

Effect of Anti-Smoking Legislation in Public Places

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Short Communication

Abstract

Background: The aim of this study was to evaluate the effect of anti-smoking legislation in public places and public support for smoking ban.

Methods: A cross-sectional survey was conducted in public places such as market, bus/railway station, workplaces and hospitals in Udaipur, India. Informed consent was obtained. The questionnaire comprised of details about their agreement with the current anti-smoking legislation and their views on the support for smoking ban in public places.

Findings: The study was conducted among 314 individuals of whom 255 (81.2%) supported the general ban on smoking in public places. Non-smokers (54.4%) agreed more than smokers that the introduction of legislation would create healthier environment ($P < 0.001$), second hand smoke is serious threat to health ($P < 0.001$), more implementation needed for current antismoking legislation ($P < 0.001$). Smokers (45.5%) agreed more than non-smokers that everyone has the right to smoke in public places ($P < 0.001$).

Conclusion: Local support for a ban on smoking in public places in Udaipur is high. But there is a lack of enforcing mechanism in support of the legislation and hence complete smoking ban along with strong enforcement may provide better results.

Keywords: Antismoking legislation, Smoking ban, Public health

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Introduction

An estimated 120 million people smoke, of which 900000 people die per year in India.¹ Smoke-free legislation, which prohibits smoking in certain settings, reduce exposure of nonsmokers to secondhand smoke and create an environment that helps smokers cut down or quit smoking.

In India, prohibition of smoking in public places is mandated under section 4 of the Cigarettes and Other Tobacco Products Act (which includes prohibition of advertisement and regulation of trade and commerce, production, supply and distribution) of 2003.² As defined under 3(l) of Control of Tobacco Products Act "public place" means any place to which the public have access, whether as of right or not, but does not include any open space. Detailed rules prohibiting smoking in public places were notified on May 30, 2008 and came into force on October 2, 2008. However, smoking bans are not without their critics. Smoker's rights group have suggested that bans on smoking in public places infringe the civil liberties of smokers.³

As no recent, local data from across the region was available on this topic, the present study sought to investigate the local effect of anti-smoking legislation in public places and to assess the variation in support for smoking ban, encourage cessation of smoking, protect people from environmental exposure to passive smoke.

Methods

A cross-sectional survey was conducted in Udaipur city, Rajasthan, India in the month of November 2012. Udaipur city has one government hospital, two main markets, six government office settings, a central bus stand and a railway station. These places were included in the study. For hospitals and offices, interviews were taken during lunch hours for 3 weeks period. Evening hours were selected for interview at the market places, bus stand and railway station as rush was seen during these hours.

Ethical approval from Ethical Committee and written informed consent from study participant was obtained. With the general public, face to face interviews were performed. The questionnaire consisted of 17 items in two sections:

1. Demographic questions including age, sex, occupation.

2. Questions for both smokers and non-smokers about the impact of anti-smoking legislation, the impact of second-hand smoking and their views for smoking ban in public places.⁴

The questionnaire was pretested in a pilot survey that comprise of 63 (20.0%) participants. Kappa ($k = 0.86$), weighted kappa ($k_w = 0.9$) were used to evaluate test-retest reliability of the questionnaire and internal consistency was assessed by Cronbach's alpha (α) coefficient ($\alpha = 0.78$).

The people who all agreed to take part in the study were included, and others were excluded at the public places. On the pre-decided days, a trained investigator visited each of the public places and a questionnaire was filled by the investigator.

The investigator took an average of 8 min to fill the questionnaire. Statistical analysis of data was processed using Microsoft Excel 2007 and SPSS (version 17, SPSS Inc., Chicago, IL, USA). Chi-square tests were used to assess the association between smoking behavior, smoking beliefs and socio-demographic variables. $P < 0.001$ was considered as a significant result.

Results

A total of 314 individuals agreed to take part in the survey of which 143 (45.5%) were smokers. There was a significant difference between the percentage of male 257 (81.8%) and female 57 (18.2%) smokers ($P < 0.001$) with none of the female participants being smokers (Table 1). Majority of participants agreed that the introduction of current anti-smoking legislation was likely to create a healthier environment (64.3%, $P < 0.001$). Almost half (49.7%) non-smokers believed that passive smoking was a serious threat to their health compared with smokers (27.1%, $P < 0.001$). Majority of the non-smokers (41.4%) were bothered by other people smoking in public places, whereas smokers (12.4%) were least bothered ($P < 0.001$). It was right to ban smoking in public places (81.2%, $P < 0.001$) (Table 2).

The study revealed a high significant association between the smokers and non-smokers in favor of the ban on smoking in all the public places. Not a single smoker was in favor of banning smoking at workplace; whereas nonsmokers (56.0%) insisted that smoking should be banned in all the public places including workplaces ($P < 0.001$) (Table 3).

Table 1. Distribution of study subjects based on age and gender

Age group	Smokers			Non-smokers			Total
	*Male	*Female	Total	Male	Female	Total	
15-30 years	60	0	60	56	21	77	137
31-45 years	58	0	58	37	26	63	121
46-60 years	22	0	22	21	10	31	53
60 above	3	0	3	0	0	0	3
Total	143	0	143	114	57	171	314

*P < 0.001 for gender (chi-square and Fischer's exact test used)

Table 2. Perception on anti-smoking legislation

Questions	Smokers (Agree)	Non-smokers (Agree)	Total	P
	[n (%)]			
The introduction of the recent anti-smoking legislation has forced smokers to reduce the number of cigarettes they smoke?	87 (27.7)	96 (30.6)	183 (58.3)	P > 0.001
The introduction of the recent anti-smoking legislation has reduced your exposure to passive smoking?	74 (23.6)	110 (35.0)	184 (58.6)	P > 0.001
The current legislation is likely to create a healthier environment?	78 (24.8)	124 (39.5)	202 (64.3)	*P < 0.001
Everyone has the right to smoke if they wish to smoke in public places?	62 (19.7)	12 (3.8)	74 (23.6)	*P < 0.001
Government has fulfilled its duty by making anti-smoking legislation?	67 (21.3)	80 (25.5)	147 (46.8)	P > 0.001
More implementation and advertisement is needed for current anti-smoking legislation?	80 (25.5)	154 (49.0)	234 (74.5)	*P < 0.001
The introduction of sign-boards (public place warnings) of anti-smoking legislation will be helpful? (e.g. No smoking)	100 (31.8)	154 (49.0)	254 (80.9)	*P < 0.001
Do you believe that second hand smoke is a serious threat to health?	85 (27.1)	156 (49.7)	241 (76.8)	*P < 0.001
Are you avoiding public places because of smoke?	18 (5.7)	86 (27.4)	104 (33.1)	*P < 0.001
Are you bothered by other people smoking in public places (workplace, buses, trains, bus/railway stations, market yard)?	39 (12.4)	130 (41.4)	169 (53.9)	*P < 0.001
It is right to ban smoking in public places	94 (29.0)	161 (51.3)	255 (81.2)	*P < 0.001

*Statistically significant

Table 3. Agreement for smoking ban in different public places

Smoking status (%)	Market (%)	Bus/railway station (%)	Work places (%)	Hospitals (%)	All the places (%)	Total	P
Smokers 94 (37)	19 (20.2)	31 (33.0)	0 (0.0)	20 (20.0)	24 (25.5)	94	*P < 0.001
Non-smokers 161 (63)	17 (10.6)	30 (18.6)	09 (5.6)	15 (9.3)	90 (56.0)	161	

*Statistically significant

Discussion

Banning smoking in public places is one way to reduce both overall smoking rates and exposure to second-hand smoke. The study result suggests that the strong local support in Udaipur city in public places is strong 255 (81.2%), which was similar to the previous study³ which states that there was strong local support in North East of England for

ban on smoking in public places.

In the present study, majority of the participants 202 (64.3%) believe that current legislation was likely to create healthier environment, which was similar to study done by Chaudhary et al.⁴ in which 61.9% participants agreed that ban on smoking in public places will create healthier environment.

The present study 255 (81.2%) favors ban on smoking in different public places such as market,

bus/railway station, workplaces, hospitals while the study done by Ahmed et al.³ which state that 332 (63.0%) respondents support for ban on smoking in places like pubs and clubs, restaurants and cafes and shopping malls. There were consistent variations in support for bans in specific places according to smoking status. Non-smokers 90 (56.0%) are more likely to support bans in all specified location while 24 (25.0%) smokers supported ban. This was similar to study done by Ahmed et al.³ which showed that 247 (76.5%) of non-smokers wish to support smoking ban overall.

The present study shows there was an overall support for the legislation, but the comparison of smokers and non-smokers beliefs showed significant differences between two groups. More non-smokers agreed than smokers that the introduction would create a healthier environment or that there would be a reduction in exposure to passive smoking that was also similar to a study done.⁴ However, both the group agreed that the introduction of the recent anti-smoking legislation has forced smokers to reduce the number of cigarettes they smoke and both the group disagreed that the government has fulfilled its duty by making anti-smoking legislation.

In the case of complete smoking ban, there is even greater need for enforcement. The enforcement includes preventing children from becoming addicted to tobacco, effective health promotion and health education programs, and television

anti-smoking advertisement⁵ prominent health warnings on tobacco product packing and financial measures to discourage tobacco consumption.

The data relied on self-reported smoking behaviors, and this might have resulted in under-reporting of smoking because of growing social unacceptability of tobacco use. Ultimately, there might have been a potential bias and underestimation of the true smoking behaviors of the general public in Udaipur city.

Conclusion

Local support for bans on smoking in public places in the Udaipur city is relatively high although varies according to smoking status. Introduction and enforcement of smoking bans in public places would not be expected to meet with great opposition and may have a positive influence on public health. There is a lack of enforcing mechanism in support of the legislation, so complete smoking ban along with strong enforcement and implementation may provide better results.

Conflict of Interests

The Authors have no conflict of interest.

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اثر قانون منع استعمال دخانیات در اماکن عمومی

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مقاله کوتاه

چکیده

مقدمه: هدف از این مطالعه، ارزیابی اثر قانون منع استعمال دخانیات در اماکن عمومی و حمایت عمومی از ممنوعیت استعمال دخانیات بود.

روش‌ها: مطالعه حاضر به روش مقطعی در اماکن عمومی مانند بازار، ایستگاه اتوبوس یا راه‌آهن، محل‌های کار و بیمارستان در شهر اودایپور هند انجام و از مشارکت کنندگان رضایت‌نامه دریافت شد. پرسش‌نامه مورد استفاده در این مطالعه شامل جزئیات در مورد موافقت مشارکت کنندگان با قانون فعلی منع استعمال دخانیات و نظرات آن‌ها در مورد حمایت از منع استعمال دخانیات در اماکن عمومی بود.

یافته‌ها: این مطالعه بر روی ۳۱۴ نفر انجام شد که ۲۵۵ نفر (۸۱/۲ درصد) از آنان با منع عمومی استعمال دخانیات در اماکن عمومی موافقت داشتند. مشارکت کنندگان غیر سیگاری (۵۴/۴ درصد) بیشتر از سیگاری‌ها موافق بودند که این قانون باعث ایجاد محیط زیست سالم‌تری می‌شود ($P < 0/001$). از طرف دیگر، سیگار تهدیدی جدی برای سلامت به حساب می‌آید ($P < 0/001$) و اقدامات بیشتری برای اجرای این قانون مورد نیاز است ($P < 0/001$). افراد سیگاری (۴۵/۵ درصد) بیشتر از غیر سیگاری‌ها موافق بودند که هر کسی حق دارد در اماکن عمومی سیگار بکشد ($P < 0/001$).

نتیجه‌گیری: میزان حمایت عمومی از ممنوعیت استعمال دخانیات در اماکن عمومی در شهر اودایپور زیاد بود، ولی فقدان یک مکانیسم اجرایی در حمایت از این قانون به چشم می‌خورد. بنابراین ممنوعیت کامل همراه با یک مکانیسم اجرایی قوی ممکن است نتایج بهتری به همراه داشته باشد.

واژگان کلیدی: قانون منع استعمال دخانیات، ممنوعیت استعمال دخانیات، بهداشت عمومی

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