

Research Article

Signboards Prohibiting Tobacco Sale Within 100 Yards of Educational Institutes: The Appraisal of Prohibition Compliance and On-Ground Status of the Anti-smoking Law in New Delhi's Major Administrative Precinct

Raja Singh^{1,2}

1. Tathatara Foundation, India; 2. Department of Architecture, School of Planning and Architecture, India

Cigarette smoking and tobacco use pose a threat to the health of young adults and adolescents. The availability of tobacco vendors near educational institutes means higher availability to a vulnerable population. The Indian Government has enacted the Cigarettes and other Tobacco products (prohibition of advertisement and regulation of trade and commerce, production, supply and distribution) Act, 2003, or the COTPA Act, 2003 under a WHO resolution, which has further rules notified. Two important rules are prohibiting the sale of tobacco products within 100 yards of educational institutes and installing a signboard stating the prohibition to sell the same. This compliance was checked in 62 educational institutions in the administrative centre of India's capital, New Delhi. The compliance of both the points, especially something easy as installations of boards is poor and less than half of the institutions had implemented. Tobacco sellers within 100 yards were present. Beyond 100 yards, but within reach was also where tobacco sellers were present. To save young adults, the compliance of COTPA, 2003 must be made strict and offenders punished severely.

Background and Introduction

The World Health Organization, in its 39th World Health Assembly and in its fourteenth plenary meeting held on 15th May 1986, urged the member states to implement the measures to 'protect children and

young people from being addicted to the use of tobacco' ^[1]. The 43rd World Health Assembly further reiterated this concern in 1990, where the member states were urged to consider their tobacco control strategies and plan for legislation and other effective measures, for among other things, protecting children from involuntary exposure to tobacco smoke and discouraging the use of tobacco, through all means of direct and indirect advertising.

As a member state, on 18th May 2003, India enacted the Cigarettes and other Tobacco products (prohibition of advertisement and regulation of trade and commerce, production, supply and distribution) Act, 2003 or the C.O.T.P.A Act, 2003 ^[2]. This was done as it was considered expedient to enact 'a comprehensive law on tobacco in the public interest and to protect the public health' and to 'prohibit the consumption of cigarettes and other tobacco products which are injurious to health with a view of achieving the public health in general as enjoined by article 47' of the Indian Constitution.

To quote the most specific provisions of concerning the prohibition of smoking in public places, Section 4 of the Act states that:

'No person shall smoke in any public place.'

This has been made to include all public places except places where there are designated smoking areas made and marked. But the most remarkable action of the Act has been the work done to reduce smoking among young people, especially those studying in schools and colleges. Section 6 of the Cigarettes and other Tobacco products (prohibition of advertisement and regulation of trade and commerce, production, supply and distribution) Act, 2003 states that:

No person shall sell, offer for sale, or permit sale of, cigarette or any other tobacco product-

(a) to any person who is under eighteen years of age, and

(b) in an area within a radius of one hundred yards of any educational institution

To put part (a), i.e., the prohibition of selling around educational institutes, into practice, the Central Government notified the in 2004 and made it further clearer, in the Cigarettes and other Tobacco Products (Display of Boards by Educational Institutions) Rules 2009 which includes the following ^[3]:

3. Display of Board by Educational Institutions. (1) The owner or manager or any person in-charge of affairs of the educational institution shall display and exhibit a board at a conspicuous place outside the premises, prominently stating that sale of cigarettes and other tobacco products in an area within a radius of one hundred yards of educational institution is strictly prohibited

and that it is an offense under Section 24 of the Act with fine which may extent to two hundred rupees.'

The above Act of the Central Government has also been complemented by the Government of National Capital Territory of Delhi's Act titled The Delhi Prohibition of Smoking and Non-Smokers Health Protection Act, 1996 ^[4].

On the apparent look of it, this legislative action seems to be an appropriate step as it is young children and young adults in and around educational institutes that need the maximum protection exposure to tobacco smoke and also access to easy tobacco in the form of cigarettes and other tobacco products.

It must be noted that the responsibility of compliance lies with the law enforcement agencies and the compounding of offenses lies with the Magistrate of the jurisdiction involved. The enforcement has also been decentralized with the head of the educational institute empowered to fine the offenders.

This study looks into compliance of the above-mentioned statutory requirements.

Aims and Objectives

To check the on-ground compliance of Section 6(b) of the Cigarettes and other Tobacco products (prohibition of advertisement and regulation of trade and commerce, production, supply and distribution) Act, 2003, which deals with the prohibition of the sale of cigarettes and tobacco products an area within a radius of one hundred yards of any educational institution in the Chanakyapuri Division of the New Delhi District in the National Capital Territory of Delhi, India.

To check the on ground compliance of Section 3 (1) of the Cigarettes and other Tobacco Products (Display of Boards by Educational Institutions) Rules 2009 which deals with Display of Board by Educational Institutions prohibiting sale of cigarettes and tobacco products within 100 yards of the educational institutes in the Chanakyapuri Division of the New Delhi District in the National Capital Territory of Delhi, India.

Methodology

The methodology of this study is as follows:

S. No.	Description
1	A revenue district was selected in New Delhi. In the revenue district out of three division one of the divisions was selected. The district chosen was New Delhi District, and the division selected was Chanakyapuri. (See Note 1)
2	The map of the New Delhi District with the Chanakyapuri Division marked was used as the guide to see the locations on Google Map with schools/colleges/educational institutes marked on the map. (See Note 2)
3	A visit was made, and the perimeter of the premises was physically seen. The location of the area was marked. Photograph, wherever applicable, of the board was taken.
4	The nearby vendors of tobacco around the perimeter of the educational institute were looked for and recorded if found. Their locations were marked using the GPS coordinates of a smartphone. Photographs excluding the vendors but including the tobacco products were taken wherever applicable. A general estimation of the 100 yards distance was made, and the vendors recorded. (See Note 3)
5	The results are compiled and reported.

Note 1: The rationale behind choosing the Chanakyapuri Division in the New Delhi District was intentional. The Chanakyapuri Division of the New Delhi District is of symbolic importance as it contains the most important institutions of Legislature, Executive and Judiciary in the Country ^[5]. This very division has the Parliament of India, the Prime Minister's official residence, the Central Secretariat, The President's House or the Rashtrapati Bhawan, the Supreme Court of India , the Delhi High Court, residences of most members of parliaments, government officials and other important institutes of national importance. Any compliance to any law should be first in this jurisdiction than in any other place in the country. A revenue district is the geographical administrative area in which a state in India is divided. Delhi, or the National Capital Territory of Delhi, has eleven such revenue districts. In one such district, ie the New Delhi District, there are three divisions, or tehsils, which is a subdivision of a district.

Note 2: All three categories of educational institutes, i.e., schools, colleges, and institutes of higher learning, were included as defined in Section 2(b) of the Cigarettes and other Tobacco Products (Display of Boards by Educational Institutions) Rules 2009 which states that ^[3]:

(b) "educational institution" means any place or centre where educational institutions are imparted according to the specific norms and include any school/college and institution of higher learning established or recognised by an appropriate authority;

Note 3: The distance measurement was based on Section 3 (2) of the Cigarettes and other Tobacco Products (Display of Boards by Educational Institutions) Rules 2009 which states that:

(2) The distance of one hundred yards referred to in sub-rule (1), shall be measured radially starting from the outer limit of the boundary wall or fence, as the case may be, of the educational institution.

The time period of this study has been in the month October and November 2022. A possible limitation is that the period could have been over a more extended period. The locations of the vendors may also fluctuate as some may be using makeshift arrangements.

Non Requirement of Ethics Clearance for this study

Also to note is that this study involved no human participants, no link is made to any individual, and is not within the scope of the National Ethical Guidelines for Biomedical and Health Research involving Human Participants, 2017. There has been no interview, questionnaire, or data from any human participant.



Figure 1. A typical board with the 100-yard requirement written in the form of 100 metres in a school.

Source: Author

The study has been posted as a pre-publication preprint on Qeios on 20th November 2022.

Results and Analysis

Out of the 62 educational institutes studied, only 27 had boards at conspicuous places outside of the premises/building, which stated that the sale of cigarettes and other tobacco products in an area within a radius of one hundred yards of an educational institution is strictly prohibited. This is 44.26 percent of educational institutes that are compliant with the Section 3 (1) of the Cigarettes and other Tobacco Products (Display of Boards by Educational Institutions) Rules 2009 which deals with Display of Board by Educational Institutions prohibiting sale of cigarettes and tobacco products within 100 yards of the educational institutes in the Chanakyapuri Division of the New Delhi District in the National Capital Territory of Delhi, India.

With respect to the sale of cigarettes and tobacco products within 100 yards of the educational institutions, it was found that four institutions had tobacco and/or cigarette sellers within 100 yards of

the school. This is 6.5 percent school where there was a violation of Section 6(b) of the Cigarettes and other Tobacco products (prohibition of advertisement and regulation of trade and commerce, production, supply and distribution) Act, 2003 which deals with prohibition of sale of cigarettes and tobacco products an area within a radius of one hundred yards of any educational institution in the Chanakyapuri Division of the New Delhi District in the National Capital Territory of Delhi, India. There were an additional nine where the seller was beyond 100 yards but well within easy reach.

There were some other educational institutes which did not put the board as specified in Section 6(b) of the Cigarettes and other Tobacco products (prohibition of advertisement and regulation of trade and commerce, production, supply and distribution) Act, 2003 which deals with prohibition of sale of cigarettes and tobacco products an area within a radius of one hundred yards. But, they put boards which stated 'No Smoking' or 'Tobacco Free Zone'. Having 'No smoking' boards are in compliance to Section 3 (b) of the Prohibition of Smoking in Public Places Rules, 2008. This study has not done an intentional analysis of the presence of the boards, but found that 11 institutions had boards of the nature 'No Smoking' or 'Smoking Prohibited' or 'Tobacco Free Zone' etc, but the exact statutory requirement spelling out the prohibition of sale within 100 yards was not put up. (See Figure 2)



Figure 2. *In some cases, there was a board prohibiting smoking, but it did not carry the statutory requirement of prohibition of sale within 100 yards of an educational institution.*

Source: Author

It must also be noted that there were multiple cases where meters was used instead of yards, or both were interchangeable. 100 yards is around 91 meters. This may not be much of a difference, but it can lead to deadlocks where the 9 meters can be a dispute. (See Figure 1)

Another observable feature was the sale of tobacco products in shacks instead of permanent shops and kiosks (See Figure 3)



Figure 3. A temporary shack opposite an educational institute. Note the absence of any formal or permanent arrangement.

Source: Author

Discussion

This paper has studied the compliance of law with respect to selling tobacco within 100 yards of educational institutes and whether schools have put a board on their premises or not. This study is not the first of its sort in India. Similar studies have been performed in India in other cities like Ahmedabad,

Mumbai, Bengaluru, as well as a three geography study done in Mohali (Punjab), Vadodara (Gujarat) & Chennai City ^{[6][7][8][9][10]}. In another study which was performed in 19 schools in Delhi, 15 schools were found to be compliant with tobacco guidelines. This study used reporting by teachers, parents, and students. But the sample size was only ten percent of the reported schools in Delhi. The schools were also selected randomly ^[11]. Another study was repeated in hospitals as institutions, which found that within 100 yards, 77% of places around hospital buildings (as institutions) there was the presence of tobacco sellers ^[12]. Another important study was performed in Mumbai. This study (26 institutions and 1533 students surveyed) created a co-relation between the presence of tobacco vendors and tobacco advertisements in the proximity of educational institutes. It states that bans on sale within 100 yards of educational institutes will be effective in reducing tobacco risk in high school students. It went on further to state that further studies should be performed to consider increasing the banned area beyond 100 meters. This is because tobacco vendor density with 200–500m of schools consistently increased student tobacco use risk ^[13]. The relation of educational institutes, especially schools is very crucial as stated earlier as the students are more prone to experimentation. Another study undertaking survey of 500 students of schools had 82 students who were tobacco users (16.4%). It was found that for the 82 students, the most used space for tobacco use was outside the school premises ^[14]. The above studies highlight the seriousness of the issue and the interest of public health experts on this matter. The current study is unique as it is performed in the heart of India's capital, at the center of its administration, to check the state of compliance with respect to the educational institutions. Other studies from other countries of the world may be interesting. Still, the laws in different geographies may differ, and comparison may not be possible as in this study under the same or related law.

Other issues are also discussed. It is important to note that there is also a positive relation between young age and a higher chance of tobacco exposure due to easy availability. This has been shown in multiple studies. A cross-sectional study was done in Delhi with 3422 children in the age group of 10–18 years. The study stated that nearly 55% of the children initiated tobacco consumption before the age of 13 years. The study further concluded that the consumption of tobacco during adolescence was the major contributor to the habit of tobacco consumption. It further suggested that interventions during these formative years are the most amenable for modifications in behavior and in adopting good habits ^[15]. A study in Central Delhi found that the median age of children and adolescents visiting the tobacco shops was 11.83 years, with the minimum age being eight ^[15]. Another study reported this age of initiation to be around 12.14 \pm 1.34 years ^[14].

Another issue is the sale of tobacco products in temporary shacks, which may not always come under building regulations as such and may also not be under any business registration procedure/mechanism (See Figure 3). This makes these difficult to regulate through law. This was also shown in another study in which instead of the non-permanent (unlike shop, kiosk or counter) , used movable Points of Sale for Tobacco was under study. The Persons using wheelchair selling tobacco products was surveyed. After studying 200 such Points of sale, it was found that 6 percent of the points of sale were within 100 meters of educational institutions ^[16]. The role of vendors is also crucial as they cannot sell tobacco products to people below 18 years of age as per section 6 of the Cigarettes and other Tobacco products (prohibition of advertisement and regulation of trade and commerce, production, supply and distribution) Act, 2003. From the point of view of tobacco vendors, a study in Delhi found that out of 60 vendors surveyed in Central Delhi, 41 (68.3%) did not ask the age of children and adolescents before selling ^[15]. The Indian Parliament has taken a further stand in this matter and stated that any one gives, or causes to be given, to any child any intoxicating liquor or any narcotic drug or tobacco products or psychotropic substance, shall be punished with a penalty of 100000 rupees and rigorous imprisonment of seven years. This is under the Section 77 of The Juvenile Justice (Care and Protection of Children) Act, 2015 ^[17].

Cigarettes and tobacco products a leading cause of cancer. Their use at an early age is not only an impediment to quitting at an early age but also affects lung health at later age ^[18] . A study has shown the high risks of smoking and concluded as follows ^[19]:

Cigarette smoking is associated with increased overall morbidity and mortality. Smoking is a cause of cancer of the lung, oral cavity, larynx, bladder, and renal pelvis and a contributing factor in the development of cancer of the pancreas, stomach, cervix, liver, penis, and rectum. Smokers are at greater risk for coronary artery disease, cerebrovascular disease, and atherosclerotic peripheral vascular disease.

Conclusion

This paper set out to study the compliance of two sections related to the Anti Tobacco law in India, in the Chanakyapuri division of the New Delhi District of India's national capital Delhi. The first was to check whether educational institutes have a board prohibiting the sale of tobacco products within 100 yards of the premises. The results show that far from being universal, it is less than half of all the educational institutes with something as simple as a board prohibiting smoking within 100 yards. The second issue at hand is the sale of cigarettes and tobacco products within 100 yards of school premises. In this regard,

too, compliance is not universal and there is availability of cigarettes and tobacco for school and college students in the heart of New Delhi, in its democratic and administrative center.

The seriousness of cigarette smoking, especially by students, should be realized. The implementation of the already enacted Cigarettes and other Tobacco products (prohibition of advertisement and regulation of trade and commerce, production, supply and distribution) Act, 2003 or C.O.T.P.A Act should be given the seriousness of a criminal offense and the law enforcement agencies, educational institutes and all other stakeholders must play an active role to protect the health of young Indians studying in schools and colleges. The C.O.T.P.A Act, 2003 should be amended to increase the punishment and serve as a deterrent just as in the Juvenile Justice Act of 2015. Cigarettes and tobacco products should be regulated just as much as liquor in New Delhi to make availability difficult. Sale to minors should be as serious as any crime which shakes the conscious of the society. Educational institutes should be checked regularly for compliance, and the role played by educational institutions must be doubled and the absence of compliance should be strictly penalized. In case of sale of tobacco products to minors, the Juvenile Justice Act, 2015 must be enforced. The schools and colleges are already empowered to collect fines in case of smoking in public areas. They can be made to submit quarterly reports for compliance with the C.O.T.P.A Act. Law enforcement agencies must make reports of the state of compliance public so that it can be used to increase accountability of law enforcement agencies. Further studies in this area can include the law's implementation and the number of enforcement instances and fines collected. Behavioral studies can also be performed to investigate the relation between the proximity in the Indian context.

Conflict of Interest

The author reports no conflict of interest.

Funding

No specific funding was taken for this study. This study was performed under paid fellowship titled 'Built Environment and Public Health Research Fellow' provided to the author by Tathatara Foundation, Bobbili, India.

Acknowledgements

Thanks to Praveen K. for undertaking the groundwork for this study. Special thanks to Group Captain P Aanand Naidu of Tathatara Foundation (mail@tathatara.org)

References

1. [△]Tobacco or Health: Agenda Item 22; Resolutions of the Thirty-Ninth World Health Assembly of Interest to the Regional Committee. World Health Organisation, 1986. https://iris.paho.org/bitstream/handle/10665.2/30360/22_10.pdf?sequence=1&isAllowed=y.
2. [△]The Cigarettes and other Tobacco Products (Prohibition of Advertisement and Regulation of Trade and Commerce, Production, Supply and Distribution) Act, 2003. . Government of India, New Delhi; 2003. <https://legislative.gov.in/sites/default/files/A2003-34.pdf>.
3. [△][△]Cigarettes and other Tobacco Products (Display of Boards by Educational Institutions) Rules, 2009.. Ministry of Health and Family Welfare, Government of India., New Delhi; 2009. <https://nhm.gov.in/cota/Notifications%20on%20Section-6%28b%29%20of%20the%20Act%20Related%20on%20Prohibition%20of%20Sa....>
4. [△]The Delhi Prohibition of Smoking and Non-Smokers Health Protection Act, 1996.. Government of India, New Delhi; 1997. <http://www.bareactslive.com/Del/dl155.htm>.
5. [△]Government of NCT of Delhi: Revenue Map of New Delhi District with Sub Divisions. <https://dmnewdelhi.delhi.gov.in/map-of-district/>.
6. [△]Elf JL, Modi B, Stillman F, Dave P, Apelberg B: Tobacco Sales and Marketing Within 100 Yards of Schools in Ahmedabad City, India. Public Health. 2013, 127:442-448. 10.1016/j.puhe.2013.02.003
7. [△]Mistry R, Pednekar MS, McCarthy WJ, et al.: Compliance with Point-of-Sale Tobacco Control Policies and Student Tobacco Use in Mumbai, India. Tob Control. 2018, 28:220-226. 10.1136/tobaccocontrol-2018-054290
8. [△]Mistry R, Pednekar M, Pimple S, et al.: Banning Tobacco Sales and Advertisements Near Educational Institutions May Reduce Students' Tobacco Use Risk: Evidence from Mumbai, India . Tob Control. 2013, 24:100-107. 10.1136/tobaccocontrol-2012-050819
9. [△]Khargekar NC, Debnath A, Khargekar NR, Shetty P, Khargekar V: Compliance of Cigarettes and Other Tobacco Products Act among Tobacco Vendors, Educational Institutions, and Public Places in Bengaluru City. Indian J Med Paediatr Oncol. 2018, 39:463-466. 10.4103/ijmpo.ijmpo13617

10. [△]Goel S, Kumar R, Lal P, Tripathi JP, Singh RJ, Rathinam A, Christian A: How Compliant are Tobacco Vendor
s to India's Tobacco Control Legislation on Ban of Advertisements at Point of Sale? A Three Jurisdictions Re
view. *Asian Pac J Cancer Prev.* 2015, 15:10637-10642. 10.7314/apjcp.2014.15.24.10637
11. [△]Bassi S, Gupta PK, Park M, et al.: School Policies, Built Environment and Practices for Non-Communicable
Disease (NCD) Prevention and Control in Schools of Delhi, India. *PLoS One.* 2019, 14:0215365. 10.1371/journa
l.pone.0215365
12. [△]Rijhwani K, Mohanty VR, Balappanavar AY, Hashmi S: Compliance Assessment of Cigarette and Other Tob
acco Products Act in Public Places in Delhi Government Hospitals. *Asian Pac J Cancer Prev.* 2018, 19:2097-21
02. 10.22034/APJCP.2018.19.8.2097
13. [△]Verma A, Goswami M, Dhillon JK.: Tobacco Use Among School Going Children. *Indian J Dent Res.* 2019, 30:
839-843. 10.4103/ijdr.IJDR_2718
14. [△]^a Singh V, Pal HR, Mehta M, Kapil U: Tobacco Consumption and Awareness of their Health Hazards Amon
gst Lower Income Group School Children in National Capital Territory of Delhi. *Indian Pediatr.* 2007, 44:293
-295.
15. ^a ^b ^cVerma AR, Goswami M. : Knowledge, Attitude, and Practices of Tobacco Vendors toward Selling Tobacc
o Products to Young Children and Adolescents in Central Delhi. *Int J Clin Pediatr Dent.* 2021, 14:97-99. 10.50
05/jp-journals-10005-1914
16. [△]Kapoor S, Kumar S, Sharma R, Pandey AK, Singh RJ: Compliance Assessment with Tobacco Control Regula
tions at Wheelchair-Based Tobacco Point of Sale in Delhi, India. *Int J Non-Commun Dis.* 2021, 6:38-45. 10.41
03/jncd.jncd_76_20
17. [△]The Juvenile Justice (Care and Protection of Children) Act, 2015. Government of India, New Delhi; 2016. htt
ps://legislative.gov.in/sites/default/files/A2016-20.pdf.
18. [△]Khuder SA, Dayal HH, Mutgi AB.: Age at Smoking Onset and its Effect on Smoking Cessation. *Addict Beha*
v. 1999, 24:673-677. 10.1016/s0306-4603(98)00113-0
19. [△]Tager IB, Muñoz A, Rosner B, Weiss ST, Carey V, Speizer FE.: Effect of Cigarette Smoking on the Pulmonar
y Function of Children and Adolescents. *Am Rev Respir Dis.* 1984, 131:752-759. 10.1164/arrd.1985.131.5.752

Declarations

Funding: No specific funding was received for this work.

Potential competing interests: No potential competing interests to declare.