LETTERS TO THE EDITOR

Letters intended for publication should be a maximum of 500 words, one table or figure, and 10 references and should be sent to Simon Chapman, deputy editor, at the address given on the inside front cover. Those responding to articles or correspondence published in the journal should be received within six weeks of publication.

Differences in self reported health status between ever-smokers and never-smokers

To the Editor - We refer to the report by Lyons *et al.*¹ who found, using the SF-36 health status questionnaire, that ever-smokers in Wales, United Kingdom, had significantly poorer self rated health on scales relating to physical functioning, bodily pain, general health perception, and vitality compared with never-smokers. We have also collected representative population data for South Australia on the SF-36 and examined differences by smoking status.

Our survey involved a multistage, systematic, clustered area sample of 4200 households, with 75 % of the sample being selected from the Adelaide metropolitan area and the remainder from country centres with a population of 1000 or more. At each selected household, one person aged 15 years or older was selected for interview, being the person whose birthday was next. Interviews were conducted in the respondents' own home by trained interviewers, with six call back visits if the selected respondent was not at home. The survey yielded 3010 completed interviews, with a response rate of 72.4 %. The data were weighted by household size, age, sex, and local government area to the South Australian population.

Of the 3010 respondents to the survey, 47.1 % had never smoked. The remaining 52.9 % comprised 27.8 % smokers and 25.2 % ex-smokers. Using multiple regression, we compared the mean scores on each scale of the SF-36 for ever-smokers and never-smokers, after adjusting for age, sex, occupational status, and alcohol consumption (see

table). Overall, we found statistically significant deficits in functioning among ever-smokers for all scales ($p < 0.01$), and among young adults, deficits pertaining to physical functioning, bodily pain and general health perception. Because our sample size was larger than that of Lyons *et al.*¹ statistical significance was more easily achieved in our study. The magnitude of score differences was broadly similar to the Lyons study for the four-scale measuring aspects of mental health, but the first four scales that measure aspects of physical health showed smaller decrements for ever-smokers. This may partly be accounted for by the fact that our sample included 15 to 19 year olds, whereas the Wales study did not.

When directly queried about the effects of smoking on their health, many smokers do not accept that their health has been adversely affected by cigarette smoking, or may attribute health changes to the effects of aging or other factors. Numerous studies show that smokers are less likely than non-smokers to believe that smoking causes disease.^{2,3} Furthermore, smokers show unrealistic optimism in rating their own likelihood of developing a smoking related disease compared to the "average" smoker.^{4,5} This denial of the effects of smoking on their present and future health is an important cognitive mechanism which facilitates continued smoking.

Given these studies, it is important to note that the SF-36 measures self perceived health status. This study has shown that when smokers are asked to make judgments about their health without a causal attribution, those who have ever smoked perceive their health as significantly poorer than never-smokers. This is so, even for young adults.

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1 Lyons RA, Lo SV, Littlepage BNC. Perception of health amongst ever-smokers and never-smokers: a comparison using the SF-36 Health Survey Questionnaire. *Tobacco Control* 1994; 3: 213-5.

2 Lee C. Perceptions of immunity to disease in

adult smokers. *J Behav Med* 1989; 12: 267-77.

3 Chapman S, Wong WL, Smith W. Self-exempting beliefs about smoking and health: differences between smokers and ex-smokers. *Am J Public Health* 1993; 83: 215-9.

4 McKenna FP, Warburton DM, Winwood M. Exploring the limits of optimism: the case of smokers' decision making. *Br J Psychol* 1993; 84: 389-94.

5 McCoy SB, Gibbons FX, Reis TJ, Gerrard M, Luus CA, Sufka AV. Perceptions of smoking risk as a function of smoking status. *J Behav Med* 1992; 15: 469-88.

Recurrent aphthous ulcers

To the Editor - I was recently faced with a 52 year old adult Ethiopian who had smoked for 40 pack-years and couldn't stop smoking. During periods of smoking abstinence he developed multiple, painful, mucocutaneous ulcers in the oral cavity, which disappeared as soon as he restarted smoking. He had made several attempts to stop smoking in the past, the longest being for two years, but he couldn't tolerate the painful oral ulcers and was advised by his family to restart smoking, which he did. He had no genital ulcers and enjoyed good health otherwise. He had never attempted a pipe as a replacement for cigarettes.

This was an unusual situation I faced as a chest physician, and I thought I should bring it to the attention of your readers. I will be very grateful to hear from anyone who might have had a similar experience, and I would like to be advised on the management of this condition.

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The above letter was referred to Dr Arden Christen, professor of oral biology and director of the Indiana University Nicotine Dependence Program, who offers the following reply:

In reply - Recurrent aphthous ulcers (RAU, canker sores) is a condition characterised by the formation of one or more extremely painful oral ulcers, which typically occur on non-keratinised oral mucous membranes. Although the precise cause of RAU is unknown, investigators have suggested that it can be related to environmental, immunological, hormonal, genetic, familial, or psychologic factors, including those which concern stress, food consumption, and allergic reactions. These ulcers can make eating, swallowing, or talking extremely painful or difficult. This disorder is very common, occurring in 10 % to 20 % of the general population.¹

About a dozen investigators have reported that smokers have fewer aphthous ulcers than do non-smokers or people who have never smoked, and that smoking cessation is often followed by the appearance or re-appearance of these extremely uncomfortable oral ulcerative lesions. It has been postulated that both smoked and smokeless forms of tobacco may provide protection against RAU because their use increases keratinisation of oral mucosa.¹

Some clinicians are successfully treating RAU lesions with the topical or systemic use of steroids, or a combination of both, and an adjuvant application of a 0.12 % chlorhexidine prescription plaque control rinse (Peridex). In addition, patients who suffer from various oral mucosal diseases should

Mean SF-36 scores (and standard errors) for never-smokers and ever-smokers, by age group (corrected for age, sex, alcohol consumption, and occupational status)

Scale	Smoking status	Age 15-29 (n = 703) Mean (SE)	Age 30+ (n = 2307) Mean (SE)	Total (n = 3010) Mean (SE)
PF	Never	94.4 (1.0)	83.3 (1.3)	84.3 (0.9)
	Ever	91.9 (0.8)†	79.7 (1.2)‡	81.5 (0.9)‡
RP	Never	87.2 (2.7)	80.0 (2.3)	80.6 (1.7)
	Ever	83.4 (2.2)	75.8 (2.2)†	76.7 (1.6)†
BP	Never	83.9 (2.0)	78.2 (1.7)	78.8 (1.3)
	Ever	79.3 (1.7)†	74.3 (1.6)‡	74.9 (1.2)‡
GH	Never	77.4 (1.7)	74.6 (1.4)	73.5 (1.0)
	Ever	71.0 (1.4)‡	69.1 (1.3)‡	68.0 (1.0)‡
VT	Never	66.5 (1.7)	65.4 (1.4)	65.1 (1.0)
	Ever	63.4 (1.4)	61.3 (1.3)‡	61.2 (1.0)‡
SF	Never	87.4 (1.8)	90.9 (1.4)	89.1 (1.1)
	Ever	84.3 (1.4)	87.3 (1.3)‡	85.6 (1.0)‡
RE	Never	89.4 (2.6)	89.0 (1.9)	88.6 (1.4)
	Ever	84.2 (2.1)	85.6 (1.8)†	84.7 (1.3)‡
MH	Never	75.2 (1.6)	80.6 (1.1)	78.6 (0.9)
	Ever	73.6 (1.3)	78.5 (1.1)†	76.6 (0.8)†

PF, physical functioning; RP, role limitations-physical; BP, bodily pain; GH, general health; VT, vitality; SF, social functioning; RE, role limitations-emotional; MH, mental health.

† $p < 0.01$ for difference between never- and ever-smokers.

‡ $p < 0.001$ for difference between never- and ever-smokers.

avoid the use of dentifrices containing the detergent sodium lauryl sulphate (SLS).²

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1 Christen AG, McDonald JL, Christen JA. *The impact of tobacco use and cessation on non-malignant and precancerous oral and dental diseases and conditions*. Indianapolis: Indiana University School of Dentistry, 1991.

2 Harris NO, Christen AG. *Primary preventive dentistry*, 4th ed. Norwalk, Connecticut: Appleton and Lange, 1995: 113.

Acute eosinophilic pneumonia: a new smoking related illness?

To the Editor – Initiation of smoking begins primarily during the teenage years. The increase in the number of underage smokers and young women smoking is one of Japan's most important health problems.¹ Young people may not be impressed by long term health risks such as lung cancer, chronic bronchitis, and emphysema. Recently we saw two young patients with acute eosinophilic pneumonia (AEP), which occurred just after smoking initiation. A 19 year old woman and 18 year old man, both previously healthy, were admitted to our hospital because of acute respiratory distress and diffuse pulmonary infiltrates on chest radiographs. Eosinophilic pneumonia was diagnosed by bronchoalveolar lavage and transbronchial lung biopsy. There was no evidence of an infectious aetiology. Both patients rapidly improved with corticosteroid therapy, and AEP was diagnosed by its clinical course.

Of interest is the fact that one patient had started smoking 10 days before the onset, and the other 3 days before. In the male patient, a challenge test was performed 44 days after his initial episode of AEP (two weeks after withdrawal of corticosteroids). He was asked to smoke three cigarettes in three hours. Subjective symptoms, physical findings, and pulmonary function tests were assessed after smoking each cigarette. He showed dry cough, dyspnoea, and hypoxaemia (Pao₂ 7.5 kPa) 15 hours after he smoked the last cigarette. Although a chest radiograph taken at that time revealed no abnormalities, FVC, FEV₁, and diffusing capacity (transfer factor) were decreased significantly. He recovered quickly again following the administration of corticosteroids.

From a review of the literature and abstracts of medical congresses, we found approximately 40 cases of AEP reported in Japan, and most of them were under 20 years old or in their early 20s. To our knowledge, there were eight other cases that suggested a relationship between smoking and onset of the disease.² In a computer based search of the literature – using the key words "smoking" or "cigarette" and "acute eosinophilic pneumonia" in combination – we were unable to find reports of a possible association between smoking and AEP.

Although AEP is a newly recognised clinical entity and a hypersensitivity reaction to inhaled antigen is suggested,^{3,4} no particular precipitating cause has been identified in any patient with AEP.⁵ It is well known that cigarette smoke is a complex mixture of more than 4000 compounds. Numerous clinical studies have documented smoking induced alterations in immune and inflammatory function.⁶ Cigarette smoking has also

been shown to be a cause of heightened airway responsiveness.⁵

The possibility that inhalation of cigarette smoke might play a role in the onset of AEP should be further explored. We encourage other investigators who are aware of cases of AEP to assess whether they may be related to smoking.

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- 1 Kawane H. The influence of the US tobacco industry in foreign markets. *N Engl J Med* 1991; 325: 815.
- 2 Abstracts of Annual Congress of Japan Society of Chest Diseases, 1995.
- 3 Allen JN, Pacht ER, Gadek JE, Davis WB. Acute eosinophilic pneumonia as a reversal cause of noninfectious respiratory failure. *N Engl J Med* 1989; 321: 569–74.
- 4 Badesch DB, King TC, Schwarz MI. Acute eosinophilic pneumonia: a hypersensitivity phenomenon? *Am Rev Respir Dis* 1989; 139: 249–52.
- 5 Acute eosinophilic pneumonia. *Lancet* 1990; 335: 947.
- 6 US Department of Health and Human Services. *The health benefits of smoking cessation*. US Department of Health and Human Services, Public Health Service, Centers for Disease Control, Office on Smoking and Health, 1990. (DHHS Publication No. (CDC) 90-8416.)

What should we call ex-smokers?

To the Editor – Efforts to integrate the treatment of nicotine and tobacco dependence into the mainstream of addiction treatment have been hampered by resistance on the part of physicians, treatment professionals, and their patients. Physicians want their patients who smoke to quit because smoking causes illness and premature death, but the success of standard medical methods is so poor that many, both physicians and patients, stop trying. Most addiction treatment professionals concede that nicotine and tobacco dependence should be included in addiction treatment but are unwilling to make the effort. Seventy five percent of alcoholics and other drug addicts are smokers; most state that they would be "better off" if they stopped smoking, but few are willing to acknowledge that nicotine and tobacco dependence represents an addiction similar to their other addictions.

Part of this resistance may have a semantic basis. Alcoholics refer to the state of recovery from alcoholism as being *sober*. Heroin and cocaine addicts refer to the state of recovery from their addictions as being *clean*. As yet, no equivalent term referring to the state of recovery from nicotine and tobacco dependence has received general acceptance. "Smoke-free" has been used, but it lacks the necessary emotional impact. "Clear" has been suggested by Charyn Sutton (John Slade, personal communication), but it has failed to excite interest at professional meetings or in patient groups.

We propose the phrase "clean and free" to indicate the state of recovery from nicotine and tobacco dependence. "Clean" suggests the salubrious result of quitting smoking (clean lungs, clean breath, clean ashtrays) and "free" suggests physical, emotional, and spiritual freedom from being controlled by an addicting substance. "Clean" has been the primary focus of public health pro-

fessionals and physicians, while "free" has been the focus of addiction treatment professionals, psychologists, and psychotherapists. Placed together, "clean and free" unites the two concepts and the two treatment goals.

We hope others will explore the use of the phrase "clean and free" as a term to indicate the state of recovery from nicotine and tobacco dependence, and will report on its acceptance among various groups.

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In reply – The above letter generated animated discussion among the editors. We have strong doubts about the validity of the authors' central proposition ("Part of this resistance [in smokers to acknowledge nicotine addiction] may have a semantic basis.") and about their statement that "few [smokers] are willing to acknowledge that nicotine and tobacco dependence represents an addiction similar to their other addictions." Kozlowski and colleagues have shown that polydrug users generally report an intensity of desire for cigarettes when they are unavailable that is as high or higher than for heroin, cocaine, or alcohol when the latter are not available.¹ Moreover, public opinion polls have consistently shown that a large majority of smokers consider cigarettes to be addicting – for example, 91% of current smokers and 87% of former smokers in the USA according to a 1994 New York Times/CBS News poll.²

We are somewhat baffled by the suggestion that smokers lack a lexicon of meaningful ways of describing their having quit. We peeled off dozens of these (for example, I'm an ex-smoker; I don't smoke any more; ...since I finally stopped smoking) and wondered why the authors seemed to think it necessary or even desirable to somehow standardise the way former smokers speak about their past smoking. While some words about alcohol and other drug sobriety are part of the standard parlance of different therapeutic movements such as Alcoholics Anonymous, these are not representative of former drug users at large, where, as with ex-smokers, a large proportion have stopped without recourse to formal therapies.

Finally several of us felt that "clean and free" was redolent with quasi-religious overtones that many would find alienating and unnecessarily melodramatic, perhaps fuelling community perceptions about ex-smokers being tedious "converts" preoccupied with their sinful past. We would welcome further correspondence on the wisdom of the authors' suggestion.

SIMON CHAPMAN
Deputy Editor

1 Kozlowski LT, Wilkinson A, Skinner W, Kent C, Franklin T, Pope M. Comparing tobacco cigarette dependence with other drug dependencies: greater or equal "difficulty quitting" and "urges to use," but less "pleasure" from cigarettes. *JAMA* 1989; 261: 896–901.

2 Janofsky M. Majority of Americans say cigarettes spur addiction. *New York Times* 1994; 1 May, section 2: 22.