

RESEARCH ARTICLE

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Compliance Assessment of Cigarette and Other Tobacco Products Act in Public Places in Delhi Government Hospitals

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Abstract

Objective: Tobacco-free policies in hospital campus reduce exposure to tobacco smoke; change the demeanour of the professionals, patients and people visiting hospitals towards tobacco use. Section-4, 5 and 6 of COTPA (Cigarettes and Other Tobacco Products Act) necessitates the need for implementation of the prohibition on smoking in public places. Against this background, the present work was designed to evaluate the status of compliance Section 4, 5 and 6 of COTPA in Delhi Government hospitals **Methods:** A cross-sectional observational study was conducted within Government hospitals. Multistage random sampling was used to select 18 hospitals out of 39 hospitals from 5 zones. Standard assessment Proforma developed by John Hopkins School of Public Health for assessing compliance to Tobacco-Free Law was used and modified to address certain aspects of Section-4, 5 and 6 of COTPA. Hospital campuses were assessed by dividing them into zones like hospital buildings, office buildings, public places outside the hospital and residential areas. **Result:** Signs of active tobacco use observed in 40.6% of hospital buildings, 35.3% in office buildings, and 75.4% in public places outside the buildings. 'No smoking signage was not as per the COTPA guidelines in 21.4% of the hospitals and 72% were not tobacco free outdoors in these positions. **Conclusion:** The study highlighted a lower compliance rate than expected which raises questions on law enforcement concerning tobacco. Hence necessary measures have to be used up for sustained awareness campaigns, backed by enforcement drives. Periodic compliance surveys will strengthen the implementation of tobacco free legislation in health care institutions.

Keywords: Compliance assessment- cigarettes and other tobacco products act- tobacco free laws- hospital locations

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Introduction

In light of WHO's definition of health "Health is the most important human asset influenced by various physical, chemical and biological agents. Deleterious Lifestyle habit like Tobacco chewing and smoking has significant impact on one's wellness. However, Tobacco is the leading cause of preventable premature deaths across the world (WHO, 2008). India is the 2nd largest consumer and producer of tobacco. It accounts for almost 1 million deaths of Indians per year. If current trends continue tobacco will account for 13% of all deaths in India by 2020 (Jha et al., 2008)

According to Global Adult Tobacco Survey (GATS) phase two was conducted in India in 2016-17, which revealed that 19.0% of men, 2.0% of women and 10.7% (99.5 million) of all adults currently smoke tobacco. 29.6% of men, 12.8% of women and 21.4% (199.4 million) of all adults currently use smokeless tobacco. 42.4% of men, 14.2% of women and 28.6% (266.8 million) of all adults currently use tobacco (smoked and/or smokeless tobacco) (MOHFW, 2017).

Health care facilities form the backbone of Health system of any society and Hospitals form a central role in dissipating preventive, curative and treatment services along with health promoting services which embraces the objective of health promotion, develops a health promoting organizational structure and civilization, including dynamic, participatory roles for patients and all members of staff. Hospitals act as "Role Model" and receive a peculiar responsibility for promoting healthy environment (Groene et al., 2005). Tobacco-free hospital campus is one path of doing so for commitment to sound health, reducing vulnerability to tobacco use, increases quit rates, change the behaviour of the healthcare professionals and patients visiting hospitals towards tobacco use (Wheeler et al., 2007).

Although stringent health policies are in force in our country, notwithstanding there is lack of rigorous compliance to the health laws. Hence, considering the enormity of the problem, member countries of the WHO negotiated and adopted a first public health treaty- the Framework Convention on Tobacco Control (FCTC) - in 2003 (WHO, 2003). It is a powerful

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global instrument that contains binding provisions on member states. It supplies a comprehensive direction for tobacco control at all levels covering more than 87.8% of the world's population in 168 nations as signatories (Shibuya et al., 2003).

India was the seventh nation in the world to ratify FCTC was also among the first nations to enact a strong national law for tobacco control in 2003, i.e. Cigarettes and Other Tobacco Products Act (COTPA), 2003 under the auspices of the FCTC (MOHFW, 2003).

NTCP (National Tobacco Control Program) launched by MOH and FW was launched in 2007-08 with an objective to bring about greater awareness about the harmful effects of tobacco use, tobacco free laws and to facilitate efficient implementation (MOHFW, 2012)

The Cigarettes and Other Tobacco Products Act (COTPA), 2003 (MOHFW, 2003) includes three main tobacco control provisions that include:

Section 4 of Tobacco Control Act, 2003 provides; Smoking in all "public places" is prohibited. "Public place" means any place to which the public have access, whether as of right or not, and includes auditorium, hospital buildings, railway waiting room, amusement centers, restaurants, public offices, court buildings, educational institutions, libraries, public conveyances and like which are visited by general public but does not include any open space.

Section-5 of Tobacco Control Act, 2003 provides Prohibition of advertisement, promotion and sponsorship of all tobacco products.

Section 6 (a) of Tobacco Control Act, 2003 provides; Prohibition on Sale to Minors

Section 6 (b) of Tobacco Control Act, 2003 provides; Prohibition on sale of tobacco products near educational institutions.

In 2008, Ministry of Health and Family Welfare, Government of India proposed the Prohibition of smoking in public place rules to strengthen the existing COTPA legislation by including public spaces that were omitted in the original legislation, and set terms such as smoking and non-smoking areas. It also provides instructions related to enforcement, which includes inside information regarding the presentation of signage in public places and identification of focal points for putting through the law. (MOHFW, 2008)

Tobacco-free hospital campus requires complying with the provisions under Section-4, 5 and 6 of COTPA. Many such compliance studies have been conducted in public places like bars, pubs, restaurants, transportation settings and other public places across the world, but in health care institutions have not been explored so far specifically in Delhi. Against this background, the present study was designed to assess the compliance to Section-4, 5 and 6 of Cigarette and Other tobacco products Act in Public places in Delhi Government Hospitals.

Materials and Methods

A cross-sectional observational study was conducted to assess the compliance to Section-4, 5 and 6 of COTPA in public places within the hospital campus. A total of

39 government hospitals (18 tertiary and 21 secondary) distributed in 5 zones of Delhi (was considered for the subject area) (MOHFW, 2016). The Ethical clearance for the study was obtained from Institutional Ethical Review Board of the Maulana Azad Institute of Dental Sciences. A multistage random sampling technique employed where 11 secondary and 7 tertiary hospitals were selected out of these hospitals as shown in Figure 1.

The public places within the Hospital campus were measured. These public place within the hospital campus are divided into four different zones like hospital buildings, office buildings public places outside the hospital and residential areas to get maximum response. Public places outside the hospitals included marketplaces, recreational spots such as greens, eating joints, schools, library, etc. Residential areas included staff quarters, hostels for doctors and nurses and homes for patients. In our study, the public places are defined as per COTPA Section 4.

A structured assessment proforma based on guide jointly developed by John Hopkins School of Public Health, Tobacco Free Kids and International Union against Tuberculosis and Lung Disease 2014, was used (Campaign for Tobacco Free Kids, John Hopkins Bloomberg School of Public Health and International Union against Tuberculosis and Lung Disease, 2014). This was further modified to include provisions of Section-4, 5 and 6 of COTPA for assessing compliance to Tobacco Free Laws as per Indian context.

The outcome variables are presented in form of percentage displaying compliance rate to Section 4, 5 and 6 of COTPA included display of signage's, evidence of recent smoking like cigarette butts or bidi ends, the presence of smoking aids and active smoking in the public space.

The trained field investigator visited these public places. The visits to the office buildings were drawn during the office hours, hospital buildings were seen during the busiest hours (10-12 noon) whereas, other public spaces and residential quarters were paid a visit during the evening hours.

The survey was held out from August 2015-October 2015. The average time spent at each location varied from 20 min to 30 min depending on the field covered. The data regarding the location was recorded in the observation sheet. The information collected was entered into MS-Excel and necessary analysis were carried out using the SPSS software version-17.

Results

A total of 155 public places within the hospital campus (hospital buildings-70, office buildings- 20, public places outside the hospitals-40, and residential areas- 25) were visited during the study. Overall compliance rate for various sections of COTPA was found to be 45%. The highest compliance rate was found in hospital buildings (35%), office buildings (33%) followed by public places outside hospital buildings (30%) and residential areas (2%). The signs of active smoking were observed more in public places (75.4%), followed by hospital buildings (40.6%) and office buildings (35.3%). "No smoking

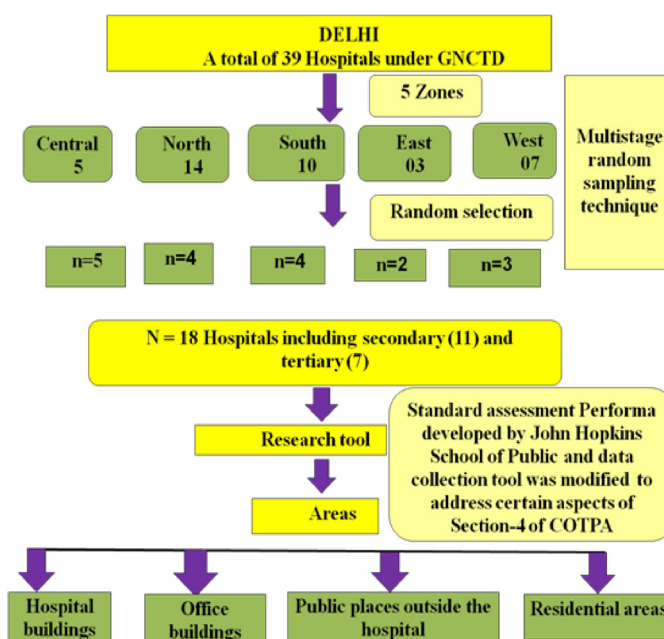


Figure 1. Flowchart Depicting Selection of Hospitals under Delhi Government

signages” board was displayed in 83% of the hospitals but compliance to content was found only 26% in these hospitals. The name, designation and telephone no. of the nodal officer with whom a complaint could be lodged if someone found smoking within the premises was not found in 38 (95%) of the places. Display of tobacco free

institution boards was seen in 60% of the hospitals with only 30% receiving the names of the reporting officer written. The tobacco vendors shops should not be present within 100 yards of any institution as per Section-6, but it was observed that these tobacco vendors was present in 77% in places around hospital buildings, followed by

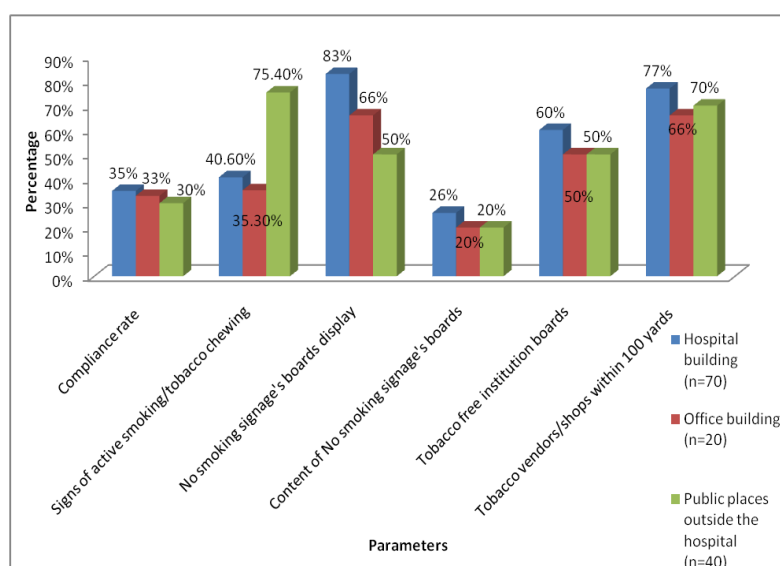


Figure 2. Compliance to Tobacco Free Legislation in Public Places within Delhi Government Hospitals

Table 1. Category Wise Compliance of Different Parameters Related to Section 4, 5 and 6 of COTPA within Hospital Campus

Parameters observed	Hospital buildings (n=70)	Office Buildings (n=20)	Public places outside the hospital (n=40)
Compliance rate	35% (n=24)	33% (n=7)	30% (n=12)
Signs of active smoking/ tobacco chewing	40.6% (n=28)	35.3% (n=7)	75.4% (n=30)
No smoking signage's boards display	83% (n=58)	66% (n=13)	50% (n=20)
Content of no smoking signage's boards	26% (n=18)	20% (n=4)	20% (n=8)
Tobacco free institution boards	60% (n=42)	50% (n=10)	50% (n=20)
Tobacco vendors/ shops within 100 yards	77% (n=53)	66% (n=13)	70% (n=21)

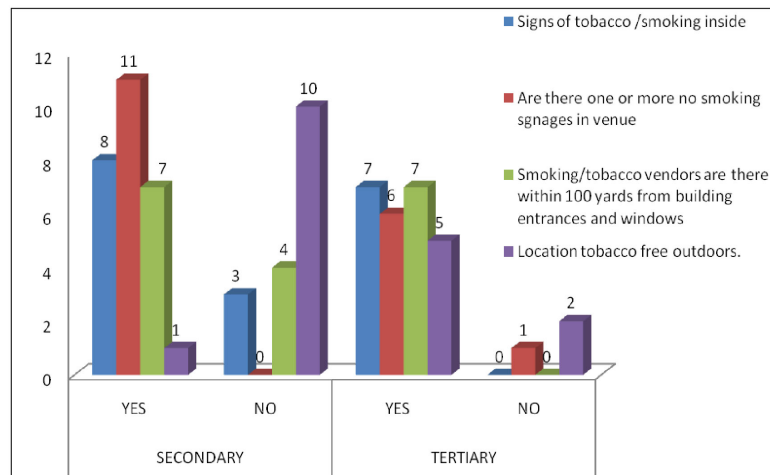


Figure 3. Comparison of Compliance to Tobacco Free Legislation of Tertiary and Secondary Care Hospitals Under Delhi Government

public places (70%) and office buildings (66%). All these findings were shown in Table 1 and Figure 2.

The overall compliance rate was found to be better in tertiary care hospitals (n=18) as compared to secondary care (n=21). It was observed that signs of active smoking (n=8), tobacco vendors shops within 100 yards (n=7) were present more in secondary care as compared to tertiary care. Although “No Smoking” signages board were found to be more in secondary care (n=11) as compared to tertiary care hospitals (n=6). In most of places around tertiary care hospitals location (n=5) were more compliant to Section 4, 5 and 6 as compared to secondary care setups (n=1) as shown in Figure 3.

Discussion

This survey was an effort to assess the compliance of Section-4, 5 and 6 of COTPA in various Government hospitals, both tertiary as well as secondary in Delhi. The outcomes of our present survey highlighted that the overall compliance for Section-4, 5 and 6 of COTPA was found to be 55% which was less when compared to the findings reported by Goel et al., (2014) (92.3%) The reasons cited by the authors were the recent creation of a District Task Force in SAS Nagar Mohali, Punjab helped ensuring effective implementation of the legislation and added to better compliance in that area. However, similar less significant compliance rates were observed in a survey done in tertiary care hospitals in smoke free city-Mohali, Punjab by Tripathy et al., (2013), in spite of the fact that it had been declared as smoke free city.

Laws and its regulations are borne out of a need or efforts to curb issues or burden of disease which have a huge societal impact. Further to ensure whether these laws have been implemented adequately or not, we need to assess compliance at every level from time to time. So there are multiple techniques available for evaluation and one way of doing so is by compliance surveys. The purpose of a compliance survey is to assess adherence, prevent deficiencies and violations, develop ways to address them (Ponto, 2015).

A survey performed in Cairo, Egypt, showed that smoke-free policies were poorly applied in great teaching hospitals. Smoking by physicians, lax enforcement, a lack of penalties for violators and lack of cessation treatment were among the barriers reported by most of the interviewed staff (Radwan et al., 2012). In different parts of the globe such as Australia, USA, Ireland, New Zealand very high points of compliance rates ranging from 95-100% were observed in bars, pubs and restaurants (Chapman et al., 2001; Weber et al., 2003; Yong, 2010; Wilson et al., 2007). This has been achieved due to rigorous implementation and awareness regarding these smokes/tobacco free laws among general public.

Another significant finding in our study was 40% signs of active smoking/tobacco chewing were observed in hospitals. Similar findings have been observed in a study Reddy et al., (2010) wherein poor compliance regarding active smoking (36%) and the unlawful display of “No smoking” signage at the entry of public places (89%) were highlighted. Well-implemented tobacco-free laws, not only protect common people and workers from exposure to second-hand smoke, but also increase public consciousness of the adverse health effects of smoking tobacco. In fact, longer the smoke free worksite policies are in place, the more pronounced their effects on smoking behavior could be. It’s a dose dependent relationship, the sterner the rules are, the greater the impact does it have on its own employees smoking behavior.

In present survey, it was observed that there were no designated smoking areas, neither were the ashtrays or other smoking aids that were present at the indoor locations nor were there tobacco sale inside these premises. This was a positive observation suggesting compliance with tobacco free laws at indoor locations and should be strengthened further to improve compliance. The “No smoking signage’s” board were displayed in 83% of the hospital buildings, but compliance regarding specifications of contents was found only in 26% and these results were almost similar to study by Lal et al., (2011) in four Indian jurisdictions.

The variability in results after implementing smoking bans may also be due to differences across study

jurisdictions (e.g., the composition of the study population, literacy rates, socioeconomic conditions, socio-spiritual factors, awareness levels, and enforcement mechanisms).

Observations outside these designated hospital locations further revealed that 77% of hospital buildings have tobacco vendors/shops present within 100 yards suggesting non-compliance with Section-6 of COTPA. Similar types of observation were also found in public places of Bengaluru city (Habbu and Krishnappa, 2015). Such open accessibility to tobacco products near high risk areas like Hospitals, Schools etc. would intensify the existent Tobacco burden. Further restricting access to tobacco products among adolescents has been viewed as an important strategy. The difference may have been effective as seen an increase of mean age of initiation from GATS-1 to GATS-2 (MOHFW, 2017). Display of boards to ban on sale of tobacco products and its ill effects posters were rarely found in these areas and need to be strengthened as visibility might positively reinforced and promote healthy practices or reduce the impact by creating awareness.

Though display of No-smoking signages was present in 90% outdoors, but it was not as per the guidelines given. Further it was observed that many people were found using tobacco products at outdoor areas in the hospital premises. This is a direct violation of the provision of the Act. Display of Tobacco free Institution boards outside were seen in 60% of the hospitals which is higher as compared to the previous study done in educational institutions of Bengaluru city (Habbu and Krishnappa, 2015). The content of these boards with name of the tobacco control officer and punishment regarding violation of the act were present in only 30% in these hospitals. This effort would surely take care of administrative intervention for immediate action.

The overall compliance to tobacco free laws was found to be higher in tertiary hospitals as compared to secondary centres. This gave an insight that better enforcement was seen in Tertiary setups as compared to Secondary setups. This could mostly be attributed to the fact that outpatient among secondary hospitals is high due to its nature or scope of services being a general hospital whereas tertiary care hospitals are specialized centres for referral cases.

Tobacco is one of the leading causes of morbidity and mortality in India. Tobacco control in India has come a long way. Since India signed the FCTC and ratifications were brought through COTPA in 2003 (WHO, 2003). The various sections of COTPA help us to regulate sales to minors, pictorial health warnings, smoking at public places and advertisement of tobacco products. Hence, to maintain the inviolability of these regulations it is necessary to evaluate various implementation strategies. Not only raising awareness would help changing the current scenario, but continuous compliance surveys for Tobacco control Legislations would aid in bringing a positive change. Strict Health care Legislations form the backbone of Healthy society in any country. Compliance studies are one of the most uncomplicated and cost-effective instruments for measuring and shaping the progress of implementation.

The overall barriers to successful implementation of many tobacco control policies could be lack of inter-sectorial

coordination, shortage of resources, low penalization of violators, lack of adequate and continuous monitoring and implementation of smoke free laws and above all low awareness among general public regarding health impact of tobacco and its related laws.

Some of the potential solution levers as suggested by many program managers include employing dedicated staff, regular training and health education drives for creating awareness, financial and non-financial (awarding for best tobacco control officer) incentives to raise their motivation and frequent updation of penalties and annual collection of fine need to be accounted to check for effective implementation and enforcement.

The study is not without inherent limitations and needs to be considered with them. The study was a cross sectional study; considered only one time field assessment. So in order to strengthen the information generated needs to be evaluated during timings of the day. The study only considered physical assessment of buildings; further interaction with tobacco control officers of respective hospitals would have given us better insight into the barriers of implementation.

Based on the findings above, we highly recommend several actions to enable us to move towards significant reductions in the growing tobacco burden. First, we encourage central and state public health organizations to establish stringent and pragmatic goals which will help reduce tobacco use especially at the district level. At the same time, realistic planning needs to take into account existing capacity of the health system. An assessment of the health system implications and related resource costs will help in planning for proper implementation of tobacco control policy and program. This will also facilitate integration of the tobacco control program into broader national health plans. While extensive scientific evidence exists on the tobacco epidemic, a lack of understanding of both policies and their implementation continues to hinder effective tobacco control. This is especially so in the context of developing countries such as India. Understanding health policy makers and program managers' opinions towards implementation of tobacco control policy is essential since they play a key role in decision-making. Understanding their perspectives can help strengthen the implementation and suggest midway corrections in the policies aiming to strengthen the diagonal integration of tobacco control in health system.

Law enforcement forms the backbone of any Successful organization. Compliance evaluation studies are an essential part of the MPOWER package since it is an equipment to screen tobacco control strategies and force bans. These are doable and replicable in any setting with nearby adjustment. These studies are a straightforward for approving advancement in the implementation, actualizing sans smoke open spots and in recognizing the lacks. These should be done scientifically and must be illustrative of the locality substances or realities. In this manner outsider evaluations are urgent to make them substantial and worthy.

The conclusion of this study highlighted a lower compliance rate than expected which raises questions on law enforcement concerning tobacco. Realizing

the pressing need to curtail the tobacco epidemic, the enforcement of the provisions of COTPA needs to be beefed up, particularly in academia, research and health care establishments. As the second largest producer and consumer of tobacco in the world, there is a greater need to dissect the case for a comprehensive tobacco control program.

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