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# "AN EXPLORATORY STUDY TO ASSESS THE KNOWLEDGE REGARDING ILL EFFECTS OF CIGARETTE SMOKING AND IT'S PREVENTION AMONG ADOLESCENT BOYS AND GIRLS IN SELECTED SCHOOLS OF PUNE CITY".

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#### **ABSTRACT**

**Introduction:** Use of tobacco significantly harms public health and increases the probability of a variation of human diseases & conditions, together with respiratory problems, cardiovascular disease & mouth cancer. There is a lot of research proving that smoking cigarettes and periodontal disease go hand in hand. Severe periodontitis is five times as likely to affect smokers as non-smokers.<sup>2</sup> Smoking is a risk cause of periodontal disease on its own, smoking increases the risk of periodontal disease. Which found an overall odds ratio of 2.82 with 95% assurance intervals between 2.36 and 3.39. According to epidemiological studies, smokers have more tooth loss. According to study, nicotine-related changes to specific adolescent brain regions may cause smoking to continue into adulthood. These alterations also have what is frequently described to as a "gateway" effect, which raises the prevalence of other substance use disorders in adolescent smokers.<sup>6</sup>. The present study title: "An exploratory study to assess the knowledge regarding ill effects of cigarette smoking and it's prevention among adolescent boys and girls in selected schools of Pune city". Objectives of the study: 1. To determine how well-informed adolescent boys & girls are about the negative effects of smoking and how to prevent them.2. To associate the findings with selected demographic variables. Material and Methods: Researcher adopted descriptive research design. The study carried out on 300 samples. Non - probability purposive sampling method was used to collect data using demographic profile and clinical profile. Data analysis was done using descriptive statistics. Results: The finding shows majority 54% have average knowledge, 32 % have poor knowledge 14% have good knowledge towards ill effects of smoking and its prevention. Conclusion: Previous knowledge is associated with p value <0.05. and, Age, education, gender and place of residence are not associated with p value >0.05.

Keywords: Assess, knowledge, smoking, prevention, adolescent

# **INTRODUCTION**

Use of tobacco significantly harms public health and increases the probability of a variation of human diseases & conditions, together with respiratory problems, cardiovascular disease & mouth cancer.1 There is a lot of research proving that smoking cigarettes and periodontal disease go hand in hand. Cigarette smoking is a major contributor to the probability for periodontal disease. Severe periodontitis is five times as likely to affect smokers as non-Journal of Data Acquisition and Processing Vol. 38 (4) 2023 696

smokers. 2 Smoking is a risk cause of periodontal disease on its own, smoking increases the risk of periodontal disease which found an overall odds ratio of 2.82 with 95% assurance intervals between 2.36 and 3.39. According to epidemiological studies, smokers have more tooth loss than nonsmokers do.3 According to these findings, smoking makes people more vulnerable to tissue damage and periodontal infections. Smoking has a range of systemic consequences that affect periodontal disease, such as altered chemotaxis, decreased phagocytosis by peripheral and oral neutrophils, and decreased antibody synthesis.<sup>4</sup> There is a sizable amount of research showing how smoking's local consequences affect periodontal health. These local consequences include nicotine's vasoconstriction as well as a drop in oxygen tension, which may foster an ideal subgingival habitat for anaerobic bacterial colonization. Although there is little scientific evidence to suggest such an effect, The heat produced by smoking cigarettes may have a local effect on the periodontium. According to several research, smokers exhibit different patterns of periodontal deterioration, which may indicate that smoking has a specific impact on the maxillary palatal surfaces, particularly in the anterior area. The average periodontal probing depth (PPD) and the occurrence of deeper periodontal pockets are generally higher in smokers. Additionally, studies have revealed that smokers experience larger mean clinical attachment level (CAL) decrease than nonsmokers. According to Haffajee and Socransky, there are differences between how attachment loss manifests in smokers and non-smokers.

#### NEED OF THE STUDY

In 2019–2020, there was a decrease in middle and high school students' use of all tobacco products, including cigars, e-cigarettes, and smokeless tobacco. According to predictions, there will be 1.73 million fewer young people who are now using tobacco products in 2020 (4.47 million) than there were in 2019 (6.20 million).<sup>7</sup>

According to a review of the 2022 National Youth Tobacco Survey (NYTS), 11.3% of middle and high school students reported using tobacco products in the previous 30 days, with rates being higher amongst young people who were experiencing exceptionally high levels of psychological distress. Young people from underprivileged backgrounds and those whose parents make less money. According to additional study, adolescents who smoke lightly or only occasionally experience the same level of difficulty stopping as those who smoke continuously.<sup>9</sup>

A cross-sectional investigation in Tikrit Teaching Hospitals, Iraq was conducted. Few smokers are aware of the hazards connected with smoking, particularly stroke (66.3%). Few smokers are aware of the survey; a questionnaire that was administered by the participant was used. The study's findings showed that 90% or more of the students had a reasonable possibility of succeeding in their attempt to stop smoking. However, the vast majority (96%) were unaware of the various NRTs. This demonstrates a glaring ignorance of the strategies that can help individuals break the habit.<sup>11</sup>

The major issue in developing nations is this. One-third of middle-aged male deaths are attributed to smoking cigarettes. This age group is now dealing with a number of issues, such as failure, anxiety, depression, adjustment issues, inefficient coping mechanisms, etc. This is the cause of the nicotine addiction in this age range. Nicotine can alter how the brain functions,

which can lead to cravings for more of it. Therefore, it is significant to spread knowledge about the negative effects of tobacco use, its prevention, and awareness of tobacco

# AIM OF THE STUDY

The aim of study is to " An exploratory study to assess the knowledge regarding ill effect of cigarette smoking and it's prevention among adolescent boys and girls in selected school of pune city

#### RESEARCH METHODOLOGY

In this study, the objectives was to assess the knowledge regarding ill effect of cigarette smoking and its prevention among adolescent boys and girls and associate the findings with selected demographic variables. Researcher adopted quantitative approach with descriptive research design prior permission was taken for the study. The study carried out on 300 samples with non - probability purposive sampling technique. Primary data was collected using demographic profile and structured questionnaire. Reliability done on 30 sample by using test retest method and result was 0.98 and it is reliable pilot study was conducted on 30 sample, data analysis was done using descriptive statistic and feasible to conduct further study.

#### RESULTS

#### **Section-I:**

Analysis of data pertaining to the demographic factors being investigated:

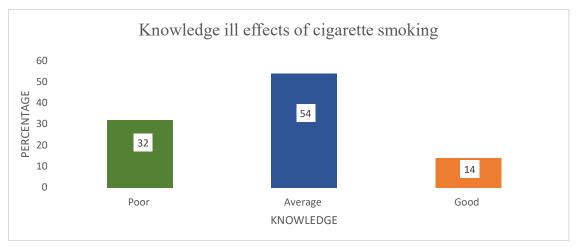
Majority 25.33% are of 15 years, 24.33% are of 17 years, 23% are of 16 years, 19% are of 14 years & 8.33% are of 18 years. Majority 35.33% have passed 10 th std, 24.33% have passed 11 th std, 22% have passed 9 th std& 18.33% have passed 12 th std. majority 54.33% are male & 45.67% are female. Majority 89.33% stays at home, 10.67% stays at hostel. Majority 91% have no previous knowledge regarding ill effects of cigarette smoking.

**Section-II:** 

Analysis related to the knowledge regarding ill effects of cigarette smoking and it's prevention among adolescent boys and girls. n=300

	Frequency	Percentage	Mean	SD
Poor	96	32		
Average	162	54	11.02	3.89
Good	42	14	Ti .	

The finding shows majority 54% have average knowledge, 32 % have poor knowledge 14% have good knowledge with mean of 11.02 & S.D is 3.89



ABOVE BAR DIAGRAM SHOWS THE KNOWLEDGE ILL EFFECTS OF CIGARETTE SMOKING

#### **SECTON III**

## The analysis related to association knowledge with selected demographic variable.

Age, Educational status, Gender, Place of residence is not associated with knowledge at the significant level of 0.05. And, previous knowledge about ill effect of cigarette smoking is associated as p value is less than 0.05 level of significance.

#### **DISCUSSION**

Majority 25.33% are of 15 years, 24.33% are of 17 years, 23% are of 16 years, 19% are of 14 years & 8.33% are of 18 years. Majority 35.33% have passed 10 th std, 24.33% have passed 11 th std, 22% have passed 9 th std& 18.33% have passed 12 th std. majority 54.33% are male & 45.67% are female. Majority 89.33% stays at home, 10.67% stays at hostel. Majority 91% have no previous knowledge regarding ill effects of cigarette smoking. The finding shows majority 54% have average knowledge, 32% have poor knowledge 14% have good knowledge with mean of 11.02 & S.D is 3.89. Age, Educational status, Gender, Place of residence is not associated with knowledge at the significant level of 0.05. And, previous knowledge about ill effect of cigarette smoking is associated as p value is less than 0.05 level of significance.

The study can be discussed with Singh, Shilpi, Dagrus, Kapil, Kariya, Pratik, Bargale, Seema, and Shah, Shreyas (2015). The study was surveyed about their knowledge of and occurrence of the negative consequences of smoking after receiving informed consent. Using a self-administered questionnaire, conduct the survey. The questionnaire collected data on adolescent smoking-related psychosocial factors, tobacco use, daily cigarette consumption, preferred smoking method, early smoking experiences as well as feelings and other elements that could inspire a quit attempt, negative effects of smoking on oral health, and information on various NRTs. In order to provide relevant findings, the feedback was examined and reduced into objective data. According to the study's findings, up to 90% of the students had a strong probability of successfully stopping smoking. However, the vast majority (96%) were unaware of the various NRTs. This demonstrates a glaring ignorance of the strategies that can help individuals break the habit. As a result, we have a clear idea of how to focus our efforts and are also hopeful about the results.

#### **CONCLUSION**

Study concluded that statistically there is no significant association found between knowledge level regarding ill effects of cigarette smoking and its prevention among adolescents except previous knowledge about ill effect of cigarette smoking. The finding shows majority 54% have average knowledge, 32 % have poor knowledge 14% have good knowledge. Although most people were aware of smoking's harmful effects and how to avoid them. To raise knowledge of the adverse consequences of smoking and ways to prevent it in communities, there is need to empathize more on this topic among adolescents. More emphasis should be given on a basis of health education to create awareness about ill effects of cigarette smoking and its prevention among adolescents in the community, schools and colleges by health care professionals. It is necessary that the health care providers must make it as a requirement that the adolescents age group must are very much important to receive information about cigarette smoking and its prevention in a variety of ways. It is important that the health care providers or heath workers enhance knowledge regarding cigarette smoking and its prevention to equip them with knowledge that will enable to communicate with the community more effectively.

#### **CONFLICT OF INTEREST**

We, researchers, understand that conflict of interest refers to situations in which financial or other personal considerations may compromise our judgment in evaluating, conducting, or reporting research. We hereby declare that we do not have any personal conflict of interest that may arise from our application and submission of our research proposal.

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