

Assessing the compliance with cigarettes and other tobacco products act 2003 in Chennai: An observational study

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ABSTRACT

Introduction: In India, tobacco is consumed widely and in multiple forms such as chewing tobacco, cigarettes, and beedis. Tobacco use is especially problematic among Indian youth. According to Global Youth Tobacco Survey reports, 14% of students currently use some form of tobacco. The COTPA ACT (2003) add relevant rules to control the tobacco menace. **Aim:** This study aims to ensure the compliance with the section of COTPA 2003 regarding the sale of tobacco products around school in Chennai. **Materials and Methods:** A total of 120 schools in Chennai were selected by simple random sampling and were observed. 150-yard radius around each school was canvassed to ensure that all shops within 100-yard radius were observed. The study was completed by visiting and observing 100-yard radius of each and every selected school. **Results:** Of 120 schools observed, nearly 52% (63) of schools had shop selling tobacco products within 100 m radius. **Conclusion:** This study shows that COTPA 2003 is not being implemented to its fullest extent in Chennai. There is widespread violation with respect to the sale of tobacco products around 100 m radius of school.

KEY WORDS: Adults, cigarettes and other tobacco products act, Schools, Smoking, Tobacco

INTRODUCTION

Tobacco use is a serious public health challenge in several regions of the world. The current trends show that >8 million deaths will be associated with tobacco use worldwide by 2030.^[1] According to the World Health Organization (WHO), tobacco is the single greatest cause of preventable death globally. Similarly, the United States centers for disease control and prevention describe tobacco as “the single most important preventable risk to human health in developed countries and an important cause of premature death worldwide.”^[2] As per the World Health Statistics 2008 report,^[3] the non-communicable conditions will cause over three-quarters of all deaths in 2030. As per the WHO report on the Global Tobacco Epidemic, 2008,^[4] tobacco kills up to half of those who use it. In fact, we can say that tobacco use is one of the biggest public health threats, the world has ever faced.

In India, tobacco is consumed widely and in multiple forms such as chewing tobacco (Gutkha), cigarettes, and

beedis (hand-rolled cigarettes). Tobacco use is especially problematic among Indian youth. As per the Global Youth Tobacco Survey reports pertaining to India,^[5] 14% of students currently use any form of tobacco, 4.1% of the students currently smoke cigarettes, and 11.8% currently use some other forms of tobacco.

Tobacco companies are taking advantage of this situation. They are advertising tobacco products using mass media techniques targeting schoolchildren and young people.^[6] There is evidence that young smokers are more familiar with cigarette advertisements and prefer the most heavily advertised brands in the convenience stores near their schools.

In this scenario, the Government of India notified in the Gazette “The Cigarettes and Other Tobacco Products (prohibition of advertisement and regulation of trade and commerce, production, supply, and distribution) Act (COTPA) 2003” and relevant rules^[7] to control the menace.

This law was intended to protect and promote public health, encompass evidence-based strategies to reduce tobacco consumption, and impose penalties to the

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violators. The chief provisions of the act were banning of direct and indirect advertisements of tobacco products, prohibition of smoking in public places, sale of tobacco to minors, and smoking within 100 m of educational institutions.^[8] The law intends to prevent the present and future generations from the adverse effects of tobacco use by forestalling youth.^[9] The successful implementation of the law is an important strategy to prevent the tobacco-related deaths and improve the productivity of the country.

Thus, a study was planned to ensure compliance with the section of COTPA 2003 regarding the sale of tobacco products around schools in Chennai city, Tamil Nadu.

Aim

- This study aims to monitor the compliance with the section of COTPA 2003 regarding the sale of tobacco products around schools in Chennai city, Tamil Nadu.

Objectives

The objectives of this study were as follows:

- Audition of activity (sales) within 100 m of schools in Chennai city.
- To check if there is any government health warning display at the store.

MATERIALS AND METHODS

It is a cross-sectional study conducted at Chennai. The school system in Chennai consists of an array of structured systems. Chennai schools fall into two administrative categories, government schools called as corporation schools and privately run schools. Private schools fall under the following categories: Schools with central board syllabus, schools with state board syllabus, schools with matriculation syllabus, schools with Anglo Indian syllabus, and schools with oriental syllabus.

Most private schools are English medium (medium of instruction is English) while the government-run schools are primarily Tamil medium (medium of instruction is Tamil). The schools run by the central government have a dual medium of instruction - English and Hindi. There are about 10 zones in Chennai and about 1221 schools in Chennai.

Study Population

Retail shops near schools in Chennai were included in the study.

Inclusion Criteria

Retail shops within 100 m of schools in Chennai were included in the study. Before the start of the study, ethical clearance was obtained from the Institutional Ethics Committee, Saveetha University. Data collection was scheduled in October 2016.

Sample Size

$n = 120$ (95% power at 5% alpha). Based on the study was done by Elf *et al.*, 2013.^[10]

Sampling

A master list of all public and private secondary schools ($n = 676$) was received from the education department of Chennai in September 2016. The list of the schools was sorted by type (public or private) and city zones (zones 1–10) and then arranged in alphabetical order. 121 schools were selected at random.

Survey

An observational study was developed based on the previous research. Data collection was done in October 2016. After having clear knowledge about COTPA 2003, methods and procedures for field observation, data collection was started.

Survey Instrument

A structured observational checklist based on a guide jointly developed by John Hopkins School of Public Health, Tobacco-Free Kids, was used to record the observational findings. The study variables included display of signages, any promotion for specific tobacco products, and presence of shops selling tobacco products within 100 m radius of school.

Data Collection

The selected schools were visited, and at each school location, the Global Positioning System (GPS) coordinates were collected using iPad AIR 2 with an attached GPS receiver. At this time, it was also noted whether or not the school location had a sign regarding the prohibition of the sale of tobacco within 100 yards of their location. Maps of each sampled location and required observational area were created for use in the field.

A 150-yard radius around each school was canvassed to ensure that all shops within a 100-yard radius were observed, including those that did not sell tobacco products. Within each location, GPS coordinates were collected at the entrance of each shop selling tobacco products to ensure that they are within 100-yard radius of school or not. The study was completed by visiting and observing 100-yard radius of each and every selected school.

Specific observations regarding tobacco advertising were also obtained where advertising was present. This included information on location, type of advertisement, and number of advertisements and violations of COTPA 2003.

Surrogate advertising, the advertising of a non-tobacco product by a company that sells a tobacco product in a nearly identical form was also captured.

Data collection was done and entered into Microsoft Excel spreadsheet for statistical analysis.

RESULTS

Results for the distribution of Shops selling Tobacco products within 100 Meter of School with Government warning board shows that Out of 120 observed schools, 52.5%(57) were having shops selling tobacco products within their 100 meter radius of which 46.7%(56) shops sell tobacco products with warning board and 5.8%(7) have no such boards. Figure 1 depicts the distribution of Shops selling Tobacco products within 100 Meter of School. The study sample consisted of 120 Schools of which 52.5 %(63) were having shops selling tobacco products within their 100 meter and 47.5%(57) were free from shops selling tobacco products.

DISCUSSION

Tobacco use is the leading cause of preventable illness and death worldwide. Smokeless tobacco proved to be highly associated with oral cancer.^[11] Tobacco has been used in both smoke and smokeless forms and its use in children and adolescents is reaching pandemic levels.^[12] It causes many different cancers as well as chronic lung diseases such as bronchitis, heart disease, pregnancy-related problems, and many other serious health problems. World is heading toward various types of non-communicable diseases, which are also known as modern epidemics. Among these modern epidemics, cancer is the second most common cause of mortality in developed countries.^[13] Reversing this entirely preventable man-made epidemic should be our top priority. This Global Tobacco Epidemic kills more people than tuberculosis, HIV/AIDS, and malaria combined. India has one of the highest rates of oral cancer in the world. This epidemic can be resolved by becoming aware of the devastating effects of tobacco, learning about the proven effective tobacco control measures, national programs, and legislation prevailing in the home country and then engaging completely to halt the epidemic to move toward a tobacco-free world.^[14] Cigarette advertising also lures adolescents and young adults to start smoking. It has been observed that adolescents and young adults do not resort to cigarettes and tobacco use in isolation.^[15]

Adolescents are the most vulnerable population to initiate tobacco use.^[16-18] It is now well established that most of the adult users of tobacco start tobacco use in childhood or adolescence. Pan masala is as harmful as smoking. It is available in the form of small packets and cans sold at affordable prices with attractive, shiny colored wrappings.^[19-22]

Adolescents are vulnerable targets for the tobacco industry, being easily influenced by television, cinema, advertisements, and by their peers.^[23] According to a

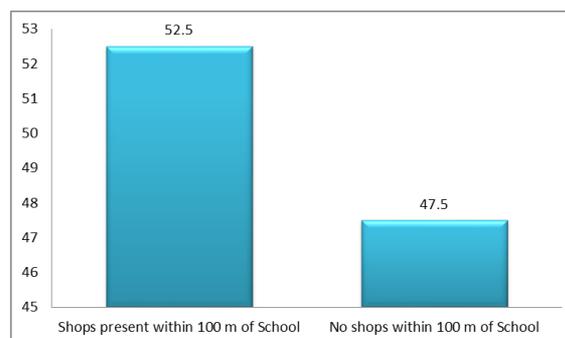


Figure 1: Distribution of shops selling tobacco products within 100 m of school premises

survey done by the National Sample Survey Organization, about 20 million children of ages 10–14 are estimated to be tobacco addicted, with 5500 new users are added every day, making 2 million new users every year.^[17]

Surveys conducted among 13–15-year-old schoolchildren in Chennai reveal that tobacco usage is high and in line with those studies done in Gujarat, Karnataka, and other Northeastern states. The aggressive sale and marketing strategies of the tobacco industry targeting young people will be among the key contributing factors to the growing epidemic of tobacco use in India. With growing IT companies, cigarette smoking is increased among the population due to peer pressure and stress. Furthermore, tobacco companies are targeting schoolchildren to increase their sales.^[24]

In Chennai, it is alarming that 52.5% of surveyed schools had stores selling tobacco products within 100 yards of radius. Results of the survey indicated that 52.5% of tobacco shops operated within 100 yards of these schools and 46.7% sell tobacco with the display warning board. The results are in line with the study conducted by Priyanka *et al.*^[25] show that 95.8% of schools have shops selling tobacco. Most of the shops had hanging displays of smokeless tobacco products, while the COTPA 2003 prohibits direct or indirect advertisement of any tobacco product.

It is really offensive that an existing law is not implemented in full fledge. The prime need of the hour is to urge the government to take strict actions to curb the tobacco menace. Licenses should be made mandatory for vendors to sell tobacco products in the state. If this proposal is implemented, it will be ensured that vendors do not flout COTPA. The more important aspect would be the strict observation and control of such restrictions. The sales of all tobacco products including the manufactured smokeless tobacco products or gutkha and their easy access strongly needs to be banned for children and children.

Exclusive complaint number must be launched by the government. Furthermore, the head of the schools must

be sensitized about taking action against perpetrators who sell tobacco within 100 yards of their school.

Oral cancer is one of the serious and growing health problems worldwide.^[26] This is a matter of great public concern. Wide publicity to the provisions of the rules should be made. There is an urgent need to take effective steps to launch community awareness programs for the schoolchildren and public to educate about the consequences of tobacco use and curb the problem. Education campaigns are needed to raise public awareness about oral cancer and its links with tobacco and alcohol consumption.^[27,28] It is high time for all the health professionals to extend their hands to create mass awareness about the harms of tobacco and the enforced laws to make India tobacco free. A review of national guidelines to regulate and evaluate the accessibility and availability of smoking products in and around the workplace may be needed.^[29]

CONCLUSION

Overall, this cross-sectional study showed that COTPA 2003 is not being implemented to its fullest extent in Chennai city, India. There was significant compliance in terms of the absence of advertisements, but the results of this study indicate that there are widespread violations with respect to the sale of tobacco products around 100 m radius of schools.

It is considered that an effective realization of this goal would require a coordinated effort from all schools and public health organizations to notify enforcement officers to effectively enforce the law. School authorities have a role to play in not only identifying tobacco retailers near schools but they also have to see the action is taken on these vendors by the law enforcing personnel. Bringing about awareness among the concerned authorities as well as enforcement of existing laws is the need of the hour. Public awareness programs, government restrictions, and regular monitoring by government agencies can, therefore, reduce the higher incidence of cancer.

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