

Assessment of Knowledge, Attitude, Behaviour and Interpersonal Factors Related to the Use of Tobacco among Youth of Udaipur City, Rajasthan, India: A Cross-Sectional Study

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Abstract

Background: Tobacco is the most important preventable cause of disease burden and death all over the world. Apart from being the single most important determinant of cancer and cardiovascular diseases, smoking is also a threat to oral health. The Global Youth Tobacco Survey (GYTS) as a part of Global Tobacco Surveillance System (GTSS) was developed to monitor tobacco use, elicit attitudes about tobacco, and obtain information on exposure to tobacco smoke among youth. This study aimed to assess the prevalence, knowledge, attitude, behaviour and interpersonal factors related to the use of tobacco among youth of Udaipur city, Rajasthan, India.

Methods: This study was conducted among 1031, 15 to 25 year old youths studying in the different colleges of Udaipur city, Rajasthan, India. The Global Youth Tobacco Survey (GYTS) core questionnaire was used. Simple descriptive statistics were used for the data.

Findings: Out of the total 1031 participants (mean age: 19.55 ± 1.35), 632 (61.2%) were men (mean age: 19.66 ± 1.36) and 399 (38.7%) were women (mean age: 19.35 ± 1.35). 493 (47.8%) were current tobacco users, the majority of which were men 411 (39.8%). 122 (11.8%) had a previous history of tobacco use, while 416 (40.3%) reported that they had never used tobacco in any form. The majority of the men, 305 (29.5%), were consuming tobacco daily. Majority of current, 152 (30.8%), and ever tobacco users, 122 (41.8%), smoke and chew gutkha at places of entertainment followed by smoking or chewing at school/college premises. The majority of them bought gutkha themselves, 292 (47.4%). Moreover, the majority of current tobacco users, 298 (72.5%) men and 82 (100%) women, wanted to stop smoking /gutkha chewing.

Conclusion: The present study indicates that there is a high prevalence of use of tobacco among youth of Udaipur city, Rajasthan, India.

Keywords: Knowledge, Attitude, Smoking

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Introduction

Tobacco is the most important preventable cause of disease burden and death all over the world.^{1,2} The World Health Organization (WHO) estimates that about 30% of the adult men global population smokes.³ Smoking kills more people than Acquired Immune Deficiency Syndrome (AIDS), alcohol, drug abuse, car crashes, murders, suicides and fires combined each year.⁴ Approximately 5 million people die prematurely every year due to tobacco related diseases, and many more suffer from smoking related morbidity, and it was estimated that the rate of fatality will be doubled by the year 2020.⁵⁻⁹ Currently about one-fifth of all worldwide deaths attributed to tobacco occurs in India; more than 800000 people die and 12 million people become ill as a result of tobacco use each year. The deaths attributed to tobacco, in India, are expected to rise from 1.4% of all deaths in 1990 to 13.3% in 2020. It is estimated that 5500 adolescents starts using tobacco every year in India, joining the 4 million young people under the age of 15 who already use tobacco.¹⁰ Apart from being the single most important determinant of cancer and cardiovascular diseases, smoking is also a threat to oral health.¹¹⁻¹³ Smoking increases the risk of oral cancer and alcohol further increases the risk.^{14,15} Smokers also have a high risk of development of periodontal disease and other systemic disease progressions.¹⁶⁻¹⁸ The prevention of tobacco among youth is of immense importance. Thus, the objective of this study was to assess the knowledge, attitude, behaviour and factors related to the use of tobacco among youth of Udaipur city Rajasthan, India. The Global Youth Tobacco Survey (GYTS) as a part of Global Tobacco Surveillance System (GTSS), initiated by the World Health Organization (WHO), the Centres for Disease Control and Prevention (CDC) United States of America (USA) was developed to monitor tobacco use, elicit attitudes about tobacco, and obtain information on exposure to tobacco smoke among youth.¹⁹

Methods

This cross-sectional questionnaire survey was conducted among 1031, 15-25 year old graduate and diploma students studying in different colleges of Udaipur city, Rajasthan, India, during the months of March-April 2010.

Multistage and random sampling was used to select the study population from eight different colleges from the four zones of Udaipur city. Prior to the study, ethical clearance was obtained from the ethical committee of Darshan Dental College and Hospital, India. The college authorities were approached, the nature of the study was explained to them, and permission was obtained from them. Trained interviewers described the purpose and process of the survey to the students and gave standardized instructions for completing the questionnaire. Verbal consent was obtained from the study population. The students who were present at the time of the survey and wanted to take part in the survey were included. The students participated in the survey voluntarily and the data was collected anonymously, using the self administered questionnaire without any identifying information, skipping or branching pattern. All the student participants were assured of anonymity and confidentiality.

The GYTS is a standardised methodology which includes data on prevalence of cigarette and other tobacco use, question on perception and attitudes about tobacco, access and availability of tobacco products, susceptibility to initiate smoking, exposure to second hand smoke, school curricula media and advertising, smoking cessation as well as some demographic information, thereby providing a systemic approach for the surveillance of youth tobacco use among students.²⁰ The GYTS core questionnaire along with additional questions regarding demographic data, use of various forms of smoking and smokeless tobacco use were added following a pilot study among (20%) participants. Kappa (k), and weighted kappa (k_w) were used to evaluate the test-retest reliability of the questionnaire and internal consistency was assessed by Cronbach's alpha (α) coefficients ($k = 0.86$), ($k_w = 0.9$) ($\alpha = 0.78$). Simple Descriptive statistics was used for data analysis.

Results

Characteristics of the samples

Out of the total 1031 participants (mean age: 19.55 ± 1.35), 632 (61.2%) were men (mean age: 19.66 ± 1.36) and 399 (38.7%) were women (mean age: 19.35 ± 1.35).

Tobacco use prevalence

The prevalence of smoking and smokeless

tobacco use among the study participants is reported in table 1. Out of 1031 participants, 493 (47.8%) were current tobacco users, the majority of which were men, 411 (39.8%). 122 (11.8%) had a previous history of tobacco use, while 416 (40.3%) reported that they had never used tobacco before in any form.

Tobacco consumption frequency and quantity

The frequency and quantity of tobacco consumption among the youth are reported in table 2. The majority of the men, 305 (29.5%), were consuming tobacco daily.

Tobacco consumption behaviour

The tobacco consumption behaviour among current and ever tobacco users are reported in table 3. The majority of current, 152 (30.8%), and ever tobacco users, 122 (41.8%), smoke and chew gutkha at places of entertainment followed by smoking or chewing at school/college premises. The majority of them bought gutkha themselves, 292 (47.4%). Moreover, the majority, 323 (52.5%), of them had friends as their main companion for smoking/gutkha chewing.

Table 1. Prevalence of smoking and smokeless tobacco use among youth

	Men [n (%)]	Women [n (%)]	Total [n (%)]
Never	149 (14.4)	267 (25.8)	416 (40.2)
Ever	72 (6.9)	50 (4.8)	122 (11.7)
Current	411 (39.8)	82 (7.9)	493 (47.7)
N = 1031	632 (61.2)	399 (38.7)	1031 (100)
Smoked	227 (22.0)	0 (0.0)	227 (22.0)
Smokeless	120 (11.6)	132 (12.8)	252 (24.4)
Combined	136 (13.3)	0 (0.0)	136 (13.3)

Table 2. Frequency and quantity of tobacco consumption among youth

Frequency	Men [n (%)]	Women [n (%)]	Total [n (%)]
Daily	305 (29.5)	0 (0.0)	305 (29.5)
Weekly	72 (6.9)	36 (3.4)	108 (10.3)
Occasionally	104 (10.8)	96 (9.3)	200 (20.1)
Tried	2 (0.1)	0 (0.0)	2 (0.1)
Quantity			
< 1 Sticks/Pouches per day	212 (20.5)	132 (12.8)	344 (33.3)
1-5 Sticks/Pouches per day	182 (17.6)	0 (0.0)	182 (17.6)
6-10 Sticks/Pouches per day	88 (8.5)	0 (0.0)	88 (8.5)
> 10 Sticks/Pouches per day	1 (0.1)	0 (0.0)	1 (0.1)

Table 3. Tobacco consumption behaviour among current and ever tobacco users

	Ever [n (%)] (n = 122)		Current [n (%)] (n = 493)	
	Men 72 (100)	Women 50 (100)	Men 411 (100)	Women 82 (100)
Main place of smoking/gutkha chewing				
School/Colleges	26 (36.1)	16 (32.0)	123 (29.9)	67 (81.7)
Home	6 (8.3)	0 (0.0)	0 (0.0)	0 (0.0)
Home of friends	0 (0.0)	0 (0.0)	19 (4.6)	0 (0.0)
Entertainment places	32 (44.4)	19 (38.0)	151 (36.7)	1 (1.2)
Indoors	8 (11.1)	15 (30.0)	116 (28.2)	14 (17.1)
Others	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)
Source of cigarettes/gutkha				
Bought themselves	27 (37.5)	0 (0.0)	208 (50.6)	57 (69.5)
Friends	45 (62.5)	50 (100)	203 (49.3)	25 (30.4)
Family members	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)
Main companion for smoking/tobacco chewing				
Alone	11 (15.2)	0 (0.0)	29 (7.0)	8 (9.7)
Friends	43 (59.7)	42 (84.0)	295 (71.0)	35 (42.6)
Family members	18 (25.0)	8 (16.0)	86 (20.9)	39 (47.5)
Others	0 (0.0)	0 (0.0)	1 (0.2)	0 (0.0)

Table 4. Attitudinal, belief, knowledge, and interpersonal factors associated with smoking among youth

	Men [n (%)] 632 (100)			Women [n (%)] 399 (100)		
	Never 149 (23.5)	Ever 72 (11.3)	Current 411 (65.0)	Never 267 (25.8)	Ever 50 (4.8)	Current 82 (7.9)
ATTITUDINAL, BELIEF AND KNOWLEDGE FACTORS						
SOCIAL BELIEF						
It is unfriendly to refuse when others offer a cigarette						
Agree	19 (12.7)	19 (26.3)	146 (35.5)	21 (7.8)	11 (22.0)	6 (7.3)
Do not know	38 (25.5)	11 (15.2)	152 (36.9)	1 (0.3)	8 (16.0)	0 (0.0)
Disagree	92 (61.7)	42 (58.3)	113 (27.4)	245 (91.7)	31 (62.0)	76 (92.6)
Smoking is an easy way to approach other people						
Agree	35 (23.4)	43 (59.7)	210 (51.0)	37 (13.8)	11 (22.0)	24 (29.2)
Do not know	23 (15.4)	1 (1.3)	88 (21.4)	23 (8.6)	0 (0.0)	11 (13.4)
Disagree	91 (61.0)	28 (38.8)	113 (27.4)	207 (77.5)	39 (78.0)	47 (57.3)
Smoking makes one appear mature						
Agree	37 (24.8)	29 (40.2)	270 (65.6)	6 (2.2)	11 (22.0)	27 (32.9)
Do not know	34 (22.8)	10 (13.8)	66 (16.0)	9 (3.3)	8 (16.0)	12 (14.6)
Disagree	78 (52.3)	33 (45.8)	75 (18.2)	252 (94.3)	31 (62.0)	43 (52.4)
Smoking is a personal issue; others should not intervene						
Agree	8 (5.3)	15 (20.8)	185 (45.0)	34 (12.7)	0 (0.0)	31 (37.8)
Do not know	48 (32.2)	34 (47.2)	167 (40.6)	48 (17.9)	8 (16.0)	23 (28.0)
Disagree	93 (62.4)	23 (31.9)	59 (14.3)	185 (69.2)	42 (84.0)	28 (34.1)
SUBJECTIVE NORMS						
Not smoking will become fashionable in future						
Agree	60 (40.0)	12 (16.6)	98 (23.8)	88 (32.9)	31 (62.0)	51 (62.1)
Do not know	16 (10.7)	3 (4.1)	98 (23.8)	109 (40.8)	8 (16.0)	17 (20.7)
Disagree	73 (48.9)	57 (79.1)	215 (52.3)	70 (26.2)	11 (22.0)	14 (17.0)
Smoking in public places is impolite						
Agree	126 (84.5)	62 (86.1)	318 (77.3)	247 (92.5)	39 (78.0)	54 (65.8)
Do not know	19 (12.7)	5 (6.9)	55 (13.3)	15 (5.6)	0 (0.0)	5 (6.0)
Disagree	4 (2.6)	5 (6.9)	38 (9.2)	5 (1.8)	11 (22.0)	23 (28.0)
With the development of society the percentage of smokers in the population will decline						
Agree	47 (31.5)	45 (62.5)	172 (41.8)	100 (37.4)	31 (62.0)	35 (42.6)
Do not know	49 (32.8)	3 (4.1)	91 (22.1)	111 (41.5)	0 (0.0)	25 (30.4)
Disagree	53 (35.5)	24 (33.3)	148 (36.0)	56 (20.9)	19 (38.0)	22 (26.8)
Felt that boys/girls who have smoke are attractive						
Agree	18 (12.0)	38 (52.7)	118 (28.7)	0 (0.0)	19 (38.0)	0 (0.0)
Do not know	0 (0.0)	6 (8.3)	95 (23.1)	9 (3.3)	0 (0.0)	0 (0.0)
Disagree	131 (87.9)	28 (38.8)	198 (48.1)	258 (96.0)	31 (62.0)	82 (100)
Felt that boys/girls who smoke have more friends						
Agree	26 (17.4)	71 (98.6)	271 (65.9)	17 (6.3)	35 (70.0)	29 (35.3)
Do not know	13 (8.7)	0 (0.0)	31 (11.6)	26 (9.7)	0 (0.0)	0 (0.0)
Disagree	110 (73.8)	1 (1.3)	109 (26.5)	224 (83.8)	15 (30.0)	53 (64.6)

Table 4. Attitudinal, belief, knowledge, and interpersonal factors associated with smoking among youth (Continued)

	Men [n (%)] 632 (100)			Women [n (%)] 399 (100)		
	Never 149 (23.5)	Ever 72 (11.3)	Current 411 (65.0)	Never 267 (25.8)	Ever 50 (4.8)	Current 82 (7.9)
ATTITUDINAL, BELIEF AND KNOWLEDGE FACTORS						
Knowledge of harmful effects						
Agree	127 (85.2)	60 (83.3)	295 (71.7)	251 (94.0)	39 (78.0)	60 (73.1)
Do not know	10 (6.7)	8 (11.1)	75 (18.2)	6 (2.2)	0 (0.0)	22 (26.8)
Disagree	12 (8.0)	4 (5.5)	41 (9.9)	10 (3.7)	11 (22.0)	0 (0.0)
INTERPERSONAL FACTORS						
Father's smoking						
Yes	26 (17.4)	25 (34.7)	182 (44.2)	99 (37.0)	42 (84.0)	28 (34.1)
No	123 (82.5)	47 (65.2)	229 (55.7)	168 (62.9)	8 (16.0)	54 (65.8)
Mother's smoking						
Yes	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)
No	149 (100)	72 (100)	411 (100)	267 (100)	50 (100)	82 (100)
Other relatives' smoking						
Yes	106 (71.1)	49 (68.0)	307 (74.6)	118 (44.1)	34 (68.0)	68 (82.9)
No	43 (28.8)	23 (31.9)	104 (25.3)	149 (55.8)	16 (32.0)	14 (17.0)
Peers' smoking						
Yes	89 (59.7)	56 (77.7)	368 (89.5)	126 (47.1)	50 (100)	59 (71.9)
No	60 (40.2)	16 (22.2)	43 (10.4)	141 (52.8)	0 (0.0)	23 (28.0)
Teachers' smoking						
Yes	56 (37.5)	47 (65.2)	228 (55.4)	192 (71.9)	42 (84.0)	45 (54.8)
No	93 (62.4)	25 (34.7)	183 (44.5)	75 (28.0)	8 (16.0)	37 (45.1)

Attitude, belief, knowledge and interpersonal factors

Attitudinal, belief, knowledge, and interpersonal factors associated with smoking among youth are reported in table 4. The majority of women non tobacco users, 245 (91.7%), disagreed that it is unfriendly to refuse when others offered a cigarette. Moreover, the majority of current tobacco users, 210 (51.0%), agreed that smoking is easy way to approach by other people, that smoking makes them appear mature, 297 (60.2%), and that smoking is a personal issue and others should not intervene, 185 (45.0%). Surprisingly, the majority of current smokers, 295 (71.7%), reported that they were aware of the harmful effects of tobacco.

Tobacco control factors

The tobacco control factors and cessation among men and women are reported in table 5. 298 (72.5%) men and 82 (100%) women current tobacco users wanted to stop smoking/gutkha chewing. Only 127 (25.7%) current tobacco

users had tried to quit smoking/gutkha chewing last year.

Table 5. Tobacco control factors and cessation among current tobacco users

	Men [n (%)] 411 (100)	Women [n (%)] 82 (100)
	Wants to stop smoking/gutkha chewing now	
Yes	298 (72.5)	82 (100)
No	113 (27.4)	0 (0.0)
Ever tried to quit smoking/gutkha chewing last year		
Yes	96 (23.3)	31 (37.8)
No	202 (49.1)	51 (62.1)

Discussion

This study is an attempt to comprehensively assess the prevalence, knowledge, attitude, behaviour, and interpersonal factors towards the use of smoked and smokeless forms of tobacco among the youth of Udaipur city, Rajasthan, India. The prevalence data on tobacco use among the youth is important both to assess tobacco as a risk factor and to establish control measures for prevention of those diseases.

India is the country of diverse cultures and multiple religions. The prevalence of tobacco use, which is also based on religious and cultural beliefs, is also variable. National figures from different states are not widely available, although effort is underway on the GYTS project. The prevalence of current tobacco use among youth in the present study was found to be 493 (47.8%), which is high when compared to other parts of India. The prevalence rate among North Eastern Indian States varied around 10.0% in Manipur and Meghalaya.²¹ In the North East, the highest rates were seen in Mizoram (18.5%) and the lowest in Tripura (2.5%).²¹ Smoking is the predominant form of tobacco use in most countries.²² As has been demonstrated in other studies,^{19,23,24} and the present study also demonstrated men, 227 (22.0%), had a higher prevalence of smoking than women, 0 (0.0%). Tobacco use among girls is not culturally accepted in the Indian society.¹⁰ In spite of these cultural norms, the present study demonstrates that more, 132 (12.8%), women subjects consume the smokeless form of tobacco than men, 132 (12.8%); contradictory to previous studies where the use of smokeless tobacco is an almost exclusive men behaviour.²⁵⁻²⁷ Gender gap in tobacco use is narrowing globally.²⁸ High prevalence of smokeless tobacco use among girls may be attributed to globalisation and glamorising tobacco as a tool of women's emancipation. The majority of current tobacco users consumed tobacco and its products daily and mostly at places of entertainment and indoor areas with friends or classmates as the main companion for smoking. To some degree smoking can be described as a catalytic promoter of friendship and condiment of social activity that provides an easy way to make new friends and develop relationships.²⁹ In our study it was not surprising that there was increased use of tobacco among the youth whose peers smoked, this was consistent with other studies.³⁰⁻³² Many studies have shown that adolescents' smoking is correlated with the smoking status of their families.³²⁻³⁴ Having family members who smoke not only provides

easier access to cigarettes, but their physical, psychological effects of use and positive smoking attitude directly influence the youth as well. In this study the teacher's smoking acted as a strong predilection for youth smoking, and increased the odd by 2.51.²⁹ Teacher's smoking acts as a barrier in the implementation of preventive policies as they directly influence the students as a role model. Therefore, the highest priority should be to increase teachers' knowledge of the hazard of tobacco use, and to reduce smoking among teachers. The majority of men and women had not tried to quit gutkha chewing in the last year. This may be due to lack of knowledge and increased habituation.

Our study has several limitations. Firstly, the GYTS relies on self-completion of the questionnaires. The accuracy of reporting in this study is not known. In our study, no biomarkers such as cotinine levels or exhaled carbon monoxide were done to validate exposure to tobacco either through self use or environmental exposure.

The present study indicates that there is a high prevalence of use of tobacco among youth of Udaipur city, Rajasthan, India. Further research to design, implement and evaluate the effectiveness of comprehensive tobacco control programmes targeting the youth of India is necessary.

Public awareness of the dangers of smoking should be promoted through public education campaigns and policy efforts need to be coordinated to address the problem. Furthermore, youth programmes and anti-tobacco advertisements need to be implemented, and increased professional help for cessation should be made available to persons who want to quit.

Conflict of Interest: The Authors have no conflict of interest.

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References

1. Peto R, Lopez AD, Boreham J, Thun M, Heath C, Jr., Doll R. Mortality from smoking worldwide. *Br Med Bull* 1996; 52(1): 12-21.
2. World Health Organization. Defining and Assessing Risks to Health [Online]. 2002. Available from: URL: <http://www.who.int/whr/2002/en/>.
3. WHO Western Pacific Region- Fact sheets:

- Smoking statistics. World Health Organization 2002. Available from: URL: http://http://www.wpro.who.int/mediacentre/factsheets/fs_20020528/en/
4. Torabi MR, Yang J, Li J. Comparison of tobacco use knowledge, attitude and practice among college students in China and the United States. *Health Promot Int* 2002; 17(3): 247-53.
 5. Ezzati M, Lopez AD. Estimates of global mortality attributable to smoking in 2000. *Lancet* 2003; 362(9387): 847-52.
 6. Peto R, Lopez AD, Boreham J, Thun M, Heath C, Jr. Mortality from tobacco in developed countries: indirect estimation from national vital statistics. *Lancet* 1992; 339(8804): 1268-78.
 7. Peto R, Lopez AD. The future worldwide health effects of current smoking patterns. In: Koop CE, Pearson CE, Schwarz MR, editors. *Critical Issues in Global Health*. San Francisco: Jossey-Bass; 2001.
 8. Warren CW, Jones NR, Eriksen MP, Asma S. Patterns of global tobacco use in young people and implications for future chronic disease burden in adults. *Lancet* 2006; 367(9512): 749-53.
 9. Wen CP, Tsai SP, Chen CJ, Cheng TY, Tsai MC, Levy DT. Smoking attributable mortality for Taiwan and its projection to 2020 under different smoking scenarios. *Tob Control* 2005; 14(Suppl 1): i76-i80.
 10. Sinha DN, Gupta PC, Pednekar M. Tobacco use among students in Bihar (India). *Indian J Public Health* 2004; 48(3): 111-7.
 11. Doll R, Peto R, Wheatley K, Gray R, Sutherland I. Mortality in relation to smoking: 40 years' observations on male British doctors. *BMJ* 1994; 309(6959): 901-11.
 12. Peto R, Darby S, Deo H, Silcocks P, Whitley E, Doll R. Smoking, smoking cessation, and lung cancer in the UK since 1950: combination of national statistics with two case-control studies. *BMJ* 2000; 321(7257): 323-9.
 13. Wilhelmsen L, Johansson S, Rosengren A, Wallin I, Dotevall A, Lappas G. Risk factors for cardiovascular disease during the period 1985-1995 in Goteborg, Sweden. The GOT-MONICA Project. *J Intern Med* 1997; 242(3): 199-211.
 14. Franceschi S, Levi F, La VC, Conti E, Dal ML, Barzan L, et al. Comparison of the effect of smoking and alcohol drinking between oral and pharyngeal cancer. *Int J Cancer* 1999; 83(1): 1-4.
 15. Hayes RB, Bravo-Otero E, Kleinman DV, Brown LM, Fraumeni JF, Jr., Harty LC, et al. Tobacco and alcohol use and oral cancer in Puerto Rico. *Cancer Causes Control* 1999; 10(1): 27-33.
 16. Norderyd O, Hugoson A, Grusovin G. Risk of severe periodontal disease in a Swedish adult population. A longitudinal study. *J Clin Periodontol* 1999; 26(9): 608-15.
 17. Soder B, Jin LJ, Soder PO, Wikner S. Clinical characteristics of destructive periodontitis in a risk group of Swedish urban adults. *Swed Dent J* 1995; 19(1-2): 9-15.
 18. Soder PO, Jin LJ, Soder B, Wikner S. Periodontal status in an urban adult population in Sweden. *Community Dent Oral Epidemiol* 1994; 22(2): 106-11.
 19. Global Youth Tobacco Survey Collaborating Group. Differences in worldwide tobacco use by gender: findings from the Global Youth Tobacco Survey. *J Sch Health* 2003; 73(6): 207-15.
 20. Global Youth Tobacco Survey Collaborative Group. Tobacco use among youth: a cross country comparison. *Tob Control* 2002; 11(3): 252-70.
 21. Sinha DN, Gupta PC, Pednekar MS. Prevalence of smoking and drinking among students in north-eastern India. *Natl Med J India* 2003; 16(1): 49-50.
 22. Wickholm S, Galanti MR, Soder B, Gilljam H. Cigarette smoking, snuff use and alcohol drinking: coexisting risk behaviours for oral health in young males. *Community Dent Oral Epidemiol* 2003; 31(4): 269-74.
 23. Centers for Disease Control and Prevention. Tobacco use among students aged 13-15 years-Kurdistan Region, Iraq, 2005. *Morbidity and Mortality Weekly Report* 2006; 55(20): 556-9.
 24. Centers for Disease Control and Prevention. Use of cigarettes and other tobacco products among students aged 13-15 years-worldwide, 1999-2005. *MMWR Morb Mortal Wkly Rep* 2006; 55(20): 553-6.
 25. Andersson B, Hibell B, Sandberg B. *Skolevers drogvanor 1999 (Drug use among students 1999)*. Stockholm: Centralförbundet för alkohol-och narkotika upplysning; 2000.
 26. Idris AM, Ibrahim SO, Vasstrand EN, Johannessen AC, Lillehaug JR, Magnusson B, et al. The Swedish snus and the Sudanese toombak: are they different? *Oral Oncol* 1998; 34(6): 558-66.
 27. Schei E, Fonnebo V, Aaro LE. Use of smokeless tobacco among conscripts: a cross-sectional study of Norwegian army conscripts. *Prev Med* 1990; 19(6): 667-74.
 28. Sinha DN, Gupta PC. Tobacco use prevalence among news print media personnel of patna. *Lifeline WHO-SEARO Newsletter*, 2000; 8: 5-6.
 29. Zhang L, Wang W, Zhao Q, Vartiainen E. Psychosocial predictors of smoking among secondary school students in Henan, China. *Health Educ Res* 2000; 15(4): 415-22.
 30. Nichter M, Nichter M, Vuckovic N, Quintero G,

- Ritenbaugh C. Smoking experimentation and initiation among adolescent girls: qualitative and quantitative findings. *Tob Control* 1997; 6(4): 285-95.
31. Paavola M, Vartiainen E, Puska P. Predicting adult smoking: the influence of smoking during adolescence and smoking among friends and family. *Health Educ Res* 1996; 11(3): 309-15.
32. Zhu BP, Liu M, Wang SQ, He GQ, Chen DH, Shi JH, et al. Cigarette smoking among junior high school students in Beijing, China, 1988. *Int J Epidemiol* 1992; 21(5): 854-61.
33. Flay BR, Hu FB, Richardson J. Psychosocial predictors of different stages of cigarette smoking among high school students. *Prev Med* 1998; 27(5 Pt 3): A9-18.
34. Jarallah JS, Bangboye EA, al-Ansary LA, Kalantan KA. Predictors of smoking among male junior secondary school students in Riyadh, Saudi Arabia. *Tob Control* 1996; 5(1): 26-9.

بررسی دانش، نگرش، رفتار و عوامل مرتبط با استفاده از سیگار در جوانان شهر بودایپور، راجستان هند

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چکیده

مقدمه: سیگار یکی از مهم‌ترین علل قابل پیشگیری بیماری‌ها و مرگ و میر در سراسر دنیا می‌باشد. از طرفی سیگار یکی از اصلی‌ترین فاکتورهای منفرد سرطان و بیماری‌های قلبی-عروقی و همچنین یکی از عوامل خطر بهداشت دهان است. ارزیابی کلی سیگار کشیدن جوانان (CYTS) به عنوان یکی از بخش‌های سیستم مراقبت جهانی سیگار جهت پایش استفاده از آن، رفتارهای منجر به سیگار کشیدن و جمع‌آوری اطلاعات در میان جوانان به کار گرفته شده است. این مطالعه با هدف، بررسی شیوع و دانش، نگرش، رفتار و عوامل مرتبط با استفاده از سیگار در میان جوانان شهر بودایپور راجستان هند انجام شد.

روش‌ها: مطالعه حاضر بر روی ۱۰۳۱ نفر از جوانان ۱۵ تا ۲۵ ساله دانشگاه‌های مختلف شهر بودایپور راجستان هند انجام شد و در آن از پرسش‌نامه اصلی CYTS استفاده گردید. در نهایت، داده‌ها با کمک آمار توصیفی ساده مورد تجزیه و تحلیل قرار گرفت.

یافته‌ها: ۶۳۲ نفر (۶۱/۲ درصد) از شرکت کنندگان مرد با میانگین سنی $1/36 \pm 19/66$ سال و ۳۹۹ نفر (۳۸/۷ درصد) زن با میانگین سنی $1/35 \pm 19/35$ سال بودند. ۴۹۳ نفر (۴۷/۳ درصد) استفاده کننده روزمره سیگار بودند که اکثریت آنان (۴۱۱ نفر، ۳۹/۸ درصد) را مردان تشکیل می‌دادند. ۱۲۲ نفر (۱۱/۸ درصد) سابقه قبلی مصرف سیگار را داشتند؛ در حالی که ۴۱۶ نفر (۴۰/۳ درصد) گزارش نمودند که سیگار را به هیچ شکلی استفاده نمی‌کنند. اکثریت مردان شرکت کننده (۳۰۵ نفر، ۲۹/۵ درصد) استفاده کننده روزانه سیگار بودند. اکثریت افرادی که هر روز سیگار را استفاده می‌کردند (۱۵۲ نفر، ۳۰/۸ درصد) و مصرف کنندگان گاه‌گاه سیگار (۱۲۲ نفر، ۴۱/۸ درصد)، مصرف سیگار یا جویدن ناس را در مکان‌های تفریحی همراه همکلاسان داشتند. در اکثریت آن‌ها، ۲۹۲ نفر (۴۷/۴ درصد) خرید سیگار بر عهده خود یا کودکانشان بود. ۲۹۸ نفر (۷۲/۵ درصد) از مردان و ۸۲ نفر (۱۰۰ درصد) از زنان خواهان قطع مصرف سیگار یا جویدن ناس بودند.

نتیجه‌گیری: این مطالعه نشان داد که شیوع مصرف سیگار در جوانان شهر بودایپور راجستان هند بالا می‌باشد.

واژگان کلیدی: دانش، رفتار، مصرف سیگار

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