Background

Tobacco smoking is harmful for health, killing approximately 70 000 persons in France every year. People with mental disorders, who have a high rate of smoking and often present with comorbid somatic illnesses, are at particularly high risk for the harmful consequences of smoking. Tobacco smoking has been banned from hospitals in many countries (partial or complete ban) in order to reduce tobacco-related morbidity in smokers, along with the need to reduce passive smoke exposure for those who are non-smokers, including patients and the nursing staff. Studies have shown that there is a high prevalence of smokers in health professionals. In Western countries, more than 20% of nurses are smokers [1-7]. An even higher rate of smoking has been reported in nurses working in psychiatric settings (35% in England [8], 47% in Ireland [5]). Studies conducted in France report that 30% of nurses [9,10] and 32.1% of physicians [11] are smokers. Non-nursing members of the staff, such as secretaries, social workers, psychologists and other employees who are in daily contact with patients may themselves be smokers, but data regarding these categories of employees are rare.

Complete tobacco abstinence is the goal that must be achieved in order to reduce tobacco-related morbidity, since even a low consumption of cigarettes is harmful to health. Moreover, besides the harmfulness of second-hand smoke, smoking in the hospital, particularly in psychiatric units, is a cause of fights, trafficking, violence and fire, and negatively impacts on mental health treatment [12]. A complete smoking ban in psychiatric settings provides an opportunity for initiating tobacco treatment services, motivating patients to quit, and supporting them with staying tobacco-free once they leave the hospital [12,13]. Reducing tobacco consumption also brings substantial financial savings to patients and the health care system. Many studies have examined the effects of a smoking ban in psychiatric settings, and, globally, the results show clear benefits (see [14] for review). Studies have shown that a successful smoking ban is well supported by patients and the staff [15,16], provides healthier lifestyle, is associated with better psychological functioning in patients [17], and saves nursing staff time [18]. Studies have also shown that smoking cessation interventions are as effective in psychiatric patients as in other people [19]. However, these benefits appear to be still largely ignored by health care professionals, who are often opposed to the smoking ban [20], and prefer a partial ban to a complete ban [21-24]. Psychiatric staff seems to be particularly reluctant about smoke-free policies [25]. If some categories of health professionals ignore the benefits of smoking cessation, or do not feel involved in the efforts to promote smoking cessation for patients, these efforts may be jeopardized by their psychological attitude. The psychological attitudes of all hospital employees are therefore a real concern in the context of smoking cessation programs [26].
The reason why people with mental disorders have a high rate of smoking likely includes a number of heterogeneous factors [27]. Among these factors, the involvement of the nursing staff has been underscored. The mentally ill are in general socially isolated and smoking may be a way to facilitate social interactions, in particular with mental health professionals who are smokers. Psychiatric patients generally experience low levels of pleasure in daily life, and the nursing staff often considers that, given that smoking is “one of the last pleasures they have”, it would be harsh to deprive patients of smoking. Mental health staff may even encourage smoking, believing that smoking has therapeutic value, reinforcing medication compliance and preventing behavioral disturbances [28]. It has also been shown that nurses who smoke feel less comfortable imposing the smoking ban on patients [29-31]. In general, nurses who smoke are less favorable to the smoking ban, and the psychological attitude of smoking nurses may foil the efforts to ban smoking [1,32].

Smoking habits and psychological attitudes towards a smoking ban have never been investigated in mental health employees in France. The purpose of the present study was to examine the smoking habits and psychological attitudes towards a complete smoking ban in a French psychiatric hospital for all those in daily contact with patients, including physicians, nurses (holding the National French Nurse diploma), nurses aids (not holding the National French Nurse diploma), cleaning staff, social workers, psychologists, occupational therapists and secretaries. The study was expected to provide elements possibly indicating to what extent, habits, beliefs and psychological attitudes of the staff might raise barriers against smoking cessation interventions.

Methods

A given day, all employees working in close contact with patients (administrative employees who work in a separate building were excluded) in the Paul-Guiraud Hospital in Villejuif, France (a 470-bed hospital, all psychiatric), were interviewed using a 5-item self-administered questionnaire developed for the purpose of the study. Before the interview, all participants read an informed consent form describing the purpose and the course of the study, and mentioning that they were free to accept or refuse to participate in the study. All employees were personally interviewed in their workplace by one of the 9 investigators (who divided themselves in order to visit all the different services and wards of the hospital), and answered the questionnaire in his or her presence. Day and night workers were interviewed. The investigators (authors of the article) are 3 physicians (RB, NB, RM), 4 nurses (NH, FD, KL, ALL), 1 researcher (PR), and the administrative direction of the hospital, which was interested in the project, delegated one of its employees to fully participate in the course of the study (DL). Smoking is banned indoors, but allowed outdoors, in the Paul-Guiraud Hospital for both patients and employees (partial ban). The Paul-Guiraud Hospital hires a part time physician (NB), a specialist in tobacco addiction, who helps those (employees or patients) who want to stop smoking, but no particular smoking cessation program is developed in the hospital. Partial smoking ban and lack of structured smoking cessation programs are common features in almost all psychiatric hospitals in France.

Besides asking for gender and age (using age brackets: 18-25; 26-35; 36-45; 46-55; over 55), the interview consisted in the 5 following questions:

1. Do you smoke?
2. If you smoke: How many cigarettes per day?
3. Would you agree with a complete smoking ban in this hospital?
4. Do you think that a complete smoking ban would: 1. Worsen the behavior of patients, 2. Have no noticeable effect on patients or improve their behavior?
5. If you smoke: Were a complete smoking ban to be established for patients only, would you yourself stop smoking during working hours?

Analyses were made for 7 categories of employees: physicians, nurses, ancillary workers (a group that includes nurses’ aids, nursing students and cleaning staff), psychologists, social workers, occupational therapists, and secretaries. Main results are presented in percentages. A khi2 was used for between-group comparisons: between ages (>45 vs <45), between men and women, between smokers and non-smokers, and, within the group of smokers, between those who smoked 10 or more cigarettes per day (“high smoking group”, HSG) and those who smoked 10 cigarettes per day or less (“low smoking group”, LSG).

The project has been submitted to an Ethical Committee (Comité de Protection des Personnes Île de France XI), which stated that, in accordance with the Declaration of Helsinki, the study (a non-interventional survey) does not fall within the scope of the French Law on Bioethics.

Results

A total of 264 employees were working the day of the study, all filled in the questionnaire (none declined, and none complained of feeling obliged to fill the questionnaire). As shown on Table 1, they were 58 men and 206 women, medium age 40.7, among which 110 (41.6%) were smokers. A minority (16%) agreed with the idea of a complete smoking ban, and a third of the smokers (32%) envisaged they would change their smoking habits in case of a complete smoking ban. The percentage of those who agreed with a complete ban was lower among smokers (5.6%) than among non-smokers (25.3%). A large majority (90%) of the 264 employees considered that a smoking ban would worsen the behavior of patients. There were no gross intergroup differences regarding the different variables, except that smokers from the ancillary workers group were more prone to change their smoking habits in the case of a complete smoking ban. Besides asking for being a non-smoker, being a smoker is significantly associated with an opposition to a complete smoking ban (p<0.0001), and is associated with the opinion that a complete smoking ban would worsen the behavior of the patients (p<0.02). Smokers from the HSG were less prone to change their smoking habits than those from the LSG (p<0.01). Smokers from the “ancillary” group were significantly more prone to change their smoking habits than other smokers as a whole (p=0.025).
The number of smokers did not significantly differ between men and women, and gender and age showed no significant association with the opinion regarding a complete ban.

Discussion

As a whole, the results of the present study show that employees working in a French psychiatric hospital largely oppose a complete smoking ban, and that those who smoke express a stronger disagreement than those who do not. About two thirds of the smokers are not prepared to change their smoking habits in case of a complete ban. Nearly all employees (90%), smokers or not, believe that a complete smoking ban will worsen the behavior of patients. The Paul-Guiraud Hospital is the second biggest psychiatric hospital in France, and the situation of the present study is likely not very different from that of the majority of psychiatric hospitals in France. In other words, the present results are probably representative of the general psychological attitudes towards a smoking ban of French employees in mental health hospitals.

A few studies have already investigated the psychological attitudes of mental health employees towards a complete smoking ban. Studies often report negative views of the staff regarding a complete ban, although not always. We found 5 studies devoted to that topic, those of Willemsen et al. [33], Bloor et al. [8], Etter et al. [22], McNally et al. [25] and Wye et al. [34], with respectively 19%, 32%, 37%, 60% and 67% of the staff supporting a complete smoking ban. These studies are from The Netherlands, Switzerland and Great Britain. Our results show lower percentages of support than in these reports, with only 16% of employees agreeing with a complete ban. The results are even more dramatic for smokers, 5.6% of which agree with the ban. The very low acceptance of a complete ban in our study, compared with other reports, can be explained by methodological issues, or by the fact that the psychological attitudes towards smoking could be particular in France, or both. The methodology of our study (each employee directly and individually approached by one of the investigators in his/her working place) implies that the responses of the employees were more spontaneous than carefully considered, possibly motivated more by emotion than reflection. In the studies quoted above, questionnaires were mailed to staff members, giving them the opportunity to take time to respond. A limitation to the mailing method is that a fairly high number of employees do not respond (absence of response in 39% to 49% in the quoted studies), whereas in our study all employees responded to the questionnaire. From a methodological standpoint, our study therefore provides responses representative of the whole staff, but possibly more emotionally motivated, or less pondered. Lack of reflection may have driven some employees to bypass the representation of the harmfulness of smoking. Regarding the singularity of the situation in France, it is recognized by French authorities that smoking cessation programs are dramatically lacking in our country, and that France should take Great-Britain as a model to conceptualize such programs [35]. Lack of smoking cessation programs likely goes with lack of information. Awareness of the dangers of smoking should have led employees to agree more frequently with a complete smoking ban. The fact that 84% of the employees opposed a complete ban, a percentage that includes non-smokers, may indicate their unawareness of the real dangers of smoking. Unawareness of the issues regarding patients and smoking is also exemplified in the present study by the fact that almost all employees ignored that a complete smoking ban is not followed by an improvement of their behavior, as shown in several studies (see [14] for review). The very low agreement with a complete smoking ban in French mental health hospital employees may therefore, in large part, be related to lack of information regarding the harmfulness of tobacco and the behavioral consequences of a smoking ban.

Smoking is harmful to health and taking care of patients is a global issue. This necessarily implicates that, along with other forms of care, health professionals should be aware of the dangers of smoking, and it is evident that all health employees should feel personally involved, and participate, in the efforts to promote smoking cessation in their workplace. According to Prochaska [36] “providers in mental health and addiction treatment settings have an ethical duty to intervene on patients’ tobacco use and provide available evidence-based treatments”. The results of the present study are in contradiction this ethical responsibility, and this needs to be discussed. The responses of employees indicate that they may be unaware of, but also that they may deny, the dangers of smoking for patients. Question 5 of the questionnaire: “Were a complete smoking ban to be established for patients only, would you yourself stop smoking during working hours?” was indeed unrealistic (a smoking ban would never be established for patients only – a smoking ban is for all), but it had purposively a projective dimension: reveal the spontaneous disposion and willingness for change of employees.

### Table 1: Demographic variables and responses to the questions in the different groups of employees. Nb cig: number of cigarettes smoked per day.

<table>
<thead>
<tr>
<th></th>
<th>N</th>
<th>Male/female</th>
<th>Age (medium)</th>
<th>Smokers</th>
<th>Nb cig</th>
<th>Agree with ban</th>
<th>Change habits (smokers)</th>
<th>Consequences: Worsen</th>
</tr>
</thead>
<tbody>
<tr>
<td>Physician</td>
<td>17</td>
<td>9/8</td>
<td>43</td>
<td>4 (24%)</td>
<td>11</td>
<td>3 (18%)</td>
<td>1 (25%)</td>
<td>15 (88%)</td>
</tr>
<tr>
<td>Nurse</td>
<td>105</td>
<td>21/84</td>
<td>42</td>
<td>43 (41%)</td>
<td>10.4</td>
<td>21 (20%)</td>
<td>12 (28%)</td>
<td>94 (89%)</td>
</tr>
<tr>
<td>Ancillary worker</td>
<td>100</td>
<td>24/76</td>
<td>40</td>
<td>43 (43%)</td>
<td>10.6</td>
<td>18 (18%)</td>
<td>20 (46.5%)</td>
<td>88 (88%)</td>
</tr>
<tr>
<td>Psychologist</td>
<td>3</td>
<td>2/1</td>
<td>35</td>
<td>1 (33%)</td>
<td>8</td>
<td>0 (0%)</td>
<td>0 (0%)</td>
<td>3 (100%)</td>
</tr>
<tr>
<td>Social worker</td>
<td>8</td>
<td>1/7</td>
<td>31</td>
<td>3 (37%)</td>
<td>11</td>
<td>1 (12%)</td>
<td>1 (33%)</td>
<td>8 (100%)</td>
</tr>
<tr>
<td>Occupational therapist</td>
<td>12</td>
<td>1/11</td>
<td>40</td>
<td>7 (58%)</td>
<td>12.1</td>
<td>0 (0%)</td>
<td>1 (14%)</td>
<td>12 (100%)</td>
</tr>
<tr>
<td>Secretary</td>
<td>19</td>
<td>0/19</td>
<td>43</td>
<td>9 (47%)</td>
<td>9</td>
<td>0 (0%)</td>
<td>1 (11%)</td>
<td>18 (95%)</td>
</tr>
<tr>
<td>All</td>
<td>264</td>
<td>58/206</td>
<td>40.7</td>
<td>110 (41.6%)</td>
<td>10.5</td>
<td>43 (16%)</td>
<td>35 (32%)</td>
<td>238 (90%)</td>
</tr>
</tbody>
</table>

Given that there is no reason why smokers and non-smokers would differ in their knowledge of the harmfulness of smoking, the fact that 94.4% of the smokers oppose a smoking ban, compared to 74.7% for the non-smokers, along with the fact that 2/3 of the smokers said that they would not change their smoking habits, likely shows that a number of smokers are in denial as to the reality of the harmfulness of smoking. Denial of harmfulness is a current psychological mechanism in addicted people, and has been demonstrated in smokers [37].

A surprising finding in the present study was that ancillary workers were significantly more prone to change their smoking habits than other employees. Although we have no clear explanation for this observation, we can speculate that the more adaptable psychological attitude of ancillary workers may be related to their position of inferiority in the hierarchy. Their position would make them more prone to adopt a psychological attitude of submission to rules, with less willingness to adopt a personal attitude of opposition. Implicitly, this means that other employees may have felt more free to express their own will or self-interest, and their opposition, possibly accompanied by a form of reality denial. Regarding the general opposition to the smoking ban, a phenomenon of “victim subculture”, developed in the victims of the smoking ban (the smokers), associated with an empathic response from the non-smoking population, as described by Bloor et al. [8], and may also have taken place in the population of our study.

Conclusions

Nurses, and treatment staff in general, are involved in all aspects of care to patients, including the necessity to promote a reduction of smoking. Smoking cessation interventions cannot succeed without the active involvement of nurses and other partners of the treatment staff. If the treatment staff is not prepared to participate in the efforts to reduce smoking, or is opposed to these efforts, smoking cessation programs have very little chances of success [1,32]. The present study shows that, in French mental health hospitals, employees in close contact with patients are not prepared, and in a large majority are opposed, to a complete smoking ban. Such generalized opposition obviously raises barriers to smoking cessation interventions or other smoking reduction policies. The study also suggests that unawareness and denial of the harmfulness of smoking may participate in the opposition of mental health employees to a smoking ban. Unawareness of nursing teams can be overcome by educational programs, as shown in one study [38]. Denial and opposition are complex issues, probably more difficult to address, but educational programs may also be helpful here.

Acknowledgements

The authors thank the Direction of the Paul-Guiraud hospital for facilitating the study.

References


