

Implementing an Indoor Smoking Ban in Prison: Enforcement Issues and Effects on Tobacco Use, Exposure to Second-hand Smoke and Health of Inmates

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ABSTRACT

Objectives: To describe the issues encountered during the implementation of an indoor smoking ban in prison and its effects on self-reported tobacco use, perceived exposure to second-hand smoke (SHS) and perceived health status of inmates in Quebec's provincial correctional facilities.

Methods: Quantitative data were obtained from 113 inmates in three provincial correctional facilities in the province of Quebec, Canada. Qualitative data were obtained from 52 inmates and 27 staff members. Participants were recruited through a self-selection process. Particular efforts were made to enrol proportions of men, women, smokers and non-smokers similar to those generally found among correctional populations.

Results: Despite the indoor smoking ban, 93% of inmates who declared themselves smokers reported using tobacco products inside the correctional facilities and 48% did not report any reduction in their tobacco use. Only 46% of smokers declared having been caught smoking inside the facility, and more than half of them (58%) reported no disciplinary consequences to their smoking. A majority of inmates incarcerated before the implementation of the ban (66%) did not perceive a reduction of their exposure to SHS following the indoor ban. Enforcement issues were encountered during the implementation of the indoor ban, notably because of the amendment made to the original regulation (total smoking ban) and tolerance from smokers in the staff towards indoor smoking. They were also related to perceptions that banning indoor smoking is complex and poses management problems.

Conclusion: This study's findings emphasize the importance of considering organizational and environmental factors when planning the implementation of an indoor smoking ban in correctional facilities.

Key words: Correctional facilities; indoor smoking ban; enforcement issues; second-hand smoke

La traduction du résumé se trouve à la fin de l'article.

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Smoking is an important health issue in correctional environments. Smoking prevalence is reported to be high in penitentiaries, yet the last study to measure tobacco use in Canadian correctional facilities dates back to 1995. At the time, 72% of the inmates held in Canadian federal penitentiaries were smokers,¹ compared to 31% of the general population aged 15 and over.² To our knowledge, no empirical study has investigated the prevalence of smoking in provincial correctional facilities. However, in a recent study carried out in three Quebec correctional facilities, health care staff members estimated that about three quarters of the inmates were smokers.³

As a consequence of the high level of tobacco use in correctional facilities, both inmates and staff members are exposed to very high levels of second-hand smoke (SHS)⁴⁻⁶ and therefore are more likely than the general population to develop tobacco-related forms of cancer and disease.⁷ According to the World Health Organization (WHO), one of the most efficient means to preserve the health of both the inmates and the staff members is the implementation of regulations banning tobacco use inside correctional facilities.⁸

Implementing smoking bans in correctional facilities has proven to be difficult: inmates tend to keep on smoking and smokers among the staff tend not to enforce the bans.⁹ Also, staff members believe the bans will increase the inmates' irritability and get in the way of the former's surveillance duties.^{10,11} When asked about implementing a smoking ban in correctional facilities, US prison administrators stated their concerns about a possible increase in the number of violent events and tobacco smuggling activities.¹¹

In Quebec, a study conducted by Royer & Cantinotti (2008) reported similar concerns, as 85% of the health care staff interviewed considered that a complete smoking ban would have negative repercussions on the inmates' behaviour, such as increasing their aggressiveness.³

On February 5, 2008, the Quebec Department of Public Security implemented a regulation that completely banned tobacco use in all its correctional facilities. Three days later, the regulation was amended to allow inmates to smoke outdoors (during their allocated period in the outside courtyard). This amendment was introduced in order to "facilitate the application of the smoking ban for tobacco users".¹² As of December 2010, this regulation was still in effect in all Quebec provincial correctional facilities.

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The main objective of this article is to describe the issues encountered during the implementation of an indoor smoking ban and its effects on tobacco use, exposure to SHS and health status of inmates in Quebec's provincial correctional facilities, based on the perceptions of both inmates and staff. Following the indoor ban, it was hypothesized that tobacco use and consequently SHS exposure would decrease as inmates could no longer smoke indoors and could only smoke for about an hour a day in the outside courtyard. It was also expected that the reduced tobacco use and SHS exposure would improve the inmates' perceived state of health. In order to account for possible paradoxical effects coming from the implementation of the ban, the antithesis stating that the indoor smoking ban would result in an increase of smoking and SHS exposure inside the correctional facilities was also considered for the purpose of analysis (two-tailed testing).

METHODS

Design of study

The study was conducted in three correctional facilities in the province of Quebec's largest urban centres: two in the region of Montreal and one in the Quebec City area. The three correctional facilities are provincial prisons for individuals incarcerated for a maximum of two years less a day, as well as for defendants awaiting trial. Each facility has particular characteristics; the *Établissement de détention de Montréal (Bordeaux)* is a detention centre for men that can hold over 1,000 inmates, while *Maison Tanguay* is a smaller institution for women (less than 200 inmates at the time of the study). By comparison, the *Établissement de détention de Québec* is an average size detention centre (around 750 inmates at the time of the study) that includes both men and women.

Data were collected from August to September 2008, i.e., six months after the implementation of the indoor smoking ban. The study was approved by the ethics approval boards of the University of Montreal and the *Centre de santé et de services sociaux de la Vieille-Capitale*.

Participants

Respondents were recruited through a self-selection process. Notices were put up at various locations in the correctional facilities to inform both inmates and staff about the study and to ask for their participation. Those who wished to participate were referred to the interviewer via a pre-identified staff contact-person. The only inmates not eligible to participate were those detained in psychiatric and secured detention wings. Overall, the sample of 113 inmates was composed of detainees (69%), defendants (26%) and offenders waiting for transfer to a federal facility (5%). Two thirds of the sample were men (65%). Of all inmates participating in the study, 80% were smokers (men: 71%, women: 95%; $\chi^2=9.00$, $p<0.01$). A vast majority of smokers (95%) reported smoking on a daily basis. Characteristics of participants are detailed in Table 1.

Instruments and variables

Two different instruments were used in the data collection process: a questionnaire and a semi-structured interview guide, both in French. The questionnaire used to collect quantitative data was administered to all 113 inmates willing to participate in the study. Of those, 52 inmates volunteered to participate in the semi-structured

Table 1. Socio-demographic Characteristics of Participants (Inmates) According to Smoking Status

Socio-demographic Characteristics	Smoking Status		Total (N=113) %
	Smokers (n=90) %	Non-smokers (n=23) %	
Sex			
Male	58	91	65
Female	42	9	35
Age (years)			
18-30	21	39	25
31-40	31	22	29
41-50	33	17	30
≥51	14	22	16
Civil status (single)	62	52	60
Primary or secondary school education	80	83	81
Duration of prison stay (days)			
1-100	51	22	45
101-200	13	35	18
201-400	26	35	27
>400	10	9	10

Note: Due to rounding, percentages may not total 100%.

interview, as did 27 staff members (administrators, correctional officers, health care officers). The semi-structured interview guide used to collect qualitative data was similar for both inmates and staff. The variables used in this article describe the inmates' smoking status and tobacco use, the perceived prevalence of smoking in the correctional facility, and the perceived effect of the ban on tobacco use, SHS exposure and general health status.

RESULTS

Prevalence of smoking and number of cigarettes smoked by inmates

Respondents were asked to estimate the prevalence of smoking in their respective correctional facility (Table 2). On average, inmates estimated a smoking rate of 85% (SD=10.6). Male smokers reported smoking more cigarettes per day than did female smokers (14 versus 11 cigarettes; $t(78) = 2.10$, $p<0.05$).

Effect of the ban on tobacco use, exposure to SHS and health

Slightly more than half the smokers (58%) felt the regulation had an effect on their cigarette consumption (Figure 1); of these, a majority (89%) reported a reduction in their tobacco use. Surprisingly, 11% of smokers reported an increase in their cigarette consumption. An explanation for these results might lie with the earlier observation that a vast majority of inmates, at least among those interviewed, kept on smoking indoors despite the ban.

It also appears that a large proportion of inmates did not perceive that the ban decreased their level of exposure to SHS (Figure 2). Among respondents who were incarcerated before the implementation of the indoor ban, only 34% perceived a reduction of their exposure to SHS. Nevertheless, 45% of the same respondents felt the ban had improved their general health. Smoking status had no significant relationship with the perception of the ban's effect on general health ($\chi^2 = 1.78$, $p=0.18$).

Enforcement of the indoor smoking ban

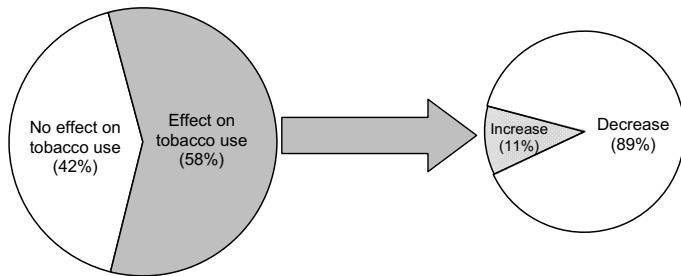
While smoking 11 to 14 cigarettes per day might seem high for individuals who are allowed only one hour to smoke in the courtyard on a daily basis, it appears to be consistent with the fact that

Table 2. Perceived Prevalence of Smoking and Number of Cigarettes Smoked Daily by Inmates in Provincial Correctional Facilities According to Sex and Smoking Status

	Sex and Smoking Status			
	Men (n=73)		Women (n=40)	
	Smokers (n=52)	Non-smokers (n=21)	Smokers (n=38)	Non-smokers (n=2)
Perceived prevalence of smoking among inmates				
Mean	80%	85%	90%	97%
Standard Deviation	10.6	10.0	8.0	2.8
Number of cigarettes smoked daily*				
Mean	14 (n=46)	-	11 (n=34)	-
Standard Deviation	7.0	-	7.1	-

* Occasional smokers not included.

Figure 1. Perception of smoking inmates regarding the effect of the indoor ban on their tobacco use



Left circle: Respondents who smoked at least 1 cigarette in the previous 30 days (N=91)

95% confidence intervals: No effect on tobacco use (31%-53%); Effect on tobacco use (47%-69%)

Right circle: Respondents who identified an effect of the regulation on their tobacco use (N=53)

95% confidence intervals: Decrease (77%-96%); Increase (4%-23%)

93% of smokers interviewed reported smoking inside their respective correctional facility despite the indoor smoking ban. The following quotes* from an inmate and a member of the staff support the previous observation:

Nobody's waiting to go out in the courtyard to smoke. (Patrick, inmate, smoker)

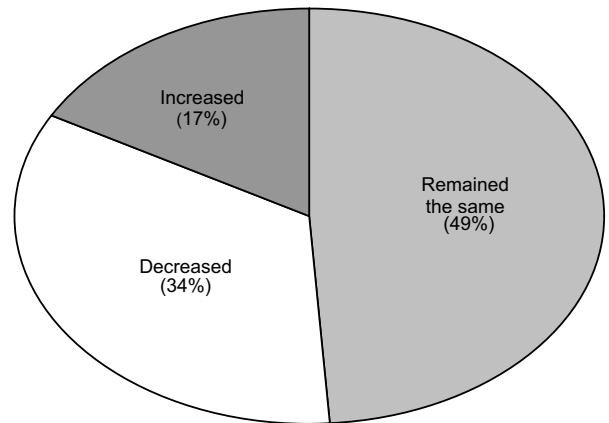
The regulation looks good on paper but here we deal with inmates, and the boys they don't respect the rules outside so they won't respect them here either. And the cravings go far beyond the fear of receiving a disciplinary report or any other consequences, so they smoke in their cell; there are some who even have the guts to smoke in the common rooms. (Kathryn, staff, non-smoker)

Interestingly, only 46% of smokers declared ever having been caught smoking inside the facility. Among those, more than half reported no consequences to their illegal smoking. Furthermore, 83% of non-smokers and 49% of smokers interviewed reported that the level of enforcement regarding tobacco use inside correctional facilities was low. To explain why the regulation was not systematically enforced, the staff pointed to the lack of clear instructions on the procedures to follow when confronted with illegal smoking:

We never received any instructions on that [...]. But look, I mean, I'd go ask the chief and I think even he couldn't tell me for sure. [...] They tell us to enforce a regulation, but... No, they never told us to write disciplinary reports; they never told us to ask them to butt out. (Karen, staff, smoker)

* All quotes were freely translated from French by the authors.

Figure 2. Perception of SHS exposure since the indoor smoking ban



Respondents incarcerated before February 8, 2008 (N=41)

95% confidence intervals: Remained the same (33%-65%); Increased (7%-32%); Decreased (20%-51%)

The staff also reported on the complexity of the application of the indoor smoking ban:

It just can't be applied. They [inmates] come back from the courtyard and they all bring tobacco in their cell; it's clear that you can't ask a smoker not to smoke during the next 23 hours by telling them 'You just have to wait'; c'mon that's completely... that's ridiculous you know. (Rachel, staff, non-smoker)

Examination of the tobacco supply policies in the three correctional facilities revealed that although the amount of tobacco available for purchase per capita was limited, it was still sold in the canteens. At the time of the study, the policies differed among the facilities. The number of cigarettes allowed per week varied between 35 to 50 cigarettes in the detention centres for women and 75 cigarettes in the detention centres for men. This is far below the reported daily number of cigarettes smoked by the respondents (mean of 77 cigarettes/week for women and 98 for men). This seems to indicate the presence of a cigarette grey market, which could have made difficult the enforcement of the indoor smoking ban.¹³

Work overload was also mentioned as a reason why the regulation was not evenly enforced:

It's because the staff is overwhelmed, because we lack manpower; they have so much to do that they go like 'No, I have too much work', and they let it fly. Sometimes they just let it fly. (Valery, staff, smoker)

It should also be recognized that some staff members were upset by the amendment made to the original regulation, i.e., from complete smoking ban to indoor ban only:

So we just went back to the way it was before. It was like "They wanna smoke, let them have it, in the end we don't really care", you know. [...] It's because we all got frustrated that the ban didn't work as planned, that we all put a lot of effort into this and that some inmates had already taken on therapy to quit smoking, and... Look, it lasted only three days; it's completely ridiculous. (Anne, staff, non-smoker)

Furthermore, it appears that the correctional officers' reactions to the amendment were, in part, influenced by their own smoking status: *It certainly has to do with each person's values hey! One who's smoking and works as an administrator, a correctional officer, any sort of job, he's gonna be more tolerant towards smoking than the other who's a non-smoker and hates cigarettes. (Helen, staff, non-smoker)*

Finally, some administrators feared that a complete smoking ban would exacerbate tensions between inmates and that violence would ensue. They perceived the ban as a threat to the management of day-to-day operations in the correctional facility. In one instance, a particular administrator held a negative view of complete smoking bans and consequently was relieved when the regulation was amended:

Oh my! That situation would've only led to conflicts [...] that would've been hard to take. [...] That would've been hard for bosses to manage. This [the complete smoking ban] could have led to hazardous situations, like riots. (Jessamine, staff, smoker)

Many inmates also reported having a negative perception of smoking bans, although not for similar reasons. According to some of the smokers interviewed, the smoking ban goes against their rights because it prevents them from making choices, including the choice to smoke:

Myself I see it as [...], a sort of repression, like a breach of my rights. [...] I consider smoking as an acquired right in detention. (John, inmate, smoker)

Some inmates consider the correctional facility, and more precisely the prison cell, as their home. Therefore they think that they should be allowed to smoke cigarettes inside their cell:

I find it inconceivable that they keep us from smoking because, in a sense, our cell's our home you know. I mean, some girls stay here a whole year. [...] Some stay here a year, eighteen months, that's a lot for them you know [...]. (Mary, inmate, smoker)

DISCUSSION

As previously stated, the decision to implement an indoor smoking ban in provincial correctional facilities was taken by the Quebec Department of Public Security with the objective of improving the health of both inmates and staff members. However, the results of this study tend to demonstrate that, six months after its implementation, the ban had not yet produced the intended results.

The most likely explanation for this finding is that a large majority of smokers kept on smoking inside the facility despite the ban. The period of time allocated for outdoor smoking is extremely limited in detention centres and most centres only allow inmates to go outside for one hour per day. Since the majority of inmates are daily smokers with likely a high level of nicotine dependence¹⁴ and since tobacco remains a legal product that they are allowed to purchase and keep in their possession at all times, most of them continued to smoke in their cells or in places out of sight of correctional officers. This continued smoking inside the correctional facilities most likely generated important SHS exposure and therefore did not generate the expected health benefits.

For the staff, organizational and environmental factors made the enforcement of the ban far too complex to be carried out efficiently. It should also be recognized that some members of the staff were greatly disappointed by the amendment made to the original regulation (complete smoking ban), and were therefore less inclined to enforce the new regulation (indoor smoking ban).

Despite the numerous issues associated with the implementation of the indoor smoking ban, one should not conclude that every attempt to limit tobacco use in correctional environments is doomed to failure or will raise multiple problems. This study took place in a context where a complete smoking ban was suddenly reduced to an indoor ban. Therefore, the present results should be considered in relation to this particular context and the issues encountered in the process of enforcing the indoor smoking ban.

This situation outlines the relevance of joining process evaluation to impact evaluation when studying the implementation of smoking bans, especially in particular environments such as correctional facilities. Resorting to impact evaluation only (also called *black box evaluation*)¹⁵ could have precluded gaining important insights on several key factors related to the problems encountered in the implementation of the ban.

The results presented in this paper have some limitations; first it should be noted that only three provincial correctional facilities were included in the study, and the sample size used was small. Consequently the results are not necessarily representative of the entire correctional population in Quebec. Also, the participants were recruited through a self-selection method; this method could have introduced a selection bias by keeping out potential respondents who were less interested to participate in the study while recruiting those whose feelings towards the smoking ban were stronger. Therefore, the selection procedure could have contributed to polarizing the respondents' opinion of the ban. As all data are self-reported and rely on the perceptions of the respondents, it is possible that they do not objectively reflect all the particular aspects of the smoking ban as experienced in Quebec. Because no objective evaluation of SHS exposure or health status was conducted before and during the study, results should only be seen as indications of the situation prevailing in Quebec provincial correctional facilities at the time of the study.

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RÉSUMÉ

Objectifs : Décrire les problèmes rencontrés suite à l'implantation d'une réglementation interdisant de fumer à l'intérieur des prisons, ainsi que les effets de cette réglementation sur l'usage du tabac, l'exposition perçue à la fumée de tabac ambiante et l'état de santé perçue chez des détenus incarcérés en établissement de détention provincial au Québec.


Méthode : Des données quantitatives ont été recueillies auprès de 113 détenus dans trois établissements de détention provinciaux situés dans la province de Québec. Des données qualitatives ont été obtenues

auprès de 52 détenus et 27 membres du personnel. Les participants ont été recrutés selon un processus d'autosélection, en visant à obtenir des proportions d'hommes, de femmes, de fumeurs et de non-fumeurs similaires à celles généralement retrouvées au sein des établissements de détention.

Résultats : En dépit de l'interdiction de fumer, 93 % des détenus se déclarant fumeurs ont affirmé utiliser des produits du tabac à l'intérieur des établissements de détention, et 48 % ont dit ne pas avoir réduit leur consommation de tabac. Seulement 46 % des détenus fumeurs interrogés ont déclaré avoir été appréhendés par un agent correctionnel lorsqu'ils fumaient à l'intérieur de l'établissement. Parmi ces derniers, plus de la moitié (58 %) n'ont pas subi de conséquences disciplinaires. Une majorité des détenus incarcérés avant l'implantation de l'interdiction de fumer (66 %) n'ont pas perçu de réduction de l'exposition à la fumée de tabac ambiante suite à l'entrée en vigueur de la réglementation. Des problèmes d'application ont été rencontrés au cours de la période d'implantation de la réglementation, notamment en raison d'une modification à la réglementation initiale (laquelle prévoyait une interdiction totale de fumer en milieu correctionnel) et de la tolérance de membres du personnel fumeurs vis-à-vis l'usage du tabac à l'intérieur des établissements. Ces problèmes étaient également reliés à la perception que l'interdiction de l'usage du tabac à l'intérieur des établissements de détention est une procédure complexe qui engendre des problèmes de gestion.


Conclusion : Les résultats de cette étude soulignent l'importance de considérer les facteurs organisationnels et environnementaux dans la planification de l'implantation d'une réglementation interdisant l'usage du tabac à l'intérieur des établissements de détention.

Mots clés : établissements de détention; interdiction de fumer à l'intérieur; problèmes d'application; fumée de tabac ambiante



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