

OTHER JOURNALS IN BRIEF

A selection of abstracts of clinically relevant papers from other journals. The abstracts on this page have been chosen and edited by John R. Radford.

HAZARDOUS DRINKING

'Excessive drinking – an inescapable part of university life?' A focus group study of Australian undergraduates

Hallett J, McManus A *et al.* *Open J Prev Med* 2014; 4: 616–629

When planning strategies for shaping behaviour, 'blackouts, hangovers and waking up in someone else's bed' were not considered a negative but indeed a positive consequence of drinking by this selected group of students.

It is argued that there appears to be a 'pervasive, normalised and celebrated nature of alcohol within the university environment'. Such a culture may be embraced particularly by dental and medical students. But is this all true? In this qualitative study, the opinions on drinking were sought from a group selected from Australian undergraduates (78% were drinking hazardously, when screened using AUDIT). Participants were recruited purposively, by emailing a random sample of 7,000 students. Two hundred replied of whom 69 were selected for this study, based largely on their alcohol consumption and associated habits. Each was allocated to one of seven focus groups. Four major themes emerged and the following comments summarised the attitudes of the students: 1) positive expectations – with drinking being 'the social lubricant', 2) inescapable culture – with drinking being linked to a 'belonging' to the university lifestyle, 3) defining situations – such as 'pre-loading', and 4) permissible drunkenness – with friends in the comfort of their home.

DOI: 10.1038/sj.bdj.2014.1159

ELECTRONIC APEX LOCATION

The effect of residual calcium hydroxide on the accuracy of a contemporary electronic apex locator

Usun Y, Uzun O *et al.* *Acta Odontol Scand* 2014; DOI: 10.3109/00016357.2014.961027

Calcium hydroxide intracanal dressing compromise the accuracy of an electronic apex locator.

A 'more than one' visit approach, with the use of a calcium hydroxide dressing, is associated with an 'improved microbiological status of the root canal system'. The authors argue that confirmation of the root canal working length may be required at each appointment. In this study, the root canals of 56 extracted upper central incisor teeth were prepared using ProTaper to size F3 file. The working length was determined using an electronic apex locator (Root ZX Mini). The canals were filled with calcium hydroxide (DiaPaste™), at the working length. After 10 days storage, calcium hydroxide was removed at the working length, 2 mm short of the working length, and 4 mm short of the working length. Residual calcium hydroxide was confirmed using radiography. Control teeth were left empty. The mean working length, determined by the electronic apex locator, was significantly less (but by only 1 mm) when 4 mm of calcium hydroxide was left in the canal.

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ELECTRONIC CIGARETTES

Review. Electronic cigarettes: review of use, content, safety, effects on smokers and potential for harm and benefit

Hajek P, Etter J-F *et al.* *Addiction* 2014; doi: 10.1111/add.12659.2

Electronic cigarettes, without combustible tobacco toxicants, pose minimal risks and 'might decrease smoking-related morbidity and mortality.'

Electronic cigarettes were invented by Hon Lik (Cantonese Yale, Han Li) in Hong Kong in 2003. More recently, the tobacco manufacturers have joined dozens of other manufacturers of electronic cigarettes and there are now hundreds of different models. Eighty one papers were interrogated in this literature review. The key findings were, 1) long-term use of electronic cigarettes, compared with combustible cigarettes, were much less harmful, if at all to users, or indeed passive smokers, 2) although there is little evidence that electronic cigarettes deter smokers from quitting, they are associated with a smoking reduction on an individual level, but this has not been shown on a population basis, 3) there is little evidence that electronic cigarettes act as a 'gateway' to smoking, 4) there is no evidence of the use of electronic cigarettes by non-smoking children, and 5) electronic cigarettes are not increasing the popularity or sales of cigarettes. It is noted that, the European Parliament has recently decided not to licence electronic cigarettes as medicines.

DOI: 10.1038/sj.bdj.2014.1161

NICOTINE – GATEWAY DRUG

Shattuck lecture – A molecular basis for nicotine as a gateway drug

Kandel ER, Kandel DB. *N Engl J Med* 2014; 371: 932–943

Those who start using cocaine when smoking may increase the addictive properties of cocaine.

As background, it has been suggested that a gateway drug could lower the threshold for addiction to other agents. The debate as to whether or not marijuana is a gateway drug has been well ventilated. However, the role of nicotine as a gateway drug has not been afforded the same platform. The distinguished scientists (Eric Kandel is a Nobel laureate) who were invited to give this lecture/paper found when using a mouse model, nicotine exerts a priming effect for cocaine through global acetylation in the striatum (sub-cortical part of the fore-brain) that, in turn creates an environment for gene expression. Such a mechanism may also occur in the amygdala (orchestrates emotion) and hippocampus (for spatial memory). Interestingly, they suggest nicotine may prime for cocaine but not cocaine for nicotine. In addition, it is possible that electronic cigarettes may offer a gateway to combustible cigarettes and illicit drugs. But then there is the 'common liability to addiction concept'; those who use drugs have genetic predisposition for all addictive agents. For a critique of this paper, see PubMed Commons.

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