

Hidden Facts of Nicotine Habit Among Children in Jaipur District, Rajasthan

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ABSTRACT

Tobacco use is the largest global threat to public health, major factors that encourage people to use smokeless tobacco is its low price, easy availability and widely held misconception that it has medicinal value for toothache, headache and GIT disturbances. Furthermore, in contrast to smoking there is no taboo against smokeless tobacco usage.

In our study children had this habit in very tender age unknowingly and need counseling and awareness at school level in children is paramount along with parents and teachers.

Keywords: Children, tobacco habit, chewing tobacco, supari

INTRODUCTION

Some health problems are wholly due to long-continued habits of abuse which causes very large proportion of the suffering in the world. It is well known that tobacco is used in every conceivable dose, in every nation and in all ranks of society. (1).

Tobacco use is the largest global threat to public health and is anticipated to kill 1000 million people prematurely this century (2).

There is sufficient evidence that the use of smokeless tobacco causes cancer and pre-malignant lesions in humans. Smokeless tobacco contains carcinogens, which contribute to cancers of the oral cavity and the risk of other head and neck cancers. Smokeless tobacco use also causes a number of potentially malignant oral conditions and can lead to nicotine addiction similar to that produced by cigarette smoking (3).

Despite this grim fact, millions of lives can be saved if urgent action is taken towards preventing nicotine addiction among adolescents.

The major factors that encourage people to use smokeless tobacco is its low price, easy availability and widely held misconception that it has medicinal value for toothache, headache and GIT disturbances. Furthermore, in contrast to smoking there is no taboo against smokeless tobacco usage and government's efforts have also focused on eliminating cigarette use than tobacco as a whole.

Tobacco is considered to be a "gateway drug" which may lead to alcohol, marijuana, and other illegal drug use. Global Youth Tobacco Survey (GYTS) reported that among adolescent children smoking form of tobacco is predominant in developed countries whereas in developing countries smokeless tobacco is equally prevalent. Literature has complete information about tobacco habits amongst adolescents but not much has been mentioned about it in children below the age of 12 years. The early age of initiation underscores the urgent need to intervene and protect this vulnerable group from falling prey to this addiction.

The present study was thus undertaken to assess the prevalence of tobacco habits among school children, determine the age of initiation and initiating factors for the same. The specific objectives were (i) to assess the prevalence of tobacco habits among school children, (ii) to determine the age of initiation of these habits, and (iii) to compare the initiating factors of habit.

Some factors associated with youth tobacco use include the following

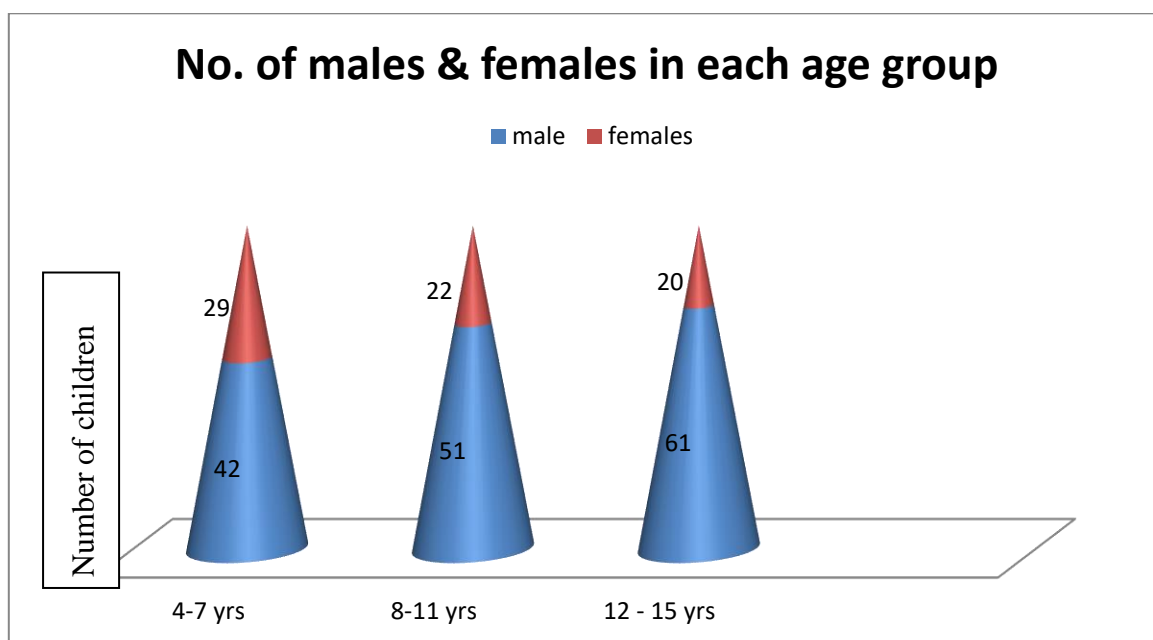
- Low socioeconomic status
- Use and approval of tobacco use by peers or siblings
- Exposure to smoking in movies
- Lack of skills to resist influences to tobacco use
- Smoking by parents or guardians and/or lack of parental support or involvement
- Accessibility, availability, and price of tobacco products
- A perception that tobacco use is the norm
- Low levels of academic achievement
- Low self-image or self-esteem
- Exposure to tobacco advertising
- Aggressive behavior (e.g., fighting, carrying weapons)

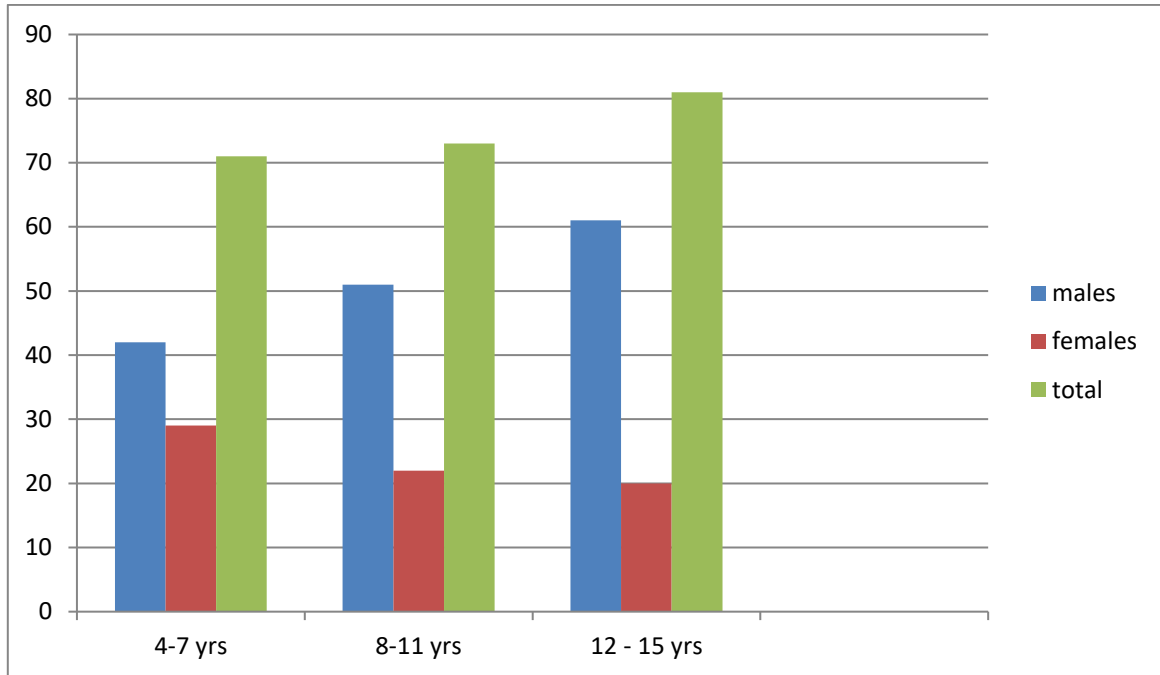
The India – Rajasthan GYTS was a school-based survey of students in standards 8-10, conducted in 2002. A two-stage cluster sample design was used to produce representative data for all of Rajasthan. Total 2011 students participated in the India – Rajasthan GYTS (Global Youth Tobacco Survey) and the results were very helpful to understand the tobacco mania in school children (4), but in this survey students of below class 8 were not included, so to determine the prevalence of habit in very young children we conducted study to assess the prevalence and the factors contributing tobacco habits in young children.

MATERIALS & METHODS

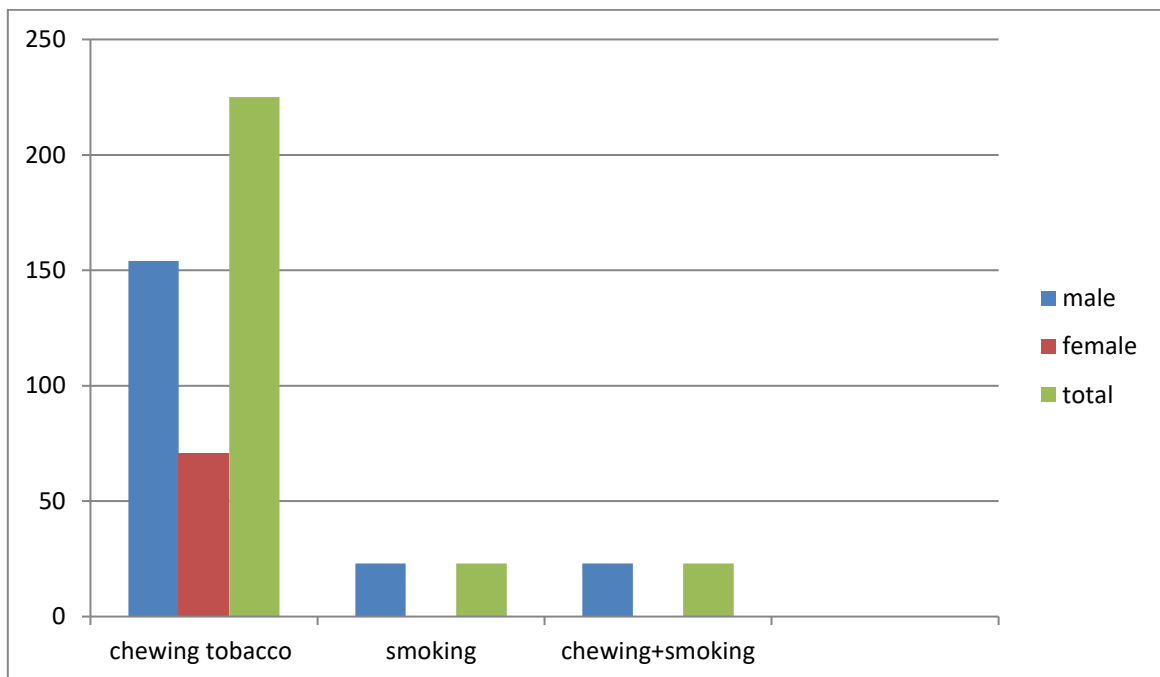
A study conducted on total 310 children who visited out patient department of Jaipur dental college in the time period of 6 months (sept. 2010- feb. 2011), out of which 225 children were gave the history of habit of tobacco. Children were divided into – 4-7, 8-11 and 12-15 year groups. This study was conducted by asking questions from a prepared questionnaire after complete general and oral examination along with the written consent get signed from their parents.

RESULTS

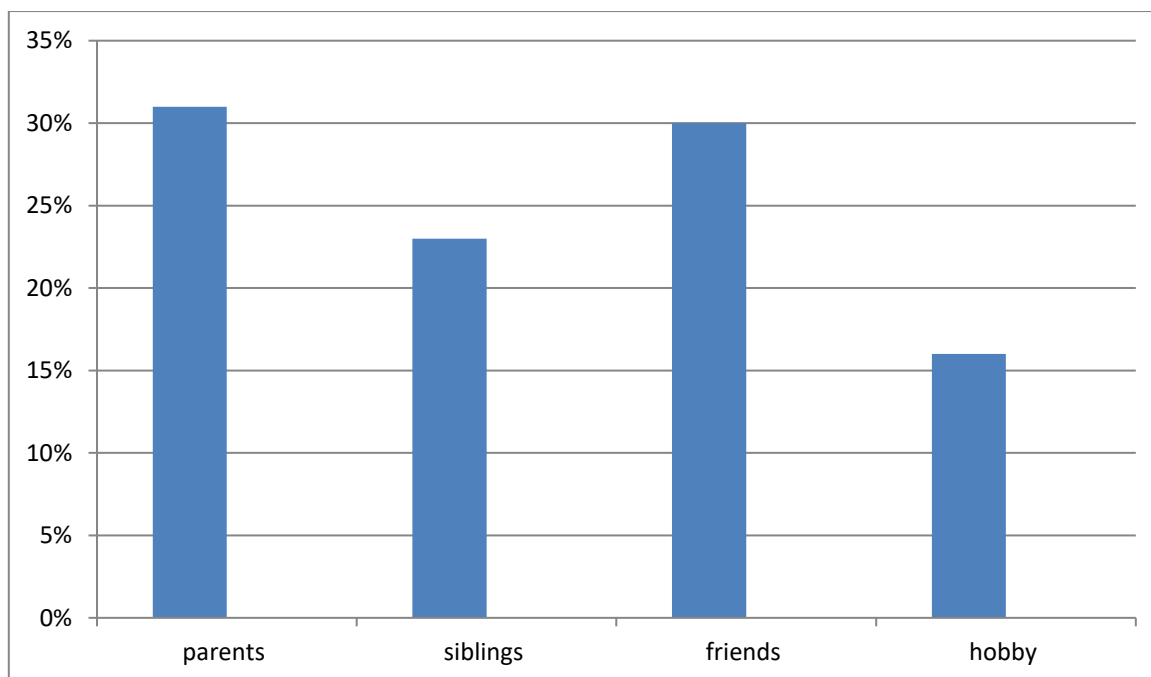




| | males | females | Total |
|-----------|-------|---------|-------|
| 4-7 yrs | 42 | 29 | 71 |
| 8-11 yrs | 51 | 22 | 73 |
| 12-15 yrs | 61 | 20 | 81 |
| Total | 154 | 71 | 225 |



| Type of exposure: | Male | Female | Total |
|-------------------|------|--------|-------|
| Tobacco chewing - | 154 | 71 | 225 |
| Tobacco smoking - | 23 | 0 | 23 |
| Chewing +smoking | 23 | 0 | 23 |



| Inducing factors: | |
|-------------------|-----|
| Parents - | 31% |
| Siblings - | 23% |
| Friends - | 30% |
| Hobby - | 16% |

DISCUSSION

Smokeless tobacco is the cheapest, least taxed and most commonly used tobacco products in India. They are highly addictive and high in carcinogens. They cause a broad spectrum of diseases; yet awareness about their ill-effects is low. Smokeless tobacco products containing arecanut, nicotine, are especially addictive and carcinogenic. All Smokeless tobacco contain nicotine, a potent addictive substance. Chewing allows nicotine, which is a drug which causes addiction, to be absorbed into the bloodstream through the tissues in the mouth. They also contain carcinogenic tobacco-specific nitrosamines, albeit at differing levels. Smokeless tobacco is carcinogenic to human, it can cause localized oral lesions, oral cancer and fatal myocardial infarction etc. also.

The habit usually starts in adolescence and rapidly escalates thereafter. In developed countries, the habit usually starts in the early teens in both boys and girls and stabilizes to adult levels by the late teens. Center for Disease Control and Prevention (CDC) in

the United States (USA) has reported that there is a significant increase in the percentage of high school students that reported current cigarette smoking from 27.5% in the year 1991 to 34.8% in 1999.³ In our study the initiation of habit has done on very early age, even before they enrolled in primary schools. So, present study is an attempt to identify the habit of addiction among 310 children in rural & urban area of Jaipur district.

Comparison with other Countries -

The Global Tobacco Youth Study (GTYS) reported that smoking is the predominant form of tobacco use among adolescent children in developed countries while in developing countries the use of smokeless tobacco is equally prevalent. In urban sites of developing countries, use of one or another tobacco product was reported as 16.9% in Barbados, 9.7% in Tianjin (China), 20.8% in Costa Rica, 15.1% in Fiji, 20.6% in Jordan, 34.1% in Poland, 35.1% in Moscow, 9.9% in Sri Lanka, 34.6% in Kiev

(Ukraine), 14.8% in Venezuela, and 18.0% in Harare (Zimbabwe).⁴

Studies in India –

In India, where tobacco and areca nut use contribute to the oral cancer burden, a 2001 survey of 67 dental students in Bihar, India showed the prevalence of tobacco and/or areca nut use as 81% (tobacco users: 43% were regular; 9.2% occasional; areca nut users: 0.7% regular and 27.5% occasional). Awareness of product-specific ill effects rose from 13% in the first, second and third year to 57% in fifth year students. Such knowledge was much higher about smoking than about smokeless tobacco and areca nut products.¹⁵

Madan et al in his study for tobacco use among school going children in Chennai city, found that prevalence of tobacco use was 41.1% among 1225 school children.¹⁶ Global Youth Tobacco Survey conducted in Delhi, India shows that one in 10 students (10%) had ever used tobacco in any form.¹⁷ A study held in schools of Jaipur concluded low prevalence of smoking and tobacco use in school children and awareness of harmful effects of tobacco is high. This study shows 2.1% boys and 1.7% girls agreed to current tobacco use. 99.5% girls were aware that tobacco use is harmful and similar proportions disliked it. More than 90% students were aware of its importance in causing respiratory diseases and the majority of boys and girls, respectively, knew of its potential to cause general debility (55.7%, 54.1%), heart disease (56.8%, 58.3%), cancer (64.6%, 64.6% use. Smoking cigarettes or *beedis* was present in 1.5% boys and 0.8% girls. Smoking or tobacco use was present in immediate family of 42.1% boys and 32.4% girls but was significantly more in family of children who used tobacco (boys 86.4%, girls 68.8%). 99.2% boys and 99.2% girls knew of its potential to cause impotence (40.9%, 23.2%), ulcer of stomach (48.1%, 46.4%) and death (68.2%, 68.1%). 76.4% boys and 75.7% girls considered quitting to smoke beneficial and 77.1% boys and 75.8% girls knew that passive smoking is

bad. 75.7% boys and 75.0% girls would insist that no-one smokes in their presence.⁶ In our study out of 310 children 225 (72.5%), 154 male (49.6%) and 71 (22.9%) females give positive history of tobacco chewing habit. Students are well known to harmful effects of smoking, and have no knowledge about ill effects of smokeless tobacco.

Factors related to habit of Tobacco -

There are multiple and interacting determinants that affect tobacco habit in children and teenagers. These are physiological factors (nicotine addiction), personal characteristics (demographics, personality, education, information), cognition and skills, environment (social, cultural, economic and political) and other concurrent habits (drinking alcohol, coffee etc.). In children the main influences in initiation of habit are environmental factors and personal characteristics. Tobacco use is significantly more in children when its use is present in family.⁶ In this study following factors were found, family history of tobacco use by elders, peer influence, experimentation, easy access to such products, personality factors, underlying emotional and psychological problems, accompanied risk-taking behaviors, and most importantly, the aggressive marketing strategies of the tobacco industry.

Role of family – This factor emerges as the main factor in our study for initiation of habit in children. Even before enrollment in school they got habit from father, mother or siblings. Usually elders consume tobacco in presence of children and females of family ask the small children to fetch the product from local shops. So, the children got access to the tobacco product without any restriction from elders.⁹

Easy availability of tobacco products - Tobacco products are socially sanctioned but are freely available in every nook and corner throughout the country. Indian govt. has imposed ban on sale of tobacco products near school and colleges, but it is not effectively regulated. In our study children from the age of 5-10 years give history of

supari offered by local vander on the place of bubblegum or toffee. 1 case of 9 years old girl in our study having the same history is suffering from O.S.M.F. due to habit of supari.

Peer pressure – Peer pressure is an important determining factor for initiation of tobacco use among children and adolescents. There are several processes by which being associated with drug-using peers contributes to drug-abusing behavior. Here, modeling and social approval play an important role. Adolescents feel insult when their friends humiliating them because of their no habit of tobacco, so they start the habit to cope up with the rest of tobacco users. In our study students give positive history of peer pressure.

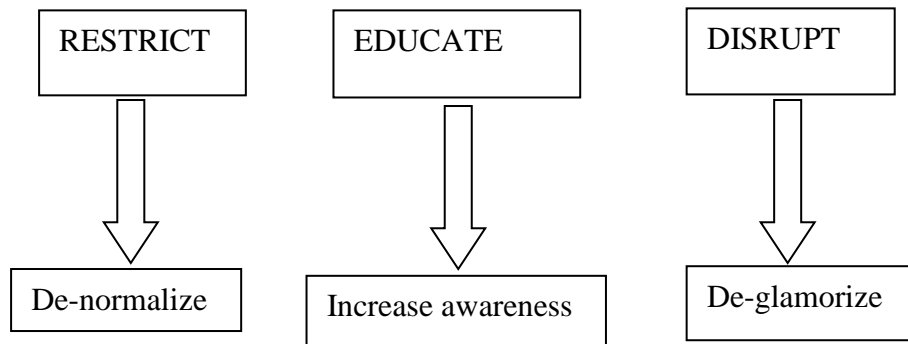
Psychological/emotional factors -

Poor school performance, truancy, low aspiration for future success, and school dropouts have been found to be associated with tobacco habit at an early age. Children and adolescents with anxiety and depression

are likely to use tobacco and other drugs, as these have anxiety relieving and mood elevating properties. Furthermore, such children may socially be anxious and feel isolated in a company of peer groups. Initiation of smoking helps them to identify with the group and hence reduces social anxiety. Children with low self-esteem are likely to be vulnerable to drug use including the tobacco.⁸

Recommended prevention strategy -

Considering the enormous adverse health consequences accompanying tobacco addiction, it is very important to develop preventive strategies to reduce tobacco consumption. Preventive strategies especially focused towards children and adolescents need to be initiated on emergent basis. This is more important for the developing countries like India, which have become the main targets of advertisement and promotional propaganda of various multinational tobacco companies.



CONCLUSION

Despite the impact of movies, music, and peers, parents can be the greatest influence in their kids' lives. Parents should talk to children about the risks of tobacco use – studies have shown that this works. If loved ones suffer with or died from tobacco-related illnesses, let kids know and also that tobacco use strains the teeth, damages the lungs, and can cause a lot of other problems, including cancer. Also mention what it can do to the way a person looks and smells, smoking makes hair and clothes stink, causes bad breath, and stains teeth and

fingerprints. Spit and smokeless tobacco cause bad breath, stained teeth, tooth decay, tooth loss, and bone loss in the jaw, etc.

The children of parents who use tobacco are much more likely to be habitual themselves, the best move, of course, is to try to quit. Meanwhile, elders should not use tobacco around children, don't offer it to them, and don't leave it where they can easily get it. And also start talking about tobacco use to children at the age of 5 or 6 years and continue through their high school years.

There should be awareness programs in primary schools also which are till now out

of the realm of tobacco prevention strategies, which is very sensitive age period and should be monitored.

Declaration by Authors

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Conflict of Interest: The authors declare no conflict of interest.

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