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Research Article

## No Smoking Approach in the Educational Institute cafeteria to strengthen the Health System in Lahore, Pakistan

Ammara Waqar <sup>1\*</sup>, Hamid Mahmood <sup>2</sup>, Asif Hanif <sup>3</sup>, Imran Hanif Hashmi <sup>4</sup>, Bilal Hussain <sup>5</sup>, Tahira Asif Hanif <sup>6</sup>, Ravi Kant <sup>7</sup>

1. University of York, UK

2. Shaheed Zulfiqar Ali Bhutto Medical University, Lahore, Pakistan

3. Sakarya University, Turkey

4. University of Health Sciences Lahore, Pakistan

5. University of Lahore, Pakistan

6. Sakarya University, Turkey

7. Shoolini University, Solan, Himachal Pradesh – 173229, India

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#### For Correspondence:

Ammara Waqar, University of York, UK

### Abstract

**Introduction:** Tobacco control strategies are structured around three main pillars: prevention, protection, and treatment. Prevention is essential to discourage new individuals, particularly young people, from starting to smoke, and it is primarily carried out through educational initiatives.

**Aim of the study:** To report the experiences of nursing students from the University of Lahore, Lahore, Pakistan, regarding smoking prevention and cessation activities conducted by a Basic Health Unit team at the Higher Education cafeteria in Lahore, Pakistan.

**Method:** This descriptive case study was conducted between March and May 2025. Fourth-year nursing students at a primary care unit in Lahore, Pakistan, carried out the activity. The target audience consisted of patients and their caregivers, with approximately 30 individuals present in the Educational Institute cafeteria on the day of the event.

**Results:** The study reveals a strong post-intervention increase in knowledge regarding the dangers of passive smoking. Before the session, many participants were only partially aware of the risks of secondhand smoke. After the dialogue, mean knowledge scores rose to nearly 7 on a 10-point scale. This indicates that the Higher Education Institute cafeteria model successfully conveys nuanced information. For example, the greater toxin exposure of passive smokers helps dispel common misconceptions.

**Discussion:** Specific actions often provide only a partial view of the problem, hindering a comprehensive understanding of its origin, development, and the intervention's long-term impact. In the activity carried out, the main limitation was the short period available, which restricted broader contact with the population of that region. This reduced the possibility of identifying the local profile, strengthening bonds, and monitoring the progress of those interested in the cessation plan.

**Conclusion:** involving nursing students in the implementation of such interventions proves highly enriching, as it integrates theory with practice, reinforces learning, fosters leadership skills, and prepares them for the challenges of professional life. It is important to emphasise that the entire process must be carried out under the supervision of a teacher and with the collaboration of the multidisciplinary health team.

**Keywords:** No smoking, Cessation, Tobacco, Nicotine, Nursing students, cafeteria, Primary health care, Multi-disciplinary Team.

## 1 INTRODUCTION

Tobacco use has spanned centuries and cultures, evolving through various patterns of consumption. However, the tobacco industry truly began to thrive in the mid-19th century, largely driven by British and American interests. In Pakistan, the industry first

established itself in the KPK region before expanding nationwide. Although tobacco use is deeply rooted in historical and cultural practices, it represents a major public health challenge today. It is a significant risk factor for numerous comorbidities, including diabetes, cardiovascular diseases, and respiratory illnesses. It is

estimated that tobacco use has caused the deaths of over 100 million people and is projected to claim up to 1 billion lives during the 21st century.<sup>1</sup>

The recognition of smoking as a disease is relatively recent, moving far beyond the earlier belief that it was simply a lifestyle choice or social behavior. Today, smoking is understood as a neurobehavioral disorder primarily driven by nicotine dependence. The factors that lead individuals to smoke are multifaceted, involving physical, psychological, and behavioral components. These may include mental health issues such as depression, anxiety, and low self-esteem, as well as cultural influences, social customs, and environmental triggers that encourage smoking behavior.<sup>2</sup>

In contrast, the anti-smoking movement emerged alongside the expansion of tobacco use. As early as 1604, laws were enacted to restrict the use of such substances. In Pakistan, smoking control movements began in the 1970s, led by health professionals and the medical community. Government involvement in this process began in 1985, with the establishment of the Advisory Group for Tobacco Control in Pakistan. A year later, the National Tobacco Control Program (NTCP) was created with the aim of reducing the prevalence of smokers and the morbidity and mortality associated with tobacco consumption and its derivatives, as well as preventing the initiation of smoking among children and young people.<sup>3</sup>

To ensure broad coverage, the NTCP collaborated with the Pakistan Health System (NHSR & C) to implement programs, initiatives, and educational campaigns. The main objective of this support network is to integrate Primary Health Care (P & SHD), which serves as the main entry point and first level of contact with the population. This integration facilitates easy access to services and enables continuous support and follow-up for individuals who wish to quit smoking, thereby strengthening assistance and promoting smoking cessation.<sup>4</sup>

Primary Health Care (a term considered equivalent to Basic Care in Pakistan) functions as the organizer of both basic and specialized health resources, with the goal of maintaining and promoting health through a set of strategies focused on preventive actions within the community. The responsibility for expanding access to smoking cessation approaches and treatment was established by Ordinance issued by the Ministry of Health. This ordinance introduced the Plan for the Implementation of the Approach and Treatment of Smoking in the NHSR & C Network and the Clinical Protocol and Therapeutic Guidelines. The Plan provides guidance on the professional training of health workers, the registration of health units and users, mechanisms for referral and counter-referral, and the supply of medications used in smoking cessation treatment. The Protocol, in turn, addresses approaches and interventions to be applied throughout the cessation process, emphasizing the importance of developing cognitive and behavioral strategies to ensure successful treatment outcomes and prevent smoking.<sup>5</sup>

Tobacco control strategies are structured around three main pillars: prevention, protection, and treatment. Prevention is essential to discourage new individuals' particularly young people from starting to smoke, and it is primarily carried out through educational initiatives. Protection focuses on shielding the population from exposure to tobacco smoke in shared and public environments. Finally, treatment should be made available to all individuals who wish to quit smoking.<sup>6</sup>

Another growing concern is the increasing use of hookahs and electronic cigarettes. This behavior has a strong social dimension, as smokers often consume these tobacco products in the company of friends and even family members. Additionally, there is significant social acceptance of these practices, influenced by media representation and cultural habits associated with social gatherings, such as coffee shops that cater specifically to these devices. Although there are still relatively few scientific studies that clarify all the harms resulting from these forms of use, it is already known that some components of the smoke are toxic and can lead to diseases such as cancer. In the case of hookahs, the gases produced by burning the charcoal used in the device further intensify the harmful effects of the inhaled fumes. Given the increasing popularity of these devices and their proven health risks, it is essential that public policies begin to consider more specific measures aimed at regulating their use.<sup>7</sup>

For individuals who wish to quit smoking, the service offers several forms of treatment management, which may involve a pharmacological approach, a cognitive-behavioural approach, or a combination of both. The appropriate treatment plan is determined during the initial assessment, which should take into account the patient's profile and personal circumstances identifying sociocultural and behavioral aspects, beliefs, fears, level of motivation to quit, and degree of dependence. Treatment should last for at least three months, while always considering the particularities of each case and the relationship established between the multidisciplinary team and the patient, which may lead to variations in duration and approach.<sup>8</sup>

Health education is one of the most effective strategies for raising awareness and preventing smoking. However, there remains a need for improvement in this approach, as many challenges persist. For health education to be effective, it requires qualified professionals who are equipped to address the issue, investment in educational initiatives, and a population with the necessary knowledge to exercise autonomy in health care. Observing the current situation, it becomes evident that many teams are still unprepared to conduct effective health education. They often struggle to view the individual holistically and to initiate a process of shared responsibility, which is essential for transforming the individual's perspective on the health-disease process, expanding knowledge, and fostering critical reflection in discussions.<sup>9</sup>

Health teams in basic health units, aiming to share knowledge with the population, have often chosen to address the topic of smoking in Educational Institute

cafeterias, either individually or in groups. This approach is practical, as it requires little of the user's time and does not demand multiple visits to the health unit. Within this context, the action described in this study emerged from a joint initiative between the Basic Health Unit and the university. This collaboration enabled students to provide educational guidance through informative leaflets and guided conversations, creating a space to address doubts and discuss issues related to smoking and cessation plans, topics that are often unfamiliar to many individuals.<sup>10</sup>

### Aim of the study

This study aims to report the experience of nursing students from the University of Lahore, Lahore, Pakistan, regarding smoking prevention and cessation activities conducted in a Basic Health Unit team at the Higher Education cafeteria in Lahore, Pakistan.

## 2 METHODS

This descriptive study is a case study conducted between March and May 2025. Fourth-year nursing students at a primary care unit in Lahore, Pakistan carried out the activity. The target audience consisted of patients and their caregivers, with approximately 30 individuals present in the Educational Institute cafeteria on the day of the event.

The Educational Institute cafeteria serves as an ideal space for disseminating knowledge and strengthening health education. It provides an opportunity to address everyday issues and to present divergent opinions, thereby encouraging discussion, reflection, and critical thinking. The overall process seeks to promote the collective construction and maintenance of health

through preventive actions, ensuring that individuals do not seek care only when they are ill. Moreover, this environment fosters closer relationships between health system users and professionals, facilitating dialogue and helping to resolve potential challenges in the care process, thus reducing emotional strain.<sup>11</sup>

In this context, the proposed activity involved using the Educational Institute cafeteria group setting to engage individuals through verbal interaction. There was no prior notice given to the population about the activity, nor was a specific space reserved for it. The students chose to approach all individuals present in the Educational Institute cafeteria that day while they awaited their appointments. Conversations were conducted individually with those seated alone or in small groups, depending on the arrangement of the participants.

The activity began with a brief introduction by the students, followed by a discussion initiated by guiding questions such as: "What is smoking?" What is passive smoking? What are the consequences of smoking? How can I quit smoking? What are the benefits of quitting, both immediate and long-term?

This stage was followed by an open dialogue in which participants' questions were addressed, and previously unfamiliar information was clarified. Each conversation lasted approximately 10 to 15 minutes. To conclude the intervention, an informational brochure was distributed, presenting details on the harmful effects of tobacco use, the signs and symptoms associated with recurrent consumption, and additional relevant information aimed at raising awareness.



Figure 1: Front of the material of support used in the action

Source: to the authors

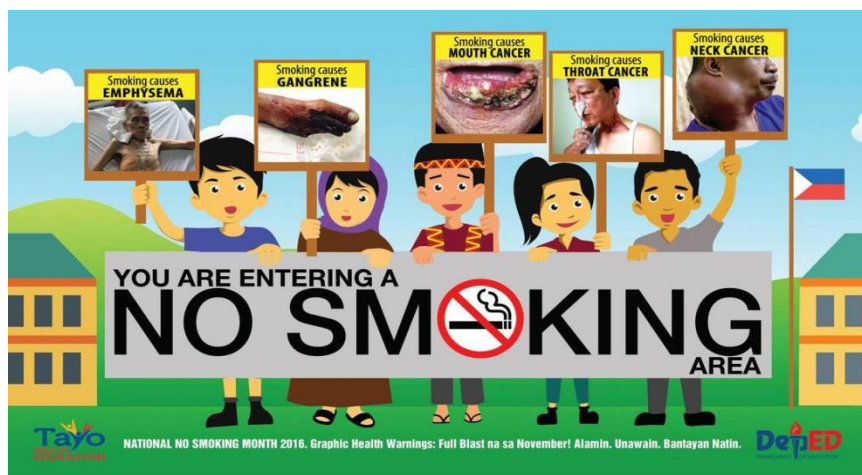


Figure 2: Material of support used in the action (Source: to the authors)

### 3 RESULTS

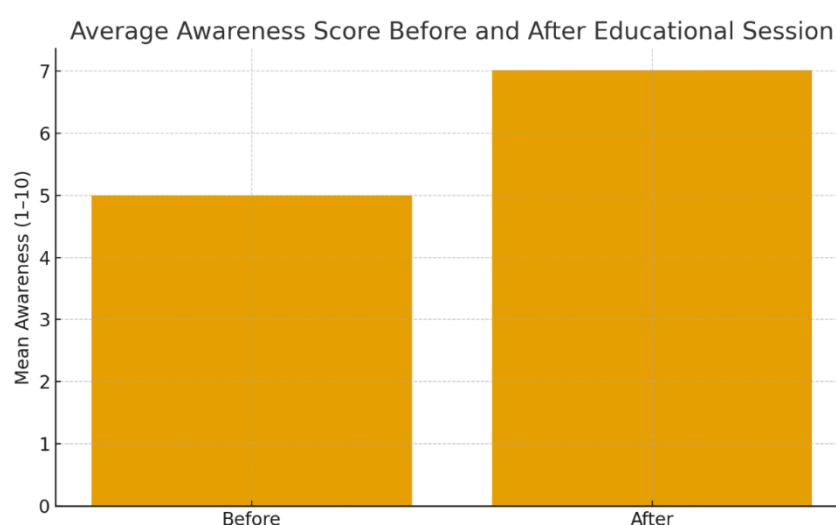


Figure 1: clearly demonstrates a marked increase in average awareness following the Higher Education Institute cafeteria educational session. Participants' understanding of smoking hazards rose from a moderate level (mean  $\approx 5.0$ ) to a notably higher level (mean  $\approx 7.0$ ). This improvement suggests that brief, structured conversations in a public health setting, even without advance notice, can yield substantial gains in awareness. It validates the approach's practicality for community-based smoking education, given limited time and resources.

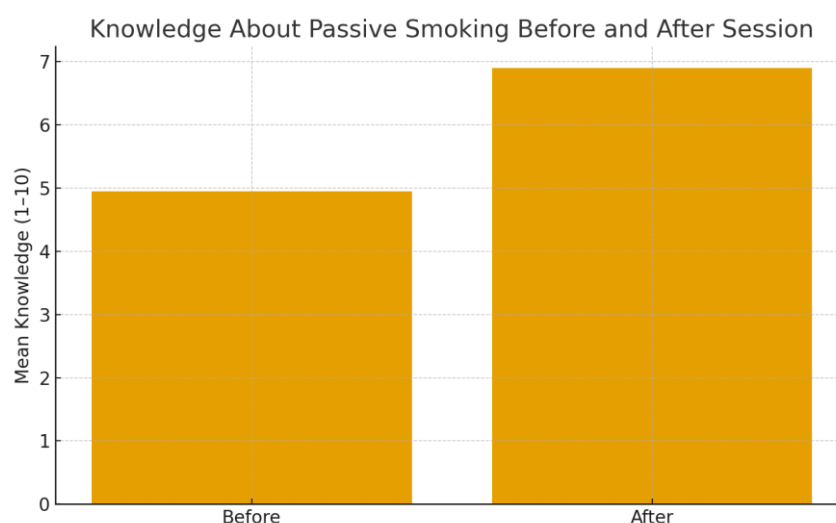


Figure 2: reveals a strong post-intervention increase in knowledge regarding the dangers of passive smoking. Before the session, many participants were only partially aware of second-hand smoke risks. After the dialogue, mean knowledge scores rose to nearly 7 on a 10-point scale. This indicates that the Higher Education Institute cafeteria model successfully conveys nuanced information, for example, the greater toxin exposure of passive smokers helping dispel common misconceptions.



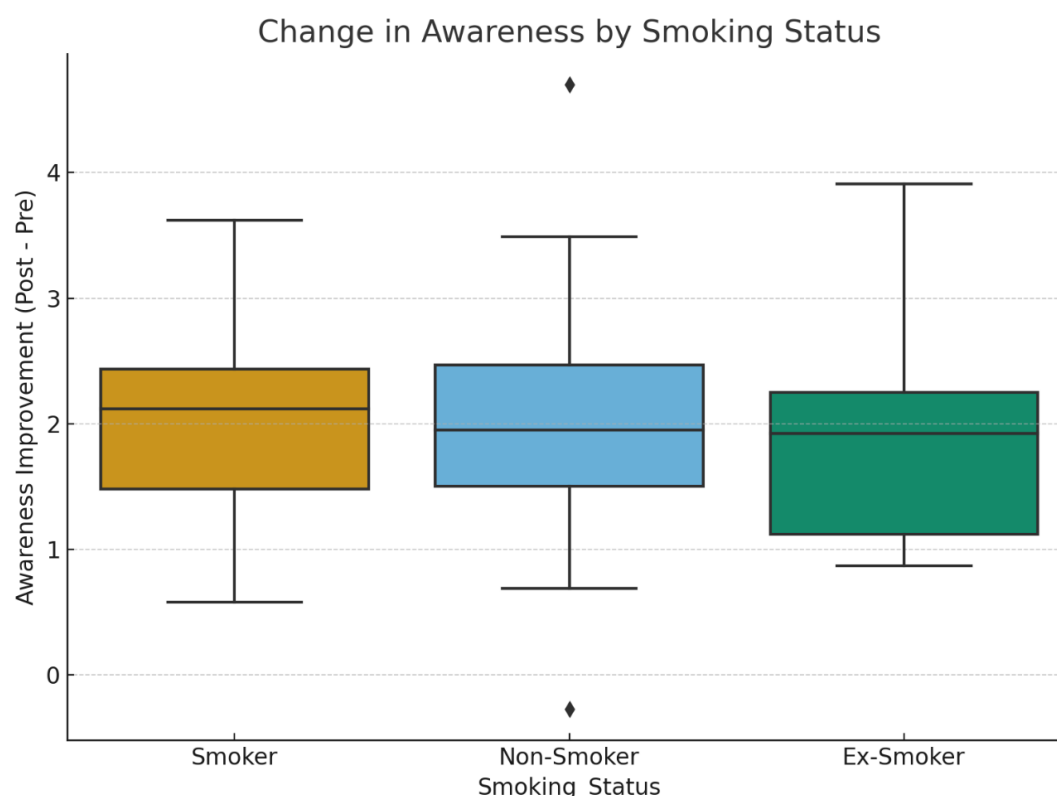


Figure 3: compares awareness improvement across smokers, ex-smokers, and non-smokers.

All three groups benefited, but smokers exhibited the largest gain, followed by non-smokers and ex-smokers.

This pattern suggests that direct exposure to health information may resonate more deeply with those personally affected by the habit.

For non-smokers, the increase likely reflects better understanding of advocacy and protective behaviors against second-hand smoke.

The results reinforce the idea that health education in shared spaces can foster mutual learning across population groups.

## 4 DISCUSSION

Historically, the nurse has played a fundamental role in the process of health education, as the act of caring is inherently linked to dialogue and teaching. This practice continually requires the professional to be critically aware of their role as an educator. By providing health education, nurses not only share knowledge but also construct a tool that fosters autonomy and critical thinking, empowering individuals to become active participants in the strengthening of Health System process, make better decisions, and exercise their citizenship.<sup>12</sup>

Aware of the impact that a health education activity can have, the students carefully planned the intervention, drawing on numerous scientific sources. One of the main concerns during the planning stage was estimating the number of people who would pass through the unit and identifying the most effective strategy to reach the largest possible audience within the available timeframe. It was decided that conducting the activity in the Educational Institute cafeteria would be the best approach, as it is a spacious area with a constant flow of users, allowing for better time management, broader reach, and the possibility of group interaction.<sup>13</sup>

Group work is an approach that promotes the involvement of all participants, not only on a personal but also on a professional level, by valuing diverse forms of knowledge and enabling creative interventions in each individual's health-disease process<sup>10</sup>. In the Educational Institute cafeteria, it was possible to engage in dialogue with small groups, which proved highly beneficial, as it allowed for the exchange of different points of view across various age groups and facilitated a natural development of the discussion. In addition, contact was established with adult smokers, non-smokers, passive smokers, and young people the latter being a particularly vulnerable group for the initiation of smoking and therefore a priority target for prevention initiatives conducted by health professionals.<sup>14</sup>

It was decided that the students would begin by introducing themselves and then immediately ask the question, "Do you smoke or know someone who smokes?" Based on the participants' responses, additional questions were posed on less commonly discussed topics, such as the different types of addiction (physical and emotional), passive smoking, and related issues. Through this ongoing process of individual and

collective self-reflection, some participants showed improvement simply as a result of receiving professional attention, even in the absence of further therapeutic intervene.<sup>15</sup>

In this context, it was explained that passive smokers are individuals who inhale tobacco smoke by being in the same environment or in close proximity to people who smoke. It is important to emphasize that passive smokers inhale up to three times more carbon monoxide and carcinogenic substances than active smokers. Therefore, there is no safe level of environmental exposure to tobacco smoke. Children, adolescents, adults, and older adults who live with smokers are more exposed to the harmful effects of cigarettes than smokers themselves—a situation explained by the fact that cigarette filters reduce but do not eliminate the inhalation of carcinogenic substances.<sup>16</sup>

To deepen the discussion, important questions were raised, such as the fact that nicotine is considered a psychotropic drug—that is, it acts directly on the central nervous system. This characteristic significantly increases the level of difficulty in quitting smoking, reinforcing that there should be no shame in seeking professional help to overcome this problem.<sup>17</sup>

Among the factors that make quitting smoking difficult are the different types of dependence, which are classified as physical, psychological, and behavioral. In physical dependence, the body becomes physiologically adapted to nicotine use, and the absence of the substance triggers a series of symptoms known as withdrawal. In psychological dependence, the individual associates' feelings of well-being with nicotine use, as the cigarette functions as an emotional regulator, creating a false sense of cognitive and emotional improvement. Finally, behavioural dependence is characterized by a compulsion to smoke in order to avoid the discomfort and distress caused by abstaining from the substances.<sup>18</sup>

Discussing the different types of addiction and how they affect individual smokers helps to break down the stigmas and labels often associated with smoking cessation, such as the notion that smokers are weak or lack willpower. Recognizing the specific type of dependence provides greater confidence in developing strategies for quitting and promotes better understanding among family members who can support the process. From this discussion, it was possible to address guidelines related to cessation planning, strategies that could be adopted, and the services available at the Basic Health Unit (Basic & Rural Health Units). Some participants shared personal experiences about why they began smoking, their previous attempts to quit whether successful or not and the feelings of shame they sometimes associated with being smokers.<sup>19</sup>

In the current context, actions aimed at preventing tobacco use are extremely necessary and should be implemented in all possible and accessible spaces, especially considering that smokers belong to a risk group for Pulmonary infections—a form of acute respiratory syndrome caused by Pulmonary infections,

that can progress to severe illness. In this regard, cigarette use not only damages lung tissue but may also increase the risk of contamination, as smokers frequently handle smoking devices (such as cigarettes and hookahs) without proper hand hygiene.<sup>20</sup>

Analyzing the current situation and the context addressed at the Basic Health Unit, it becomes evident how essential it is to adopt a welcoming and sensitive approach to this topic, as many individuals are afraid to discuss it and often feel judged. It is the responsibility of the professional conducting the educational activity to demonstrate the opposite—to set aside personal impressions and values and to provide information that is both educational and encourages open dialogue. While the population generally recognizes the harmful effects of smoking, there remains limited understanding when the discussion expands to topics such as passive smoking, types of addiction, the existence of support groups, and cessation plans. Through these dialogues, some participants expressed interest in joining the therapeutic plan, particularly those who had previously attempted to quit the habit without success.<sup>21</sup>

In the context of the knowledge acquired by nursing undergraduates, this type of professional experience fosters the development of strategic elements for integrated, patient-centered care—such as theoretical understanding, critical reasoning, leadership, argumentation, and, above all, autonomy. There was a clear enrichment in recognizing the social role that nursing professionals can play within the community, while also understanding the challenges faced when engaging with the public and the need to improve approaches to health education. Developing an activity of this nature required research, discussion, and continuous feedback with the supervising professor, ensuring that students were supported throughout the process. This dynamic contributed to building their confidence and autonomy.<sup>22</sup>

On this occasion, the participation of the Basic Health Unit (Basic & Rural Health Units) team was extremely important, as they identified the need to address this issue and received the proposed activity positively. The distinguishing aspect of this initiative was the use of the Educational Institute cafeteria, as opposed to traditional group methods that require predefined dates, times, and locations. This approach made it possible to use the time clients spent in the strengthening of Health System space more efficiently.<sup>23</sup>

In addition to the educational benefits for students, an action of this nature fosters collaboration between the university, the community, and the health environment, an important pillar upheld by the university's core values. It involves all parties in the learning process and in promoting health, serving as a means of exercising citizenship. Furthermore, this proposal opens pathways for the development of extension and research projects in the field, contributing to scientific advancement.<sup>24</sup>

Unfortunately, specific actions often provide only a partial view of the problem, hindering a comprehensive understanding of its origin, development, and the intervention's long-term impact. In the activity carried

out, the main limitation was the short period available, which restricted broader contact with the population of that region. This reduced the possibility of identifying the local profile, strengthening bonds, and monitoring the progress of those interested in the cessation plan. However, as previously mentioned, conducting such initiatives broadens the potential for future studies that can address these gaps and deepen understanding of the issue.<sup>25</sup>

## 5 CONCLUSION

The fight against smoking in Pakistan has been ongoing for decades. Over time, the country has adopted several strategies, among which the National Tobacco Control Program (NTCP) stands out for implementing numerous measures to control tobacco use, including cessation programs and educational campaigns. These efforts have produced promising results, as evidenced by the reduction in the prevalence of tobacco users and the decline in morbidity and mortality associated with this substance.

The key actors behind these initiatives are healthcare professionals who work directly with the population through education and treatment. Achieving positive results requires multidisciplinary collaboration and a holistic understanding of the individual. It is also evident that actions using a more personalized and dialogical approach tend to generate greater public engagement than those based solely on the simple presentation of information.

When addressing smoking cessation, the individual must be engaged in an open and welcoming dialogue that allows them to feel comfortable exploring in-depth

information about cessation plans, types of addiction, and the effects of secondhand smoke. Educational initiatives may also involve individuals close to smokers, as they are also affected, and increasing their understanding can help strengthen support networks.

In conclusion, involving nursing students in the implementation of such interventions proves highly enriching, as it integrates theory with practice, reinforces learning, fosters leadership skills, and prepares them for the challenges of professional life. It is important to emphasize that the entire process must be carried out under the supervision of a teacher and with the collaboration of the multidisciplinary health team.

**Institutional Review Board Statement:** The study was conducted according to the guidelines of the Declaration of Helsinki and approved by the University of Lahore, Lahore, Pakistan.

**Informed Consent Statement:** Written informed consent was obtained from all participants involved in the study.

**Data Availability Statement:** The raw data supporting the conclusions of this article will be made available by the authors on request. The data are not publicly available due to privacy and ethical reasons.

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## Author Contribution:

S. N.	Author Name	Authors Contribution	Affiliation
1.	Dr. Ammara Waqar	Principal Researcher	Postdoc Researcher, University of York, UK
2	Prof. Dr Hamid Mahmood	Associate Researcher	Shaheed Zulfiqar Ali Bhutto Medical University, Islamabad, Pakistan
3.	Asif Hanif	Associate Researcher	Sakarya University, Turkey
4.	Imran Hanif Hashmi	Data Collection	University of Health Sciences, Lahore, Pakistan
5.	Bilal Hussain	Data Compiler	University of Lahore, Pakistan
6.	Tahira Asif Hanif	Final Proofreading	Sakarya University, Turkey
7.	Ravi Kant	Faculty of Applied Sciences & Biotechnology	Shoolini University, Solan, Himachal Pradesh – 173229, India

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