kashmir (31.4%) as reported by GATS India 2009–2010.

The ST/gutka consumption is more among the uneducated (31.2%) and school educated (39.1%) compared to professionals (11.1%). Similar trends are reported by GATS India 2009–2010 concluding that the prevalence of tobacco use decreases with increase in education among both males and females.<sup>[3]</sup>

GATS India 2009–2010 reports considerable variation in quit attempts across states/UTs. For users of ST, it ranges from 8% in Delhi to 54% in Jammu and Kashmir. In the present study, higher intention to quit was seen among the past users (84.2%). This may be expected as they have

succeeded in their quit attempts and the current user would be underreporting the unsuccessful events.

Singh *et al.* reported that in Rajasthan, India, every 10% increase in price of cigarette, bidi, and chewing tobacco leads to 8.0%, 6.2%, and 3.3% reduced consumption of these products, respectively.<sup>[13]</sup> The highest price increase was observed with chewing tobacco much more than the cigarettes and this led to the highest reduction in consumption and sales of chewing tobacco.

Despite the wide publicity and media campaign, the awareness about ST-gutka sales and consumption ban in Jammu and Kashmir was significantly low among the current users (51.6%). This may be due to easy availability of their daily dose of tobacco product. Even though the ST-gutka products are not on display, it is sold to regular customers may be at a higher price.

The respondents believe that the reason for government to impose heavy taxes and sale ban on tobacco product is to reduce consumption and improve health. Majority of users and non-users consider this sale and consumption ban in Jammu and Kashmir would be effective if not, very effective. Similarly, Singh *et al.* reported that ban on production of various tobacco products is the most effective method to reduce tobacco use. Proper education on ill effects of tobacco, legal action, and increasing the cost of tobacco products is other effective measures.<sup>[13]</sup>

The black marketing, false branding, and easy availability of these ST-gutka products have been a major concern. The study subjects report that even after the ban, gutka products are easily available to the regular customers and many do not face any difficulty in getting them. Shopkeepers have been displaying pouches of mouth fresheners and been selling gutka to known customers via illegal sales.<sup>[11,12]</sup>

On the other side, the ST association and gutka producers started a country-wide campaign promulgating the proposition that ban of gutka brought under Food Safety Regulation Act is not correct and it is an act of strong cigarette lobby.<sup>[10]</sup> The gutka should not be considered as a food product and banning it may hamper the lives of many areca nut farmers. Their contention is that cigarette contains more tobacco as well as cancer-causing substances when compared to gutka and pan masala.

The generalization of results of the present study should be done carefully as more currents users of ST responded compared to the past users and non-users. This may be due to the method of sample selection. The study also oversamples males (88%) likely due to willingness of participation is more in males than females. However, the findings of this study provide an insight into the effectiveness of legislation and baseline for study including different populations on a larger scale.

# **CONCLUSION**

The positive attitudes of the people of Jammu region of Jammu and Kashmir indicate that the increase sale tax and consumption ban by the government are an effective measure for improvement of health and reduce consumption. They demonstrate that the policy has been lagging behind to curb the black market sale or false branding of gutka products, although they also identify the need for greater public education to counter common misunderstandings.

#### **REFERENCES**

- Reddy KS, Gupta PC. Report on: Tobacco Control in India, Ministry of Health and Family Welfare. New Delhi: Government of India; 2004.
- Sinha DN, Narain JP, Kyaing NN, Rinchen S. WHO framework convention on tobacco control and its implementation in South-East Asia region. Indian J Public Health 2011;55:184-91.
- Ministry of Health and Family Welfare. Global Adult Tobacco Survey 2009-2010. Ministry of Health and Family Welfare. New Delhi: Government of India: 2010.
- Gupta PC. Gutka: A major new tobacco hazard in India. Tob Control 1999;8:134.
- Gupta PC, Ray CS. Smokeless tobacco and health in India and South Asia. Respirology 2003;8:419-31.
- Sonal M. Madhya Pradesh Bans Gutka and other Chewing Tobacco Products. Down to Earth; 2012. Available from: http://www.downtoearth. org.in/content/madhya-pradesh-bans-gutkha-and-other-chewing-tobaccoproducts. [Last accessed on 2014 Dec 15].
- Gupta S. Madhya Pradesh First State to Ban Gutkha. Times of India; 2012. Available from: http://www.articles.timesofindia.indiatimes.com/2012-04-04/india/31286978\_1\_ban-gutkha-magnesium-carbonate-oral-cancer. [Last accessed on 2014 Dec 15].
- Arora M, Madhu R. Banning smokeless tobacco in India: Policy analysis. Indian J Cancer 2012;49:336-41.
- Ramachandran L. Chronicle of a Ban Retold. The Hindu; 2012. Available from: http://www.thehindu.com/opinion/open-page/chronicle-of-a-banretold/article3901601.ece. [Last accessed on 2014 Dec 14].
- Roy SD. Gutkha Producers use Mass Media to Fight Ban. Times of India; 2012. Available from: http://www.articles.timesofindia.indiatimes. com/2012-10-04/mumbai/34259157\_1\_gutka-and-pan-masala-antitobacco-crusaders-tobacco-products. [Last accessed on 2014 Apr 29].
- Dwivedi P, Das A. Gutka Ban: Still a Long Road Ahead. The Sunday Indian;
   2012. Available from: http://www.thesundayindian.com/en/story/gutka-ban-still-a-long-road ahead/14/40448. [Last accessed on 2014 Dec 20].
- Nair S, Schensul JJ, Bilgi S, Kadam V, D'Mello S, Donta B. Local responses to the Maharashtra gutka and pan masala ban: A report from Mumbai. Indian J Cancer 2012;49:443-7.
- Singh V, Sharma BB, Saxena P, Meena H, Mangal DK. Price and consumption of tobacco. Lung India 2012;29:212-6.
- DNA Correspondent. Cancer Centres Urge PM to Ban Gutka across India. DNA; 2012. Available from: http://www.dnaindia.com/mumbai/1767377/ report-cancer-centres-urge-pm-to-ban-gutka-across-india. [Last accessed on 2014 Apr 12].
- Available from: https://www.dailyexcelsior.com/govt-bans-chewable-tobacco-in-jk. [Last accessed on 2016 Sep 07].

How to cite this article: Singh P, Jain P, Agarwal G, Swarnkar SK, Chauhan A, Rathore BS. Sale and Consumption on Smokeless Tobacco in Jammu and Kashmir, India: Attitude and Views of Jammu Adult Population. Int J Sci Stud 2019;7(2):55-60.

Source of Support: Nil, Conflict of Interest: None declared.