## Original Research Article

# Knowledge, attitude and practices regarding smoking amongst young females 

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#### Abstract

Background: Smoking amongst women is increasing in the developing countries like India. There is paucity of data on the knowledge, attitude and practices of smoking amongst females in India. Hence a study was planned to assess the same. Methods: It was a qualitative research using descriptive questionnaire, prepared using the basic protocols available as per WHO Global Adult Tobacco Survey, conducted by self-reporting, from February to March, 2018 in the University Institute of Applied Management Sciences, Panjab University, Chandigarh. It was administered to 111 females aged 18 to 35 years, residing in Chandigarh. Results: Total22.5\% of the female respondents were current smokers. Majority of them belonged to the age group of 26-35years; were either employed or were studying and felt that females resorted to smoking for gaining pleasure and relieving stress. Most of them were aware of passive smoking. Majority felt that people who smoke should quit for their own health and for their families and street plays, public awareness camps, television and cinema halls are important mediums for helping to quit. Will power be found to be most important to help smokers quit. Some quoted the role of nicotine replacement therapy, exercise, individual counseling etc also. Majority of the females started smoking early, at an age of 16-25years, consuming 1-10cigarettes per day and had been smoking since more than a year when interviewed. Smoking was primarily introduced by peers. All the smokers were aware of different types of smoking hazards, most commonly reported as cancer and asthma. 16/25 smokers wanted to quit and 14/16 had tried in the past but were unsuccessful. Conclusions: This study gives an indication of rising smoking trend in females. Smoking cessation measures need to be made more gender-sensitive, targeting females in their early ages.


Keywords: Females, Smoking, Smoking cessation, Smoking hazards

## INTRODUCTION

Cigarette smoking is one of the leading causes of preventable diseases and death. 1 It is more common in
males than females. With the rising awareness in the developed countries, the prevalence of smoking amongst women is decreasing further. ${ }^{1}$ However, the same is increasing in the developing countries. In India too, there
is a rise in the number of female smokers, compared to the male population, where use of tobacco is decreasing. ${ }^{1,2}$ As per a recent WHO report, females in large metro cities in the modern urban India constitute bulk of the smokers, probably due to consideration of smoking as a status symbol. ${ }^{3}$

In the absence of documented evidence, data based on conversations, discussions and observations from many women has brought out the reasons for smoking. These include smoking as a personal choice, feeling of freedom, societal pressures and status issues etc. ${ }^{4}$

Considering the increasing rates of smoking amongst females, and paucity of concrete data on this subject from India, a study was planned to find the knowledge, attitude and practices of females about smoking. The study aimed to establish the reasons for starting and continuing smoking and thus help in formulating policies and preventive measures for smoking amongst females.

## METHODS

The research design of this study was a qualitative research based on a cross-sectional, descriptive questionnaire survey. The questionnaire was prepared using the basic protocols available in WHO Global Adult Tobacco Survey (GATS-2011) Questionairre. ${ }^{5}$ It was conducted from February to March 2018.

This study was conducted in the University Institute of Applied Management Sciences (UIAMS), Sector-25, Panjab University, Chandigarh after the protocol was approved by the Ethics Committee of UIAMS. Participation in this study by the candidates was totally based on their willingness to participate. Statistically 111 females participated in the study during the specified period.

## Data collection

An 18 items questionnaire written in English language was used in this study. Both open and close ended questions were included. A standardized questionnaire, designed based on tobacco control knowledge-attitudepractice model among young adult female smokers, that covered demographic characteristics age, educational level, dwelling time etc. and smoking-related knowledge-attitude-practice, about tobacco-related diseases, smoking cessation-related thoughts and existing practices and past smoking practice were assessed.

Before conducting the actual survey, piloting of the questionnaire was done to assess the feasibility and applicability of the questionnaire and finalized after repeated discussions with experts to establish face and content validity. After piloting, minor changes were done in the questionnaire. Information was sought by means of self-reporting.

## Inclusion criteria

- All females, willing to participate, aged between 18 and 35 years who could access the questionnaire within the study period.


## Exclusion criteria

- It also included those women who were not willing to participate in the study and did not respond to the questionnaire.


## Statistical analysis

Data was entered in MS Excel; descriptive statistics analysis of distribution and percentage calculations were done.

## RESULTS

Table 1 shows the age distribution, occupation and current smoking status of 111 female respondents who were enrolled in the study. It was seen that $22.5 \%$ of the respondents were current smokers. Majority belonged to the age group of 26-35 years and were either employed (Government/Private job/ self-employed) or were studying.

Table 1: Age group, occupation and current smoking status of all the female respondents.

| Parameter |  | Number <br> $=\mathbf{1 1 1}$ | Percentage |
| :--- | :--- | :--- | :--- |
| Age group <br> (in years) | $\mathbf{1 6 - 2 0}$ | 10 | 9.0 |
|  | $21-25$ | 22 | 19.8 |
|  | $26-30$ | 46 | 41.5 |
|  | $31-35$ | 33 | 29.7 |
|  | Govt/ Pvt job | 58 | 52.2 |
|  | Self employed | 17 | 15.3 |
|  | Student | 35 | 31.6 |
| Current | Unemployed | 1 | 0.9 |
| Smokers | Yo | 25 | 22.5 |

Table 2 shows the responses of all these respondents regarding their knowledge and attitude for smoking related hazards. Responses specifically related to knowledge regarding smoking cessation have also been shown. Majority felt that females resort to smoking for gaining pleasure and relieving stress ( $37.8 \%$ each).

Most of them were aware of passive smoking. Though all the respondents were aware that smoking is injurious to health, however, few did not know about the different types of hazards. Majority felt that people who smoke should quit for their own health ( $49.5 \%$ ) and for the welfare of their families ( $27 \%$ ) and street plays, public awareness camps, television and cinema halls are important mediums for helping quitting. While most of
the respondents felt that will power is important to help smokers quit, some respondents also quoted the role of nicotine replacement therapy, exercise and individual counseling.

Table 2: Knowledge and attitudes of all the female respondents.

| Parameter |  | $\begin{aligned} & \text { Number } \\ & =111 \end{aligned}$ | \% |
| :---: | :---: | :---: | :---: |
| Reasons for smoking | Pleasure | 42 | 37.8 |
|  | Stress | 42 | 37.8 |
|  | Social image | 21 | 18.9 |
|  | Others | 6 | 5.5 |
| Knowledge about different types of smoking hazards | Yes | 100 | 90.1 |
|  | No | 11 | 9.9 |
| Knowledge about passive smoking | Yes | 90 | 81.1 |
|  | No | 21 | 19.9 |
| Reasons for quitting smoking | Health | 55 | 49.5 |
|  | Family reasons | 30 | 27 |
|  | Social acceptability | 10 | 9 |
|  | Bad smell | 10 | 9 |
|  | Others | 6 | 5.5 |
| Best medium for smoking cessation | Street play | 25 | 22.5 |
|  | Public awareness camp | 20 | 18 |
|  | Cinema halls | 18 | 16.2 |
|  | Television | 19 | 17.1 |
|  | Others | 29 | 26.2 |
| Measures to help quit | Will power | 40 | 36 |
|  | Exercise | 15 | 13.5 |
|  | Nicotine replacement therapy | 11 | 10 |
|  | Individual counseling | 11 | 10 |
|  | Others | 20 | 18 |
|  | Don't know | 14 | 12.5 |

Table 3 shows the various characteristics of the female respondents who were smokers. Their practices of smoking and its initiation and knowledge and attitude regarding smoking and related hazards were specifically enquired.

Majority of the females who smoked, started early, at an age of 16-25 years ( $60 \%$ ), with consumption of 1-10 cigarettes per day ( $80 \%$ ) and had been smoking since more than a year ( $64 \%$ ) when interviewed. Smoking was primarily introduced by peers (76\%). All the smokers were aware of different types of smoking hazards, most commonly they reported that smoking leads to cancer and asthma. 16/25 ( $64 \%$ ) smokers wanted to quit and 14/16 ( $56 \%$ ) had tried in the past but were unsuccessful.

Table 3: The knowledge, attitude and practices of the female respondents who were smokers.

| Parameter |  |  | \% |
| :---: | :---: | :---: | :---: |
| Age at which started smoking (in years) | 16-20 | 8 | 32 |
|  | 21-25 | 15 | 60 |
|  | 26-30 | 2 | 8 |
| Past smoking status | Daily basis | 8 | 32 |
|  | Less than daily | 17 | 68 |
| Current smoking status | Daily basis | 9 | 36 |
|  | Less than daily | 16 | 64 |
| Time since using tobacco | <6 months | 6 | 24 |
|  | 6 months - 1 year | 3 | 12 |
|  | >1 year | 16 | 64 |
| Tobacco consumption per day (number of cigarettes) | 1-10 | 20 | 80 |
|  | 11-20 | 4 | 16 |
|  | >20 | 1 | 4 |
| Smoking introduced by | Peers | 19 | 76 |
|  | Self | 2 | 8 |
|  | Social media | 4 | 16 |
| Reasons for smoking | Pleasure | 13 | 52 |
|  | Stress | 6 | 24 |
|  | Social image | 4 | 16 |
|  | Others | 2 | 8 |
| Knowledge abou different types of smoking hazards | Yes | 25 | 100 |
|  | No | 0 | 0 |
| Want to quit | Yes | 16 | 64 |
|  | No | 9 | 36 |
| Quit attempts in the past | Yes | 14 | 56 |
|  | No | 11 | 44 |

## DISCUSSION

Majority of the respondents in this study belonged to the age group of 26-35 years. Most of the females were either employed (Government/ Private sector/ self-employed) or were studying. These results are in comparison to studies in the developed world, where young people, especially females, experiment with tobacco in an attempt to achieve the image of maturity, sophistication, attractiveness, sociability or feminity. ${ }^{1}$ Data wise $22.5 \%$ of the females in this study were current smokers. Worldwide, though there is a substantial decrease in smoking rates, this general trend is not evident in women, as supported by the prevalence of smoking in females in this study. There are closing gender gaps, with more women taking up smoking. ${ }^{1,6,7}$ These findings also suggest that smoking in females in India is seen in young educated employed population with no financial constraints. However, the resultant consequences so associated, for the future generations, need to be considered seriously. Smoking in the females in the childbearing age group is a threat to the unborn babies and dangerous for their children directly, as well as through passive smoking.

As per respondents, females usually resort to smoking for gaining pleasure and relieving their stress. Most of the respondents knew about passive smoking. Though all the respondents were aware that smoking is injurious to health, however, when asked for the types of hazards caused by smoking, 11 respondents were not aware of the different types of hazards. The figures as obtained from this study are in comparison to the available literature. ${ }^{1,5}$ Majority felt that people who smoke should quit for their own health and for the ultimate benefits of their families. Street plays, public awareness camps, television and cinema halls are important mediums for helping a smoker quit, as per respondents. The role of media has already been highlighted in a global survey. ${ }^{1}$ Majority felt that will power is most important to help smokers quit, some people quoted the role of nicotine replacement therapy, exercise, individual counseling etc as the most important measures to quit smoking. There have been studies in the past which have highlighted that lower awareness and use of nicotine replacement therapy, counseling etc is a major barrier to quitting smoking measures. ${ }^{8}$ However this study shows that female respondents were aware of the various measures available for the same. Increasing education levels and widespread publicity through media could be responsible for this finding in this study.

Majority of the females who smoked, started early, at an age of 16-25 years. These results are similar to various other studies, where it is seen that smoking usually occurs at such early ages, especially in women. ${ }^{9-11}$

When evaluated for current smoking status, 1 female who was smoking less than daily in the past, shifted to daily smoking over time, thus increasing the number of current daily smokers to 9 , from a number of 8 (as shown in past daily smoking). Similar trends have also been reported by a previous study. ${ }^{12}$ This striking fact signifies the importance of smoking cessation programs and their absence in the current scenario. Majority of the smokers had been smoking since more than a year when interviewed. Majority smoked 1-10 cigarettes per day. In smokers, it was seen that smoking was primarily introduced by peers. Pleasure derivation and stress relief were the two most common reasons quoted by female smokers for resorting to this habit. All the smokers were aware of smoking hazards and most commonly reported hazards were cancer and asthma. This was another important finding, as despite being aware of the types of hazards even, the female smokers continued to smoke. ${ }^{16}$ smokers wanted to quit, and a significant proportion of them $(14 / 16)$ had tried for the same in the past but had have been unsuccessful. This is an important finding as this subgroup of female smokers, who already aimed to quit, should be the first target population where smoking cessation measures should be immediately introduced, as they will be highly successful. This finding also signifies that since $9 / 25$ female smokers did not want to quit, this is also an important percentage of female smokers who need to be repeatedly counseled so that they are convinced over shortest possible periods of time, and
hence are ready to quit smoking. It has also been seen that the women who initiate smoking are less likely than men to quit and are there are more risks of health problems. ${ }^{13,14}$ Smoking has already been established as single most common preventable cause of mortality, and smoking cessation interventions are deemed to yield positive results. ${ }^{15}$ More studies, with larger sample size are required in Indian female population to generate concrete data.

## CONCLUSION

This study may be an indication of emerging rise in trends in smoking in females. Besides strict legislative policies, smoking cessation measures need to be made more gender-sensitive and should be directed particularly towards females in their teens and childbearing age group. At the societal level, there is a need of change in health behaviors. Healthy practices followed by them will propagate healthy lifestyles in the coming generations too.

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## REFERENCES

1. (Global Adult Tobacco Survey) Fact Sheet, India, 2016-17. Available at: https://www.who.int/tobacco/surveillance/survey/ga ts/GATS_India_2016-17_FactSheet.pdf. Accessed 20 January 2020.
2. Ng M, Freeman MK, Fleming TD, Robinson M, Dwyer-Lindgren L, Thomson B, et al. Smoking prevalence and cigarette consumption in 187 countries, 1980-2012. JAMA. 2014 Jan 8;311(2):183-92.
3. WHO report on the global tobacco epidemic 2017. Available
at: https://www.who.int/tobacco/global_report/2017/en/ Accessed 20 January 2020.
4. Warren CW, Jones NR, Eriksen MP, Asma S, Global Tobacco Surveillance System (GTSS) collaborative group. Patterns of global tobacco use in young people and implications for future chronic disease burden in adults. Lancet. 2006 Mar 4;367(9512):749-53.
5. Tobacco questions for surveys. A subset of key questions from the Global Adult Tobacco Survey (GATS).

Available
at: https://www.who.int/tobacco/publications/surveillan ce/tqs/en/ Accessed 20 January 2020.
6. Reitan T, Callinan S. Changes in smoking rates among pregnant women and the general female population in Australia, Finland, Norway, and Sweden. Nicotine Tobacco Res. 2017 Mar 1;19(3):282-9.
7. Thun M, Peto R, Boreham J, Lopez AD. Stages of the cigarette epidemic on entering its second century. Tobacco Cont. 2012 Mar 1;21(2):96-101.
8. Meltzer LR, Simmons VN, Sutton SK, Drobes DJ, Quinn GP, Meade CD, et al. A randomized controlled trial of a smoking cessation self-help intervention for dual users of tobacco cigarettes and e-cigarettes: Intervention development and research design. Contemp Clin Trials. 2017 Sep 1;60:56-62.
9. Moon-Howard J. African American women and smoking: starting later. AmJ Pub Health. 2003 Mar;93(3):418-20.
10. Thompson AB, Moon-Howard J, Messeri PA. Smoking cessation advantage among adult initiators: Does it apply to black women?. Nicotine Tobacco Res. 2011 Jan 1;13(1):15-21.
11. Jha P, Ramasundarahettige C, Landsman V, Rostron B, Thun M, Anderson RN, et al. 21st-century hazards of smoking and benefits of cessation in the United States. New Eng J Med. 2013 Jan 24;368(4):341-50.
12. Thompson AB, Mowery PD, Tebes JK, McKee SA. Time trends in smoking onset by sex and race/ethnicity among adolescents and young adults:
findings from the 2006-2013 National Survey on Drug Use and Health. Nicotine Tobacco Res. 2018 Feb 7;20(3):312-20.
13. King G, Polednak A, Bendel RB, Vilsaint MC, Nahata SB. Disparities in smoking cessation between African Americans and Whites: 1990-2000. Am J Pub Health. 2004 Nov;94(11):1965-71.
14. Thompson AB, Tebes JK, McKee SA. Gender differences in age of smoking initiation and its association with health. Addic Res Theory. 2015 Sep 25;23(5):413-20.
15. The World health report: 2003 - World Health Organization Available at: https://www.who.int/whr/2003/en/whr03_en.pdf. Accessed 20 January 2020.

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