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Exploration of in-patient attitudes towards smoking within a large mental health trust

AIMS AND METHOD

To explore the smoking habits of in-patients on psychiatric wards, their beliefs about the effects of smoking on health, and their attitudes towards hospital and government smoking policies. Face-to-face interviews with 135 in-patients were conducted.

RESULTS

A total of 54.1% of participants smoked. Smoking was less prevalent in those aged 65 years and older ($P < 0.001$). Non-smokers were more likely to believe smoking to be harmful to health ($P = 0.002$). Overall, 71.1% of the participants favoured the existing smoking policy, with only 3.0% wanting a complete ban on smoking and 54.1% agreeing with banning smoking in public places.

CLINICAL IMPLICATIONS

Further studies are warranted into the views of in-patients elsewhere and to see whether attitudes change as trusts tighten their smoking policies. Outdoor smoking areas may need to be considered, although in practice this may not be possible in all trusts.

On 1 July 2007 all enclosed or substantially enclosed public places and workplaces became smoke free as required by The Health Act 2006. A temporary exemption for mental health units ends on 1 July 2008. Until then they may have a designated smoking room meeting specified requirements.

A very small number of studies exist on attitudes of staff towards smoking in psychiatric hospitals in the UK (Tarbuck, 1996; Stubbs *et al*, 2004), with even less information regarding patients' views. With impending government legislation and potential plans within Mersey Care NHS Trust to restructure the in-patient units, this was an ideal time to investigate this topic.

Mersey Care NHS Trust provides mental health services for the population of Liverpool, Sefton and Kirkby. At the time we surveyed its wards, the Trust had a general non-smoking policy. This entailed one or two smoking rooms on each ward with all other enclosed areas being non-smoking.

Our study aimed to explore the attitudes of in-patients across the General Adult and Old Age Directorates of the Trust towards the smoking policy and towards the perceived effects of smoking on health and well-being. We also aimed to examine any changes in smoking habits during hospital admission.

Method

A questionnaire was constructed following a review of literature on this topic (Senior, 1982; Stubbs *et al*, 2004; Willemsen *et al*, 2004) and based on the previous discussions with patients and ward staff. Structured and open-ended questions were included to generate both quantitative and qualitative data. The study protocol was then submitted to the Liverpool Research Ethics Committee Coordinator.

During April and May 2006, face-to-face interviews were conducted with in-patients accepted for the study on ten general adult and three functional old age wards in

the Trust hospitals. Patients were excluded from participation if their condition was too unstable. Written consent from each patient was obtained prior to interview.

The results were analysed using SPSS version 14.0 for Windows. Differences between smokers and non-smokers, under 65-year-olds and over 65-year-olds, and those detained and informal were tested with the Pearson chi-squared and Fisher's Exact tests, both two-tailed. Since there was a higher number of smokers among younger patients ($\chi^2 = 14.28$, $P < 0.001$), results pertaining to age were standardised according to current smoking habits. Ex-smokers were reclassified as non-smokers to reduce the number of analyses.

Results

Patient characteristics

Out of 243 in-patients on the 13 wards, 135 were successfully interviewed (response rate 55.6%; 52.6% men, 47.4% women). The mean age of interviewees was 49.7 years (s.d. = 16.7, range 18–86), with 76.3% aged less than 65 years. A total of 68.1% of the participants were in informal care and 15.6% had been in hospital for at least 6 months.

Smoking status

The overall percentage of current smokers was 54.1%, with 54.8% smoking prior to admission. No differences were found with respect to gender, Mental Health Act status or length of stay in hospital. However, more of those younger than 65 years old smoked than those aged 65 years and over (63.1% v. 25.0%; $\chi^2 = 14.28$, $P < 0.001$). Within the smoking group, 59.7% smoked at least 20 cigarettes per day (Table 1).

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	Current smokers <i>n</i> (%)	Increase in smoking since admission <i>n</i> (%)	Believe smoking is harmful to health <i>n</i> (%)	Problems with current ward policy <i>n</i> (%)	Policy C ¹ chosen over more restrictive policies (A ² +B ³) <i>n</i> (%)	Policy C chosen over less restrictive policies (D ⁴ +E ⁵) <i>n</i> (%)	Agreement with government proposals <i>n</i> (%)
Age (years) <65 v. ≥65	65 (63) v. 8 (25)** ⁶						
Detained v. informal patients	27 (63) v. 46 (50) ⁶	12 (28) v. 13 (14) ^{6,7}		22 (51) v. 35 (38) ⁶	27 (77) v. 69 (81) ⁶	27 (77) v. 9 (91) ^{6,7}	17 (40) v. 56 (61) ⁶
Non-smokers v. smokers			62 (100) v. 63 (86)** ⁸	25 (40) v. 32 (44) ⁶	43 (70) v. 53 (90)** ⁶	43 (98) v. 53 (79)** ⁸	48 (77) v. 25 (34)** ⁶
Non-smokers <65 years v. non-smokers ≥65 years			38 (100) v. 24 (100)	21 (55) v. 4 (17)* ⁸	27 (73) v. 16 (67) ⁶	27 (96) v. 16 (100) ⁸	28 (74) v. 20 (83) ⁸
Smokers <65 years v. smokers ≥65 years			56 (86) v. 7 (88) ⁸	31 (48) v. 1 (13) ⁸	47 (92) v. 6 (86) ⁸	47 (77) v. 6 (86) ⁸	22 (34) v. 3 (38) ⁸

P*<0.05, *P*<0.01, ****P*<0.001.

The complete set of data is available in the online data supplements to this paper.

1. General non-smoking policy with designated smoking areas.
2. Complete ban inside and on premises.
3. Complete ban inside only.
4. General smoking policy with non-smoking areas.
5. No restrictions on smoking.
6. χ^2 test.
7. Values approaching significance.
8. Fisher's test.

Changes in smoking habits

Although the reported overall rate of smoking remained fairly constant between pre-admission and the time of interviewing, 14.1% of the participants reported an increase and 23% a decrease of the habit. Two people reported re-starting smoking, two reported smoking for the first time in their lives and two reported both increasing and decreasing of smoking since admission.

To give reasons for increasing smoking, participants could choose those provided in the questionnaire – 'boredom' (*n*=18), 'stress' (*n*=12) and 'to socialise' (*n*=6) – and cite their own, for example 'enjoying smoking' (*n*=1), 'craving more when unwell' (*n*=1) and 'the environment' (*n*=1).

Reasons for decreasing smoking were the provided options: 'health concerns' (*n*=17), 'financial reasons' (*n*=7) and 'advice from staff' (*n*=1), and other reasons like 'smoking restrictions on the ward' (*n*=7), 'difficulty obtaining cigarettes' (*n*=3), 'shouldn't smoke in hospital' (*n*=2), 'want to give up smoking' (*n*=1), 'pressure from relatives' (*n*=1) and 'less stressed in hospital' (*n*=1).

Attitudes towards effects of smoking on health

The number of participants who believed smoking to be harmful to health was 92.6%, with smokers less likely to

believe this than non-smokers (86% v. 100%, Fisher's=9.17, *P*=0.002). As much as 84.4% of the participants thought passive smoking to be harmful to health, with no difference between smokers and non-smokers, and 2.2% were not sure.

Attitudes towards general non-smoking policy

Fifty-seven participants (42.2%) reported difficulties with the current general non-smoking policy. These results are shown in Table 2. Those non-smokers younger than 65 years old were more likely to report difficulties than non-smokers aged 65 years and over (Fisher's=9.11, *P*=0.003).

Preferred smoking policy within the Trust

Only 3.0% chose complete ban inside and on premises as their preferred smoking policy, 14.1% supported complete ban inside only, 71.1% supported a general non-smoking policy with designated smoking areas, 7.4% a general smoking policy with non-smoking areas and 4.4% would like no restrictions on smoking.

Attitudes towards government proposals

As much as 54.1% of participants in the study agreed with the government proposals to make all public places

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	<i>n</i> (% of total sample)	Smokers, <i>n</i> (% of smokers)	Non-smokers, <i>n</i> (% of non-smokers)	Ex-smokers, <i>n</i> (% of ex-smokers)
No difficulties expressed	78 (57.8)	40 (54.8)	28 (63.6)	10 (55.6)
People non-compliant with policy	30 (22.2)	9 (12.3)	13 (29.5)	8 (44.4)
Concerns about the smell of smoke on themselves	16 (11.9)	2 (2.7)	9 (20.5)	5 (27.8)
Concerns about passive smoking	14 (10.4)	1 (1.4)	9 (20.5)	4 (22.2)
Concerns about fire risks	14 (10.4)	3 (4.1)	8 (18.2)	3 (16.7)
Unable to smoke where wishes to	14 (10.4)	14 (19.2)	0	0
Breathing difficulties	6 (4.4)	1 (1.4)	4 (9.1)	1 (5.6)
Unable to access certain rooms due to people smoking	6 (4.4)	1 (1.4)	4 (9.1)	1 (5.6)
Inadequate standard of smoking area (cleanliness)	5 (3.7)	4 (5.5)	1 (2.3)	0
Smoke infiltrating non-smoking areas	5 (3.7)	1 (1.4)	2 (4.5)	2 (11.1)
Unhappy that no non-smoking TV room	5 (3.7)	2 (2.7)	1 (2.3)	2 (11.1)
Eye irritation	4 (3.0)	0	3 (6.8)	1 (5.6)
Fans in smoking room not working	4 (3.0)	3 (4.1)	0	1 (5.6)
Unable to watch TV when smoking	4 (3.0)	4 (5.5)	0	0
Worsening of an existing medical condition	2 (1.5)	0	2 (4.5)	0
Temptation to restart smoking	1 (0.7)	0	0	1 (5.6)
Unable to smoke alone	1 (0.7)	1 (1.4)	0	0
Headaches	1 (0.7)	0	1 (2.3)	0
Nose irritation	1 (0.7)	0	1 (2.3)	0

non-smoking. Non-smokers were more likely to agree than smokers (77% v. 34%, $\chi^2=25.2$, $P<0.001$) and informal patients were more likely to agree than detained patients (61% v. 40%, $\chi^2=5.37$, $P=0.020$).

Appendices (see online data supplements)

1. Outline of the qualitative data generated from additional comments (Table DS1).
2. The complete data on the comparison of questionnaire responses (Table DS2).

Discussion

The higher smoking rates among younger people in this study were also found by the General Household Survey in the general population (Office for National Statistics, 2005a). That more smokers reported a decrease in smoking (23.0%) than an increase (14.1%) contrasted with our expectations, based on anecdotal evidence, that smokers might smoke more in hospital. Hence, we feel that the assumption that it would be particularly difficult to target non-smoking policies at psychiatric in-patients may not be justified.

While a high proportion (92.6%) of the patients in this study recognised smoking to be harmful to health, we did not ascertain whether they appreciated the extent of the harm caused. In 2005, only 48% of the population was aware that smoking is responsible for the most premature deaths in the UK (Omnibus Survey; Office for National Statistics, 2005b). The high percentage of patients (84.4%) in our study recognising passive smoking as being harmful to health is compatible with the Omnibus Survey findings in 2005 when over 80% of participants thought second-hand smoking would

increase a non-smoking adult's risk of lung cancer, bronchitis and asthma.

The finding that non-smokers younger than 65 years old reported more difficulties with separate smoking areas on the wards than non-smokers aged 65 and over may result from the greater proportion of smokers in the under-65-group. Alternative explanations may be different ward layouts, greater tolerance towards smoking among older people who grew up in a more smoking-permissive society and the fact that older people have been found to be more reluctant to express dissatisfaction with hospital policies (Calnan *et al*, 2003).

Although non-smokers and smokers were equally likely to have problems with the existing policy, the majority of complaints (80.8%) were anti-smoking in nature. Nevertheless, despite these difficulties and knowledge of the harmful effects of smoking, the current general non-smoking policy was by far the most popular (71.1%). This may indicate that in-patients on psychiatric wards are generally tolerant towards others. Alternatively, it may reflect the problem of social desirability, which commonly appears in surveys. In contrast with our study, a large Dutch survey of staff and patients across various psychiatric settings found that 45% of patients preferred a general non-smoking policy (Willemsen *et al*, 2004). However, only 8% preferred a complete smoking ban which compares with 11.8% in our study favouring the more restrictive policies.

There was a large difference observed in our study between those wanting a total smoking ban inside hospital buildings (14.1%) and those supporting the government proposals of banning smoking in public places (54.1%). This may reflect views that smoking policies should be more lenient in psychiatric units, as highlighted by the comments of eight patients. We found a



considerably lower percentage of participants agreeing with the proposed ban on smoking in public places (54.1%) than was seen in the public consultation on the Health Bill (89.6%; Department of Health, 2005). Since our data shows that non-smokers were more likely to agree with this aspect of the legislation than smokers, this may be one explanation. Alternatively, our proactive method (face-to-face interviews) might have encouraged a wider variety of respondents.

There were some limitations to this study, namely volunteer bias, recall bias and slight environmental differences between wards. The number of hypothesis tests would have increased the likelihood of chance findings. Conversely, the small numbers in some groups may have meant insufficient power to detect additional significant differences. Lastly, ex-smokers were re-classified as non-smokers although these two groups may have had different views.

Our study reinforces previous findings that smoking is more prevalent in patients on psychiatric wards than in general populations (de Leon *et al*, 1995; Meltzer *et al*, 1996; Lasser *et al*, 2000).

As the majority of in-patients, both smokers and non-smokers, felt there should be smoking areas within psychiatric units, can any appropriate compromise be reached there in view of the current legislation? One suggestion would be to ban smoking inside buildings in line with government legislation, but to have unenclosed smoking shelters outside the buildings, away from potential routes of entry of smoke into buildings. However, this may mean staff escorts being exposed to second-hand smoke. Furthermore, only patients well enough to leave the ward would be able to smoke. Another option could be outdoor smoking areas leading off from and visible from wards, but the problem of smoke infiltrating buildings remains and could necessitate the redesigning of buildings in many trusts.

It would be interesting to know if these results are mirrored elsewhere in the country and whether patients' views are changing following the implementation of tighter smoking policies within NHS trusts. It would also be worth evaluating the level of compliance with such policies.

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Declaration of interest

The authors were employed by Mersey Care NHS Trust at the time of the study.

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