SMOKING AMONG SCHOOL STUDENTS - A SURVEY

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ABSTRACT

Background: Adolescent tobacco smoking is a major health concern in India. Schools may be able to influence adolescent behaviour regarding smoking. Moreover, the prevalence of cigarette smoking varies between schools, and some of this variability may be explained by school factors. The World Health Organization (WHO) reported that mortality due to smoking-related diseases was higher than the combination of all infectious diseases worldwide. To know the smoking habits among school students. Questions were prepared and administered to 120 participants through survey planet an online survey. The study population were school students of age group between 13 to18 years. The study estimated that 27 % of the total participants smoked their first cigarette in their age of 16 to 19 years and 34 % of the total participants smoked their first cigarette in the age group 11 and 15 years old. 25 % of the people who smoke have given their opinion that their friends who smoke have influenced them even 28 % of the total study population including the non smokers have suggested that television and movie advertising also

influenced the students to smoke. 54 % of the total study population (school students) are smoking. 28% of the smokers have decided that they will stop smoking.

Keywords: influence; adolescents; movie advertising; world health organisation

INTRODUCTION

A repository for the collection, analysis, validation and dissemination of all smoking and health-related data was established by the World Health Organization **(Saha *et al.*, 2007)**. Smoking prevalence in men and women averages 42% and 24%, respectively, for developed countries, and 48% and 7%, respectively, for less developed countries. In the United States, in comparison approximately 47 million people smoke cigarettes . Both active and passive smoking are implicated in this increase, and several studies of smoking behaviour and disease incidence in women suggest greater susceptibility of women to tobacco carcinogens **(Henschke, Yip and Miettinen, 2006)**. Comparative toxicity studies have shown that the new experimental cigarettes that in comparison with standard cigarettes heat tobacco have a relatively low toxicity **(Foy *et al.*, 2004)**. By measuring the intimal-medial thickness of the carotid artery in a large longitudinal atherosclerosis risk study of 10,914 individuals quantitative risk estimates were obtained. Increases of 50%, 25% and 20% were shown over nonsmokers in current, ex-and passive smokers,

respectively, thus suggesting a role of all types of tobacco smoke exposure in the progression of atherosclerosis **(Howard *et al.*, 1998)**.

Two polymorphic variants that interact with smoking to modify lung cancer risk have been identified **(Nakachi *et al.*, 1993) (Okada *et al.*, 1994)**. Cigarette smoking is a major preventable cause of morbidity and mortality worldwide. Some time before 18 years of age , most adult smokers start smoking regularly **(Meijer *et al.*, 1996)**. Mortality and morbidity due to smoking-related diseases are important public health issues globally **(Organization and Others, 2011)**. The World Health Organization (WHO) reported that mortality due to smoking-related diseases was higher than the combination of all infectious diseases worldwide **(Lim *et al.*, 2017)**.

Even the other authors like **Kuang Hock Lim, Hui Li Lim, Chien Huey Teh, Chee Cheong Kee, *et al*,** conducted a survey among school-going adolescents in selected secondary schools in Peninsular Malaysia-findings from the Malaysian Adolescent Health Risk Behaviour (MyaHRB) study. A

study was carried out in 2013, which involved a total of 40 secondary schools. They were randomly selected using a two-stage clustering sampling method. Subsequently, all upper secondary school students (aged 16 to 17 years) from each selected school were recruited into the study. Data was collected using a validated standardised questionnaire and the prevalence of smoking among them were nearly 14.6 % and it was significantly higher for males than the females. Previously our team has a rich experience in working on various research projects across multiple disciplines. **(Muthukrishnan and Warnakulasuriya, 2018), (Govindaraju, Neelakantan and Gutmann, 2017), (Chen *et al.*, 2019), (Priyanka *et al.*, 2017), (Sitharthan *et al.*, 2019), (Priyadharsini *et al.*, 2018), (Azeem and Sureshbabu, 2018), (Wu *et al.*, 2019), (Abitha and Santhanam, 2019), (Manohar and Abilasha, 2019), (Venu, Dhana Raju and Subramani, 2019), (Wang *et al.*, 2019), (Girija, Jayaseelan and Arumugam, 2018), (Sheriff, Ahmed Hilal Sheriff and Santhanam, 2018), (Dhinesh *et al.*, 2017)** Now the growing trend in this area motivated us to pursue this project. Smoking nowadays is most common among the school students this survey was done to know the smoking prevalence percentage. It was also a comparative study between urban and rural school students. Our study aimed to know the smoking habits among school students.

MATERIALS AND METHOD

Self-administered design was designed based on awareness on the effects of smoking, sampling was done by Stratified Random sampling. Ethical approval and informed consent from the participants were obtained from the institutional review board. The questionnaire was distributed through an online survey planet link the study population included [number of school students] belonging to 13 – 18 years of age group. The participants were explained about the purpose of study in detail .The questions were carefully studied and the corresponding answers were marked by the participants. Only completed surveys were taken for analysis and the incomplete surveys were eliminated. All the responses obtained were tabulated and reliability of the data was checked. The participants did the survey voluntarily and no incentives were given to them.
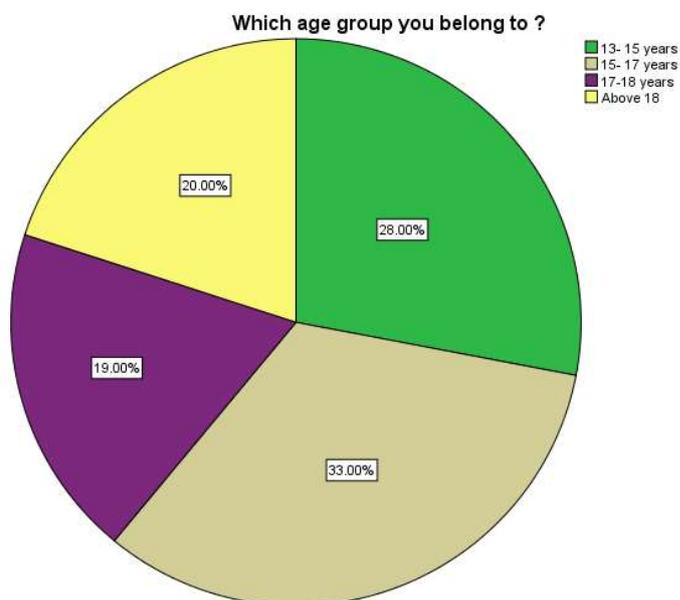
RESULTS

Figure 1: Pie chart represents the age group of the population of the survey. Many of the participants who were involved in the study were in the age group of 15 - 17 years; 33% and 28% of the population belongs to the age group of 13-15 years.19% of the respondents were from 17-18 years, 20% of the respondents belonged to the age group of above 18 years.
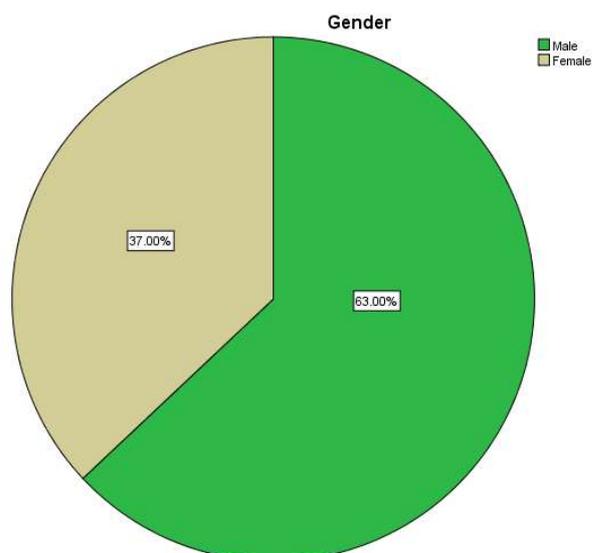

Figure 2: Pie chart represents the gender of the survey population. 63% of the respondents are male and 37% of the respondents are female
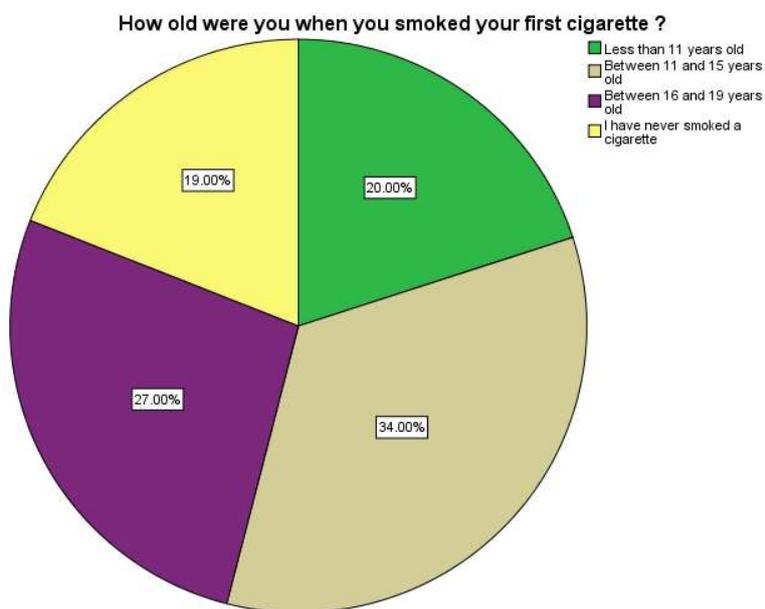
Figure 3: Pie charts represent the percentage of how old the respondents were when they smoked their first cigarette. 20% of the respondents were less than 11 years and 34% of the respondents were between 11 and 15 years and 27% of the respondents were between 16 and 19 years old
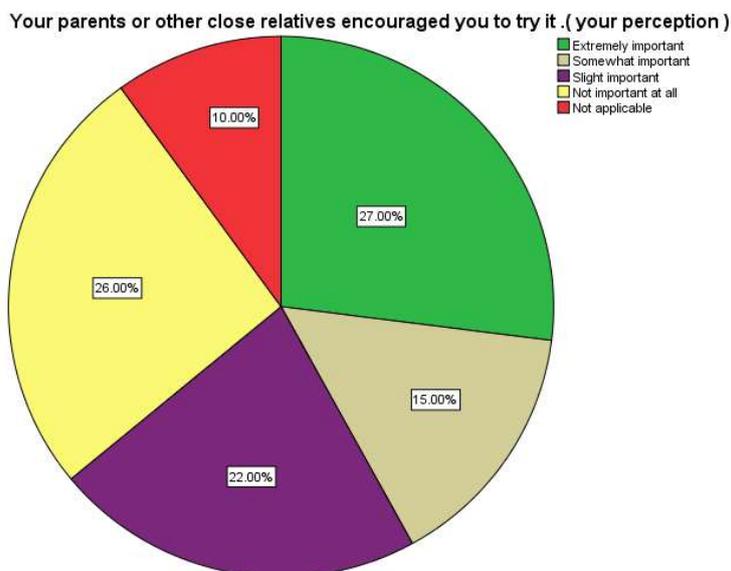

Figure 4: Pie chart represents the perception of respondents whether parents or other relatives would have been encouraged to smoke. 27% of respondents polled that the parents or the relatives would have encouraged them to smoke.28% of respondents polled that the parents or the relatives would not have encouraged them to smoke

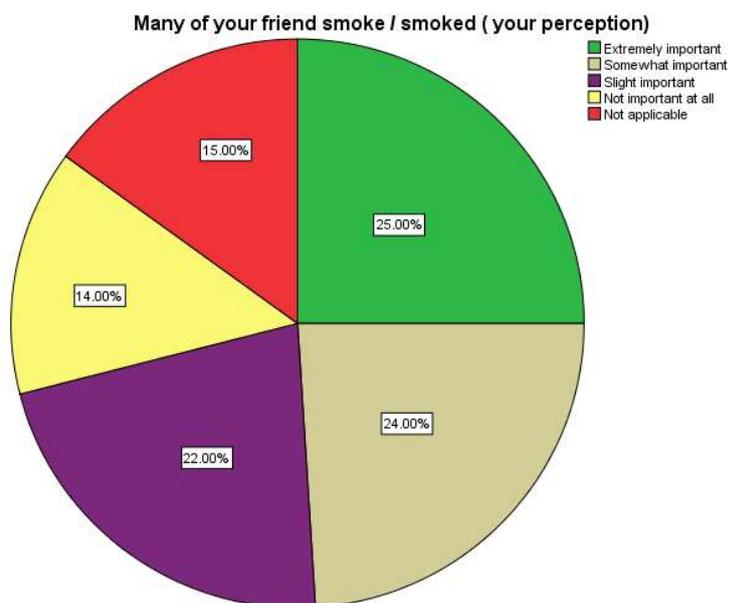**Many of your friend smoke / smoked (your perception)**

Figure 5: Pie chart represents the perception of respondents whether many of the friends smoke so because of that school children would have started this habit. 25% of respondents polled that many of their friends smoked so because of that they started smoking. 14% of respondents polled that this would not have encouraged them to smoke

Many of your friends encouraged you to try it ? (your perception)
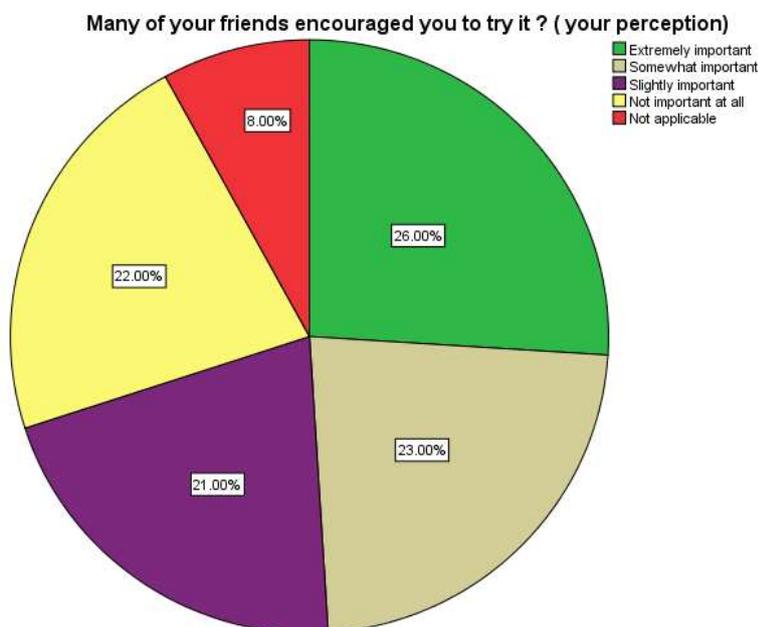

Figure 6: Pie chart represents the perception of respondents whether many of the friends would have encouraged them to smoke. 26% of the participants including non smokers have suggested that friends might have encouraged them to smoke and it's an extremely important factor. However, 22% of the participants' opinions were that friends would not be encouraged to smoke.

You knew someone who smoked you look up to and respected (i.e teacher, sports , star , neighbour,someone at church etc)
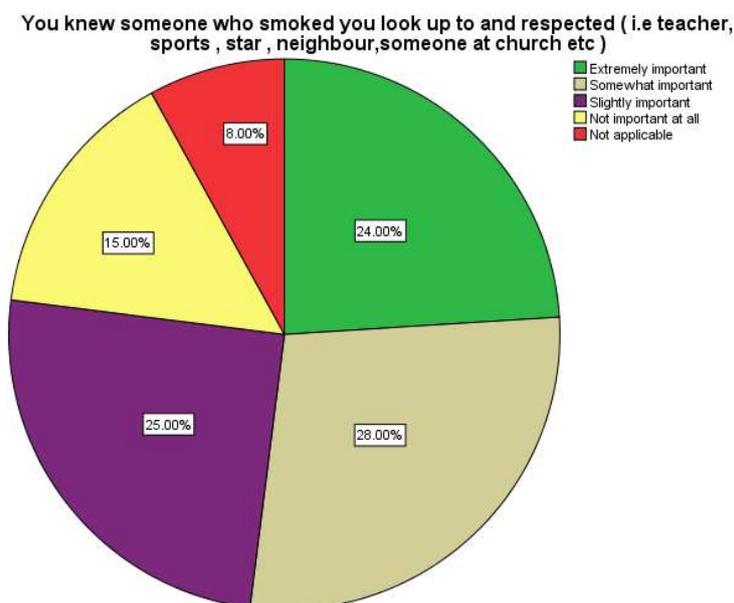

Figure 7: Pie chart represent the perception of respondents whether a person whom they look upto might have a smoking habit so this made them cultivate the same habit. 24% of the total population have suggested that students got influenced because of the person whom they look upto may smoke. It can be any film stars, celebrity ,sports person ,teacher , guide.15% of the population have denied it.

Television / movie advertising (your perception)
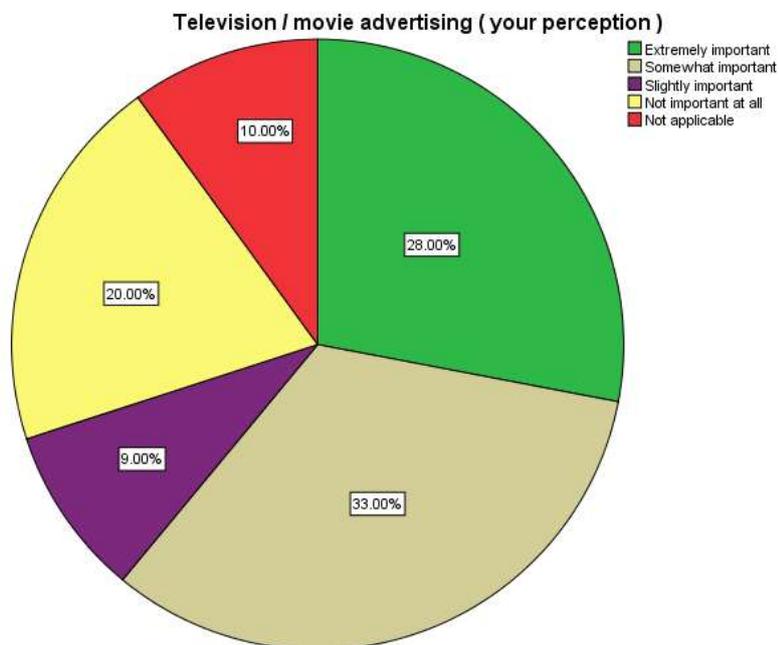

Figure 8: Pie chart represent the perception of respondents whether television or movies might have an impact on inculcating the smoking habit. 28% of the survey participants including some of the non smokers have told that television and movie advertising will have a very good impact on the school students that will evoke them to smoke. 20% of people have denied it.
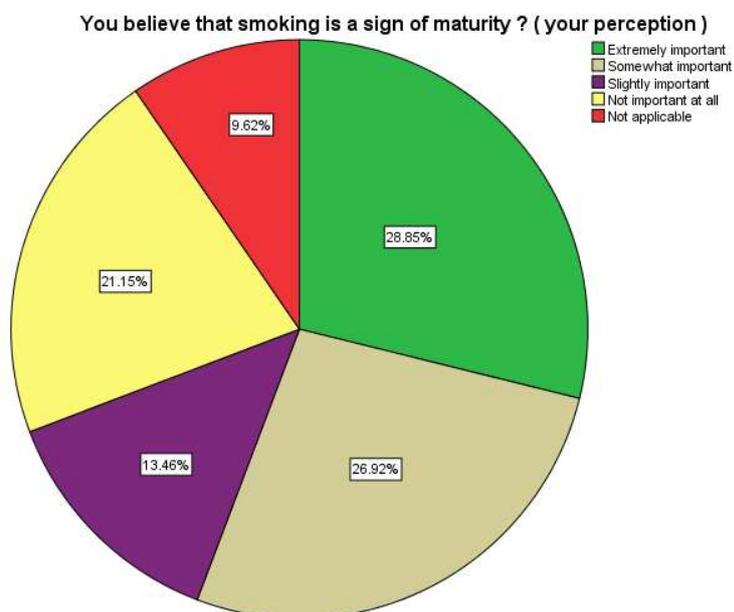
Figure 9: Pie chart represent the perception of respondents whether they believe that smoking is a sign of maturity. 28.35% of the respondents thought that they might have started smoking thinking that it is a sign of maturity and 21.15% of the population have denied it
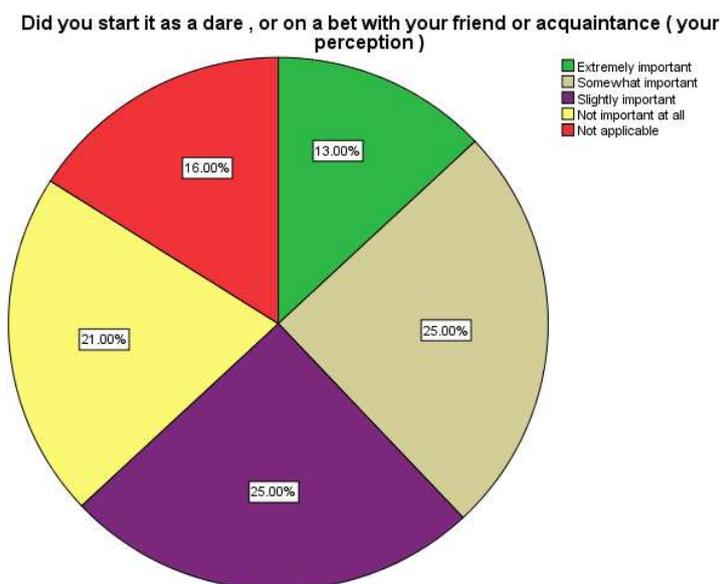

Figure 10: Pie chart represent the perception of respondents whether they started smoking as a bet or dare with your friend. 13 % of the people have polled for that they might have started smoking as a bet or dare with their friend or acquaintance and 21% denied it
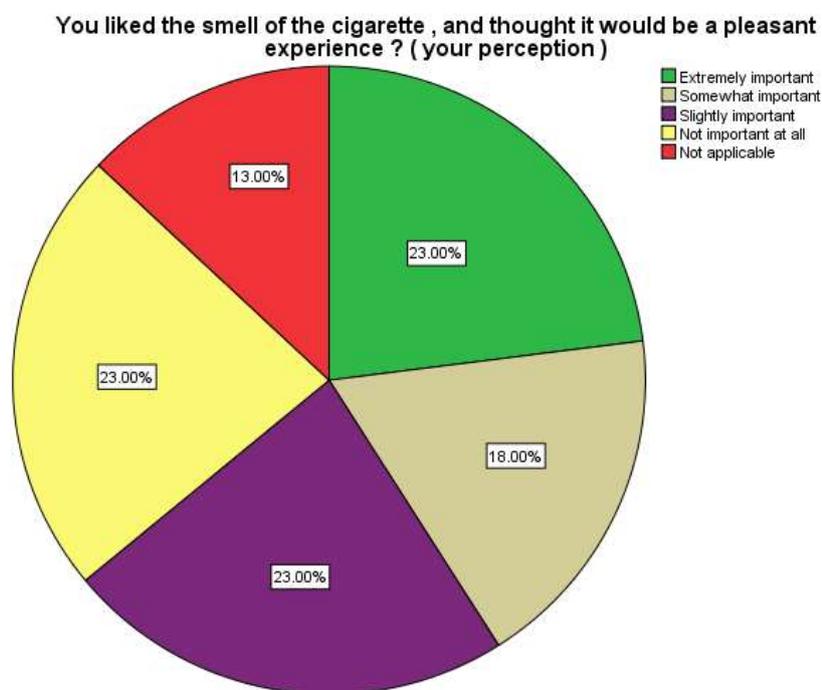
Figure 11: Pie chart represent the perception of respondents that since they liked the smell of the cigarettes , and thought it would be a pleasant experience. 23% of the smokers who have answered this question have accepted that they liked the smell of the cigarette so they continued smoking. 23% of them have denied it
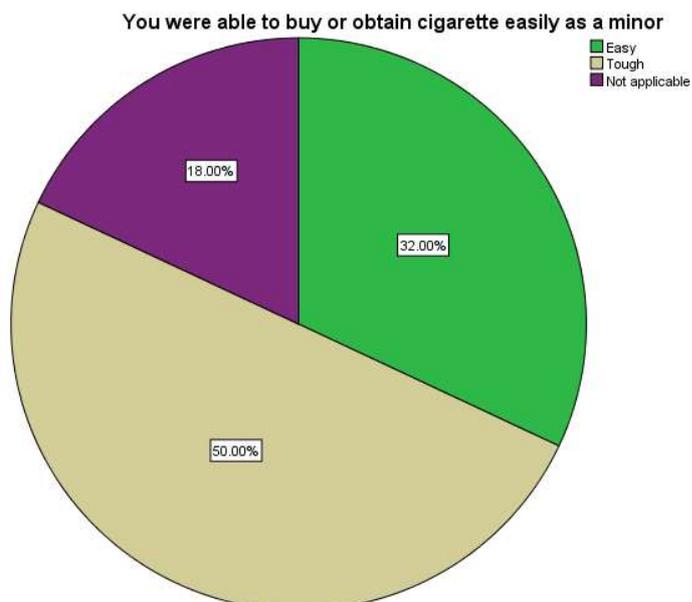
Figure 12: Pie chart represents the percentage of the respondents who were able to obtain cigarettes easily as a minor. 32% of the respondents said it was easy for them to obtain cigarettes. 50% of the respondents said it was tough for them to obtain cigarettes

Figure 13: Pie chart represents the percentage of people who wanted to stop smoking. 28% of the people have said that as soon as possible they will stop smoking. 21% of the people are not ready to stop smoking. 7% of the people have decided to smoke the rest of their life. 26% of the people have already not started this smoking habit
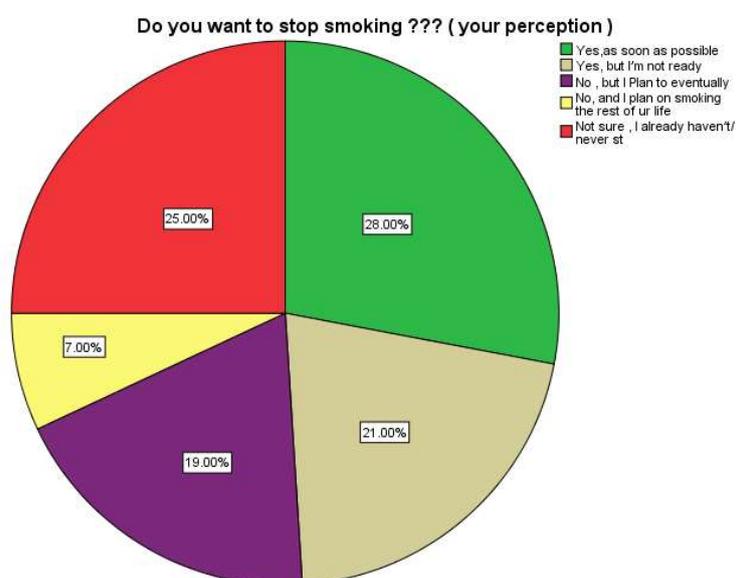
DISCUSSION

Many of the participants who were involved in the study were in the age group of 15 - 17 years that is 33% and 28 % of the population belongs to the age group of 13-15 years and 19% of the respondents were from 17-18 years. 20% of the respondents belonged to the age group of above 18 years **(Figure 1)**. 63% of the respondents are male and 37% of the respondents are female **(Figure 2)**. 20% of the respondents were less than 11 years and 34% of the respondents were between 11 and 15 years and 27% of the respondents were between 16 and 19 years old when they smoked their first cigarette **(Figure 3)**, A similar study was conducted by **Yousif. M.Gadalla (Gadalla *et al.*, 2012)** in the year

2012 in which similar results were obtained by them - Age of initiation was as early as 11 years old, smoking between 11-13 years of age was 29 (23.4%) and between 14-17 years 94(75.8%). 27% of respondents polled that the parents or the relatives would have encouraged them to smoke. 28% of respondents polled that the parents or the relatives would not have encouraged them to smoke **(Figure 4)**. 25% of respondents polled that many of their friends smoked so because of that they started smoking. 14% of respondents polled that this would not have encouraged them to smoke **(Figure 5)**. 26% of the participants including non smokers have suggested that friends might have encouraged them to smoke and it's an

extremely important factor. However, 22% of the participants' opinions were that friends would not be encouraged to smoke **(Figure 6)**. 24% of the total population have suggested that students got influenced because of the person whom they look upto may smoke. It can be any film stars, celebrity, sports person, teacher, guide.15% of the population have denied it **(Figure 7)**. 28% of the survey participants including some of the non smokers have told that television and movie advertising will have a very good impact on the school students that will evoke them to smoke. 20% of people have denied it **(Figure 8)**. Much research has examined the influence of individual characteristics and characteristics in the immediate social environment **(Conrad, Flay and Hill, 1992; Tyas and Pederson, 1998; National Center for Chronic Disease Prevention and Health Promotion (US) Office on Smoking and Health, 2012)**. 28.35% of the respondents thought that they might have started smoking thinking that it is a sign of maturity and 21.15% of the population have denied it **(Figure 9)**. 13 % of the people have polled for that they might have started smoking as a bet or dare with their friend or acquaintance and 21% denied it **(Figure 10)**. 23% of the smokers who have answered this question have accepted that

they liked the smell of the cigarette so they continued smoking. 23% of them have denied it **(Figure 11)**. 32% of the respondents said it was easy for them to obtain cigarettes. 50% of the respondents said it was tough for them to obtain cigarettes **(Figure 12)**. 28% of the people have said that as soon as possible they will stop smoking. 21% of the people are not ready to stop smoking. 7% of the people have decided to smoke the rest of their life.26% of the people have already not started this smoking habit **(Figure 13)**.

Preventing young people from starting to smoke is critical and a crucial step for cancer control. The Theory of Triadic Influence **(Flay, Petraitis and Hu, 1999)** posits that factors from three different levels of context can influence youth smoking onset:, characteristics in the immediate social environment surrounding youth (e.g., friends and family members), individual characteristics (e.g., age and gender), and characteristics in the broader social environment surrounding youth (e.g., school community). Students are at increased risk for smoking if they (a) often see students smoking near their school, (b) attend a school with a relatively high senior student smoking rate, and (c) report that students at their school smoke where they are not allowed

(Leatherdale and Manske, 2005). Few studies have examined how school characteristics are related to youth smoking behavior. Considering that smoking rates vary across schools (Aveyard, Markham and Cheng, 2004) (Aveyard *et al.*, 2005) and that the variation is not caused by differences in student characteristics , it is important to identify the influential school characteristics associated with that variability.

Different risks and protective factors related to smoking have been described among adolescents in the last decades (Hawkins, Catalano and Miller, 1992). These factors manifest themselves at different levels (e.g., personal, familial, school level) introducing complexity when trying to understand the behaviour of adolescents. Several authors have found significant intra-school correlations in smoking onset, monthly smoking prevalence and the number of cigarettes smoked per day, which could be related to the characteristics of the students within each school or other school contextual features. Those studies exploring contextual effects using multilevel modelling have found that schools with a combination of higher performance and less truancy (Aveyard *et al.*, 2004), schools receiving social assistance (Linetzky *et al.*, 2012) and

mixed sex or vocational high schools had a higher risk for smoking (Heo *et al.*, 2014). Our institution is passionate about high quality evidence based research and has excelled in various fields (Pc, Marimuthu and Devadoss, 2018; Ramesh *et al.*, 2018; Vijayashree Priyadharsini, Smiline Girija and Paramasivam, 2018; Ezhilarasan, Apoorva and Ashok Vardhan, 2019; Ramadurai *et al.*, 2019; Sridharan *et al.*, 2019; Vijayashree Priyadharsini, 2019; Chandrasekar *et al.*, 2020; Mathew *et al.*, 2020; R *et al.*, 2020; Samuel, 2021). We hope this study adds to this rich legacy.

Limitation:

 This is an online survey were bias can be expected from respondents, sampling and selection error, less sample size

Future Scope:

In future this study can be conducted on different professionals and students which assess various behavioural and knowledge patterns and their psychological or physical stress, can be considered with the habit of smoking and its prevalence with different professions.

CONCLUSION

This study concludes that almost half of the total study population (school students) are smoking, among them the majority of the smokers have an idea to stop their smoking

habit but few of them do not have any idea to stop the habit of smoking

ACKNOWLEDGEMENT

CONFLICT OF INTEREST

The author declares that there was no conflict of interest in the present study

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