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.\textsuperscript{1,2} The World Health Organization (WHO) estimates that about 30% of the adult men global population smokes.\textsuperscript{3} Smoking kills more people than Acquired Immune Deficiency Syndrome (AIDS), alcohol, drug abuse, car crashes, murders, suicides and fires combined each year.\textsuperscript{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.\textsuperscript{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.\textsuperscript{10} Apart from being the single most important determinant of cancer and cardiovascular diseases, smoking is also a threat to oral health.\textsuperscript{11-13} Smoking increases the risk of oral cancer and alcohol further increases the risk.\textsuperscript{14,15} Smokers also have a high risk of development of periodontal disease and other systemic disease progressions.\textsuperscript{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.\textsuperscript{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.\textsuperscript{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 ($kw$) were used to evaluate the test-retest reliability of the questionnaire and internal consistency was assessed by Cronbach's alpha ($\alpha$) coefficients ($k = 0.86$), ($kw = 0.9$) ($\alpha = 0.78$). 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 ± 1.55).

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 |
|-----------------------------------------------|
| **Men** [n (%)] | **Women** [n (%)] | **Total** [n (%)] |
| --- | --- | --- |
| **Frequency** | **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) |
| **Main place of smoking/gutkha chewing** | **Men** 72 (100) | **Women** 50 (100) | **Men** 411 (100) | **Women** 82 (100) |
| 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 (%)] | Women [n (%)] |
|--------------------------------|-------------|---------------|
|                                | 632 (100)   | 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) |
| ATTITUDBINAL, 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 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 (60.9)        | 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 (%)] | Women [n (%)] |
|--------------------------|-------------|---------------|
|                          | Never 149 (23.5) | Current 411 (65.0) | Never 267 (25.8) | Current 82 (7.9) |
| ATTITUDINAL, BELIEF AND KNOWLEDGE FACTORS | Ever 72 (11.3) | Ever 50 (4.8) |
| Knowledge of harmful effects | 632 (100) | 399 (100) |
| Agree | 127 (85.2) | 295 (71.7) | 251 (94.0) | 39 (78.0) | 60 (73.1) |
| Do not know | 10 (6.7) | 75 (18.2) | 6 (2.2) | 0 (0.0) | 22 (26.8) |
| Disagree | 12 (8.0) | 41 (9.9) | 10 (3.7) | 11 (22.0) | 0 (0.0) |
| INTERPERSONAL FACTORS | | | | |
| Father’s smoking | | | | |
| Yes | 26 (17.4) | 182 (44.2) | 99 (37.0) | 42 (84.0) | 28 (34.1) |
| No | 123 (82.5) | 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) |
| No | 149 (100) | 411 (100) | 267 (100) | 50 (100) | 82 (100) |
| Other relatives’ smoking | | | | |
| Yes | 106 (71.1) | 307 (74.6) | 118 (44.1) | 34 (68.0) | 66 (82.9) |
| No | 43 (28.8) | 104 (25.3) | 149 (55.8) | 16 (32.0) | 14 (17.0) |
| Peers’ smoking | | | | |
| Yes | 89 (59.7) | 368 (89.5) | 126 (47.1) | 50 (100) | 59 (71.9) |
| No | 60 (40.2) | 43 (10.4) | 141 (52.8) | 0 (0.0) | 23 (28.0) |
| Teachers’ smoking | | | | |
| Yes | 56 (37.5) | 228 (55.4) | 192 (71.9) | 42 (84.0) | 45 (54.8) |
| No | 93 (62.4) | 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.

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. In the North East, the highest rates were seen in Mizoram (18.5%) and the lowest in Tripura (2.5%). Smoking is the predominant form of tobacco use in most countries. As has been demonstrated in other studies, and the present study also demonstrated men, had a higher prevalence of smoking than women, 0 (0.0%). Tobacco use among girls is not culturally accepted in the Indian society. 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. Gender gap in tobacco use is narrowing globally. 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. 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. Many studies have shown that adolescents’ smoking is correlated with the smoking status of their families. 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. 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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مقاله پزوهشی

بررسی دانش، رفتار، عوامل مرتبط با استفاده از سیگار در جوانان شهر بوداپست، 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 اصلی‌ترین‌ها است که منجر به ریزش سلامتی و ریزش‌های قلبی-عروقی و همچنین یکی از عوامل خطر بهداشت دهان است. از زبانی، کلی سیگار کشیدن جوانان (CYS) به عنوان یکی از بخش‌های سیستم مراقبت بهداشت سگار جهت پایش استفاده از آن، رفتاری مربوط به سیگار کشیدن و جمع‌آوری اطلاعات در ميان جوانان به کار گرفته شده است. این مطالعه به هدف بررسی شیوع و دانش نگرش، رفتار و عوامل مرتبط با استفاده از سیگار در میان جوانان شهر بوداپست، راجستان هند انجام شد.

روش‌ها: مطالعه حاضر بر روی 1321 نفر از جوانان 15 تا 25 ساله، دانشگاه‌های مختلف شهر بوداپست، راجستان هند انجام شد. در این پرسشنامه، اصول استفاده گردید. در نهایت، داده‌ها به کمک آمار توصیفی ساده مورد تجزیه و تحلیل قرار گرفت.

یافته‌ها: 232 نفر (39٪) از شرکت کنندگان مرد با میانگین سن 23/35 ± 19/34 سال و 299 نفر (39٪) زن با میانگین سنی 23/35 ± 19/34 سال بودند. 41/3 نفر (74/30) از شرکت کننده‌های زن در سیگار کشیدن به اثبات رسید. در مورد سیگار کشیدن برای داشتن، سایر فعالیت‌های سیگار کشیدن، اکثریت مردان (2 نفر، 71/40) و مصرف سیگار جمعه (2 نفر، 41/26) استفاده کننده روزانه سیگار بودند. اکثریت آنان که روز سیگار را استفاده می‌کردند (4 نفر، 152/80) در جوانان مصرف سیگار به هیچ شکلی استفاده نمی‌کردند. اکثریت مردان خود نسبت به مصرف‌های ترکیبی همکلاسیان دانستند. در اکثریت آنان، 198 نفر (47/52 درصد) خرد سیگار به عهده خود یا کودکانشان بود. 398 نفر (72/73 درصد) از مردان و 2 نفر (00/80 نفر) از زنان خواننده کشور سیگار با جویدن ناس بودند.

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

واژگان کلیدی: دانش، رفتار، مصرف سیگار

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