

Original Article

Psychological Factors Influencing Initiation and Cessation of Tobacco Habit among Indian population-A Cross Sectional Study

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ABSTRACT

Background: Tobacco abuse is one of the most harmful habits practiced by the population worldwide.

Aims: To assess various factors leading to initiation and discontinuation of tobacco and to understand different psychological aspects behind its initiation.

Method: A cross sectional study was conducted among 300 past and current tobacco users visiting Oral Medicine Clinics of Manipal College of Dental Sciences, Mangalore, India. A self-administered questionnaire was used to gather details related to age of initiation of tobacco usage; frequency, duration and pattern of consumption; their knowledge towards tobacco hazards; and, reasons for initiation and discontinuation of the same.

Results: Respondents were divided into three age groups (15-30, 31-50, and >51 years). Majority of 92.7%, 95.1% and 92.3% in Group I, II and III respectively were aware of harmful effects of tobacco. Relief from tension was the main reason for initiation of tobacco usage. A total of 29 (10.7%) had discontinued their habits and the main reason was advice from their family and friends.

Conclusion: Tobacco abuse is on the rise despite the high awareness towards its hazards, indicating the involvement of other factors such as psychological dependency, peer and cultural influences, etc. Results of the study highlight the importance of targeting the family members of tobacco users in helping quit tobacco by its users. Further avenues to be explored are various modes of stress management among users of tobacco which might help in the prevention and cessation of tobacco usage.

Keyword: Smoking, Tobacco, Chewing, Initiation, Cessation

INTRODUCTION

Tobacco abuse is one of the most harmful habits practiced by the population worldwide. It is reported that every six seconds a person dies due to consumption of tobacco [1]. Approximately 5.4 million people die each year due to various tobacco-related illnesses and is expected to increase to more than 8 million a year by 2030 [2] and tobacco could be the single biggest cause of death worldwide [3].

Tobacco consumption can result in various debilitating diseases such as various types of cancers

[4,5,6,7], cardiovascular disease [8,9,10,11], obstructive pulmonary disease [12,13], peripheral vascular disease [14], stroke [15], acid peptic disease [16, 17], addiction [18], diabetes [19, 20] and macular degeneration which can lead to blindness [21]. Usage of tobacco is also associated with infections and impaired wound healing [22] leading to increased risk of post-operative complications [23]. Cleft lip and palate, still birth, low birth weight, perinatal mortality, etc. was seen in infants born to mothers using tobacco during pregnancy [24, 25]. Orally, potentially malignant disorders, halitosis, staining of teeth, taste dysfunction, diminished success with periodontal

treatment and dental implants has been associated with tobacco habits [26].

In India, the deaths related to tobacco consumption are very high [27] and is responsible for half of all the cancers in men and a quarter of cancers in women [28]. Despite all the measures the consumption of tobacco is on the rise in India. Lack of knowledge, addictive nature of tobacco, financial independence could be contributing towards initiation of tobacco usage at an early age. The other cause could be economic development due to industrialization, resulting in people getting stressed both physically and mentally. In order to relieve them from stress people fall prey to the various deleterious habits like smoking, alcohol, betel nut chewing, pan chewing, etc. Hence, there is urgent necessity of vigorous implementation of anti-tobacco preventive programs, especially in the developing countries.

Intervention programs like mass media communication, conducting anti-tobacco campaigns in schools can target young children to avoid experiencing the first exposure to tobacco. In order to plan an effective intervention, it is essential to have information on the extent and the type of tobacco use, reasons for the initiation and various factors which lead to the discontinuation of the habit. Thus the present study was undertaken to assess the various factors leading to initiation and discontinuation of tobacco; and, to understand different psychological aspects behind it.

METHODOLOGY

A questionnaire based cross-sectional study was conducted among 300 patients with tobacco habit attending the dental outpatient department at Manipal College of Dental Sciences, Mangalore. The internal consistency of the questionnaire was assessed using Cronbach's α was found to be 0.81. Permission to conduct the study was obtained from the Institutional Review Board prior to commencement of the study. The study subjects were categorized into three groups based on their age, Group I (15-30years); Group II (31-50years) and Group III (> 51 years). Purpose of the survey was explained to the study subjects and the questionnaire was subsequently administered after obtaining a verbal consent for the same. Questions were based on the age of initiation; various patterns of tobacco consumption; their knowledge about the tobacco hazards; and reasons for initiation and discontinuation. The data was

analyzed using statistical package for social sciences (SPSS), version 11.5 (SPSS Inc, Chicago IL) and descriptive statistics was calculated.

RESULTS

A total of 300 subjects participated in the study and were in the age range of 15-79 years. All the subjects participated in the study were males and the subjects were divided into three groups according to their age, group I (15-30yrs) group II (31-50yrs) and group III (51-80yrs). Majority of study subjects 170 (56%) were below the age of 30 (Table 1).

Table 1: Representation of the subjects by age

Age group	Number	Percentage
15-30yrs	180	60
31-50yrs	81	27
51-80yrs	39	13
Total	300	100

Among the three groups, 92.7% in Group I, 95.1% in Group II and 92.3% in Group III were aware of the harmful effects of various forms of tobacco. It was noted that smokeless form of tobacco consumption was more common in the younger age (Group I), with 61.5% of subjects using smokeless form as compared to 42% and 37.5% of Group II and III respectively. In contrast, smoking of tobacco was more common in Group III (62.5%) when compared to Group I (38.5%) and Group II (7.4%). Cigarette was observed to be the most popular modality of tobacco smoking, when compared to beedi. (TABLE 2)

Table 2: Relationship of various types of habits and awareness about the harmful effects among various age groups

Habit	Group I	Group II	Group III
Chewing	110(61.50)	34(42.00)	15(37.50)
Smoking	69(38.50)	6(7.40)	25(62.50)
Beedi	10(5.60)	8(9.90)	3(7.70)
Cigarette	87(48.60)	38(46.90)	23(59.00)
Awareness about the harmful effects	166(92.70)	77(95.10)	36(92.30)

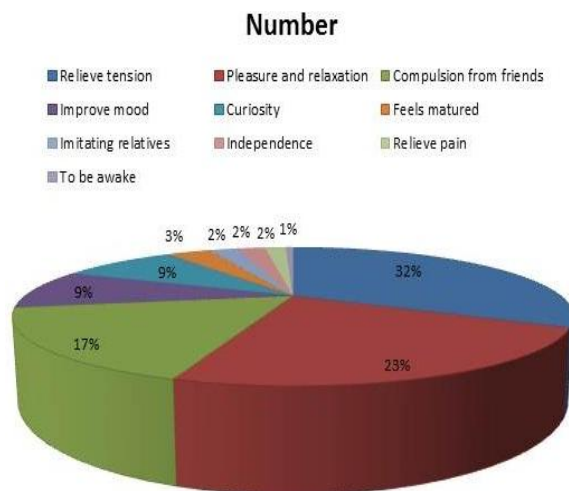
The subjects were divided into three groups according to the type of habit, only smoking were 135 (45%), chewed tobacco were 141 (47%) and subjects who had both forms (smoking and chewing habits) were 24 (8%).

The main reason for smoking was to relieve tension [32%], other reasons cited were pleasure and relaxation [23%] compulsion from friends [17%], mood elevation [9%], curiosity [9%], feel like an adult [3%], show independence [2%], relief from pain [2%] (CHART 1).

While the reasons elicited for chewing tobacco were to relieve tension [29%], compulsion from friends [22%] pleasure [15%], relief from boredom [11%] ,curiosity [7%], alertness during driving [6%], imitating relatives [3%], concentration [3%], refresh breath [2.12%], postpone hunger [1.41%], relief from tooth ache [1.41%] and to make an impression in society [0.70%] (CHART2).

Overall when comparing the various habits, it was found that the main reason cited was to relieve tension [30%] followed by pleasure and relaxation [19.49%], compulsion from friends [17.69%] ,mood enhancement [12.05%], curiosity [8.20%] ,imitating relatives [3.08%], feel matured [2.3%] ,independence [2.05%] (CHART3)

Chart 1: Reasons for smoking



Around 11.2% of the subjects in Group I, 3.7% in Group II and 2.6% in Group III had discontinued their habit and the various reasons were persuasion from family and friends, advertisements, oral changes, and seeing people suffering. Majority of the past and present users were aware about the ill effects of the tobacco habit whereas only 6% of the study subjects were unaware about the harmful effects of tobacco.

Chart 2: Reasons for chewing tobacco

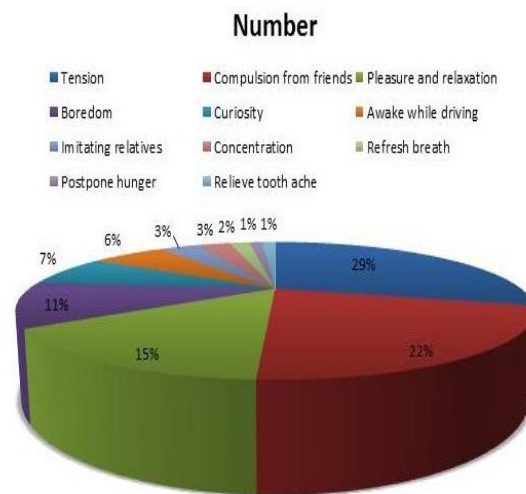
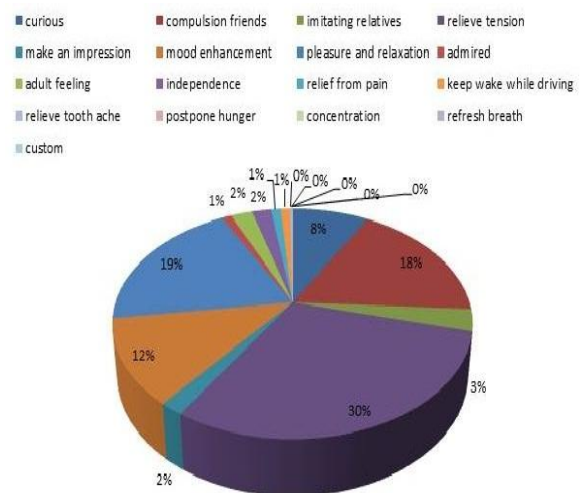


Chart 3: Reasons for initiation of various habits



DISCUSSION

Tobacco is the single largest risk factor for various diseases and its presence in the young heralds more serious problems as they may be exposed for longer periods. In the present study, more than half of the subjects were below 30 years. Similarly, Rani et al. (2003) [28] observed that tobacco use was more prevalent in subjects below 50 years and then it leveled or declined in their study.

Smoking cigarette was more popular than beedi in our study which could be due to urbanization, decline in production and an increase in the income. A variety of reasons were reported in the present study for

initiation of smoking which were relief of tension; compulsion from friends; curiosity; imitating relatives; make an impression in society; mood elevation; pleasure and relaxation; to be admired; feeling matured and independent. These findings are consistent with the studies done by Chadda and Sengupta, 2002[29]; Thanh, 2005[30]; Muttappallymyalil et al, 2013[31]; Binu et al., 2011[32].

Apart from these reasons, 13 subjects in the present study reported that they started the habit to get relief from pain. Although smokers claim that smoking relieves their stress, Parrot (1999) [33] reported that the stress levels in smokers were higher than in non-smokers which he attributed to the change in mood patterns described by smokers. Our study findings are consistent with these results wherein relief from tension emerged as the main reason for tobacco habits. Chadda (2002) [29] reported that in India, the use of smokeless tobacco has become popular during the last few decades. Smokeless form of tobacco was the most commonly used modality in the present study which could be due to its easy access and availability in small sachets, which makes it easy to consume. The increase in consumption of arecanut products could be due to its psychoactive and addictive nature.[34] In the present study the reasons for chewing by the respondents who chewed tobacco were curiosity; compulsion from friends; imitating relatives; relief from tension; making impression; relieve boredom; to be alert and to postpone hunger. These results were in accordance to the findings of Creath et al., 1992 [35]; Chadda and Sengupta, 2002 [29]; Oakley et al.,2005[36] and Thankappan & Thesia2007[3]. Few of the present study subjects had quit tobacco due to various reasons such as advise from family and friends [37,38], advertisements[39], developed oral changes [40] and seeing other tobacco users suffer. Arguderet et al [41] (2012) in their study found that the reasons for cessation were fear of deterioration of health; better model for their children; developed disease; breathlessness; harm to the environment; economic reasons; bad smell; being a good example and few were advised by their physicians. Cessation of the habit might be difficult as nicotine is addictive, and also arecoline, a para-sympathomimetic agent in arecanut could stimulate a sense of wellbeing, thereby reducing tension and making it difficult to stop [42]. Majority (96%) of the subjects in the present study was aware of the harmful effects of tobacco which is in accordance to the study by Zahiruddin et al (2011) [43]. Increased awareness could be due to

increase in literacy, mass media communications, pictorial warnings and various other anti-tobacco initiatives. In spite of high awareness, the incidence of consumption is on the rise. Tobacco cessation programs should be introduced in schools so that we can curb the desire of initiation of abusive habits among the younger generation.

Further research has to be directed towards the psychological tangent of the patient to obtain more insight regarding the habit acquisition, addiction and cessation.

The present study has to be viewed under the light of its limitations. It is a questionnaire based study which is susceptible for biases and study results need to be confirmed in larger sample size.

FUTURE RECOMMENDATIONS

There is need to enhance education and awareness among people using mass media, school based programs etc. with respect to harmful effects of tobacco; manifestations of tobacco related diseases; whom to approach if help required in quitting; and establishment of tobacco cessation clinics to help users quit tobacco through appropriate counseling, motivation and treatment. There is need to conduct studies targeting the role of family members of tobacco users in helping quit tobacco by its users. Further avenues to be explored are various modes of stress management among users of tobacco which might help in the prevention and cessation of tobacco usage.

CONCLUSION

The present study revealed that the respondents had high awareness towards harmful effects of tobacco; many are persistently indulging into these abusive habits. Although tobacco consumption is banned, people disregard these rules due to lack of stringent implementation of laws. Adding further to this scenario is lack of education, peer and cultural influences and socioeconomic inadequacies. Once they come in to force, gradually better results can be expected. There is need to enhance education and awareness among people using mass media, school based programs etc. with respect to harmful effects of tobacco; manifestations of tobacco related diseases; whom to approach if help required in quitting tobacco; and, establishing tobacco cessation clinics. A good knowledge of the psychological effects behind the

initiation and perpetuation of tobacco habit is required to plan effective interventions.

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