doi:10.1111/j.1753-6405.2007.00095.x

Smoking and surgery: an opportunity for health improvement

Luke Wolfenden, John Wiggers, Jenny Knight and Elizabeth Campbell

Hunter New-England Area Health Service, New South Wales, and University of Newcastle, New South Wales

Despite continued reductions in smoking prevalence in Australia, recent data from New South Wales (NSW) indicates that approximately 20% of adults currently smoke daily or occasionally, a figure that is higher among Aboriginal and Torres Strait Islander people or those from other socio-economically disadvantaged groups.[1] To address the health burden of tobacco use it is recommended that health professionals working in a variety of health care settings provide routine smoking cessation advice and assistance to all patients who smoke.[2] In particular, it is recommended that health professionals capitalise on the 'teachable moment' smokers experience during the period of hospitalisation, where patients are more motivated to take steps to improve their health, are more ready to quit smoking and more receptive to quit smoking advice.[3]

Attending for surgical preparation at a pre-operative clinic may also represent a moment where smoking cessation advice from health professionals may be particularly salient as, in addition to the long-term health benefits of smoking cessation, quitting smoking prior to surgery can reduce the likelihood of post-operative complications.[4] To assess the readiness to quit, demographic characteristics and perceived acceptability to smoking cessation care by pre-operative clinic staff, 2,318 eligible patients (95% consent rate) attending a non-cardiac pre-operative clinic in NSW were screened for tobacco use. Of the 421 identified smokers, 79% were contemplating (26%) or preparing (53%) to make a quit attempt. This is similar to the findings of other research in pre-operative clinics (63-68%),[5-7] higher than that found for patients admitted to medical and surgical services (43-49%)[8,9] or for smokers in the study area (54%).[10] Furthermore, compared with tobacco users in the community, the study found a higher representation of disadvantaged groups such as those without a university education (95% compared with 86% in the community) and those of Aboriginal or Torres Strait Islander origin (6% compared with 3% of smokers in the community).[10]

Ninety per cent of smokers surveyed agreed that it would be appropriate for pre-operative clinic staff to discuss their smoking during their pre-operative consultation and 95% agreed that it was appropriate to be offered nicotine replacement therapy (NRT) by clinic staff to support a cessation attempt. Such findings support previous research in the area, which has found that even intensive cessation efforts in this setting are considered highly acceptable by patients,[11] and in instances where cessation support is not provided patients report dissatisfaction with the pre-operative care they receive.[12]

The findings of the study suggest that pre-operative clinic staff have a clear opportunity to provide smoking cessation care to smokers who are ready to quit, who may be more likely to be socio-demographically disadvantaged, defined by education and Aboriginality, and who would find the provision of cessation care acceptable. Despite this opportunity, and cessation advice being a recommended component of pre-operative care,[13] research in Australia indicates that only 17% of smokers receive cessation advice from their GP or specialist prior to their pre-operative clinic visit[5] and 47% and 39% receive cessation advice from pre-operative clinic nursing and anaesthetist staff respectively.[11] International research suggests that the provision of pre-operative smoking cessation care overseas is similarly limited.[7]

Enhancing the provision of smoking cessation care to patients pre-operatively should be a goal shared by public health practitioners and clinicians responsible for the surgical management of patients. In the pre-operative clinic setting,

collaborative initiatives between these health professionals can increase patient abstinence from tobacco prior to surgery and smoking cessation post-operatively.[14] As such, public health practitioners must advocate for the provision of pre-operative smoking cessation care and support clinician attempts to improve such care. By failing to do so, a unique opportunity to reduce the burden of tobacco on the community and to minimise the clinical risk of surgery will be missed.

References

1. Public Health Division [data and statistics page on the Internet]. Sydney (AUST): NSW Department of Health; 2007 Feb [cited 2007 Apr 23]. *The Health of the People of New South Wales – Report of the Chief Health Officer*. Available from: http://www.health.nsw.gov.au/public-health/chorep/toc/choindex.htm
2. Fiore MC, Bailey WC, Cohen SJ, et al. *Treating Tobacco Use and Dependence: Clinical Practice Guideline*. Rockville (MD): Public Health Service, US Department of Health and Human Services; 2000.
3. Emmons KM, Goldstein MG. Smokers who are hospitalized: a window of opportunity for cessation interventions. *Prev Med.* 1992;21:262-9.
4. Moller AM, Villebro N, Pedersen T, Tonnesen H. Effect of preoperative smoking intervention on postoperative complications: A randomised clinical trial. *Lancet.* 2002;359:114-7.
5. Rissel C, Salmon A, Hughes AM. Evaluation of a (pilot) stage-tailored brief smoking cessation intervention among hospital patients presenting to a hospital pre-admission clinic. *Aust Health Rev.* 200;23:83-93.
6. Haile MJ, Wiggers J, Spigelman AD, et al. A novel strategy to stop cigarette smoking by surgical patients: pilot study in a preadmission clinic. *ANZ J Surg.* 2002;72:618-21.
7. Ratner PA, Johnson JL, Richardson CG, et al. Efficacy of a smoking cessation intervention for elective-surgical patients. *Res Nurs Health.* 2004;27:148-61.
8. Rigotti NA, Arnsten JH, McKool KM, et al. Efficacy of a smoking cessation program for hospital patients. *Arch Intern Med.* 1997;157:2653-60.
9. Vernon JD, Crane LA, Prochazka AV, et al. Smokers hospitalized in an urban public hospital: addiction, stages of change and self efficacy. *Prev Med.* 1999;28:488-95.
10. Paul CL, Wiggers J, Daly JB, et al. Direct telemarketing of smoking cessation interventions: will smokers take the call? *Addiction.* 2004;99:907-13.
11. Wolfenden L, Wiggers J, Knight J, et al. Increasing smoking cessation care in a preoperative clinic: randomized controlled trial. *Prev Med*. 2005;41(1): 284-90.
12. Haddock J, Burrows C. The role of the nurse in health promotion: an evaluation of a smoking cessation programme in a surgical pre-admission clinic. *J Adv Nurs.* 1997;26:1098-110.
13. Simminds M, Petterson J. Anaesthetists' records of preoperative assessment. *Clinical Performance and Quality Health Care.* 2000;8:22-7.
14. Wolfenden L, Wiggers J, Knight J, et al. A programme for reducing smoking in pre-operative surgical patients: randomized controlled trial. *Anaesthesia.* 2005:60(2);172-9.

Correspondence to:
Mr Luke Wolfenden, Hunter New-England Population Health,
Locked Bag 10, Wallsend, New South Wales 2298.
Fax: (02) 4924 6215; e-mail: luke.wolfenden@hnehealth.nsw.gov.au