

A Descriptive Study to Assess the Knowledge of Adolescents Regarding Tobacco Smoking in Selected Community Area of New Delhi

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Abstract

Tobacco use, particularly smoking, is a major public health concern, especially among young people, who are often at risk of starting smoking at an early age. The study was conducted in a specific community area of New Delhi to evaluate adolescents' awareness of the health risks associated with tobacco use, including its links to heart disease, lung cancer, chronic obstructive pulmonary disease (COPD), and other serious health conditions. A structured questionnaire was used to gather data from adolescents aged 12-18 years, focusing on their knowledge about the harmful effects of smoking, factors influencing their attitudes towards tobacco use, and sources of information they rely on for learning about smoking-related risks. The results of this study provide valuable insights into the gaps in knowledge and the misconceptions that may exist among adolescents regarding tobacco smoking. The findings highlight the importance of targeted health education and awareness campaigns in schools and communities to reduce tobacco use initiation and promote healthier lifestyles among young people. The study concludes with recommendations for enhancing tobacco prevention efforts and improving adolescent education on the risks of smoking.

Problem Statement: A descriptive study to evaluate knowledge of adolescents regarding tobacco smoking in selected community area of New Delhi

Objectives:

1. To assess the knowledge regarding tobacco hazards.
2. To find the association between knowledge score and selected demographic variables.

Results: The relationship between adolescents' knowledge of tobacco use and specific sociodemographic factors, including age in years, education, father's occupation, monthly family income, family kinds, and tobacco smoking addiction practices of family members. The findings showed that adolescents' demographic characteristics and their knowledge of tobacco use did not significantly correlate. Thus, the null hypothesis is accepted and the research hypothesis H1 is rejected.

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Conclusion: The present study concluded that the adolescent boys' knowledge of drug addiction prevention was lacking. The study's conclusions demonstrated how successful the progressive study was in raising adolescents' level of awareness about tobacco smoking among adolescents. The study found that all of the adolescents in the experimental group had increased levels of knowledge of tobacco smoking, regardless of differences in demographic characteristics.

Keywords: Tobacco smoking, Adolescents, Knowledge.

INTRODUCTION

There are various reasons why people consume tobacco. Some people enjoy holding and caressing cigarettes, some find smoking enjoyable, and some believe it provides them more energy or helps them relax when they're stressed. Others are addicted to nicotine and have a craving for smokes.

The leading preventable cause of death worldwide is tobacco usage. Smoking is a major risk factor for heart attacks, strokes, chronic obstructive pulmonary disease (COPD), which includes emphysema, and chronic bronchitis, and cancer, particularly lung cancer, cancers of the larynx and mouth, and pancreatic cancer. The diseases that tobacco use most frequently causes are those that affect the heart, liver, and lungs. Heart, liver, and lung ailments are the most common diseases caused by tobacco smoking. Peripheral vascular disease and hypertension are further consequences. The length of time and quantity of smoking determine the repercussions. Smoking cigarettes with more tar and beginning to smoke earlier in life raises the risk of these diseases. Furthermore, it has been shown that the health of people of all ages is harmed by secondhand smoking, commonly referred to as environmental tobacco smoke. The cigarettes are sold because they contain more tar and are less likely to be filtered; tobacco-related diseases may be more common in developing countries.

Nicotine is a stimulant found in cigarettes and other smoked tobacco products, and it is one of the primary causes of tobacco use. Even though the quantity of nicotine inhaled with tobacco smoke is quite small (most of the substance is destroyed by the heat) it is still sufficient to cause physical or psychological dependence. Nicotine is powerfully addictive. Nicotine addiction changes the chemical balance in your brain. Addiction keeps people smoking even when they want to quit. Breaking addiction is harder for some people than others. Many people need more than one try to quit.

Former and current smokers have a lower incidence than non-smokers, but the authors

pointed out that individuals were more likely to be discouraged from smoking by the movement abnormalities linked to Parkinson's disease than to be protected by smoking. The potential prevention of Parkinson's disease by nicotine was examined in another study. Some of the chemicals in tobacco smoke suppress MAO-B, whereas nicotine stimulates the dopaminergic pathway in the brain, which is compromised in Parkinson's disease. This enzyme generates oxidative radicals by degrading dopamine.

The fact that nicotine addiction boosts sales has long been recognized by cigarette manufacturers. Today's cigarettes release nicotine faster and in greater quantities than in the past. It's possible that the chemicals and additions used by tobacco corporations to create cigarettes contributed to their increased addictiveness. Nicotine rushes from your lungs to your heart and brain after inhalation. You may have believed that cigarettes labeled as "filtered," low-tar or "light" were less harmful than others. However, studies reveal that these cigarettes are no safer than regular cigarettes and are just as addicting. Misleading labels are no longer permitted. There is a lethal mixture of almost 7,000 compounds in tobacco smoke. Hundreds are poisonous. Cancer can be caused by about 70.

However, nicotine does contribute to acute episodes of some ailments, including heart disease, stroke, and impotence, since it stimulates the synthesis of adrenaline, which raises blood pressure, heart and respiration rate, and free fatty acids. Recent studies have shown that tobacco usage increases dopamine release in the brain. A study found that smokers outperform non-smokers in memory and response time, which is consistent with increased dopamine receptor activation.

Teenagers have a heightened sensitivity to nicotine. Every day, almost 4,000 teens light up for the first time. That's around 1.5 million youths a year. It is equivalent to a city like Philadelphia's entire population.

Teens who smoke cigarettes often don't realize how easy it is to become addicted. Every day, about 1,000 kids begin smoking due to the

extreme strength of nicotine addiction. Why is this important? Since the majority of smokers today became addicted when they were still in their teens.

The World Health Organization (WHO) collects statistics only on smoked tobacco. There are two ways to ingest tobacco: smoking it or using smokeless alternatives like chewing it. Consequently, more study has been done on smoking than any other intake method.

In 2000, there were 1.22 billion smokers; by 2010, that figure is predicted to rise to 1.45 billion and by 2025, it will have risen to 1.5 to 1.9 billion. If prevalence had decreased by 2% year since 2000, this number would have been 1.3 billion in 2010 and 2025. Despite a 0.4 percent decline from 2009 to 2010, the United States maintains an average consumption of 17.9 percent.

As of 2002, 20% of young teens (ages 13 to 15) worldwide smoked, and between 80,000 and 100,000 children were becoming addicted to the habit. everyday addiction; about half of them live in Asia. According to estimates, half of those who begin smoking during youth will keep smoking for 15 to 20 years.

among nations that display visual health warnings on tobacco packaging, India's rating has fallen to 136 out of 198. According to a release, this is significantly worse than the nation's 2012 ranking of 123rd. the cigarette package's health warnings. The WHO Framework Convention on Tobacco Control (FCTC) sixth session in Moscow saw the publishing of the International Status Report 2014, which ranked 198 nations according to the size of their cigarette packaging's health warnings.

MATERIAL & METHODS

Research Approach & Design: Descriptive survey is an approach which concerns with the conditions that are existing, opinion that are held and effects that is evident. These studies are designed to describe specific variables. The descriptive study is a research design that involves collecting information from a variety of people who resemble the total population of interest of investigation. In order to fulfill the objectives of the study descriptive correlational survey approach is necessary. This approach includes personal interview based on pre-prepared questionnaire method. These studies are concerned with observing the distribution of disease or health related characteristics in human population and identifying the characteristics with which the disease in question seems to be associated.

In this, study approach was directed towards the awareness of adolescent group regarding the health hazards of tobacco consumption.

Setting: The Research was carried out in the selected area of New Delhi.

Population: The study population comprises of all the adolescents (9-19) residing in the above selected area.

Target Population:

Inclusive criteria

1. Adolescent age male those are available at the time of data collection.
2. Adolescent age male those are willing to participate.
3. Adolescent age male who can understand Hindi or English.

Exclusive criteria

1. Adolescent age male that is not smoking tobacco.

Sample: The samples of study consist of tobacco consuming adolescents in selected area of New Delhi.

Sample Size: Considering the availability of subjects and time available for data collection, it was decided to include only 100 adolescents in the study.

RESULT

Major findings of the study Maximum (55%) of adolescent regarding tobacco smoking were in the age Majority (60%) of adolescent regarding tobacco smoking belongs to Hindu and remaining 25% adolescent boys belong to Muslim family 10% belongs to Sikh community 5% from Christian community. Maximum (50%) of adolescent whose father was educated till senior secondary. Followed by 20% of adolescent boys whose fathers were educated till higher secondary, 15% are graduates, 10% are educated till primary and the remaining 5% of adolescent boy's fathers had no formal education. Maximum (40%) of adolescent who's Mother was not educated. Followed by 20% of adolescent Mothers were educated till Primary, 16% are educated till higher secondary, 10% are educated till senior secondary and the remaining 14% of adolescent Mothers had are graduates. Maximum (50%) of adolescent whose father was Professional workers. Followed by 30% of adolescent whose fathers were self-employed, 15% are doing own

business and the remaining 5% of adolescent boy's fathers are unemployed. Maximum (80%) of adolescent mothers were House wives. Followed by 10% of adolescent's mothers were Professional worker, 6% are self-employed and the remaining 4% of adolescent boys mothers had business. Maximum (60%) of adolescent having family income above 12000 rs. Followed by 20% having family income 8000-12000 Rs & 15% are 4000-8000rs, and remaining 5% having family income is

below 4000 rs. Maximum (60%) of adolescent had belonged to Extended family families. Followed by 30% who belonged to the joint family and the remaining 10% who belonged to the Nuclear family. Maximum (80%) of adolescent having family member's habits of smoking alcoholism and drug addiction and remaining 20% of adolescent having family members are not having habits of tobacco smoking alcoholism and drug addiction.

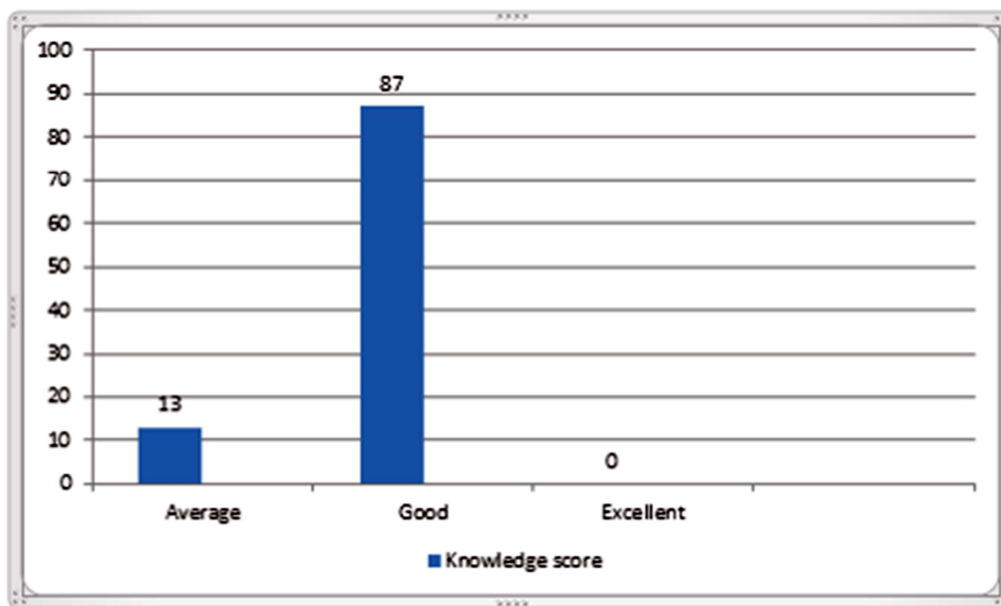


Fig. 1: Knowledge score of adolescents regarding tobacco smoking

DISCUSSION

Tobacco use, particularly smoking, remains a critical public health issue, especially among adolescents, who are often vulnerable to initiating smoking at an early age. The results of this study provide valuable insights into the understanding, awareness, and misconceptions surrounding tobacco use in this specific adolescent population.

Key Findings and Interpretation

1. **Knowledge of Health Risks:** The study revealed that a significant portion of adolescents had basic knowledge of the harmful effects of tobacco smoking, including its association with cancer, respiratory diseases, and heart disease. However, many adolescents demonstrated limited understanding of the full scope of tobacco-

related health risks, particularly concerning chronic diseases like chronic obstructive pulmonary disease (COPD) and peripheral vascular disease. This finding is consistent with other studies that suggest while most adolescents are aware of the general dangers of smoking; the depth of their understanding often remains superficial. This gap in knowledge is concerning, as the more informed individuals are about the risks, the less likely they are to begin smoking or continue the habit once initiated.

2. **Sources of Information:** The study identified that the primary sources of information about tobacco smoking for adolescents were school-based programs, media campaigns, and family members. Notably, adolescents who reported receiving information from school health education programs showed a better understanding of the harmful effects of

smoking. However, the study also highlighted a significant reliance on peer groups and social media for information, which may sometimes provide inaccurate or misleading messages. This finding underscores the importance of strengthening formal educational initiatives and ensuring that they are evidence-based and engaging enough to reach adolescents effectively. Moreover, peer influence remains a powerful force, often shaping adolescent attitudes towards smoking, suggesting the need for peer-led interventions.

3. **Attitudes and Perceptions:** Although many adolescents recognized the risks of smoking, a substantial number of participants reported that they perceived smoking as a social activity or a sign of maturity and independence. This is particularly relevant in a culturally diverse and urbanized environment like New Delhi, where peer pressure and the desire to fit in with social groups may be strong motivators for experimentation with tobacco use. Adolescents may view smoking as a status symbol, which diminishes their perception of the associated health risks. This perception could be mitigated by addressing smoking not just as a health issue, but also as a social behavior shaped by peer pressure, family dynamics, and media influences.
4. **Misconceptions and Gaps in Knowledge:** Several misconceptions were identified, including the belief that smoking only causes immediate harm (e.g., coughing or bad breath) and that the long-term consequences, such as lung cancer or heart disease, are unlikely to affect young smokers. Some adolescents were also unaware of the addictive nature of nicotine and the impact of smoking on mental health, which could lead them to underestimate the potential for dependency. These findings suggest that there is a critical need for comprehensive, age-appropriate educational programs that go beyond just listing health risks and instead focus on explaining the long-term consequences, the addictive properties of tobacco, and the social and psychological factors involved in smoking behavior.
5. **Demographic Variations:** The study also observed differences in knowledge based on gender, socioeconomic status, and family background. Female adolescents, particularly those from higher socioeconomic backgrounds, were found to have a better

understanding of the risks of smoking. In contrast, male adolescents from lower socioeconomic groups were less aware of the long-term dangers of tobacco use. This highlights the need for targeted interventions that consider the specific demographic characteristics of adolescents. In communities with lower socioeconomic status, smoking prevention programs should also focus on improving general health literacy, addressing financial barriers to health care, and offering community-based cessation support.

6. **Recommendations for Health Education and Intervention:** Based on the findings, it is evident that there is a critical need for enhanced tobacco prevention programs in schools and community centers across New Delhi. These programs should be designed to provide accurate, comprehensive information about the short- and long-term health risks of tobacco use, the addictive nature of nicotine, and strategies for resisting peer pressure. Interactive and engaging methods, such as peer education, digital platforms, and social media campaigns, can be effective in reaching adolescents where they are most likely to seek information. Furthermore, involving families in educational efforts could strengthen the impact of tobacco prevention programs, particularly by addressing familial attitudes towards smoking.

CONCLUSION

This study underscores the importance of early intervention in tobacco prevention and the need to address knowledge gaps among adolescents. While many young people are aware of the health risks associated with smoking, their understanding is often incomplete or based on misconceptions. Comprehensive tobacco education programs, peer-led interventions, and family involvement are essential for reducing smoking rates among adolescents in New Delhi. By strengthening awareness and promoting healthier behaviors, public health initiatives can help prevent the initiation of tobacco use and reduce the long-term health burden of smoking in this vulnerable population.

Conflict of Interest: There are no conflicts.

Source of Funding: Self.

Ethical Clearance: Ethical clearance has been taken from institutional ethical committee.

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