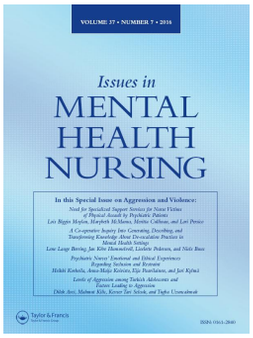

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Opinions of Hospitalized Patients with Mental Disorders and Patients in Basic Health Units in Brazil Regarding Tobacco Smoking

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ABSTRACT

This study aims to investigate the opinions of psychiatric patients and the general population on the smoking ban in health service facilities. A cross-sectional study was carried out in a mental health outpatient care unit (MHOC; $n = 126$), a psychiatric hospital (PH; $n = 126$), and a basic health unit (BHU; $n = 126$). The participants in the hospital were less in favor of the smoking ban compared with those attending out-of-hospital units (MHOC, 84%; PH, 69%; and BHU, 100%). Subjects with four or more psychiatric admissions (odds ratio (OR), 3.24) and smokers (OR, 3.18) were most likely to agree that patients have the right to smoke in health service facilities. The psychiatric population was less tolerant of the smoking ban, reflecting the culture of smoking in mental health service facilities.

The prevalence of smokers in the psychiatric population is higher than that in other groups (Cole & Fiore, 2014; Cook et al., 2014; Mackay, 2016; Oliveira & Furegato, 2016; Schroeder & Koh, 2014; U.S. Department of Health and Human Services [USDHHS], 2014; World Health Organization [WHO], 2013).

A Brazilian study found that 80% of tobacco users smoked within psychosocial care centers (CAPS) or psychiatric hospitals (PHs) (Barros et al., 2014). A recent research found only six abstinent patients among 96 smokers hospitalized in the psychiatric unit of a general hospital (Oliveira & Furegato, 2016).

The analysis of physical, mental, and social damage that tobacco causes in people with mental disorders indicates that smoking is a serious public health problem that requires professional's attention. The promotion of tobacco abstinence among these subjects should be integrated with the goals of psychiatric services so as to guarantee their physical, mental, and social well-being (García-Portilla & Bobes, 2016; Ruther et al., 2014; Schroeder, 2009).

Historically, nursing teams have used tobacco smoking as a means to alleviate anxiety, deal with idleness, control patient' behavior (reward/punishment), and incentivize patient adherence to therapeutic proposals (Mackay, 2016; National Association of State Mental Health Program Directors [NASMHPD], 2010; O'Donovan, 2009; Ratschen, Britton, & McNeill, 2011).

Smoking as a way to alleviate idleness during psychiatric hospitalization is especially important in Brazilian PHs. In many of these facilities, the treatment is centered on the biomedical model, with emphasis on the use of psychotropic drugs.

Other therapeutic activities are scarce and planned without concern for constructing individualized therapeutic projects. For example, in occupational therapy, drawing and other manual activities (commonly used in many hospitals) may lead the patient to disinterest by making them feel infantile or due to the lack of specific skills.

To exemplify this reality, Oliveira (2016) described a typical day of patients hospitalized in a Brazilian PH: 7:20 am, breakfast; 8:00 am, religious time – Monday to Saturday; 9:00 am, individual or group psychological care with doctors and social workers – 3 days a week; 10:30 am, occupational therapy – Monday to Saturday; 12:00 nn, lunch; 1:30 pm, family visit – 3 days a week; 2:30 pm, afternoon tea; 3:00 pm, public telephone access – 3 days a week; 5:30 pm, dinner; 8:00 pm, tea.

There are reports in the literature that after the implementation of smoking restrictions and some initial contrary reactions, smokers became more involved in other activities and in conversations with the other patients, as though the absence of cigarettes encouraged them to seek some other "refuge" (Hehir, Indig, Prosser, & Archer, 2012; Jochelson, 2006; Oliveira & Furegato, 2015).

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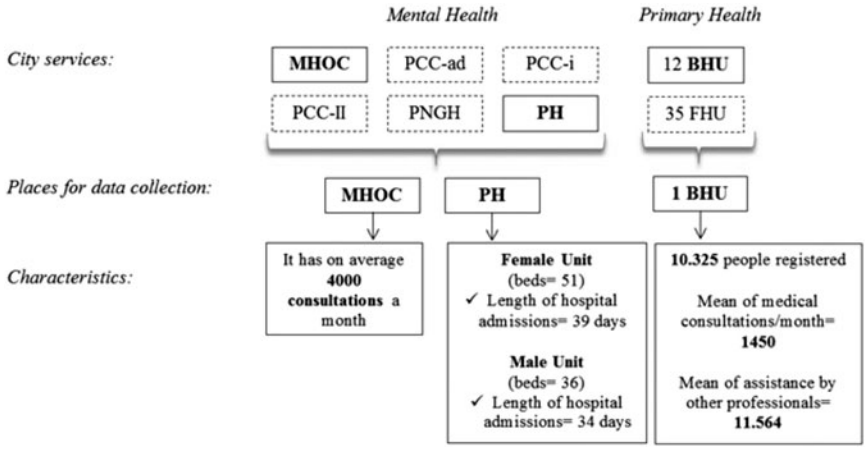

Figure 1. Description of the selected study sites.

Nursing has an important role in the perpetuation of the smoking culture in many psychiatric institutions. However, international publications have reported a growing interest in this professional category to modify that reality, with more and more nurses becoming involved in programs for smoking cessation and in the dissemination of scientific research on the subject (Dickens, Staniford, & Long, 2014; Kourakos, Kalokairinoul, Zyga, & Koukial, 2016; Li, Lee, Chen, Jeng, & Chen, 2014; McCloughen, Foster, Kerley, Delgado, & Turnell, 2016; Robson et al., 2017; Sarna et al., 2014).

Unfortunately, in Brazil, this progress is not observed in the same degree as in other countries. There has been a change of mentality in some mental health service facilities, which have committed themselves to comply with the Anti-Smoking Law (12.546/2011). However, such change is more common in services linked to universities. In addition, the Brazilian publications on this subject are recent and limited to a few groups of researchers.

The reconfiguration of the smoking culture in health services, as imposed by the smoking ban in closed collective environments in Brazil (Law 12.546/2011), and the need to intervene in the high prevalence of smokers among individuals with mental disorders have led scholars to rethink the role of nurses in this process.

The current ethical discussions on smoking in health services directly involve the nursing staff who, in the daily care routine, have the responsibility of distributing cigarettes to the patients. This has culminated with the opposition of the Regional Nursing Council of the State of São Paulo (Brazil) (Conselho Regional de Enfermagem [COREN], 2011).

Nursing is the health category with the highest number of professionals and the one that offers direct and continuous care with greater proximity to the patients, with nurses acting as a link between the patients and the other team members. In the psychiatric admission context, for example, the uninterrupted care (24 hours) offered by nurses leads to a deep knowledge of each patient and his or her needs, which works in favor of their participation in the planning and implementation of tobacco control (American Nurses Association [ANA], 2014; Bialous et al., 2017; Cook et al., 2014; NASMHPD, 2010; O'Donovan, 2009).

Therefore, an investigation of what people think about tobacco smoking in health service facilities is necessary. The present study aimed to study the opinions of psychiatric patients and the general population on the smoking ban in health service facilities.

Methods

Design

This is a cross-sectional, descriptive-analytical, epidemiologic study done in a city in the state of Sao Paulo, Brazil, from April to July 2014.

The sample of people with mental disorders was obtained from two health service facilities: a mental health outpatient care (MHOC) unit and the care units of PH.

The sample of general population served in basic health units (BHUs) was obtained through data collection in 1 of the 12 BHUs in the city. The criterion for choosing the BHU was the flow of patients attended daily (Figure 1).

Sample

The sample consisted of 378 participants: 126 mental disorder patients in the MHOC unit, 126 mental disorder patients admitted to the PH, and 126 persons from the general population assisted at the BHU.

The sample size was calculated based on the estimated prevalences of smokers in the MHOC unit (P1) and the PH (P2), which were 40% and 60%, respectively. These estimates were according to the scientific literature and the researchers' perception based on the nursing practice. The level of significance (α) was 5%, and the beta (β) was 10%:

$$n = \frac{(Z_\alpha + Z_\beta)^2 \times (P_1Q_1 + P_2Q_2)}{(P_1 - P_2)^2}$$

$$n = \frac{(1.96 + 1.28)^2 \times (40 \times 60 + 60 \times 40)}{(40 - 60)^2} \qquad n = 126$$

To be included in the study, the patients should attend the MHOC unit, PH, or BHU on the data collection day and should live in the city. Persons with intellectual disability, those with problematic use of alcohol or illicit

Table 1. Absolute and relative frequency (%) of the participants' opinions ($n = 378$) on the tobacco smoking permission in the health services, according to sudy site.

Opinions	Study place			Total
	MHOC *n* (%)	PH *n* (%)	BHU *n* (%)	*n* (%)
Smoking in health services is a patient's right	22 (17.5)	59 (46.8)	8 (6.3)	89 (23.5)
Allowing smoking in health services is an omission of care	92 (73)	72 (57.1)	120 (95.2)	284 (75.1)
Allowing smoking is a lack of respect to patients and professionals who do not smoke	111 (88.1)	95 (75.4)	126 (100.0)	332 (87.8)
Smoking should be prohibited in all health services	106 (84.1)	87 (69.1)	126 (100.0)	319 (84.4)
If smoking were prohibited, I would not go back to this health service	9(7.1)	49 (38.9)	6 (4.8)	64 (16.9)

substances but without psychiatric comorbidities, those below 15 years old, and those who had difficulty communicating verbally were excluded.

Instrument

The "Questionnaire Identifying Patients Attending Mental Health and Primary Care" was used in the data collection. This instrument consisted of identification and statement variables for determining patient opinions on the tobacco ban in health service facilities.

The questionnaire, which was developed by the authors for a larger project, compared the prevalence and epidemiologic profile of tobacco use between psychiatric patients and the general population. Because it was not a measurement instrument, validation was not carried out. However, the questionnaire was sent to four mental health experts, who evaluated the variables in terms of relevance, understanding, clarity, response options, and formatting.

The identification variables selected for this study are as follows: study site (MHOC unit, PH, or BHU), sex (female or male), age (15–29, 30–39, 40–49, 50–59, or $\geq$60 years), current occupation (retired, with employment contract, or without occupation), major psychiatric diagnosis (schizophrenia/schizoaffective, mood, and personality disorders, or anxiety/other), and time to diagnosis (up to 1 year, 1–12 years, or $\geq$12 years).

In addition to the identification variables, five affirmative statements expressing opinions on the smoking ban in health service facilities were selected: (1) Smoking in health service facilities is a patient's right; (2) Allowing smoking in health service facilities is an omission of care; (3) Allowing smoking in health service facilities shows a lack of respect to nonsmoker patients and professionals; (4) Smoking should be prohibited in all health service facilities; and (5) If smoking were prohibited, I would not go back to this health service facility. The respondents were asked to indicate whether or not they agree with each statement.

Procedure

To implement the cross-sectional design, the data collection was carried out concomitantly in the three groups, 1 day per week for each study site. The collection days were alternated between service facilities.

To obtain the participants in this work, the team at each study site daily provided the researcher with a list of patients or inpatients with scheduled appointments. In addition to the exclusion criteria, the order of arrival of the patients at the service facilities was followed.

The interviews were done individually in a reserved room to avoid any interruptions. A single researcher carried out the 378 interviews, which lasted an average of 18 minutes (range 10–47 minutes) each.

During the interviews, the questionnaires were completed by the researcher in the *TabacoQuest* application, which was specifically developed by the authors for this project (Oliveira, Duarte, Alves, & Furegato, 2016). The researcher stood next to each interviewee, allowing him or her to follow the reading of the question/statement on the tablet and then recording the responses.

Ethical issues

The Research Ethics Committee of Ribeirão Preto College of Nursing, University of São Paulo, approved the present study (308/2013). Each participant signed two copies of the free and clarified consent term (FCCT). Those below 18 years old ($n = 3$) signed a term of assent, submitted along with the FCCT signed by a legal guardian.

Statistical analysis

The statistical analysis was carried out with the use of the Stata software (version 12.1). Descriptive statistics (absolute and relative frequencies, means, standard deviations, and minimum and maximum values) were used to characterize the participants. The bivariate analysis allowed the identification of statistical evidence of association between the opinions on smoking and the study sites (MHOC unit, PH, and BHU) with the use of the chi-square test. The level of significance (α) applied was 5%.

To verify the magnitude of the associations evidenced by the chi-square test, *Cramér's V* coefficient was calculated, which varies from 0 to 1; the closer the value is to the unit, the stronger the association. Cramér's V coefficient allows the classification of the association as weak, moderate, or strong (Cohen, 1988).

After the bivariate analysis, multivariate analysis was done for the following dependent variables: "Smoking in health service facilities is a patient's right"; "Allowing smoking in health service facilities is an omission of care"; and "Smoking should be banned in all health service facilities." Because these variables are dichotomous (agree or disagree), a logistic regression model was constructed. The odds ratio (OR) was used as a comparison element.

Table 2. Chi-square test and Cramér's *V* coefficient for classification of strength of associations between opinions and study place.

Opinions	χ^2 (*p*-value)	Cramér's *V* coefficient
Smoking in health services is a patient's right	61.2242 (<0.001)*	0.4025
Allowing smoking in health services is an omission of care	49.3881 (<0.001)*	0.3615
Allowing smoking is a lack of respect to non-smoker patients and professionals	35.6912 (<0.001)*	0.3073
Smoking should be prohibited in all health services	45.8316 (<0.001)*	0.3482
If smoking were prohibited, I would not go back to this health service (MHOC, PH, or BHU)	65.0440 (<0.001)*	0.4148

*Evidence of statistical association ($p < 0.05$).

The logistic regression included the independent variables that presented $p < 0.20$ in the bivariate analysis (Oliveira, 2016) and that were considered relevant for the subject. After the construction of the logistic regression model, the variance inflation factor (VIF) was calculated; the square root of this measure indicates how much multicollinearity is responsible for the increase in the standard error (Hair, Black, Babin, Anderson, & Tatham, 2009).

The mean VIF for the logistic regression models was <10: "Smoking in health service facilities is a patient's right" (VIF, 2.88); "Allowing smoking in health service facilities is an omission of care" (VIF, 2.88); and "Smoking should be prohibited in all health service facilities" (VIF, 1.45).

Results

Characteristics of the participants

Most of the participants (67.5%) were women. The mean age was 48.3 years (SD, 14.5; range 15–79 years). The number of elderly (≥60 years) in the BHU was higher than that in other service facilities (MHOC, 19%; PH, 11%; and BHU, 40%).

Although the participants in the BHU were predominantly elderly, there were more people inserted in the labor market in this facility. In the PH, although 88.9% of participants were ≤59 years, there was a higher prevalence of retirees (MHOC, 19%; PH, 37.3%; and BHU, 22%).

The functional commitment of the PH patients was confirmed by the finding that 69.1% stopped working after their mental disorder diagnosis. In the MHOC and the BHU, the percentages were 44.4% and 5.6%, respectively.

Of the 378 participants, 288 (76.2%) had a psychiatric diagnosis (all patients in the MHOC unit and PH and 36 subjects in the BHU). Schizophrenia and schizoaffective disorder (38.2%) were the most frequent diagnoses, followed by mood disorders (25%), anxiety/others (24%), and personality disorders (12.8%).

Of the total sample, 35.4% were smokers (MHOC, 27%; PH, 60%; and BHU, 19%).

Opinions on the smoking ban

Most of the participants objected to smoking in health service facilities because they considered allowing smoking to be an omission of care and a sign of lack of respect for nonsmokers. A few argued that patients have the right to smoke in health facilities and that they would not go back to a MHOC unit, PH, or BHU if smoking was banned there (Table 1).

Table 3. Odds ratio (OR) adjusted for the participants' opinion ($n = 378$) on permission to tobacco smoking in health services.

	Smoking in health services is a patient's right		
Variables	Agree *n* (%)	Disagree *n* (%)	Adjusted[1] OR (95% CI)[2]
Place			
MHOC	22 (17.5)	104 (82.5)	1.47(0.37,5.82)
PH	59 (46.8)	67 (53.2)	2.40 (0.53, 10.85)
BHU	8 (6.3)	118 (93.7)	1
Sex			
Female	45 (17.6)	210 (82.4)	1
Male	44 (35.8)	79 (64.2)	1.36 (0.74, 2.47)
Age group (years)			
15–29	17 (35.4)	31 (64.6)	1.28 (0.46,3.52)
30–39	20 (29.4)	48 (70.6)	1.17 (0.46,3.00)
40–49	22 (30.6)	50 (69.4)	0.96 (0.39,2.37)
50–59	14 (13.9)	87 (86.1)	0.42 (0.17, 1.05)
≥60	16 (18.0)	73 (82.0)	1
Psychiatric admissions			
None	14 (7.82)	165 (92.18)	1
One	12 (23.08)	40 (76.92)	1.68 (0.59, 4.79)
Two	9 (29.03)	22 (70.97)	1.83 (0.53,6.31)
Three	4 (26.67)	11 (73.33)	1.69 (0.36,7.88)
Four or more	50 (49.50)	51 (50.50)	**3.23 (1.09,9.56)**
Smoke			
Smoker	59 (44.03)	75 (55.97)	**3.18 (1.69,5.99)**
Former smoker	6 (9.23)	59 (90.77)	0.94 (0.34,2.63)
Non-smoker	24 (13.41)	155 (86.59)	1
Time of diagnosis			
Not applicable	5 (5.56)	85 (94.44)	1
Up to 1 year	7 (18.42)	31 (81.58)	1.67(0.29,9.73)
1–12 years	34 (27.42)	90 (72.58)	1.33 (0.27,6.50)
More than 12 years	43 (34.13)	83 (65.87)	1.72 (0.36,8.21)
Total	89 (23.5)	289 (76.5)	

Note:OR (95% CI) in bold indicates evidence of statistical association.
[1]Logistic regression.
[2]Odds ratio and confidence interval (95%).

A comparison of the opinions of the respondents at the three study sites showed that those in the hospital were less in favor of the smoking ban compared with the participants in out-of-hospital units.

Most respondents in the MHOC unit and PH expressed their support for the smoking ban in health service facilities and considered smoking in these places as an omission of care and a sign of lack of respect to nonsmokers. However, the frequencies of these responses were lower than those found among the subjects in the BHU, who were all in favor of the smoking ban and considered the permission of smoking as a sign of lack of respect to nonsmokers.

Although most of the participants in the PH approved of the smoking ban in health service facilities, half of these respondents argued that patients have the right to smoke in these places. In the BHU, a few respondents agreed with this statement. In the MHOC unit, there was greater consistency in the patients' views of the two proposed situations. In the general population (patients from the BHU), a few

respondents disagreed that allowing smoking indicated neglect of care.

Table 2 shows the results of the chi-square test on the data presented in Table 1, as well as Cramér's *V* coefficient; the strength of the association was moderate for the classification of all the investigated items on smoking in health service facilities.

Multivariate analysis

According to the bivariate analysis, the PH patients showed the most agreement that smoking in health service facilities is a patient's right and the least agreement that allowing smoking represents an omission of care. However, when adjusted for sex, age group, psychiatric admissions, tobacco smoking, and time to diagnosis, the association of these opinions with the study site was no longer evident (Tables 3 and 4).

In the logistic regression model, persons with a history of four or more psychiatric admissions and smokers had, respectively, 3.23 and 3.18 higher chances of agreeing that patients are entitled to smoke in health service facilities compared with those without a history of admission and nonsmokers, regardless of the interference of the other variables (Table 3).

Compared with those who reported never having been admitted to psychiatric service and nonsmokers, those with a history of four or more admissions and smokers were, respectively, 65% and 60% less likely to agree that smoking in health service facilities was an omission of care (Table 4).

Smokers were 74% less likely than nonsmokers to agree that smoking should be banned in health service facilities. Regarding psychiatric admissions, those with a history of four or more admissions were 82% less likely to be in favor of the smoking ban than those without a history of admission (Table 5).

Discussion

In this study, the subjects in psychiatric service units and the general population were found to have different opinions on tobacco smoking in health service facilities. Those who were admitted to the hospital were generally less supportive of a smoking ban, with some even asking the interviewer whether the research would result in such prohibition.

Almost half of those admitted to the PH argued that smoking in health service facilities is a patient's right. The percentage of agreement was lower in the MHOC unit and almost derisory in the BHU. This difference is attributed to the greater number of smokers in the PH and to the fact that such facility is an old service unit with the historical and cultural heritage of the old asylums. This was confirmed by the multivariate analysis, which showed that smokers and persons with a history of four or more psychiatric admissions agreed the most with this statement, regardless of the health service unit, sex, age, length of stay, and time to diagnosis.

Table 4. Gross odds ratio (OR) adjusted for the participants' opinion ($n = 378$) on permission to tobacco smoking in health services.

	Allowing smoking in health services is omission of cart		
Variables	Agree *n* (%)	Disagree *n* (%)	Adjusted[1] OR (CI 95%)[2]
Place			
MHOC	92 (73.6)	33 (26.4)	0.42 (0.11,1.57)
PH	72 (57.1)	54 (42.9)	0.43(0.10,1.85)
BHU	120 (95.2)	6 (4.8)	1
Sex			
Female	204 (80.31)	50 (19.69)	1
Male	80 (65.04)	43 (34.96)	0.89(0.50,1.60)
Age group (years)			
15–29	28 (58.3)	20 (41.7)	0.41 (0.15,1.12)
30–39	40 (58.8)	28 (41.2)	**0.34 (0.14,0.85)**
40–49	54 (75.0)	18 (25.0)	0.98 (0.39,2.47)
50–59	85 (85.0)	15 (15.0)	1.36 (0.55,3.37)
≥60	77 (86.5)	12 (13.5)	1
Psychiatric admissions			
None	161 (90.45)	17 (9.55)	1
One	37 (71.15)	15 (28.85)	0.58 (0.22,1.50)
Two	18 (58.06)	13 (41.94)	0.35(0.12,1.04)
Three	11 (73.33)	4 (26.67)	0.61 (0.14,2.66)
Four or more	57 (56.44)	44 (43.56)	**0.35 (0.13,0.97)**
Smoke			
Smoker	79 (58.96)	55 (41.04)	**0.38 (0.20,0.72)**
Former smoker	57 (87.69)	8(12.31)	0.91 (0.35, 2.36)
Non-smoker	148 (83.15)	30 (16.85)	1
Time of diagnosis			
Not applicable	87 (96.67)	3(3.33)	1
Up to 1 year	26 (68.42)	12 (31.58)	0.24 (0.04,1.50)
1–12 years	82 (66.67)	41 (33.33)	0.43(0.07,2.42)
More than 12 years	89 (70.63)	37 (29.37)	0.40 (0.07, 2.25)

Note: OR (95% CI) in bold indicates evidence of statistical association.
[1]Logistic regression.
[2]Odds ratio and confidence interval (95%).

Table 5. Gross odds ratio (OR) adjusted for the participants' opinion ($n = 378$) on smoking in health services.

	Smoking should be prohibited in all health services		
Variables	Agree *n* (%)	Disagree *n* (%)	Adjusted[1] OR (CI 95%)[2]
Sex			
Female	229 (89.80)	26 (10.20)	1
Male	90 (73.17)	33 (26.83)	0.57 (0.29,1.11)
Age group (years)			
15–29	36 (75.0)	12 (25.0)	0.63 (0.21,1.88)
30–39	55 (80.88)	13 (19.12)	0.76 (0.26, 2.20)
40–49	59 (81.94)	13 (18.06)	0.86 (0.30,2.45)
50–59	89 (88.12)	12 (11.88)	1.07(0.38,2.98)
≥60	80 (89.89)	9 (10.11)	1
Psychiatric admissions			
None	171 (95.53)	8 (4.47)	1
One	44 (84.62)	8 (15.38)	**0.32 (0.11,0.99)**
Two	25 (80.65)	6 (19.35)	0.31 (0.09,1.06)
Three	13 (86.67)	2 (13.33)	0.50 (0.09,2.87)
Four or more	66 (65.35)	35 (34.65)	**0.18 (0.08,0.45)**
Smoke			
Smoker	90 (67.16)	44 (32.84)	**0.26 (0.13,0.54)**
Former smoker	63 (96.92)	2 (3.08)	2.09 (0.44,9.95)
Non-smoker	166 (92.74)	13 (7.26)	1

Note: OR (95% CI) in bold indicates evidence of statistical association.
[1]Logistic regression.
[2]Odds ratio and confidence interval (95%).

Despite cultural differences, research in Australia, Brazil, England, and Switzerland has shown that tobacco is used by psychiatric patients during hospital admission to cope with the conflicts caused by living with other patients, to stay calm during procedures they are not used to witnessing

(mechanical restraints of other patients), and to fill the lack of activities (idleness) (Jochelson, 2006; Keizer, Descloux, & Eytan, 2009; Lawn, Pols, & Barber, 2002; Oliveira & Furegato, 2014).

A Brazilian census carried out in PHs in the state of São Paulo, Brazil, showed that patients value smoking during hospitalization because it makes them feel free to make their own choices, defining the moment when they light the cigarette at will (Cayres, Ribeiro, Elias, & Coutinho, 2015).

Lawn and Campion (2013) explained that during psychiatric admission, the patients face numerous rules that limit their freedom to make decisions. In general, there is a time to eat, sleep, shower, and take medicines. Therefore, smoking becomes one of the rare activities that the patient can control. This helps us to understand, at least partially, why nearly half of the PH patients considered smoking as a right.

The permission of tobacco smoking in mental health service facilities is a complex issue because its foundations are based on the history and culture of PHs. Nevertheless, this issue needs to be rethought.

The approval in 2014 of the Brazilian Law (No. 12.546) that prohibits smoking in collective places was a matter of concern for many psychiatric patients and mental health professionals who faced a challenging reality. However, such approval was controversial because the decree (No. 8262/2014) that established the prohibition stipulated that health institutions were exempted from the smoking ban if the physicians allowed the patients to smoke.

This exception, foreseen in the Law, conflicts with the view of the Regional Nursing Council of the state of São Paulo, which has positioned itself against the nursing staff to distribute cigarettes to patients in psychiatric admission (COREN, 2011).

The role of nursing in the distribution and control of cigarettes during psychiatric admission is complex. In addition to using tobacco for many years to control the behavior of psychiatric patients, many nursing professionals have become smokers themselves. Therefore, the issue of the smoking ban requires considering not only the patients but also the professionals who have an intimate relationship with the culture of smoking in psychiatric institutions.

The above-mentioned remark in the Brazilian Law indicates a regression to smoking control in the country and signals the segregation of authorities between psychiatric patients and the rest of the population. Although the Law does not make it clear that the exception is directed at the psychiatric population, this target audience is implied.

In the United States, for example, the percentage of PHs that banned tobacco smoking increased from 20% to 79% between 2005 and 2011 (Schacht, Ortiz, & Lane, 2012). At the current juncture, Brazil will hardly achieve similar results.

Allowing tobacco use in environments that are designed to promote, maintain, and restore health is unacceptable in view of the ethical and legal obligations of nurses and other professionals to protect the health of their patients and the obligation of health institutions to protect the health of their collaborators, who are exposed to secondhand smoke (Lawn & Campion, 2013; Mackay, 2016; Royal College of Physicians, 2013).

In this study, the vast majority of respondents agreed that smoking in health service facilities represents a lack of care by professionals and a lack of respect for nonsmokers. The percentage of respondents who agreed with these opinions was higher among the general population. In this regard, a study of 82 patients admitted to different units (except psychiatry) in Canadian hospitals found that the patients believed smoking during hospitalization was against the principle of health promotion (Shopik, Schultz, Nykiforuk, Finergan, & Kvern, 2012).

Recognizing the prominent role of tobacco use during psychiatric admission, it was not surprising that PH patients expressed the least support for the smoking ban and further stated that they would not return to the facility if smoking was prohibited there.

In the MHOC and the BHU, the number of respondents who said they would not return to the facility if smoking was banned there was insignificant, which is consistent with the short time spent in these places compared with inpatient facilities.

A research at a university hospital in a city of São Paulo showed that 12% of psychiatric patients, 4% of their family members, and 10% of professionals believed that patients with mental disorders should be allowed to smoke in outpatient clinics. When the same question was applied to psychosocial care centers, the percentages increased to 36%, 28%, and 40%, respectively (Scherer & Scherer, 2014).

The PH patients' dislike of the possibility of a smoking ban is in accordance with other studies that reported strong patient opposition to such prohibition. Among the expressions used by patients to describe this situation are agony, despair, punishment, and torture. However, the same surveys showed that after the implementation of the ban or a decrease in the number of cigarettes smoked, the patients showed less opposition because they found that they were able to stay abstinent, and they perceived improvements in both their physical and mental health (Etter & Etter, 2007; Etter, Khan, & Etter, 2008; Filia et al., 2015; Oliveira & Furegato, 2015; Voci et al., 2010).

An Australian study at a forensic PH reported that 75% of patients recognized physical benefits from tobacco withdrawal and that 68% were discharged with the intention of remaining abstinent (Hehir, Indig, Prosser, & Archer, 2012).

Considering the insights in this discussion, the present study provides valuable contributions to the nursing profession and scientific research, by investigating the perceptions of psychiatric patients and the general population on a current and controversial subject, i.e., the prohibition of smoking in health services.

In addition to its contributions, the limitation of this work should also be noted. The method used does not allow the determination of temporality. For example, it could not verify if the respondents started to consider smoking in health service facilities as a right before or after they became smokers.

Despite this limitation, one of the main strengths of this study, besides the methodological rigor applied in the planning and data analysis, was that the interviews were done by a single professional, thus avoiding bias.

The data collection through a mobile device was also a strong point of this work because it promoted the participation of people with mental disorders and the general population in the research (it aroused curiosity in patients who were at the service facilities during the data collection periods); it made the interviews less tiring (the user-friendly interface of the application favored greater interaction with the interviewees and encouraged their participation by providing answers); it helped develop a connection between the interviewer and the interviewee, leading to trust and sincerity in responses (and promoting greater visual contact), and it prevented human errors and resulted in increased consistency and integrity of the recorded data (data validation at the time of interview and automatic tabulation).

Final considerations

The psychiatric population, especially those admitted in the PH, was less tolerant of the smoking ban in health service facilities, reflecting the culture of smoking in this type of institution.

Smokers and those with several psychiatric admissions were less in favor of the smoking ban and less in agreement of the statement that allowing smoking represents an omission of care, regardless of the other variables. Further, these respondents were more likely to agree that patients are entitled to smoke in health service facilities.

Declaration of interest

The authors report no actual or potential conflicts of interest.

References

American Nurses Association [ANA]. (2014). *Tobacco free nurses*. Retrieved from http://www.nursingworld.org/MainMenuCategories/WorkplaceSafety/Healthy-Nurse/TobaccoFree.html

Barros, F. C. R., Melo, A. P. S., Cournos, F., Cherchiglia, M. L., Peixoto, E. R. M., & Guimarães, M. D. C. (2014). Cigarette smoking among psychiatric patients in Brazil. *Cadernos de Saúde Pública*, 30(6), 1195–1206. doi:10.1590/0102-311X00027113

Bialous, S. A., Sarna, L., Wells, M. J., Brook, J. K., Kralikova, E., Pankova, A., … Przewozniak, K. (2017). Impact of online education on nurses'delivery of smoking cessation interventions with implications for evidence-based practice. *Worldviews on Evidence-Based Nursing*, *14*(4), 367–376. doi:10.1111/wvn.12197

Cayres, A. Z. F., Ribeiro, M. C., Elias, R., & Coutinho, R. A. (2015). *Camin- hos para a desinstitucionalização no estado de São Paulo: Censo Psicos- social 2014*. São Paulo: FUNDAP.

Cohen, J. (1988). *Statistical power analysis for the behavioral sciences* (2nd ed.). Hillsdale, NJ: Erlbaum.

Cole, H. M., & Fiore, M. C. (2014). The war against tobacco: 50 years and counting. *Journal of American Medical Association*, *311*(2), 131–132. doi:10.1001/jama.2013.280767

Cook, B. L., Wayne, G. F., Kafali, E. N., Liu, Z., Shu, C., & Flores, M. (2014). Trends in smoking among adults with mental illness and association between mental health treatment and smoking cessation. *Journal of the American Medical Association*, *311*(2), 172–182. doi:10.1001/jama.2013.284985

Dickens, G. L., Staniford, J., & Long, C. G. (2014). Smoking behavior, motives, motivation to quit and self-efficacy among patients in a secure mental health service: Comparison with staff controls. *Journal of Psychiatric and Mental Health Nursing*, *21*(6), 483–490. doi:10.1111/jpm.12088

Etter, M., & Etter, J. F. (2007). Acceptability and impact of a partial smoking ban in a psychiatric hospital. *Preventive Medicine*, *44*(1), 64–69. doi:10.1016/j.ypmed.2006.08.011

Etter, M., Khan, A. N., & Etter, J. F. (2008). Acceptability and impact of a partial smoking ban followed by a total smoking ban in a psychiatric hospital. *Preventive Medicine*, *46*(6), 572–578. doi:10.1016/j.ypmed.2008.01.004

Filia, S. L., Gurvich, C. T., Horvat, A., Shelton, C. L., Katona, L. J., Baker, A. L., … Kulkarni, J. (2015). Inpatient views and experiences before and after implementing a totally smoke-free policy in the acute psychiatry hospital setting. *International Journal of Mental Health Nursing*, *24*(4), 350–359. doi:10.1111/inm.12123

García-Portilla, M. P., & Bobes, J. (2016). Smoking cessation programs for persons with schizophrenia: An urgent unmet need. *Revista de Psiquia- tria y Salud Mental*, *9*(4), 181–184. doi:10.1016/j.rpsm.2016.09.002

Hair, J. F., Black, W C., Babin, B. J., Anderson, R. E., & Tatham, R. L. (2009). *Análise multivariada de dados*. Porto Alegre, Brazil: Bookman.

Hehir, A. M., Indig, D., Prosser, S., & Archer, V. A. (2012). Evaluation of a smoke-free forensic hospital: Patients' perspectives on issues and benefits. *Drug and Alcohol Review*, *31*(5), 672–677. doi:10.1111/j.1465-3362.2012.00456.x

Jochelson, K. (2006). Smoke-free legislation and mental health units: The challenges ahead. *British Journal of Psychiatry*, *189*(6), 479–480. doi:10.1192/bjp.bp.106.029942

Keizer, I., Descloux, V., & Eytan, A. (2009). Variations in smoking after admission to psychiatric inpatients units and impact of a partial smoking ban on smoking and on smoking-related perceptions. *International Journal of Social Psychiatry*, *55*(2), 109–123. doi:10.1177/0020764008092357

Kourakos, M., Kalokairinoul, A., Zyga, S., & Koukial, E. (2016). Views and attitudes of patients in mental facilities regarding smoking. *Global Journal of Health Science*, *8*(8), 228–242. doi: 10.5539/gjhs.v8n8p228

Lawn, S. J., Pols, R. G., & Barber, J. G. (2002). Smoking and quitting: A qualitative study with community-living psychiatric clients. *Social Science & Medicine*, *54*(1), 93–104. doi: 10.1016/S0277-9536(01)00008-9

Lawn, S., & Campion, J. (2013). Achieving smoke-free mental health services: Lessons from the past decade of implementation research. *International Journal of Environmental Research and Public Health*, *10*(9), 4224–4244. doi:10.3390/ijerph10094224

Li, I. C., Lee, S. Y., Chen, C. Y., Jeng, Y. Q., & Chen, Y. C. (2014). Facilitators and barriers to effective smoking cessation: Counselling services for inpatients from nurse-counsellors' perspectives – A qualitative study. *International Journal of Environmental Research and Public Health*, *11*(5), 4782–4798. doi:10.3390/ijerph110504782

Mackay, A. (2016). The human rights implications of smoking bans in closed environments: What Australia may learn from the international experience. *International Journal of Law, Crime and Justice*, *46*, 13–30. doi:10.1016/j.ijlcj.2015.12.005

McCloughen, A., Foster, K., Kerley, D., Delgado, C., & Turnell, A. (2016). Physical health and well-being: Experiences and perspectives of young adult mental health consumers. *International Journal of Mental Health Nursing*, *25*(4), 299–307. doi:10.1111/inm.12189

Sarna, L. P., Bialous, S. A., Kralikova', E., Kmetova, A., Felbrova', V., Kulo- vana', S., … Brook, J. K. (2014). Impact of a smoking cessation educational program on nurses' interventions. *Journal of Nursing Scholarship*, *46*(5), 314–321. doi:10.1111/jnu.12086

National Association of State Mental Health Program Directors [NASMHPD]. (2010). *Tobacco-free living in psychiatric settings. A best practices toolkit promoting wellness and recovery*. Virginia: NASMHPD.

O'Donovan, G. (2009). Smoking prevalence among qualified nurses in the Republic of Ireland and their role in smoking cessation. *International Nursing Review*, *56*(2), 230–236. doi: 10.1111/j.1466-7657.2008.00700.x

Oliveira, R. M. (2016). Prevalence and epidemiological profile of tobacco use in the psychiatric population from secondary and tertiary levels of care compared to the general population from basic health network (Doctoral dissertation). University of São Paulo, Ribeirão Preto, Brasil. Retrieved from http://www.teses.usp.br/teses/disponiveis/22/22131/tde-24012017-161236/pt-br.php

Oliveira, R. M., & Furegato, A. R. F. (2016). Difficulties faced by psychiatric patients while trying to quit smoking. *Revista Mineira de Enfermagem*, *20*(e-945), 1–9. doi: 10.5935/1415-2762.20160015

Oliveira, R. M., & Furegato, A. R. F. (2015). The decreasing number of cigarettes during psychiatric hospitalization: Intervention or punishment? *Revista Brasileira de Enfermagem*, *68*(1), 76–83. doi: 10.1590/0034-7167.2015680111p

Oliveira, R. M., & Furegato, A. R. F. (2014). The opinion of patients with mental disorders about tobacco and its prohibition in psychiatric hospitalization. *Revista da Escola de Enfermagem da USP*, *48*(3), 500–506. doi:10.1590/S0080-623420140000300016

Oliveira, R. M., Duarte, A. F., Alves, D., & Furegato, A. R. F. (2016). Development of the TabacoQuest app for computerization of data collection on smoking in psychiatric nursing. *Revista Latino Americana de Enfer- magem*, *24*(e2726), 1–10. doi: 10.1590/1518-8345.0661.2726

Ratschen, E., Britton, J., & McNeill, A. (2011). The smoking culture in psychiatry: Time for change. *The British Journal of Psychiatry*, *198*(1), 6–7. doi:10.1192/bjp.bp.110.081372

Robson, D., Spaducci, G., McNeill, A., Stewart, D., Craig, T. J. K., Yates, M., & Szatkowski, L. (2017). Effect of implementation of a smoke- free policy on physical violence in a psychiatric inpatient setting: An interrupted time series analysis. *Lancet Psychiatry*, *4*(7), 540–546. doi:10.1016/S2215-0366(17)30209-2

Royal College of Physicians. (2013). *Smoking and mental health: A joint report by the Royal College of Physicians and the Royal College of Psychiatrists*. London: RC PSYCH. Retrieved from https://www.rcplondon.ac.uk/projects/outputs/smoking-and-mental-health

Ruther, T., Bobes, J., De Hert, M., Svensson, T. H., Mann, K., Batra, A., … Moller, H. J. (2014). EPA guidance on tobacco dependence and strategies for smoking cessation in people with mental illness. *European Psychiatry*, *29*(2), 65–82. doi:10.1016/j.eurpsy.2013.11.002

Conselho Regional de Enfermagem [COREN]. (2011). *Parecer COREN-SP GAB no 063/2011*. São Paulo: COREN.

Schacht, L., Ortiz, G., & Lane, M. (2012). *Smoking policies and practices in state psychiatric facilities: Survey results from 2011*. Falls Church, VA: National Association of State Mental Health Program Directors Research Institute.

Scherer, E. A., & Scherer, Z. A. P. (2014). Patients', families', and staff's opinion within a psychiatric in firmary. *Revista Enfermagem UERJ*, *22*(3), 376–382.

Schroeder, S. A. (2009). A 51-year-old woman with bipolar disorder who wants to quit smoking. *Journal of the American Medical Association*, *301*(5), 522–531. doi:10.1001/jama.2008.982

Shopik, N. A., Schultz, A. Z., Nykiforuk, C. I., Finergan, B. A., & Kvern, M. A. (2012). Impact of smoke-free hospital grounds policies: Patient experiences and perceptions. *Health Policy*, *108*(1), 93–99. doi:10.1016/j.healthpol.2012.08.006

Schroeder, S. A., & Koh, H. K. (2014). Tobacco control 50 years after the 1964 Surgeon General's report. *Journal of the American Medical Association*, *311*(2), 141–143. doi:10.1001/jama.2013.285243

U.S. Department of Health and Human Services [USDHHS]. (2014). *The health consequences of smoking – 50 years of progress*. Rockville, MD: USD-HHS.

Voci, S., Bondy, S., Zawertailo, L., Walker, L., George, T. P., & Selby, P. (2010). Impact of smoke-free policy in a large psychiatric hospital on staff attitudes and patient behavior. *General Hospital Psychiatry*, *32*(6), 623–630. doi:10.1016/j.genhosppsych.2010.08.005

World Health Organization [WHO]. (2013). *WHO report on the global tobacco epidemic, 2013: Enforcing bans on tobacco advertising, promotion and sponsorship*. Geneva: WHO.