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Prevalence and pattern of use of tobacco and its association with knowledge attitude and practice of oral hygiene in the rural population of Uttar Pradesh (East).

Pathology

KEYWORDS:

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ABSTRACT

Background: use of smokeless tobacco in rural Uttar Pradesh.

Aims and Objectives: to find the prevalence and pattern of use of tobacco and its association with knowledge attitude and practice

Material and Method: A random selection of a total of 1331 subjects in the study from villages of Lucknow, Kanpur area. A structured questionnaire was used as a survey tool.

Results: tobacco was the most common chewing habit (36.1%). A stong association between oral habits and knowledge attitude practice scores was observed ($p<0.001$). Duration of tobacco use was also associated with knowledge attitude practice scores ($p<0.001$).

Conclusion: there is a need for implementation of awareness and mass screening programmes to not only educate people about the ill effects of tobacco but also discourage its use because of its oral and systemic health implications.

INTRODUCTION

Chewing and smoking of tobacco along with consumption of alcohol are some of the common social habits in India.[1] The Portuguese introduced tobacco in India about 400 years ago and since then it has become a part of our social and cultural surrounding.[2] India is next to China in the second place as far as manufacturing and consumption of tobacco is concerned.[2,3] The prevalence of use of tobacco use among Indian adults is 35%.[4] Initially in India beedi smoking was very popular but now smokeless tobacco is used in preparation of paan and gutkha. [5] Dry tobacco-areca nut preparations such as paan masala, gutkha and mawa are very popular amongst individuals and have a very high addictive potential. According to a survey, it has been estimated that there are 250 million users who are ten or more than 10 years of age. [5] Smoking, drinking and tobacco chewing are associated with oral lesions such as leukoplakia, oral submucous fibrosis and oral lichen planus which have a tendency for malignant transformation. [6] Tobacco consumption is one of the most important risk factors for oral cancer. Nearly 50% males and 25% females are affected by cancers related to tobacco. [7] Tobacco use survey has been conducted by us to gather data on the use of tobacco by the population, The purpose of this survey was for planning awareness programmes about the ill effects of tobacco.

MATERIAL AND METHOD

AREA OF SURVEY

A total of 1331 cases were enrolled for the cross sectional study. Villages between Lucknow and Kanpur were randomly selected for the study. A consent from the village Pradhans was taken so that they could extend their cooperation in arranging for space and minimal furniture. ASHA and Anganwadi workers, primary school teachers in these villages were contacted to ensure community mobilization.

DEMOGRAPHIC PATTERN

Subjects from all age groups without any bias for gender, caste or creed were considered

SURVEY TOOL

A self- administered structured questionnaire was developed in which questions were related to knowledge attitude and practice. The scoring was done on the basis of Likert's scale. All questions related with knowledge had 4 correct answers; the respondent was awarded 1 point for each correct answer. All questions related with attitude were scored from 0-4 where 0 depicts the most negative and 4 the most positive response. For questions related to practice, a score of 0 indicated the most negative while a score of 4 gave the most positive response. For the question related to adverse habits, a score of 4 was the most positive response and 1 mark was deducted for every adverse habit.

STATISTICAL ANALYSIS

It was done using SPSS software version 15.

RESULT

Table 1: Descriptive Data regarding dental hygiene and health related Knowledge, Attitude and Practices

SN	Variable	Minimum Score	Maximum Score	Mean Score	SD
	Knowledge				
1.	Food items having adverse impact on dental health	0	4	1.25	0.95
2.	Substances that make teeth stronger and healthy	0	4	1.27	0.98
3.	Good oral hygiene products	0	4	1.77	1.10
4.	Adverse oral habits	0	4	1.52	0.97
5.	Gum bleeding and dental caries	0	4	1.05	0.88
	Attitude				
1.	Good eating habits	0	4	2.06	1.35
2.	Fluoridated toothpaste	0	4	1.80	1.18
3.	Use of Pan/Pan masala and tobacco	0	4	2.59	1.09
4.	Visiting dentist regularly	0	4	2.61	1.10
5.	Caring for deciduous teeth	0	4	2.09	1.20
	Practices				
1.	Frequency of toothbrushing	0	4	2.00	0.81
2.	Visiting a dental clinic	0	4	0.50	0.78
3.	Using Pan/Pan masala and tobacco	0	4	3.35	1.04
4.	Frequency of Rinsing mouth	0	4	1.90	1.27
5.	Use of pins/metal wires and sharp objects to clear the food particles	0	4	2.66	1.04

Mean knowledge scores for different aspects were less than 2 for all the items, thereby indicating poor awareness regarding dental hygiene and oral health.

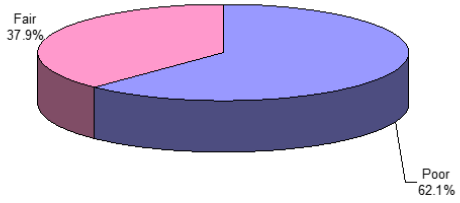
However, mean scores of attitude were above 2 for all the items except use of fluoridated toothpaste. Maximum positive scores for attitude were observed for the item visiting dentist regularly and use of pan/pan masala and tobacco.

For practice dimension, mean scores were maximum for use of pan/pan masala and tobacco and minimum for visiting a dental

clinic. For items frequency of toothbrushing, use of pan/pan masala and tobacco and use of pins/metal wires and other sharp objects to clear teeth of food particles mean scores were above 2.

Table 2: Distribution of patients according to dental hygiene and oral health knowledge, attitude and practice category

SN	Category	No. of subjects	Percentage
1.	Poor	827	62.1
2.	Fair	504	37.9
3.	Good	0	0
4.	Excellent	0	0



Majority of subjects had poor scores (62.1%). There were 504 (37.9%) subjects with fair scores. None of the subjects had good or excellent scores.

IV. Adverse habits and KAP scores

Addictive habits	Total no. of cases	%	poor scores (827)	%	Fair score (504)	%	X2	p
Tobacco use	481	36.1	343	41.5	138	27.4	26.955	<0.001
Chewing tobacco	317	23.8	224	27.1	93	18.5	12.864	<0.001
Smoking	195	14.7	155	18.7	42	8.3	26.907	<0.001
Pan Masala with Tobacco	175	13.1	133	16.1	42	8.3	16.466	<0.001
Pan Masala without Tobacco	29	2.2	21	2.5	8	1.6	1.332	0.249
Duration of use								
Non-users	850	63.9	484	58.5	366	72.6	30.5	<0.001
< 5Yrs	136	10.2	88	10.6	48	9.5		
6-10 Yrs	142	10.7	105	12.7	37	7.3		
>10 Yrs	203	15.3	150	18.1	53	10.5		
Alcohol use	61	4.6	46	5.6	15	3.0	4.789	0.029
Gingivitis	2	0.2	2	0.2	0	0.0	0.251	0.616

Tobacco use was quite common (36.1%), chewing tobacco was the most common habit (23.8%) followed by smoking (14.7%), pan masala with tobacco use (13.1%) and pan masala without tobacco use (2.2%).70% males and 22.2% females were addicted to tobacco. A strong association between adverse oral habits and KAP scores was observed (p<0.001) for all the habits except use of pan masala without tobacco.

Duration of tobacco use was also significantly associated with KAP scores (p<0.001) with significantly higher proportion of subjects having poor scores showing prolonged use (>5 years) (30.8%) as compared to those having fair scores (17.8%).

Use of alcohol was also significantly higher among those having poor KAP scores (5.6%) as compared those having fair scores (3.0%) and the association was also significant statistically (p=0.029).

DISCUSSION

Prevalence of tobacco use

Tobacco abuse was the most common habit in our study which was 36.1%. The prevalence of tobacco use in the present study was found to be similar to the prevalence in other studies. Global Adult Tobacco Survey India (GATS India)[4] found the prevalence of 35% in the population aged 15 years and above. In a study conducted by Rani et al in 2003[8], it was found that 30 percent of the population aged 15 years and above were tobacco users. Survey conducted by the Indian Council of Medical Research in Karnataka and Uttar Pradesh found the prevalence of tobacco use as 29.6% in Karnataka and 34.6% in Uttar Pradesh[9]

Sex and tobacco use.

In prevalence surveys in eight rural areas in India, smokeless tobacco use was 3-53% in men and 3-49% in women [10-13]

In our study 77.8% males and 22.2% females were addicted to tobacco Rani et al [8], in their study found that, 47% men and 14% of women used tobacco in smoked or smokeless forms. Sen et al [14] in their study reported the male and female ratio of tobacco use to be 36% and 19% respectively.

Knowledge and tobacco use

Tobacco use was found more common among the uneducated people in the country. Education was one of the most important determinants of tobacco use irrespective of the type of use. Uneducated males and females in India were at a higher risk of using tobacco. This can often be attributed to less knowledge and awareness among the uneducated people. Being poor was significantly associated with a higher risk of use of smokeless tobacco among males, and use of smokeless tobacco and dual use of tobacco among females in India. The relation between these socioeconomic markers and tobacco consumption is similar to relations observed in developed countries and other studies done in previous decades in India [8], [15]. This study also shows that, in India, the non-awareness of health hazards increases the likelihood of using tobacco. The risk of consuming other forms of tobacco use was also significantly affected by the non-awareness of the selected health hazards of tobacco use. Other studies suggest that the knowledge of health hazards of tobacco is significantly related to avoidance behaviour. The severity of health risks is though sometimes not adequately understood by tobacco users [16].

Oral hygiene knowledge, attitude and practice

It has been observed that oral hygiene has mostly remained as an ignored and unrealized major social problem. Majority of the people are unaware about the relationship between oral hygiene and systemic diseases or disorders. Many diseases show their first appearance through oral signs and symptoms and they remain unchanged or untreated because of this missing awareness. This fact coincides with our study where knowledge regarding oral health was poor. Visiting a dentist is still not considered a preventive dental behavior, at present it only depends on the treatment needs. [17] The present study shows that patients visited the dentist only in case of a problem. These results are similar to the study done by Jain et al. where 54% of the subjects visited the dentists when they were in pain. [18] Very few participants in the study used fluoridated toothpastes and brushed twice, which is very less as compared to United States where 90% of the studied group was doing the same. [19] There is generally a failure in the use of interdental aid as a preventive tool. In a study conducted in Saudi Arabia in 2001, where no subject used dental floss for interdental cleaning, which is similar to our results. [20]

CONCLUSION

There was a substantial use of smokeless tobacco in our study coupled with poor knowledge attitude and behaviour. It is therefore necessary to implement intervention at various levels with a pronged strategy of awareness and education programmes for the rural masses so that the use of smokeless tobacco is discouraged.

REFERENCES

1. Saraswati TR, Ranganathan K, Shanmugam S, SowmyaRamesh, Narasimhan PD, Gunaseelan R. Prevalence of oral lesions in relation to habits: Cross sectional study in south India. Indian J Dent Res 2006;17:121-5.
2. Kaur J, Jain DC. Tobacco control policies in India: Implementation and challenges. Indian J Public Health 2011;55:220-7.
3. World Health Organization (WHO). Fresh and alive: MPOWER, WHO report on the global tobacco epidemic, Geneva, Switzerland: WHO; 2008
4. Government of India, Ministry of health and family welfare, Global adult tobacco survey, India 2010
5. Reddy KS, Gupta PC. Economic History of tobacco production: From colonial origins to contemporary trends. In: Report on tobacco control in India. Joint report supported

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by Ministry of Health and family welfare, Government of India, Centre of disease control and prevention, USA: World Health Organization;p. 19-32.
6. Murthy NS, Mathew A. Cancer epidemiology, prevention and control. Curr Sci 2004;86:518-27. Barnes L, Eveson JW, Reichart P, Sidransky D. World Health Organization Classification of Tumours. Pathology and Genetics of Head and Neck Tumours. New Delhi, India: International Agency for Research on Cancer (IARC) IARC Press; 2005. p. 177-9
7. Barnes L, Eveson JW, Reichart P, Sidransky D. World Health Organization Classification of Tumours. Pathology and Genetics of Head and Neck Tumours. New Delhi, India: International Agency for Research on Cancer (IARC) IARC Press; 2005. p. 177-9
8. M Rani, S Bonu, P Jha, S N Nguyen, L Jamjoum. Tobacco use in India: prevalence and predictors of smoking and chewing in a national cross-sectional household survey. tobaccocontrol.bmj.com 2003 12: e4.
9. Dr. Kishore Chaudhry Deputy Director General Indian Council of Medical Research Prevalence of Tobacco Use in Karnataka and Uttar Pradesh in India 2001.2
10. Wahi PN. The epidemiology of oral and oropharyngealcancer. A report of the study in Mainpuri district,UttarPradesh, India. Bull. World Health Organ.1968; 38: 495–521
11. Mehta FS, Pindborg JJ, Gupta PC, Daftary DK. Epidemi-ologic and histologic study of oral cancer and leuko-plakia among 50,915 villagers in India. Cancer1969; 24:832–49.
12. Mehta FS, Gupta PC, Daftary DK, Pindborg JJ, Choksi SK.An epidemiologic study of oral cancer and precancerous conditions among 101,761 villagers in Maharashtra, India. Int. J. Cancer1972; 10: 134–41.
13. Bhonsle RB, Murti PR, Gupta PC, Mehta FS. Reversedhumti smoking in Goa. An epidemiologic study of 5449 villagers for oral precancerous lesions. Indian J. Cancer1976; 13: 301–5.
14. Sen U, Basu A. Factors influencing Smoking behavior among Adolescents. Asian Pac J Cancer Prev. 2000; 1 (4): 305--309. 18
15. Subramanian SV, Nandy S, Kelly M, Gordon D, Davey Smith G (2004) Patterns and distribution of tobacco consumption in India: cross sectional multilevel evidence from the 1998–9 National Family Health Survey. BMJ 328(7443):801–806.
16. World Health Organization (2011) WHO report on the global tobacco epidemic 2011: Warning about the dangers of tobacco. Geneva: World Health Organization. Gundala
17. R, Chava VK. Effect of lifestyle, education and socioeconomic status on periodontal health. Contemp Clin Dent 2010;1:23-6.
18. Jain N, Mitra D, Ashok KP, Dundappa J, Soni S, Ahmed S. Oral hygiene - Awareness and practice among patients attending OPD at Vyas Dental College and Hospital, Jodhpur. J Indian Soc Periodontol 2012;16:524-8
19. Survey of family tooth brushing practices. Bureau of Dental Health Education. Bureau of Research and Statistics. J Am Dent Assoc 1966;72:1489-91.
20. Jamjoom HM. Preventive Oral Health Knowledge and Practice in Jeddah, Saudi Arabia. J KAU Med Sci 2001;9:17-25.