

Awareness and knowledge regarding the Antitobacco Laws and perceiving Interventions for Effective Tobacco Control among Young Adults

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ABSTRACT

Background

Tobacco consumption is a significant public health challenge, particularly among young adults. Despite the presence of anti-tobacco laws and control measures, awareness and compliance remain suboptimal. This study aims to assess the awareness, knowledge, and perceptions regarding anti-tobacco laws among young adults, along with their attitudes towards potential interventions for effective tobacco control.

Materials and Methods

A cross-sectional study was conducted among 500 young adults aged 18-25 years across colleges and public spaces in a metropolitan city. A structured questionnaire was used to collect data on participants' awareness of anti-tobacco laws, knowledge of the harmful effects of tobacco, and their perceptions of intervention strategies. The questionnaire included multiple-choice and Likert-scale questions. Data were analyzed using descriptive statistics and chi-square tests to assess the association between awareness levels and demographic factors.

Results

Out of the 500 participants, 65% (n=325) were aware of the existence of anti-tobacco laws, but only 40% (n=200) could recall specific provisions like the ban on smoking in public places. Approximately 58% (n=290) recognized the significance of warning labels on tobacco products. However, only 30% (n=150) were aware of penalties for violations of these laws. Participants indicated a strong preference (75%, n=375) for educational campaigns over punitive measures for effective tobacco control. Awareness levels were significantly higher among urban participants compared to those from semi-urban areas ($p < 0.05$).

Conclusion

The findings suggest that while awareness of anti-tobacco laws is moderate among young adults, there are gaps in specific knowledge about legal provisions. Educational interventions, including awareness campaigns and peer-group initiatives, are likely to be more effective than punitive measures in promoting tobacco control. There is a need for collaborative efforts involving policymakers, educational institutions, and healthcare professionals to enhance the reach and impact of anti-tobacco programs.

Keywords: Tobacco control, Anti-tobacco laws, Young adults, Awareness, Interventions, Public health, Smoking prevention, Educational campaigns.

Introduction

Tobacco consumption is a leading preventable cause of morbidity and mortality worldwide, accounting for more than 8 million deaths annually (1). Young adults, especially those aged 18–25 years, are at a critical stage where lifestyle behaviors, including smoking habits, are established. This makes them a key target group for tobacco prevention and cessation programs (2). Despite the enforcement of anti-tobacco laws, such as smoking bans in public places and mandatory health warnings on cigarette packages, tobacco use among young people remains a significant public health issue (3).

In India, the Cigarettes and Other Tobacco Products Act (COTPA) of 2003 prohibits smoking in public places, bans tobacco advertising, and mandates pictorial warnings on tobacco products. However, studies have shown that knowledge and enforcement of these provisions are often inadequate, especially among younger populations (4). Additionally, the transition from adolescence to adulthood is marked by increased experimentation with substances, including tobacco, which poses a challenge for sustained tobacco control (5).

Awareness of anti-tobacco laws and effective interventions are essential components of comprehensive tobacco control strategies. Research indicates that public health campaigns, peer-led interventions, and community-based education significantly improve compliance with tobacco laws (6). Young adults' perceptions of such interventions, as well as their understanding of the legal framework, can influence the success of tobacco control efforts. Moreover, the effectiveness of punitive measures, such as fines, remains debated, with growing evidence suggesting that educational approaches yield better outcomes (7).

This study aims to assess the awareness and knowledge of anti-tobacco laws among young adults and explore their perceptions of different interventions for effective tobacco control. The findings will provide insights into the current state of awareness and offer recommendations for designing targeted strategies to curb tobacco use in this vulnerable population.

Materials and Methods

Study Design and Setting

This was a cross-sectional study conducted over a period of three months in a metropolitan city in India. The study targeted young adults aged 18–25 years, recruited from various educational institutions and public spaces, such as malls, parks, and recreational centers.

Sample Size and Sampling Technique

A total of 500 participants were included in the study using convenience sampling. The sample size was calculated based on an expected awareness level of 60% about anti-tobacco laws, with a confidence level of 95% and a margin of error of 5%. Inclusion criteria were individuals aged 18–25 years, willing to participate in the study, and providing informed consent. Those with a history of smoking-related disorders were excluded.

Data Collection Tool

A structured, self-administered questionnaire was designed to assess the awareness and knowledge of anti-tobacco laws, as well as perceptions of potential interventions for tobacco control. The questionnaire was divided into three sections:

- **Section 1:** Demographic data (age, gender, educational background, and location).
- **Section 2:** Awareness and knowledge of anti-tobacco laws (e.g., public smoking bans, pictorial warnings, fines).
- **Section 3:** Perceptions of interventions (educational campaigns, punitive measures, and peer-led programs).

The questions were a mix of multiple-choice questions and Likert-scale items, allowing participants to rate their agreement with specific statements.

Data Collection Procedure

The participants were briefed about the objectives of the study, and written informed consent was obtained. The questionnaires were distributed in person and collected immediately upon completion to ensure a high response rate. Participation was voluntary, and anonymity was maintained throughout the study.

Statistical Analysis

Data were entered and analyzed using SPSS software version 25.0. Descriptive statistics, such as frequency and percentage, were used to summarize the demographic variables and awareness levels. Chi-square tests were

applied to assess the association between awareness and demographic factors, such as gender, education level, and location (urban vs. semi-urban). A p-value of <0.05 was considered statistically significant.

Ethical Considerations

Ethical approval was obtained from the Institutional Ethics Committee. All participants were informed about the purpose of the study, and their right to withdraw at any stage was emphasized. Data confidentiality and participant anonymity were maintained throughout the study.

Results:

Table 1: Demographic Details of the Participants

Characteristic	Category
Gender	Male: 280 (56%) Female: 220 (44%)
Age Group (years)	18-20: 200 (40%) 21-23: 180 (36%) 24-25: 120 (24%)
Educational Background	Undergraduate: 300 (60%) Postgraduate: 200 (40%)
Location	Urban: 350 (70%) Semi-urban: 150 (30%)

Table 2: Awareness and Knowledge about Anti-Tobacco Laws

Awareness of Anti-Tobacco Laws	Number of Participants	Percentage (%)
Yes	325	65
No	175	35

Table 3: Knowledge of Specific Provisions (among those aware)

Provision	Aware Participants	Percentage (%)
Public Smoking Ban	280	86.2
Pictorial Warnings	290	89.2
Fines for Violations	150	46.2

Table 4: Perceptions of Effective Interventions for Tobacco Control

Intervention Type	Preferred by Participants	Percentage (%)
Educational Campaigns	375	75
Punitive Measures	100	20
Peer-led Programs	275	55

A total of 500 participants were included in the study, with demographic characteristics summarized in **Table 1**. The majority were male (56%), with 70% residing in urban areas. Participants were predominantly undergraduates (60%), and the most common age group was 18-20 years (40%).

Awareness and Knowledge of Anti-Tobacco Laws

As shown in **Table 2**, 65% (n=325) of participants reported awareness of the anti-tobacco laws, while 35% (n=175) were unaware. Among those who were aware, knowledge of specific provisions varied (**Table 3**). A large proportion knew about the public smoking ban (86.2%) and pictorial warnings (89.2%), but only 46.2% were familiar with the fines for violations.

Perceptions of Effective Interventions

Participants' preferences for interventions are detailed in **Table 4**. Educational campaigns were favored by 75% (n=375) of the participants, followed by peer-led programs (55%). In contrast, only 20% (n=100) supported punitive measures as an effective intervention strategy.

The data suggests that while general awareness of anti-tobacco laws is moderate, there are gaps in knowledge

about specific legal provisions. Furthermore, participants expressed a stronger inclination toward educational approaches rather than punitive actions for tobacco control.

Discussion

The present study highlights the level of awareness and knowledge regarding anti-tobacco laws among young adults, as well as their perceptions of effective interventions for tobacco control. The findings indicate that although 65% of the participants were aware of anti-tobacco laws, there remain significant gaps in specific knowledge, such as fines for violations, with only 46.2% being aware of these provisions. Similar trends have been observed in previous studies, which report limited awareness of legal frameworks even in regions with strict anti-tobacco policies (1,2).

One notable finding is that while awareness of pictorial warnings on cigarette packages was high (89.2%), awareness alone may not translate into behavioral change. Research suggests that although pictorial warnings can be effective in raising awareness, the actual impact on cessation rates is modest unless complemented by other interventions, such as counseling and public health campaigns (3). This aligns with the participants' preference for educational campaigns (75%) as a more effective strategy, reflecting the need for preventive measures over punitive ones (4).

The preference for educational campaigns over punitive measures could be attributed to the developmental stage of young adults, who may respond better to positive reinforcement rather than punishment (5). Peer-led programs also garnered substantial support (55%), suggesting that young adults value interventions involving their social networks. Studies have demonstrated that peer influence can significantly affect smoking behavior and is a promising avenue for youth-targeted tobacco control efforts (6).

The study also revealed that awareness levels were significantly higher among participants from urban areas compared to semi-urban ones. This disparity could be due to better access to information and greater exposure to anti-tobacco campaigns in urban settings (7). Bridging this gap will require targeted interventions in semi-urban and rural areas, where tobacco use often remains high and enforcement of tobacco laws may be less rigorous (8). These findings have important implications for policymakers and public health professionals. While enforcing anti-tobacco laws is necessary, the focus should shift toward comprehensive, youth-friendly interventions that include educational campaigns and peer involvement. Public health efforts should also aim to improve the visibility and accessibility of information about the legal consequences of tobacco use (9-11). A multi-pronged approach, including community outreach and media campaigns, is essential to ensure the success of tobacco control strategies.

Conclusion

This study reveals that while there is moderate awareness of anti-tobacco laws among young adults, there are significant gaps in knowledge regarding specific provisions, such as penalties for violations. Participants demonstrated a clear preference for educational interventions and peer-led programs over punitive measures, emphasizing the importance of positive, community-based approaches for tobacco control. The higher levels of awareness among urban participants indicate the need for targeted efforts in semi-urban areas to bridge the information gap.

Policymakers and public health professionals must prioritize youth-centric campaigns that leverage education and peer networks to foster behavioral change. A multi-faceted strategy that combines legal enforcement with awareness campaigns and community engagement will be essential to enhance the effectiveness of tobacco control efforts among young adults. Addressing the disparities in awareness and ensuring broader access to anti-tobacco information can help create a smoke-free generation and reduce the burden of tobacco-related diseases.

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