# Compliance monitoring of prohibition of smoking (under section-4 of COTPA) at a tertiary health-care institution in a smoke-free city of India

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# ABSTRACT

**Background:** India enacted a comprehensive tobacco control law known as cigarettes and other tobacco products act (COTPA) in 2003. However, enforcement of the provisions under the law is still a matter of concern. Compliance survey is an effective tool to measure the status of implementation of the law at various public places. Smoke-free hospital campus demonstrates commitment to good health and sends a pro-healthy signal to the community. **Objective:** The objective of this study was to assess the compliance to the prohibition of smoking at public places (under section-4 of COTPA) in a tertiary health-care institution in a smoke-free city of India. **Materials and Methods:** An observational cross-sectional study was conducted at 40 different venues within a tertiary health-care institution in a smoke-free of assessment by a structured checklist, which included evidence of active smoking, evidence of recent smoking, display of signages, presence of smoking aids, cigarette butts and bidi ends. **Results:** Overall compliance rate for section-4 of COTPA was found to be mere 23%. Evidence of active smoking was observed in 21 (52.5%) venues. Signages were seen at only 8 places (20%). Butt ends and other smoking aids were seen in 37 (92.5%) and 26 (65%) places respectively. **Conclusion:** These dismal findings suggest non-compliance to the provisions under COTPA, which calls for a sensitization workshop and advocacy for all the stakeholders.

KEY WORDS: Cigarettes and other tobacco products act, compliance, smoke-free city, tertiary health-care institution

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## INTRODUCTION

Tobacco is the leading cause of preventable premature deaths across the globe.<sup>[1]</sup>Each year tobacco use kills about 1 million Indians.<sup>[2]</sup> If current trends continue tobacco will account for 13% of all deaths in India by 2020.<sup>[3]</sup> Tobacco control is one of the most rational, evidence-based policies in health-care.<sup>[4]</sup> The World Health Organization Framework Convention on Tobacco Control (FCTC) was a much needed response to the global tobacco epidemic.<sup>[5]</sup>

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It is a powerful global instrument that contains binding provisions on member countries. The FCTC provides a comprehensive direction for tobacco control at all levels covering more than 87.8% of the world's population with 168 countries as signatories.<sup>[4]</sup> India was the seventh country in the world to ratify FCTC.<sup>[6]</sup> In light of the fact that India is a major consumer and producer of tobacco, this stands as a major leap forward. India was also among the first countries to enact a strong national law for tobacco control in 2003, i.e. Cigarettes and Other Tobacco Products Act (COTPA), 2003 under the aegis of FCTC.<sup>[7]</sup> However, little action was initiated to implement the legislation until an intense civil society campaign led by a non-governmental organization spurred the local authorities to enforce the law in Chandigarh. The Right to Information Act, 2005 was used as a weapon to push the administration into action and raise public awareness. Finally, the city was declared as a "smoke-free city" in India in the year, 2007.<sup>[7]</sup> Following this, four other jurisdictions Sikkim state, Vilupuram district and Coimbatore city in

TamilNadu and Shimla city in Himachal Pradesh were declared smoke-free following the results of compliance studies conducted.<sup>[8]</sup> However, the sustainability of the "smoke-free status" is a big question. There are clear areas of concerns such as smoking in slum areas, tea shops, eating places, educational institutions, taverns where there is clear violation of anti-smoking laws.

Many compliance surveys have been conducted in bars, pubs, restaurants, transportation settings and other public places across the globe. However, smoking in an academic, research or health care institution has not been explored so far. Smoking in such a setting propagates a bad signal among the young intellectual community. Hospitals provide health-care and as such, have a special responsibility to set an example for other organizations and communities engaged in promoting healthy ways of living. Smoke-free hospital campus is one way to demonstrate commitment to good health. It communicates a consistent pro-health message to the community and more so to the patients. Smoke-free policies in campuses certainly reduces exposure to tobacco smoke, increases quit rates, prevents initiation of smoking among youths and also reduces daily cigarette consumption among habitual smokers.<sup>[9,10]</sup> It might also change the behavior of the health-care professionals and patients towards smoking.

Smoke-free campuses have been quite a success in the west, but it has never kicked off in this part of the world. The college campuses are still a big market for the tobacco industry because the youths easily fall victims to their bait. However, with the growing recognition of healthy workplaces for better business and good health smoke-free hospital is not a distant dream.

Smoke-free hospital campus requires complying with the provisions under section-4 of COTPA. Under section-4 of COTPA, no person shall smoke in any public place. It mandates display of board with certain specifications containing the warning "No Smoking Area-Smoking Here is an Offence" at prominent places. Any person who contravenes the provisions of section-4 shall be punishable with fine which may extend to two hundred rupees.<sup>[11]</sup>

Against this background, the present study was planned to assess the status of compliance with anti-smoking provisions under section-4 of COTPA in public places within a tertiary health-care and research institution in a smoke-free city.

#### MATERIALS AND METHODS

The tertiary hospital under study is a 1800 bedded hospital, established to provide high quality patient care, impart medical education and conduct research of the highest standard. It serves nearly 1,000 indoor and 4,600 outdoor patients daily. A cross-sectional observational study was conducted in the public places within the hospital campus during the month of January 2012.

All major public places within the hospital premises were line listed (N = 40). They were grouped under four different categories namely hospital buildings (n = 13), office buildings (n = 6), public places outside the hospital (n = 14) and residential areas (n = 7). Public places outside the hospital included marketplaces, recreational spots such as parks, eating joints, schools, library etc. Residential areas included staff quarters, hostels for doctors and nurses and homes for patients. In this study, "publicplace" was defined according to COTPA 2003 as "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, workplaces, shopping malls, cinema halls, educational institutions, libraries and public conveyances, which are visited by the general public."[11]

A structured observational checklist based on a guide jointly developed by John Hopkins School of Public Health, Tobacco Free Kids and International Union Against Tuberculosis and Lung Disease was used to record the observational findings.<sup>[12]</sup> The study variables included display of signages, evidence of recent smoking like butts or bidi ends, the presence of smoking aids and active smoking in the public place.

The trained field investigator visited the public places. The visits to the office buildings were made during the office hours, hospital buildings were visited during the busiest hours (10-12 noon) whereas, other public places and residential quarters were paid a visit during the evening hours. The average time spent at each location varied from 20 min to 30 min depending on the area covered. The information regarding the location was recorded in the observation sheet. The data collected was entered into MS-Excel and analyzed using the SPSS software version-17.

The results were shown in the form of percentages such as percentage of public places where signages were displayed, percentage of public places where no active smoking was observed, percentage of public places, which did not have smoking aids such as ashtrays, matchsticks or evidence of recent smoking such as cigarette butts and bidi ends etc.

#### RESULTS

A total of 40 public places were visited during the study. Overall compliance rate for section-4 of COTPA was found to be a mere 23%. The compliance rate varied across various categories of public places. The highest compliance rate was found in hospital buildings (37%), office buildings (26.7%) followed by public places outside hospital buildings (14.3%) and residential areas (11.4%). The name, designation and telephone no. of the reporting officer with whom a complaint could be lodged if someone found smoking within the premises was not found in 38 (95%) of the places. Signages were found in 8 (20%) places with name of the reporting officer in only two of them. A total of 7 out of 13 hospital buildings visited had signage boards displayed. They were placed at conspicuous places most of the time. Three different types of display boards were used with variations in the text and size of the signage boards.

A total of 21 (52.5%) of the public places had evidences of active smoking, which is a discerning fact considering the smoke-free tag attached to the city. Only 14 (35%) of the venues were devoid of any smoking aids whereas 37 (92.5%) had evidences of cigarette butts and bidi ends [Table 1].

#### DISCUSSION

Compliance studies are simple and cost-effective tool for checking progress in the enforcement and implementation of smoke-free public places.<sup>[8]</sup> Many compliance monitoring exercises have been undertaken in different parts of India in the last 2 years. The smoke-free law requires compliance with the provisions under section-4 of COTPA and the presence/absence of these were used as criteria for determining the level of compliance. Four jurisdictions namely Sikkim state, Vilupuram district and Coimbatore city in Tamil Nadu and Shimla city in Himachal Pradesh were declared smoke-free following the results of individual compliance studies.<sup>[8]</sup> Five parameters were studied similar to the present survey, which included evidence of active smoking, evidence of recent smoking, display of signages, presence of smoking aids and presence of cigarette butts and bidi ends. In sharp contrast to the present study, the compliance rates in those four jurisdictions varied from 82-100%.<sup>[8]</sup> In another compliance survey in SAS Nagar Mohali, Punjab the overall compliance rate was found to be as high as 92.3%.<sup>[13]</sup> The author has credited the strong enforcement of the provisions of COTPA in Puniab for the high rate of compliance. Very high levels of compliance ranging from 95-100% have been observed in different parts of the globe such as Australia, USA, Ireland, New Zealand in the bars, pubs and restaurants.<sup>[14-17]</sup> This has been a reality because of the strict implementation of anti-smoking laws. Reddy et al. however, found poor compliance (36%) in terms of active smoking similar to the present survey.<sup>[18]</sup> The variations in the compliance rates can be attributed to the differences in the study population, socio-cultural issues and enforcement of anti-smoking law. <sup>[18]</sup> However, there is quite some evidence, which suggests that the law is widely flouted in India.<sup>[19]</sup>

The results of the study show that only 8 (20%) of public places have signages displayed and only two of them have the names of the reporting officer over it. This certainly needs the attention of the administration for immediate redressal. The prevalence of active smoking in more than half of the public places is a matter of great concern. It may serve to normalize and sanctify smoking behavior sending a mixed message to the public about the dangers of tobacco.<sup>16]</sup> Halperin and Rigotti conducted a compliance assessment of tobacco control policies in the US public universities and found that only half of the schools provided complete smoke-free atmosphere. One third sold tobacco on campus and none banned tobacco sponsorships and promotions.<sup>[20]</sup> A 1999 survey of 116 nationally representative private and public universities in US reported that a mere 27% banned smoking in all student residences.<sup>[21]</sup> Similar levels of compliance or even poorer have been reported in this study, which is a gross violation of the provisions of the act.

#### CONCLUSION

Recognizing the urgent need to curb the tobacco epidemic, the enforcement of the provisions of COTPA needs to be strengthened, especially in academic, research and healthcare institutions. As the second largest producer and consumer of tobacco in the world, there is greater need to examine the case for a comprehensive tobacco control program. Apart from the anti-smoking legislations, policies related to taxation, illicit trading, advertising, promotion and sponsorship of tobacco products, content regulation, packaging and labeling needs to be looked into seriously backed up by strong political commitment.

Compliance assessment studies are an integral part of the MPOWER package because it is a tool to monitor tobacco control policies and enforce bans. The poor compliance that appeared in the survey will serve as an evidence to advocate necessary corrective actions. The presence of active smoking is a matter of concern, which needs to be addressed by the administration because of the wrong

Table 1: Category	v wise compliance t	to smoke-free law in	public places under study
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Parameters	Categories of public places				Total no. (%)
	Hospital buildings (n=13)	Public places outside hospital (n=14)	Offices ( <i>n</i> =6)	Residential areas (n=7)	<i>n</i> =40
Signages displayed	7	0	1	0	8 (20)
Name of reporting officer	2	0	0	0	2 (5)
No active smoking	6	6	5	2	19 (47.5)
No smoking aids	7	3	2	2	14 (35)
No cigarette butts and bidi stubbs	2	1	0	0	3 (7.5)
Total	24 (65)	10 (70)	8 (30)	4 (35)	

message it sends to the public. Sensitization workshops of different stakeholders, especially the media may be organized to raise awareness regarding the provisions under COTPA. A Policy Enforcement Working Group should be constituted consisting of various stakeholders such as students, faculty, administration and other active groups in the campus. The group should have the power to inspect any place in the campus and issue challans to the offenders of the law. At the same time, enforcement should be supportive rather than punitive. The in-charge of the department/building should be made the reporting officer and displayed clearly on the signage boards. Public awareness should be created regarding the provisions of the act through posters, pamphlets, meetings, seminars and notices at prominent places. We can also innovate by printing anti-smoking messages in patient treatment cards. We should try to include more smokers in the anti-tobacco activities. These anti-smoking efforts might promote quit rates; thus, necessitating the need for a Tobacco Cessation Clinic. Periodic compliance surveys should be carried out to closely monitor the adherence to the provisions of the law. Compliance monitoring of anti-smoking laws should be replicated in other places as well to spur the local authorities to take immediate remedial actions.

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