Prevalence and Impact of Tobacco Consumption Among the students in Kathmandu Valley

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ABSTRACT

This study examines the prevalence and determinants of tobacco use among adolescent students in the Kathmandu Valley, where tobacco consumption remains a substantial public health concern. Using a mixed-method design, data were collected from a purposive sample of 250 students aged 13-19 years from grades 8-12 across selected schools and colleges. Quantitative data were gathered through structured questionnaires, supplemented by qualitative insights from semi-structured interviews, focus group discussions, and document analysis. Results indicate that 59.6% of respondents used tobacco in some form, with the highest prevalence among the 14-16 age group. Contrary to common perceptions, tobacco use was more prevalent among females than males, and usage rates were higher among college students than school students. Nearly 70% of respondents came from joint families, and a significant proportion belonged to agricultural households, some engaged in tobacco cultivation. Family tobacco use, peer pressure, and media exposure emerged as strong predictors of adolescent tobacco consumption. Despite widespread awareness of tobacco's health risks, social acceptance and inadequate enforcement of existing policies perpetuate high usage rates. The findings highlight an urgent need for comprehensive, multi-level interventions that address familial and community influences, regulate media portrayals, and strengthen policy implementation within educational settings.

KEYWORDS: Adolescent health, Tobacco use, Peer pressure, Parental influence, public health policy

Introduction

Tobacco use continues to be one of the most significant public health challenges worldwide, including in Nepal. While international campaigns and interventions have reduced tobacco consumption in many high-income countries, its use remains widespread in South Asia, particularly among younger populations. In recent years, rising tobacco use among school- and college-going students in the Kathmandu Valley has emerged as a serious concern. This trend is alarming given the well-established risks of early initiation, which often leads to long-term dependence and severe health consequences (WHO, 2023). The purpose of this study is to assess the prevalence of tobacco product use among adolescents in the Kathmandu Valley and to identify key correlates such as socio-economic status (SES), family influence, peer pressure, and exposure to tobacco-related media or cultural norms. It also evaluates the perceived impact of government tobacco control policies in educational institutions. A mixed-method approach combining quantitative surveys with qualitative interviews and group discussions was employed to capture both statistical patterns and personal narratives, offering a comprehensive understanding of the issue. Tobacco initiation typically begins during adolescence, with most adult users starting

before the age of 18 (CDC, 2022). Multiple socio-cultural factors contribute to early uptake, including family tobacco use, peer influence, social acceptance, weak enforcement of regulations, and targeted media promotion (Bhan et al., 2018). Although Nepal's Tobacco Product Control and Regulation Act (2011) introduced measures such as pictorial warnings and advertising bans, implementation and monitoring especially in schools remain inadequate (MoHP, 2020). This research extends previous studies by integrating local evidence to inform culturally relevant, evidence-based interventions aimed at reducing tobacco use among youth in the region.

METHODOLOGY

Research Design

The use of tobacco among adolescents was investigated using a quantitative design. A structured survey questionnaire was completed by 250 students and supplemented with semi-structured interviews and documents.

Sample

A stratified random sample design was adopted with a concentration on adolescent students of grades 8 to 12, and was recruited from 5 randomly selected schools and colleges in Kathmandu valley. Participants' age was between 13 and 19 years which represents adolescent development phase according to WHO.

Data Analysis

Descriptive and inferential statistical analyses were conducted using SPSS Version 25 for quantitative data. Socio-economic factors associated with tobacco use were explored by demographic analysis.

RESULTS

Prevalence

The prevalence of tobacco use in Kathmandu valley has been shown in the given figure:

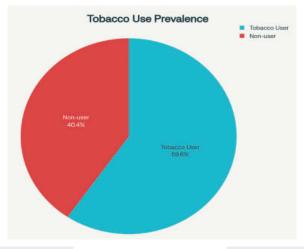


Figure 1: Prevalence of Tobacco use in Kathmandu valley

Of the 250 student respondents, 149 (59.6%) were found to be consumers of tobacco in one or another form, like smoking, gutkha, and hookah. The maximum prevalence was found in the 14-16-yearold age-category, indicating an early onset. A surprising finding, but intuitive from the data and findings, is the larger number of females as compared to male tobacco users contradicting the popular myth that the behavior is predominantly more of male in the country.

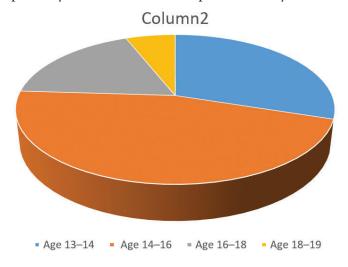


Figure 2: Tobacco Use by Age Group

Figure no.2 demonstrates that the rate of tobacco use was the highest among those aged 14–16 years, and thus early prevention and intervention for the required age group is very important.

Institutional Trends

The use was higher among the college students compared to the school students. This pattern implies that school-based surveillance and teacher—parent communication could act as deterrents to tobacco use among younger adolescents, but formal controls or effective disciplinary procedures do not exist in college life style with higher probabilities for exposure and opportunity to access.

Socio-Economic and Family Infuence

An evident association was detected between smoking and different socio-economic aspects in the adolescent study population. It is noteworthy that almost 70% of them belonged to the joint family system where the supervision tends to suffer as everybody is busy participating in the household affairs. Forty-five percent of them were from farming families, some of which were actively involved in cultivating or using tobacco for either consumption or commercial purposes. This environmental tobacco exposure was associated with adolescent behavior. Most notably, the study revealed that youth with family tobacco users were 3.2 times as likely to use tobacco, illustrating the strong impact of family norms in adolescent tobacco use. This emphasis highlights the applicability of tackling family and community influences in any public health interventions to reduce adolescent tobacco consumption.

Motivating Factors

Table 1 summarizes the key motivating factors behind tobacco use:

Table 1: Motivating Factors Behind Tobacco Use among Students

Factor	% of respondents citing this factor
Peer pressure	66%
Family influence	52%
Media/advertisement	38%
Curiosity and experimentation	41%
Stress relief	29%
Easy access	34%

Table 1 illustrates indicates that Peer pressure was identified as the most influential factor, just slightly above family influence. Students said they often started smoking or chewing tobacco in an effort to feel cool among friends and older siblings. Many respondents also mentioned media propagation particularly in movies, music and social media that glamorize and promote tobacco use as socially acceptable

DISCUSSION

The results point to a grim situation that the majority of adolescents in Kathmandu Valley are involved in tobacco use and it is intertwined to them at the level of socialization. Forging the age-of-initiation of tobacco is falling, the growth of female users acts as a barometer for the changes in society's attitudes toward gender and tobacco. Studies carried out in South Asian countries have also shown the co-relationship between early age of initiation and number of years of addiction (Bhan et al., 2018; Reddy et al., 2020). Schools, especially the colleges, seem either incapable or disinterested in enforcing the tobacco control regulations. This abandonment, together with peer and other family members behavior, facilitates tobacco use. A key issue is the gap between knowledge and action. Even though the danger is known, teenagers never stop thanks to habit, social acceptance and the absence of an intervention. Further, the observation that tobaccousing families tended to have children who used tobacco supports the need for community-level change strategies to be implemented in tandem with institutional policies. Interventions must be culturally appropriate and must break the intergenerational chain of tobacco normalization.

CONCLUSION

This study demonstrates the frequent use of tobacco among Kathmandu Valley youth with peer influence, family influence, and media exposure emerge as important forces. Despite young people being well informed, and national government policy being out in front of need, the yawning gap between policy and delivery is also worthy of note. Poor institutional implementation, social cultural acceptance, and lack of effective outreach programs are factors responsible for the persistence of this public health issue. Multi-leveled interventions are needed to meet this urgent need. There should be a uniform antitobacco campaign in schools and colleges by involving students, teachers and parents. There is need of effective monitoring of policy compliance by Ministry of Health and Population and regulation of media glamorization of use of tobacco. Finally, community-level interventions should incorporate education and work training to reduce dependence on tobacco cultivation.

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