

Adults' Addictive Behavior Can be Prevented if Parents are Aware.

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Research Article

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Abstract

Addiction is characterized as the inability to avoid using a physical drug or engaging in virtual mode behavior. Due to the influence of the situation and surrounding factors, every person performs or engages in some action. This type of behaviour could become addictive if it becomes habit forming. If an action is carried out by unconscious actions, it has the potential to become addictive. A method of calculating operation in relation to an object. If an action is carried out by unconscious actions, it has the potential to become addictive. A method of evaluating behaviour related to an addictive concern that can help determine the presence of addiction. Since the decision to confess to the addiction is unclear. In this regard, tobacco use analysis is an important part of preventing addiction and raising awareness. Tobacco consumption assessment studies in India are urgently needed, and parental care, especially in adults, must be improved to protect them from tobacco and other drug inducing substances. The motivating factor for first-time tobacco use, as well as the effects of smoking, were discovered in this research. The first tobacco, whether smoking or smokeless tobacco, is stimulated by smoking motive influences both directly and indirectly (orally consume).

1. Introduction

In the area of addictive prediction, determining addictive paradoxes is a critical challenge. Realization is the awareness of truth in its broadest sense. Many of us, both physically and virtually, are unaware of our level of addictive concern. Predicting virtual and emotional-based behaviour poses some difficulties in determining an addictive level. Specifically, how to measure the addictive and what types of controls will help us track the addiction and get a clear estimate of the individual's addictive level. The threshold values differ depending on a variety of factors such as age, gender, culture, and so on. Identification of tobacco use triggers and their effects on the emotionally and physically are important for determining the source of current parenting of adults and existing smokers for cessation. This research offers useful knowledge for the next generation of parents who are responsible for their children. Children's treatment and parenting in low and middle-income countries (LMICs) including India face numerous challenges. Since tobacco regulation in India is extensive and complicated [18], and socioeconomic and health disparities are rampant [1]. Tobacco is eaten by approximately 28.6% of the population [2]. Tobacco use is a significant public health problem worldwide, with one-third of the population in India smoking [3]. According to the National Family Health Survey (NFHS), NFHS 3(2005), and NFHS 2(1998), all types of tobacco use increased during the 7-year gap [2]. Parenting and education have played a critical role in preventing tobacco use and increasing knowledge of drugs and their effects. Identification of triggering factors and study of the consequences of tobacco use are critical and essential in this regard. Smokers' reviews and questionnaire results are used to identify causing factors in this evaluation analysis. In India, there were several different types of tobacco products, including smoking and smokeless tobacco (orally consume form). 14 percent of the population drank the smoked version. Indians smoked 6.2 cigarettes a day on average [4]. In India, beedis accounted for the bulk of smoked tobacco consumption [9]. Beedis are taken 8 to 10 times more than cigarettes by people in low socioeconomic groups [10]. According to a

survey of schoolchildren aged 13 to 15, one out of every five non-smokers predicted that they will start smoking during the next year [5]. Tobacco use is increasing at a rate of 2–3% per year [7][8]. Adults are influenced by a variety of factors, both consciously and unknowingly, to make and initiate their first tobacco use. We may divide them into two types of media based on their self-report: direct and indirect media. Direct media include peers, families, and culture. Indirect media include social media, actors/casting mannerism, smoke smells, and other characteristics. Young people are affected by surrogate ads [6]. The amount of tobacco-related education given to schoolchildren has increased [13]. For initial tobacco consumption, a number of sourcing stimulus factors have been identified. The phenomenon was studied as a result, and it was divided into two categories: health problems and drug craving. The consequences are inferred if smokers have developed serious health problems and are attempting to quit smoking successfully, or else they will develop an additional opioid addiction.

2. Materials And Method

We gathered data from 1,246 smokers via a self-questionnaire report at the Tamilnadu Psychiatry Club, Chennai deaddiction drug treatment centre. The data was obtained with the consent of the participants, and the analysis was approved by the Chennai deaddiction drug centre. To identify which is the first tobacco consume among cigarette, chewing tobacco, or snuff (These are the most commonly available types of tobacco in Tamilnadu, India), they were asked to find causing factors "What is the type of initial tobacco consume?" The country with the most consumers of smokeless tobacco [SLT] is India)[11]. SLT usage continued to rise in the age group 15 to 49 years, according to a study that examined nationally representative published data between 2005 and 2009 [12]. This question was posed as a result of TNTS's foundation (Tamilnadu tobacco survey). Demographic information such as "gender" and "age" is gathered. "What is the age of first cigarette or tobacco consumption?" was also asked of those aged 15–18, 19–21, and 22 and up. "How many cigarettes do you smoke on a regular basis?" between the ages of 0 and 3, 4 to 9, 10 to 12, and 13 and up We screened and classified them into direct media based on "What is the triggers component of your first tobacco consumption?" Peers, families, and culture are represented by 1,2,3, as well as indirect media. 4,5,6 represent media, scent, and actor mannerism, respectively, while 0 represents other influences. The basic causes of tobacco use are identified by these questions, and the effects are identified by the following questions. Is there any other drug craving (dual or polydrug) among 1 or 2? 1 means 'yes,' 2 means 'no.' 'Are you having health problems?' A score of 1 indicates severity, while a score of 2 indicates no or average. Tobacco use is a significant risk factor for noncommunicable diseases: By 2030, the overall burden of NCDs is projected to increase from 40% in 1990 to 75%[14]. Tobacco is the leading cause of NCDs, accounting for between 63 and 80 percent of NCD-related deaths in LMICs [15], with 50 percent of these deaths occurring in the active age group of 30 to 69 years [16][17]. Finally, have you tried to stop using tobacco?' 1 denotes 'yes,' while 2 denotes 'no,' or 'never try.' We classified clusters based on the above-screened response and used a two-step cluster analysis to find similarities and significance of factors and their influences. The Chennai Opioid Abuse Center gave their approval to this report (CDDC).

2.1 Cluster details

Males (748) and females (498), totaling 1,246, were divided into three clusters based on identical responses. Cluster I (N = 533) had a combined 42.8 percent of all genders, cluster II (N = 341) had a combined 27.4 percent, and cluster III (N = 372) had a combined 29.9 percent (Table 1). The IBM SPSS 16.1 version was used to conduct a two-step cluster analysis.

Table 1
Cluster details

Cluster	N	% of	
		Combined	% of Total
1	533	42.8%	42.8%
2	341	27.4%	27.4%
3	372	29.9%	29.9%
Combined	1246	100.0%	100.0%
Total	1246		100.0%

In general, reinforcement learning, which is the process of making decisions based on previous results, has an effect on current choices. In the case of addictive behaviour, the reward thinking process arises based on the result of previous action, whether physical activity or virtual interactivity.

2.1.1 Cluster significance Vs starting age of initial cigarette

The triggers element has also been collected, as well as the initial age or first attempt of tobacco use. The analysis recommends intensive parenting care, especially for adults, in order to prevent smoking and other substance use. The majority of smokers started smoking when they were 15–18 years old in cluster III (71.3%) and 19–21 years old in clusters I and II (55.7%) and 41.5 percent respectively (Table 2). As a result, this age group of adults needs additional support from parents and education regarding the risks of using drugs and other tobacco products. In India, children were trained to buy tobacco for women, so they were exposed to tobacco at a young age, leading to early initiation and addiction [19]. Smoking-related influences had a strong and easy impact on adults of all ages. The majority of smokers began their tobacco and other drug use when they were adults.

Table 2
Consolidated FTC data

Gender	Cluster I	Cluster II	Cluster III
Male	71.3%	0	28.7%
Female	0%	68.5%	31.5%
First tobacco consume			
Chewing	0%	0%	100%
Smoking	54.3%	34.7%	11%
Snuff	0%	0%	100%
Starting age of FTC			
15–18	28.7%	0%	71.3%
19–21	55.7%	41.5%	0%
22<	0%	0%	100%
How many cigarettes consume			
1–3	0%	85.1%	14.9%
4–9	0%	38.8%	61.2%
10–12	88.2%	0%	11.2%
13<	6.6%	0%	93.4%
Influencing Factor			
Peer	81.3%	18.7%	0%
Family	56.7%	43.3%	0%
Society	64.6%	35.4%	0%
Media	2.2%	40%	57.8%
Actors mannerism	0%	0%	100%
Secondhand smoke	0%	52.2%	47.8%
Others	0%	0%	100%
Additional drug craving			
Yes	75%	25%	0%
No	0%	30.5%	69.5%
Health Issues			

Gender	Cluster I	Cluster II	Cluster III
Seriousness	84.2%	15.8%	0%
Normal	16.1%	34.8%	49.1%
Quit attempt			
Yes	57.9%	37%	5.1%
No	0%	0%	100%

2.1.2 Cluster significant Vs cigarette density usage

Cigarette use increased as a result of the question about when a smoking habit becomes addictive, regardless of age, and there were more opportunities to use dual or polydrug use. Cluster II people preferred 1–3 cigarettes 85.1 percent, cluster III people preferred 4–9 cigarettes 61.2 percent, cluster I people preferred 10–12 cigarettes 88.2 percent, and cluster III people preferred 13 and above cigarettes 93.4 percent. Overall, 1–3 cigarette smokers account for 328, 4–9 cigarette smokers for 160, 10–12 cigarette smokers for 592, and 13 and above cigarette smokers for 166.

2.1.3 Cluster significance Vs influencing of DM

Different backgrounds and age groups have various influencing factors. Peers, families, and culture all influence adults to use tobacco through direct motives in direct media (DM). Peers are people from a school, college, or friends who are directly motivated to smoke cigarettes. Family gatherings, occasional celebrations, and family members that inspire, as well as society locations such as public places such as shopping malls and parks, where smokers directly or implicitly motivate adults to smoke cigarettes. When tobacco use has a significant impact on the time of adult peers. After a grown-up family, culture is considered important and plays an important role in the consumption of a greater number of drug products. Cluster I peers have an 81.3 percent effect on others, the II family has a 43.3 percent influence, and cluster III is dominated by other variables.

2.1.4 Cluster significance Vs influencing of IM

Many items are given inadvertently, as well as reasons to smoke cigarettes. Smoking is also influenced by platforms such as social media and television shows. At least one scene of cigarette consumption occurs every 40 minutes on television [1]. Many adults have become addicted to smoking in order to gain likes and orders for attention on social networking platforms such as Facebook and mobile entertainment apps such as Tik Tok. Actors'/Casting's smoking habits are indirectly motivators for people to smoke, particularly adults. Some smokers say that the scent of cigarettes and other characteristics pique their interest in using them. When it comes to social media, the actor's demeanour is heavily affected by his or her tobacco use.

In comparison to other indirect media influences, cluster I media has a 2.2 percent impact, cluster II smell has 52.2 percent initial smokers, and cluster III actors mannerism has the highest number of smokers.

3. Phenomenon Of Consequence

Smoking has a direct and indirect effect on dual and polydrug use. Many long-term drug users say that smoking was the initial catalyst, accompanied by quick access to other drug cravings and use. As a result of the addictive nature of smoking and other drug use, the effects vary from person to person. Many side effects are a result of dual and polydrug use, which leads to poor physical and mental health. Drug users are suffering from high blood pressure, nervousness, and a variety of other physical health issues, as well as poor self-esteem, depression, and drug craving, among other psychological issues. As a result, additional drug cravings, health problems, and efforts to quit smoking are investigated. Because of the root of smoking as a disease, it leads to other drug cravings, health problems, and eventually, realisation and severe attempts to quit smoking. People with a broad understanding of tobacco-related harm but little knowledge of the precise consequences of use, according to numerous studies [20].

3.1 Cluster significant Vs additional drug craving

The majority of smokers have admitted to having a constant need for and use of dual and poly substances such as liquor and other opioids. Clusters I and II have 75 percent and 25% dual and polydrug users, respectively. Except for tobacco use, Cluster III reported that they use other drugs infrequently or never.

3.2 Cluster significant Vs Health Issues

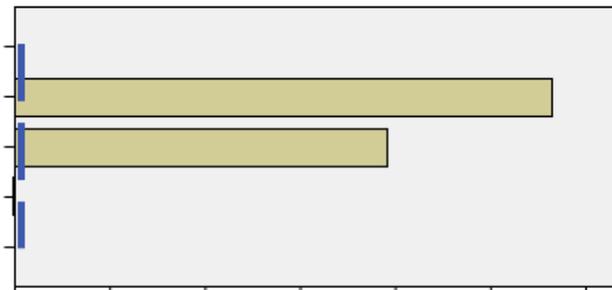
The majority of smokers are suffering from severe health problems as a result of their constant use of tobacco and other substances. Cluster I has 84.2 percent of people with serious health problems or frequent medication consumption, while clusters II and III have normal or no serious health issues.

3.2.1 Cluster significant Vs Quit attempts

Many smokers have decided to quit due to government regulations such as smoking bans in public places and a lack of cigarette supply. Cluster I has 57.4 percent of the population, while clusters II and III have 37 percent and 5% of the population, respectively, attempting and successfully quitting smoking. Cluster III primarily stated that they smoked only 1–3 or few cigarettes a day or were only casual smokers, and that they would try to stop smoking in the future.

Gender

Bonferroni Adjustment Applied

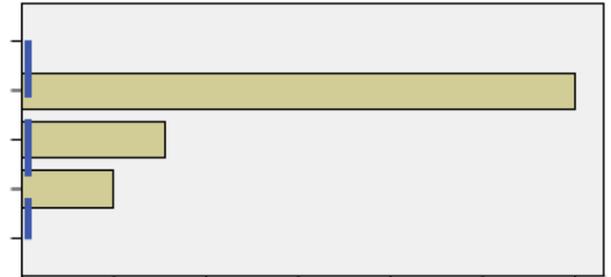


- Log10(Probability): larger value is more significant

— Tolerance — Significance

First tobacco consume

Bonferroni Adjustment Applied

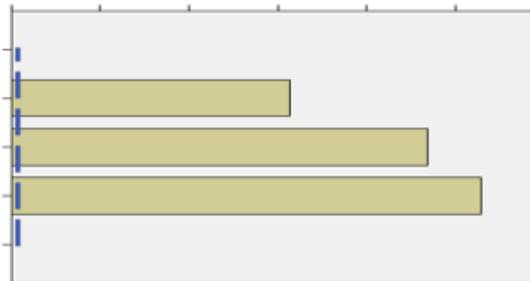


- Log10(Probability): larger value is more significant

— Tolerance — Significance

Starting age of first tobacco

Bonferroni Adjustment Applied

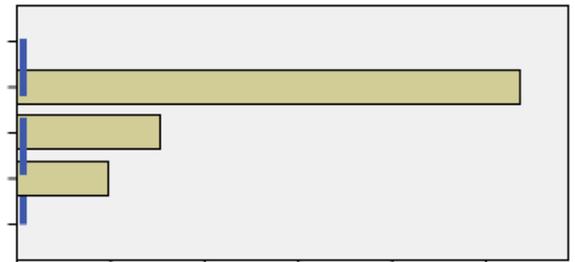


Log10 (Probability): larger value is more significant

— Tolerance — Significance

How many cigarette consumes

Bonferroni Adjustment Applied

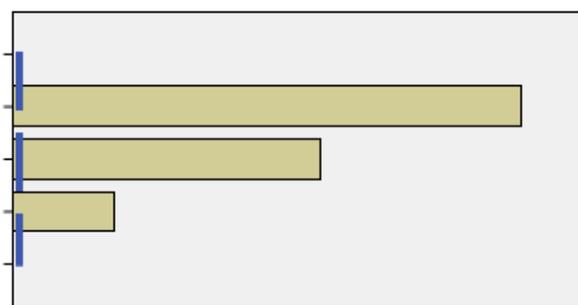


- Log10(Probability): larger value is more significant

— Tolerance — Significance

Influenced by Media

Bonferroni Adjustment Applied

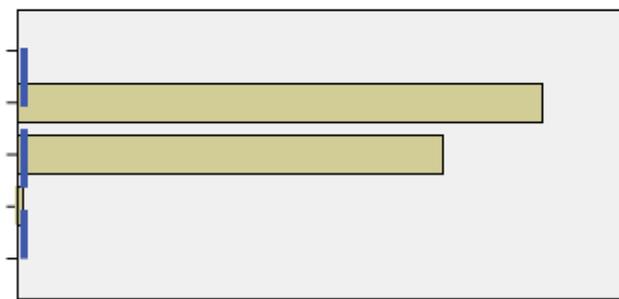


Log10 (Probability): larger value is more significant

— Tolerance — Significance

Additional drug craving

Bonferroni Adjustment Applied

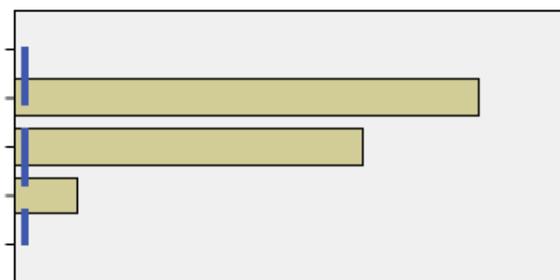


- Log10(Probability): larger value is more significant

— Tolerance — Significance

Health issues

Bonferroni Adjustment Applied

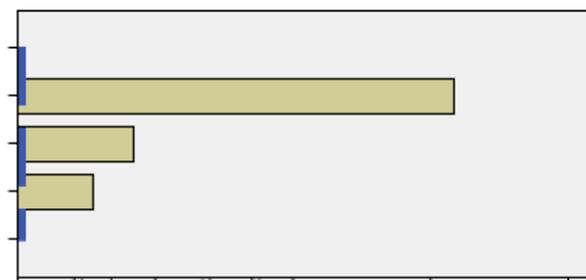


Log10 (Probability): larger value is more significant

— Tolerance — Significance

Quit attempt

Bonferroni Adjustment Applied



- Log10(Probability): larger value is more significant

— Tolerance — Significance

4. Results

The above diagram and cluster graph, as well as the Bonferroni adjustment and significance of each cluster, show that cluster analysis was efficient. Males and females are more important in terms of cigarette intake, according to cluster percentages. Among the three types of tobacco, cigarettes, chewing tobacco, and snuff, cigarettes were the most common, followed by chewing tobacco, and finally snuff. In comparison to 15–18, the age group 19–21 has a higher interest in or likelihood of using tobacco. Finally, people in their twenties and thirties are less likely to start a new habit or smoke cigarettes. Many that have been smoking for a long time, such as those who have had years of experience, smoke 10–12 cigarettes per day on average, while the majority of female smokers, as well as those who have had significant health problems, smoke 1–3 cigarettes per day. Cigarette smokers who consume 4 to 9 cigarettes per day and those who consume 13 or more cigarettes per day are more addicted to smoking and have less interest in quitting. Peers and culture have made significant contributions to the initiation of cigarette or tobacco use at the level of influencing factors. The actor's demeanour, the media, and the scent or properties of the cigarette all play a role in affecting the first cigarette's intake. Family members,

the occasional celebration, and the majority of female smokers have not specified the initial impact of tobacco use so that these types of ignoring causes can be classified.

As a result of the intensified drug cravings, the majority of cigarettes, with the exception of cluster III, use dual and polydrug combinations. Clusters II and III expressed a desire to try new medications. As a result, clusters II and III are struggling with severe health problems or need to see a doctor on a daily basis for other health issues. Smoking cessation is more successful in clusters I and II than in cluster III in this respect. The health problems vary depending on the individual's immune function, smoking and polydrug use, age group, and climate, as well as self-hygienic behaviours.

Overall, cluster I mostly represents males, and their first tobacco consumption (FTC) was a cigarette; they began smoking at the age of 19–21, smoking an average of 10–12 cigarettes per day, and their peers heavily influenced them to take FTC; as a result, they became more interested in dual and poly drug consumption, and they became more likely to face severe health problems, prompting attempts to quit smoking.

Cluster II mostly represents females, and their FTC is also tobacco, with a starting age of 19–21, comparable to cluster I, and 1–3 cigarettes per day used to smoke and smell or other features of cigarettes and culture, as well as having an interest in other drugs and health issues.

Cluster III represents both males and females, and chewing tobacco was used as FTC and 15–18, and later on in life they had a greater interest in 13 cigarettes per day, and actor's demeanour was highly influencing to use cigarette, and there was not much interest in other drugs, and they are still in their early years, so health problems are common and quit attempts are ineffective.

5. Conclusion

Peers, family, and society are specifically initiating first tobacco consumption (FTC) in Tamilnadu, while social media, movie actors' mannerism, and second-hand smoke are indirectly initiating FTC. In this regard, smokers and their personal views as well as their problems with tobacco use are important in raising public consciousness regarding smoking cessation. The causes and effects of smoking are numerous. The use of cigarettes indirectly stimulates the use of other substances. The majority of poly-drug users admit that tobacco was their first drug of choice. In this regard, the factors that lead to the initiation of FTC and their implications are addressed, and a two-step cluster analysis was used to determine them. Overall, many social welfare organisations and the state and the Indian government have taken many rules such as public places smoking bans that are effectively working and reducing cigarette use among people in Chennai compared to the previous few decades. Additional drug cravings, such as for alcoholic drinks, have recently risen steadily, and this needs to be minimised, as well as parental care for the children to shield them from influencing factors that contribute to cigarette and other drug use. This appraisal research primarily focused on the age group and origin reasons for indulging in tobacco use, which contributes to adult parenting knowledge.

Declarations

Conflict Of Interest

None of authors have conflict of interest

Ethical Approval

Tamilnadu Psychiatry Club were approved this research work.

Dataset Available

<https://www.kaggle.com/sabapathi2000/multi-addict-datasettamilnadu>

References

1. Subramanian SV, Ackerson LK, Subramanyam MA, et al. Health inequalities in India: the axes of stratification. *Brow J World Aff.* 2008; 14:127–138.
2. GATS. Global Adult Tobacco Survey: fact sheet, India 2016-17; 2017. http://www.who.int/tobacco/surveillance/survey/gats/GATS_India_2016-17_FactSheet.pdf.
3. IIPS. *Global Adult Tobacco Survey India, 2009-2010*. New Delhi, India: Ministry of Health and Family Welfare, Government of India; 2010.
4. Pawar SP, Pednekar MS, Gupta PC, Shang C, Quah ACK, Fong GT. The relation between price and daily consumption of cigarettes and bidis: findings from TCP India wave 1 survey. *Indian J Cancer*, 2014; 1:S83–S87.DOI:10.4103/0019-509X.147479.
5. Warren W, Jones WR, 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; 367:749–53.
6. International Agency on Tobacco and Health. India: gutka banned ads survive. 2004; 149:3–9.
7. Kumar S. India steps up anti-tobacco measures. *Lancet.* 2000; 356:1089.
8. WHO. *Tobacco or Health: A Global States Report*. Geneva, Switzerland: World Health Organization; 1997.
9. Shimkada R, Peabody JW. Tobacco control in India. *Bull World Health Org.* 2003; 81:48–52.
10. Jandoo T, Mehrotra R. Tobacco control in India: present scenario and challenges ahead. *Asian Pac J Cancer Prev.* 2008; 9:805–810.
11. Sinha DN, Suliankatchi RA, Gupta PC, et al. Global burden of all-cause and Cause-specific mortality due to smokeless tobacco use: systematic review and Meta-analysis. *Tob Control.* 2010; 20:1–8.
12. Mini GK, Thankappan KR. Switching to smokeless tobacco, the most common smoking cessation method: results from the Global Adult Tobacco Survey, India. *Pub Health.* 2016; 136:172–174.

13. Sorensen G, Gupta PC, Sinha DN, et al. Teacher tobacco use and tobacco prevention in two regions in India: results of the global school personnel survey. *Prev Med.* 2005; 41:417–423.
14. Pednekar M, Nagler E, Pawar P, et al. The prevalence of tobacco use among manufacturing workers: findings from the baseline survey of Mumbai worksite tobacco control study. *Prev Med.* 2016;1:13.
15. WHO (2011). *WHO Report on Global Tobacco Epidemic, 2011*. Geneva, Switzerland: The EMPOWER Package.
16. Peto R, Lopez AD, Boreham J, et al. (1994). *Mortality from Smoking in Developed Countries; 1950–2000*. Oxford: Oxford University Press.
17. Jha P, Jacob B, Gajalakshmi V, et al. Nationally representative case-control study of smoking and death in India. *N Engl J Med.* 2008; 358:1137–1147.
18. McKay AJ, Patel RK, Majeed A. Strategies for tobacco control in India: a systematic review. *PLoS ONE.* 2015; 10:e0122610. DOI:10.1371/journal.pone.0122610.
19. Nair S, Schensul JJ, Begum S, et al. Use of SLT by Indian women aged 18–40 years during pregnancy and reproductive years. *PLoS ONE.* 2015; 10:e0119814.
20. McKay AJ, Patel RK, Majeed A. Strategies for tobacco control in India: a systematic review. *PLoS ONE.* 2015; 10:e0122610. DOI:10.1371/journal.pone.0122610.