FROM EDUCATION TO ADVOCACY: SURVEYING SMOKING CESSATION KNOWLEDGE AMONG STUDENTS IN NORTH MAHARASHTRA

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ABSTRACT

Introduction - Smoking cessation is a significant public health priority, with pharmacists playing a key role in assisting individuals to quit smoking and mitigate associated health risks. Tackling smoking addiction necessitates a thorough understanding of its various aspects, including the addictive properties of tobacco, its detrimental health effects, and the dangers of second-hand smoke exposure. Pharmacological and behavioural interventions, such as nicotine replacement therapies, alternative pharmacological options, and counselling techniques, are vital tools for effective cessation. Equipping pharmacy students with the necessary knowledge and skills through targeted education and surveys prepares them to overcome barriers, educate patients, and implement effective strategies, enhancing public health outcomes. **Materials and Methods -** A structured questionnaire was developed and distributed among participants using convenient sampling. The questionnaire included questions related to smoking, its adverse effects, and various cessation methods to evaluate awareness of smoking cessation. Data management and statistical analysis were performed using Microsoft Excel software. **Results and Discussion -** A total of 359 male students were participated. The findings, summarized in Table 1, reveal that among the 291 participants, a significant proportion (81.1%) are from nucleated family type and lacked adequate awareness of effective and positive smoking cessation strategies. **Conclusion -** The majority of teenage participants were unaware of effective methods for quitting smoking successfully and completely. Awareness programs, social campaigns, expert talks, and educational lectures are crucial in addressing this lack of awareness and fostering healthier behaviors.

INTRODUCTION

Understanding smoking addiction

Smoking addiction poses a substantial global public health challenge, deeply rooted in the highly addictive properties of tobacco and the severe health risks it entails. Tobacco contains nicotine, a powerful substance that fosters dependence, making it difficult for individuals to quit once they start. This addiction not only impacts the individual smoker but also imposes a heavy burden on healthcare systems and society as a whole. The harmful consequences of smoking extend beyond respiratory issues, such as chronic bronchitis and lung cancer, to include cardiovascular diseases, stroke, and a host of other serious health conditions. Furthermore, the widespread prevalence of smoking contributes to passive smoke exposure, which poses significant health risks to non-smokers, including children and pregnant women. Addressing smoking addiction requires a comprehensive approach that combines public health campaigns, policy interventions like taxation and smoking bans, and accessible cessation programs to mitigate its far-reaching impact on global health.[1] Understanding the mechanisms of addiction, the harmful components of tobacco, and the impact of both direct and additional smoke is crucial in combating this epidemic. The highly addictive nature of smoking is primarily linked to nicotine, the key psychoactive compound found in tobacco. Once inhaled, nicotine swiftly enters the bloodstream and travels to the brain in a matter of seconds. There, it binds to nicotinic acetylcholine receptors, triggering the release of neurotransmitters like dopamine. This surge of dopamine generates a sense of pleasure and reward, activating the brain's reward pathways and reinforcing the smoking behaviour. As a result, individuals often find it extremely challenging to quit smoking. Beyond nicotine, tobacco

smoke contains thousands of other chemicals that contribute to its addictive properties. For instance, ammonia is added to enhance the absorption of nicotine in the lungs, increasing its potency. Additionally, compounds such as acetaldehyde may work in synergy with nicotine to amplify its effects, further entrenching the addiction. Over time, the brain undergoes significant changes in response to continuous nicotine exposure. This leads to the development of tolerance, where progressively higher doses of nicotine are required to achieve the same pleasurable effects. Concurrently, dependence sets in, characterized by the onset of withdrawal symptoms when nicotine use is reduced or stopped. These physiological adaptations create a vicious cycle, making smoking cessation an arduous process for many.[2]

Health risks associated with smoking
Smoking is one of the leading causes of preventable illnesses and deaths worldwide, posing serious health risks that impact almost every organ in the body. Smoking greatly heightens the risk of heart attacks, strokes, and peripheral artery disease. It damages blood vessel linings, encourages blood clot formation, and impairs oxygen delivery by raising carbon monoxide levels in the bloodstream. Tobacco smoke contains harmful carcinogens like benzene and formaldehyde, which directly damage lung tissues, increasing the risk of lung cancer. Additionally, smoking is the primary cause of chronic obstructive pulmonary disease (COPD), including chronic bronchitis and emphysema, both of which significantly impair lung function and diminish quality of life. Beyond lung cancer, smoking is strongly linked to cancers of the mouth, throat, oesophagus, bladder, pancreas, and stomach. For women, smoking can result in infertility, pregnancy complications, and low birth weight in new-borns. In men, it is associated with reduced sperm quality and erectile dysfunction. Smokers often have a compromised immune system, making them more vulnerable to infections such as pneumonia and influenza. The health risks of smoking are widespread and severe, emphasizing the critical importance of tobacco cessation for improved health and longevity.[3]

Effects of passive smoke
Passive smoke, poses severe health risks to non-smokers, including children and pregnant women. It contains the same harmful chemicals as directly inhaled smoke and can cause Cardiovascular Issues (Increased risk of heart disease in adults), Respiratory Problems (Asthma, bronchitis, and other respiratory illnesses, especially in children), Sudden Infant Death Syndrome (Exposure to second-hand smoke significantly increases the risk of SIDS in infants), Cancer Risks (Non-smokers exposed to second-hand smoke are at risk of developing lung cancer), etc.[4]

Comprehensive approach to smoking cessation
Smoking cessation is critical for public health due to the extensive risks of tobacco use. Pharmacological approaches significantly aid in overcoming nicotine dependence by addressing its physiological and psychological components. These approaches are categorized into Nicotine Replacement Therapies (NRTs) and non-NRT pharmacological options, each with distinct mechanisms and considerations. Careful assessment of side effects is essential. NRTs may cause skin irritation or gastrointestinal discomfort. Varenicline and bupropion require monitoring for neuropsychiatric effects, particularly in those with mental health conditions.[5-6] Effective cessation begins with setting a clear goal of complete abstinence. Selecting appropriate medication tailored to the individual's needs and ensuring optimal dosing are essential. Regular monitoring of therapeutic outcomes allows necessary adjustments to maximize benefits while minimizing risks.

Nicotine Replacement Therapies (NRTs)[5-9]
NRTs deliver controlled nicotine doses, reducing withdrawal symptoms and cravings without the harmful chemicals in tobacco.
Patches: Provide steady nicotine release over 16–24 hours, peaking between 6–12 hours, with an 82% bioavailability.
Gums: Chewed intermittently for about 30 minutes, these offer 1.4–3.4 mg nicotine per piece, with up to 30 pieces allowed daily for acute cravings.
Lozenges: Suitable for those intolerants to gum, lozenges dissolve discreetly and effectively manage cravings.
Nasal spray: Delivers fast nicotine relief via two squirts per dose.
Inhalers: Mimic smoking rituals, delivering 4 mg nicotine through 80 puffs.
Combination therapy, such as patches with gum, enhances effectiveness, and gradual tapering aids in nicotine independence.[6]

Non-NRT Pharmacological Options[7-9]
Non-NRT medications target nicotine addiction through neurochemical pathways:
Varenicline: A partial agonist at nicotinic receptors, reducing cravings and blocking nicotine's effects. Side effects include nausea and mood changes, necessitating caution in psychiatric cases.
Bupropion: A norepinephrine -dopamine reuptake inhibitor, effective against withdrawal symptoms but contraindicated in seizure or eating disorder histories.
Clonidine: An α2 adrenergic agonist suppressing withdrawal symptoms like tension and restlessness.
Nortriptyline: A tricyclic antidepressant used as a second-line therapy.

Behavioural and Non-Pharmacological interventions in smoking cessation
Smoking addiction involves both physical dependence on nicotine and ingrained behavioural habits. While pharmacological treatments like nicotine replacement therapies (NRTs) are widely used, behavioural and non-pharmacological interventions are equally critical for addressing the psychological and emotional aspects of smoking, ensuring long-term success and relapse prevention. These include counselling techniques, self-help resources, and support systems.[9]

1.   Behavioural counselling techniques
Motivational Interviewing (MI) and Cognitive Behavioural Therapy (CBT) are two key methods for helping individuals quit smoking. MI is a patient-centered approach that enhances motivation by resolving internal conflicts about quitting, using empathetic listening and non-judgmental support. It empowers individuals to make their own decisions while highlighting the benefits of quitting. CBT focuses on identifying and changing negative thoughts and behaviors associated with smoking. It helps individuals recognize triggers and develop healthier coping mechanisms, reinforcing positive behaviors and challenging beliefs that smoking provides relief. Combining CBT with pharmacological treatments often improves quit rates.[10]

2.   Self-Help Resources and Apps
Mobile apps like Smoke Free, Quit Genius, and Quit Now! are valuable tools for smoking cessation. They offer features such as progress tracking, daily motivational messages, and strategies for managing cravings. These apps also provide information on health benefits, relaxation techniques, and social support through online communities. By keeping users accountable and motivated, these digital resources significantly enhance quit rates.[11]

3.   Support systems: Quit Lines and Community programs
Quit lines provide free, confidential telephone Counselling with trained professionals who offer personalized advice and emotional support. Community programs, available in settings like hospitals and clinics, offer face-to-face group Counselling, workshops, and educational sessions on managing stress and avoiding triggers. Support groups, both in-person and virtual, create a sense of camaraderie and shared effort, making the quitting process less isolating. These support systems, especially when combined with NRTs, improve the chances of successfully quitting smoking.[5]

Role of Pharmacy Students and Pharmacists in smoking cessation
Smoking remains one of the most significant causes of preventable deaths globally, leading to a myriad of serious health complications such as cardiovascular diseases, lung cancer, respiratory disorders, and strokes.

Addressing this critical public health issue requires a collaborative and informed effort, where pharmacy students and pharmacists emerge as key contributors. Armed with specialized knowledge and training, they hold a vital position in the fight against tobacco use. Their role extends beyond simply advising patients to quit smoking; they are instrumental in educating the public about the dangers of tobacco consumption, fostering awareness, and guiding individuals through the challenging process of cessation. This article delves into the multifaceted roles pharmacy students and pharmacists play in smoking cessation. It examines their perception of their responsibilities, their understanding of effective strategies for initiating meaningful conversations about quitting, and their awareness of the ethical and legal aspects involved in tobacco cessation efforts. Through their active participation, these healthcare professionals significantly contribute to promoting healthier communities and advancing public health initiatives.[13] Pharmacy students and pharmacists hold a unique position to influence health behaviors due to their direct access to patients and the trust they often share. Despite this, many pharmacists perceive their role primarily as medication dispensers and may overlook their potential in lifestyle interventions, such as smoking cessation counselling. However, their role in educating patients about the hazards of smoking, the benefits of quitting, and the support resources available is crucial. Pharmacy students, through their academic and clinical training, gain comprehensive knowledge of pharmacological options for smoking cessation, including nicotine replacement therapy (NRT), varenicline, and bupropion. They also learn the importance of motivating behaviour change, encouraging patients, and connecting them to counselling services or quit lines. Raising awareness among pharmacy students and pharmacists about their significant role in smoking cessation is vital. By educating patients on the health risks of smoking and providing personalized advice and tailored cessation programs, pharmacists can significantly contribute to reducing smoking-related illnesses and deaths. Their ability to deliver individualized care ensures patients receive the support they need to quit smoking successfully.[13]

Knowledge of strategies for initiating conversations about quitting
One of the primary barriers to smoking cessation is the reluctance of patients to discuss their smoking habits with healthcare providers. Pharmacy students and pharmacists need to possess effective communication skills and be confident in initiating conversations about quitting smoking. A common strategy is the **"5 A's" approach**, which includes:
1.   **Ask:** Inquiring about the patient's smoking status.
2.   **Advise:** Providing clear, non-judgmental advice on the importance of quitting.
3.   **Assess:** Evaluating the patient's readiness to quit.
4.   **Assist:** Offering cessation resources, including NRTs or behavioural counselling.

5. **Arrange:** Following up to ensure continuous support.

Pharmacy students should be train in utilizing these strategies during their clinical rotations and internships, ensuring that they feel equipped to discuss smoking cessation with patients. Furthermore, role-playing scenarios and communication workshops can help build confidence and improve patient interaction skills. A patient-centered approach, where pharmacists actively listen to the patient's concerns and motivation for quitting, can lead to better outcomes in smoking cessation.[5]

Awareness of Ethical and Legal considerations
Pharmacy students and pharmacists play a vital role in healthcare, particularly in smoking cessation counselling, which comes with significant ethical and legal responsibilities. A key ethical obligation is maintaining patient confidentiality. Discussing smoking habits can make patients feel vulnerable, especially if they have struggled to quit in the past. To address this, pharmacists must create a safe and private environment, ensuring that all shared information remains confidential. Equally important is the ethical principle of non-judgmental care. Pharmacists should approach smoking cessation with empathy, understanding the addictive nature of smoking without stigmatizing or shaming patients. This compassionate approach helps patients feel supported rather than judged, fostering a positive environment for change. On the legal side, pharmacists need to be well-versed in regional tobacco control laws, including regulations on the sale of tobacco products, advertising restrictions, and public smoking guidelines. Additionally, they must understand the legal aspects of providing smoking cessation aids and medications. Adhering to prescription regulations and following protocols for over-the-counter nicotine replacement therapies (NRTs) are critical to ensure compliance and effective patient care.[14-15]

Barriers and Challenges in smoking cessation
Smoking is a leading cause of preventable death globally, and despite the well-established health risks, quitting remains a significant challenge for most off individuals. Although pharmacological treatments, Behavioural therapies, and support systems are available, various barriers hinder effective smoking cessation. Understanding these obstacles is crucial, especially for pharmacy students and practicing pharmacists, as they play a pivotal role in guiding patients toward successful cessation.[16]

Common barriers to smoking cessation
1. **Lack of motivation:** One of the most prominent barriers to quitting smoking is the lack of motivation. Many smokers may not perceive the immediate benefits of quitting, particularly if they do not yet experience significant health issues related to smoking. Others may feel that they are too addicted to quit or that the effort involved outweighs the perceived benefits. The psychological dependence on smoking can also contribute to this lack of motivation, as some individuals view smoking as a way to manage stress, anxiety, or boredom.

2. **Withdrawal symptoms:** Nicotine addiction is a powerful force that can make quitting extremely difficult. Withdrawal symptoms—such as irritability, anxiety, restlessness, difficulty concentrating, and intense cravings for nicotine—are common and often overwhelming for those attempting to quit. These physical and psychological symptoms make it hard for smokers to maintain their commitment to quitting, leading many to relapse even after short periods of abstinence.

3. **Social and Environmental Influences:** Smoking is often deeply embedded in a person's social circle, especially among peers who smoke or in environments where smoking is socially acceptable. Social situations, such as gatherings or breaks at work, can trigger cravings and make it harder to resist the urge to smoke. Additionally, the presence of smoking advertisements, tobacco products in stores, or even certain smells can act as constant reminders of the habit, weakening an individual's resolve.

4. **Fear of weight gain:** Many individuals fear weight gain after quitting smoking, as nicotine acts as an appetite suppressant. This concern can deter smokers from quitting, as they may feel that gaining weight will negatively impact their health or self-esteem. This fear is especially prominent in women, who are more likely to express concerns about post-cessation weight gain.

5. **Mental health issues:** Smokers with underlying mental health conditions, such as depression or anxiety, may face additional challenges in quitting. Smoking is often used as a coping mechanism to manage symptoms of these conditions, and quitting can exacerbate feelings of anxiety or depression, especially if not properly managed. Without the right support systems in place, these individuals may find it particularly challenging to quit.[17]

Challenges faced by pharmacists in providing smoking cessation support
Pharmacists are in a unique position to assist with smoking cessation due to their accessibility, knowledge of pharmacological therapies, and counselling skills. However, they face some challenges in delivering effective cessation support:
1. **Lack of Time and Resources:** Pharmacists often work in fast-paced environments where patient interactions are brief. They may not have enough time to engage in detailed counselling sessions or provide personalized cessation plans. This time constraint limits the effectiveness of interventions, especially in complex cases where a more tailored approach is needed.

2. **Limited training in behavioural counselling:** Although pharmacists are well-versed in the pharmacological treatments for smoking cessation, many may not have sufficient training in behavioural counselling techniques. Smoking cessation is not solely about prescribing nicotine replacement therapies (NRT) or medications; it also requires addressing the behavioural and psychological aspects of addiction. Pharmacists may feel unprepared to provide counselling on topics such as stress management or coping strategies for cravings.

3. **Patient Resistance and Reluctance:** Many patients are resistant to smoking cessation advice or simply lack the desire to quit. They may not trust the pharmacist's role in smoking cessation or feel that their health problems are not severe enough to warrant quitting. Overcoming this resistance requires pharmacists to employ effective motivational interviewing techniques and build trust with their patients, which can be challenging without the proper communication skills.

4. **Complex patient profiles:** Some patients may have complex medical histories, including comorbid conditions such as heart disease, diabetes, or mental health disorders. Tailoring smoking cessation treatment to these individual needs requires careful assessment and planning, which can be difficult for pharmacists who may not have access to a comprehensive medical history or may need to collaborate with other healthcare professionals.

5. **Stigma and Judgment:** There is still a significant stigma surrounding smoking, and some pharmacists may unintentionally perpetuate this by making judgments about patients who continue to smoke. Patients may feel judged or embarrassed to seek smoking cessation help, leading them to avoid the pharmacy or refuse support. This barrier can be overcome by creating a non-judgmental, supportive environment and demonstrating empathy.[18]

Public Health and Policy awareness on smoking cessation

Smoking is a leading cause of preventable diseases and deaths worldwide. To address this global health crisis, numerous public health initiatives and policies have been established to promote smoking cessation and reduce tobacco use. Awareness of these initiatives, laws, and regulations is crucial for healthcare professionals, including pharmacists, as they play a vital role in educating patients and advocating for public health policies. This article explores national and international smoking cessation initiatives and the laws and regulations designed to control tobacco use.[19]

National and International initiatives for smoking cessation
World Health Organization (WHO) Framework Convention on Tobacco Control (FCTC)

The WHO Framework Convention on Tobacco Control (FCTC), established in 2003, is the world's first international public health treaty aimed at reducing tobacco consumption. It is a legally binding agreement between countries to implement evidence-based tobacco control measures. The FCTC emphasizes the importance of reducing the demand for tobacco products by implementing policies such as: **Tobacco advertising bans**: Prohibiting advertising, promotion, and sponsorship of tobacco products. Health warnings: Requiring graphic health warnings on tobacco packaging. Tobacco tax increases: Raising taxes on tobacco products to discourage consumption. Support for cessation: Encouraging access to smoking cessation programs and medications. Smoke-free environments: Enforcing policies that prohibit smoking in public places. By adopting the FCTC, countries commit to reducing smoking rates, protecting non-smokers from exposure to second-hand smoke, and providing support for individuals seeking to quit smoking. The treaty serves as a framework for national tobacco control policies, guiding countries in the fight against tobacco-related diseases.[20]

National Tobacco Control Program (NTCP) in India
India has recognized the growing burden of tobacco use and its impact on public health. The National Tobacco Control Program (NTCP), launched in 2007 by the Ministry of Health and Family Welfare, aims to reduce tobacco consumption through a combination of health promotion, regulation, and education. The program's objectives include Awareness campaigns: Raising public awareness about the harmful effects of tobacco use. Cessation support: Providing resources and counselling to help individuals quit smoking. Enforcement of tobacco control laws: Strengthening the implementation of tobacco control laws, such as the Cigarettes and Other Tobacco Products Act (COTPA) of 2003. Tobacco-free environments: Promoting smoke-free public spaces and workplaces. The NTCP focuses on both rural and urban populations, targeting high-risk groups such as youth and marginalized communities. Its success depends on the active participation of healthcare providers, educators, and law enforcement to create an environment where tobacco use is no longer socially acceptable.[21]

Laws and Regulations related to smoking
Tobacco sales restrictions - Many countries, including India, have implemented laws restricting the sale of tobacco products, aiming to reduce accessibility and consumption. In India, the Cigarettes and Other Tobacco Products Act (COTPA) of 2003 imposes several regulations to control tobacco sales: No sales to minors: Tobacco products cannot be sold to individuals under the age of 18. Ban on tobacco sales in certain areas: The sale of tobacco products is prohibited within 100 yards of educational institutions. Display of health warnings: Tobacco products must carry graphic health warnings, clearly stating the risks associated with smoking. These restrictions aim to reduce tobacco consumption by

limiting access to tobacco products, particularly for vulnerable populations such as adolescents and children. By enforcing these laws, governments can help reduce the initiation of smoking, especially among young people.[22]

Public smoking bans - Public smoking bans are one of the most effective measures to protect non-smokers from the harmful effects of second-hand smoke. Many countries, including India, have enacted laws that prohibit smoking in enclosed public spaces, workplaces, and public transportation. In India, the implementation of COTPA has resulted in Banning smoking in public places: Smoking is prohibited in schools, hospitals, offices, and public transport. Designated smoking zones: In some public spaces, smoking is allowed only in designated areas to minimize exposure to second-hand smoke. These regulations help reduce the public health impact of second-hand smoke and encourage smokers to quit by removing smoking-friendly environments. Public smoking bans also help reduce tobacco consumption by making it less socially acceptable.[23]

RESULTS AND DISCUSSION
The **Figure No 01** and **Table No 01** provides valuable insights into the smoking cessation awareness levels and demographics of the participants. The figure is evident that there are substantial gaps in participants' understanding of critical aspects of smoking cessation. For instance, 81.06% of participants were unaware of common myths about smoking cessation, while 83.29% lacked awareness of the most common health risks associated with smoking. These figures highlight an urgent need to address misinformation and educate individuals about the dangers of smoking. Similarly, 65.18% of participants were uninformed about the consequences of smoking during pregnancy, and 65.46% were unaware of the impact of passive smoking on non-smokers, both of which are crucial areas for public health education. Knowledge about behavioural and pharmacological interventions was moderate, with 67.41% aware of the mechanism of nicotine replacement therapy and 68.24% familiar with behavioural strategies used in smoking cessation. However, this indicates that a significant proportion still requires further education to fully understand these cessation tools. The table further reveals the demographic distribution of participants, which provides context for interpreting the knowledge gaps. The majority of participants were aged 17–19 years (65.5%), indicating that the study largely targeted a young demographic, a critical group for smoking cessation efforts as they are at a formative stage in developing lifelong habits. Most participants came from nuclear families (81.1%), and a significant proportion (57.7%) resided in rural areas, suggesting that socioeconomic and cultural factors may play a role in shaping their awareness and attitudes toward smoking cessation. Regarding family income, the majority belonged to families with an annual income between ₹51,000–₹70,000 (62.1%), which points to the influence of economic factors on access to information and cessation resources. Additionally, 32.6% of participants reported a family history of smoking or tobacco use, which could contribute to normalization of smoking behaviors and complicate cessation efforts.

Table No. 01: Demographic Details and Socio-economic factor.

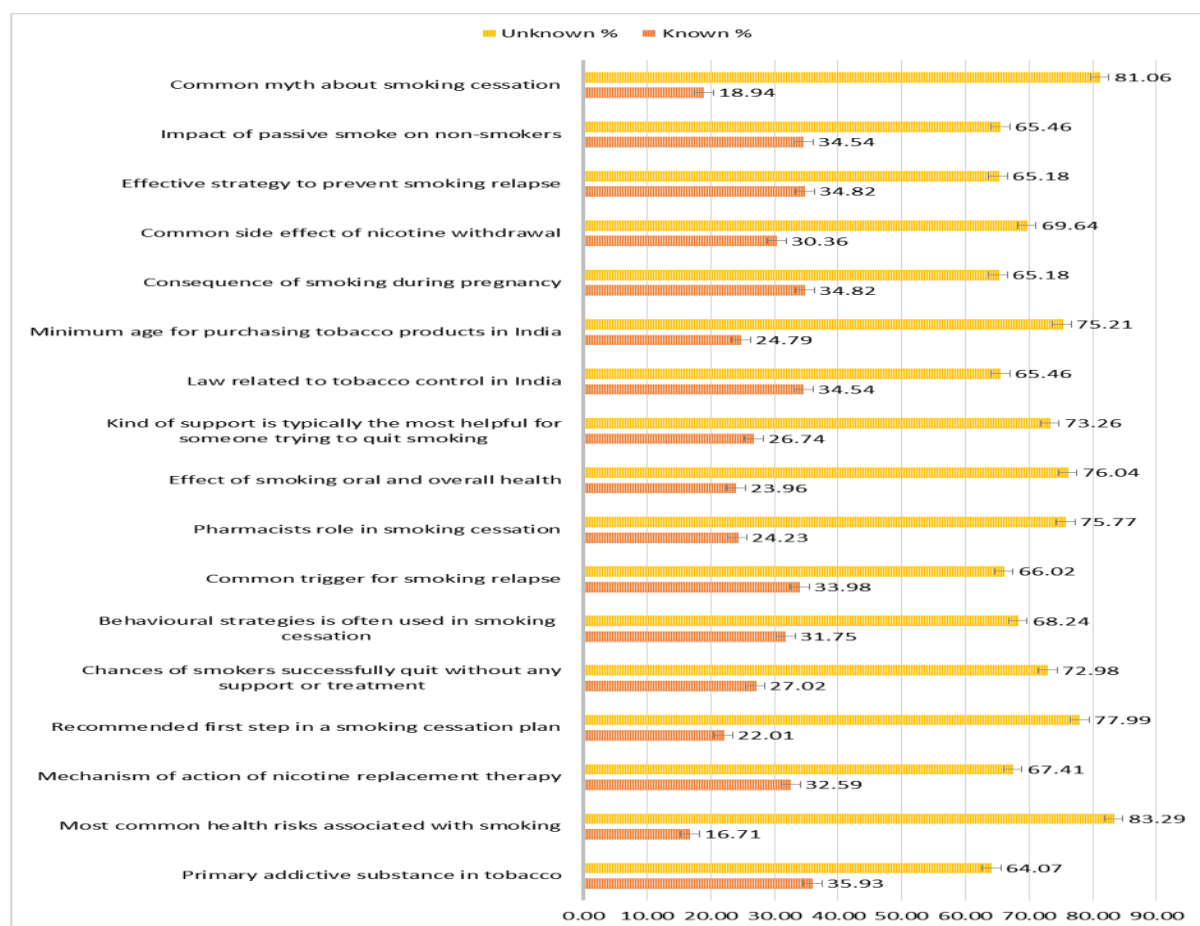| Data		Participants	
		Number	**%**
Age (in Years)	17– 19	235	65.5
	20– 22	116	32.3
	Other	8	2.2
Family	Nuclear	291	81.1
	Joint	59	16.4
	Extended	5	1.4
	Single parent	4	1.1
Residence	Urban	152	42.3
	Rural	207	57.7
	Metro city	0	0.0
Family annual income	20 K - 50 K	67	18.7
	51 K - 70 K	223	62.1
	71 K - 100 K	37	10.3
	> 01 Lakh	23	6.4
	> 05 Lakh	8	2.2
	> 10 Lakh	1	0.3
Family history of smoking or tobacco	Yes	117	32.6
	No	172	47.9
	Maybe (Doubt)	46	12.8
	Do not know	24	6.7

Figure No. 01: Participants responses to topics asked.

The participant's responses underscores the importance of tailored interventions to address the specific needs of this population. Awareness campaigns should prioritize dispelling myths about smoking cessation, emphasizing the health risks of smoking, and educating individuals about effective behavioural and pharmacological strategies. Given the rural dominance and socioeconomic background of the participants, programs should be designed to be accessible and culturally relevant, with a focus on empowering young individuals to make informed decisions. Moreover, special attention should be given to participants with a family history of tobacco use, as they may require additional support to overcome the influence of familial smoking behaviors. Overall, these findings highlight the need for a multifaceted approach to smoking cessation awareness, incorporating education, counselling, and community-based initiatives.

CONCLUSION
Tobacco poses significant health, social, economic, and environmental challenges, contributing to 13% of deaths in India by 2020. Tobacco dependence resembles a chronic disease, with users often cycling through remission and relapse. Recognizing its chronic nature is vital for consistent, long-term treatment. Modern interventions can double cessation rates compared to no treatment, enhancing patient satisfaction. Along with dental professionals, pharmacist play a crucial role in influencing patient behaviour. Coordinated efforts, including financial and human resource mobilization, are essential to integrate tobacco control into health and development strategies for sustained impact. Understanding the addictive nature of nicotine, the comprehensive health risks of smoking, and the danger of second-hand smoke underscores the critical need for smoking cessation efforts. Tobacco use remains a major public health concern, demanding education, awareness, and supportive interventions to protect both smokers and non-smokers. Pharmacists and pharmacy students are uniquely positioned to play a pivotal role in this endeavour, serving as advocates for a smoke-free society and contributors to global and national anti-tobacco initiatives like WHO's FCTC and India's NTCP. By combining pharmacological and non-pharmacological approaches, such as Nicotine Replacement Therapies (NRTs), Motivational Interviewing, and Cognitive Behavioural Therapy, healthcare professionals can address both the physiological and psychological aspects of nicotine addiction. Tailored interventions, including quit lines, self-help apps, and community programs, empower patients to make lasting behavioural changes, enhancing their chances of quitting successfully. Pharmacists' accessibility enables them to overcome barriers such as motivational and social challenges, providing personalized counselling and recommending appropriate treatments. However, challenges like time

constraints, limited behavioural therapy training, and patient resistance necessitate enhanced resources and ongoing education. By understanding smoking cessation laws, regulations, and policies, pharmacists can educate patients, advocate for stronger tobacco control measures, and support public health initiatives to curb tobacco use. Empowering pharmacy students with the knowledge, skills, and confidence to implement these strategies is vital for fostering healthier communities and reducing the burden of tobacco-related diseases. Through their efforts, pharmacy professionals can significantly impact public health, contributing to a smoke-free society.

Survey questions for smoking cessation
1. What is the primary addictive substance in tobacco?
2. What are the most common health risks associated with smoking?
3. What is the mechanism of action of nicotine replacement therapy?
4. What is the recommended first step in a smoking cessation plan?
5. How effective is nicotine replacement therapy in helping individuals quit smoking?
6. Which are a common side effect of varenicline?
7. What percentage of smokers successfully quit without any support or treatment?
8. How long does nicotine withdrawal typically last after quitting smoking?
9. Which behavioural strategies often used in smoking cessation programs?
10. Which is a common trigger for smoking relapse?
11. What role do pharmacists play in smoking cessation?
12. What is average number of attempts a smoker makes before successfully quitting?
13. What is the role of nicotine in the body?
14. How can smoking affect your oral health?
15. Which group is most likely to benefit from smoking cessation programs?
16. What is recommended way to address nicotine cravings during smoking cessation?
17. What type of support is typically helpful for someone trying to quit smoking?
18. Which is a law related to tobacco control in India?
19. What is the minimum age for purchasing tobacco products in India?
20. How does the WHO contribute to smoking cessation?
21. What are the consequence of smoking during pregnancy?
22. What are the common side effect of nicotine withdrawal?
23. What are the effective strategy to prevent smoking relapse?
24. What is the impact of second-hand smoke on non-smokers?
25. What are the common myth about smoking cessation?
26. What is the primary goal of the National Tobacco Control Program (NTCP) in India?
27. How can pharmacists assist patients in quitting smoking?
28. What is the success rate of quitting smoking after one attempt?

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