Short Summaries

Derek Richards

Centre for Evidence-Based Dentistry, Oxford UK

These short summaries are of Cochrane reviews

Evidence-Based Dentistry (2007) 8, 27-28. doi:10.1038/sj.ebd.6400500

Opinion leaders promote evidence based practice

Doumit G, Gattellari M, Grimshaw J, O'Brien MA.

Local opinion leaders: effects on professional practice and health care outcomes. Cochrane Database Syst Rev 2007; issue 1

The translation of evidence into practice is slow, unpredictable and incomplete: it is estimated that 30–40% of patients do not receive treatment in line with research evidence. The Cochrane Effective Practice and Organisation of Care Group (see www.epoc.uottawa.ca) have been undertaking systematic reviews of educational, behavioural, financial, organisational and regulatory interventions designed to improve health professional practice and the organisation of healthcare services, potentially spanning any clinical area, for more than 10 years.

This updated review looked at the effect of opinion leaders in promoting evidence-based practice. Opinion leaders are people who are seen as likeable, trustworthy and influential. Because of their influence, Social Learning Theory hypothesises that opinion leaders may be able to help and persuade healthcare providers to use evidence when treating and managing patients.

Randomised controlled trials that used objective measures of performance or provider behaviour and/or patient health outcomes were included: 12 studies met the eligibility criteria. The review shows that, based on moderate quality evidence, opinion leaders do promote evidence-based practice. Most of the studies included were based in hospitals so it is not clear whether the effect will occur in clinics and other settings. It is not known if opinion leaders have certain professional or personality traits that affect whether they are successful or not. More also needs to be known specifically about what opinion leaders do and how they do it. Opinion leaders identified by asking people, "who are the opinion leaders?" on a questionnaire are more likely to change behaviour than opinion leaders identified by asking people to judge others who were preselected as opinion leaders.

Steroids for acute sinusitis

Zalmanovici A, Yaphe J.

Steroids for acute sinusitis. Cochrane Database Syst Rev 2007; issue 2

Acute sinusitis is a common reason for primary care visits (the tenth most frequent diagnosis and fifth most common for which an antibiotic is prescribed) and causes significant symptoms and often time off work and school. Sinusitis is frequently caused by viral infections, although most primary care physicians think of sinusitis as an acute bacterial infection and consequently prescribe antibiotics in 85–98%

of cases. Even if it is bacterial in origin it will often resolve without antibiotic treatment. It has been suggested that intranasal corticosteroids (INCS) may relieve symptoms and hasten recovery in acute sinusitis because of their anti-inflammatory properties. This Cochrane review found four randomised placebo-controlled intervention studies addressing this question. The trials involved 1943 participants treated for 15 or 21 days: the results suggested there may be a modest effect of INCS on the resolution or improvement of symptoms. Only minor adverse effects were reported.

Decongestants provide relief of nasal obstruction for adults with the common cold

Taverner D, Latte J.

Nasal decongestants for the common cold. Cochrane Database Syst Rev 2007; issue 1

This Cochrane review looked at the use of decongestants for the common cold, which is the commonest common reason for illness in adults — in whom two to four episodes can be experienced every year.

Seven trials conducted in adults were identified and used to determine the benefit of one dose of decongestant. This was found to be a 6% improvement in reported symptoms of congestion with a 4% improvement in congestion symptoms continued after 3–5 days' use of decongestants. There was also a reduction in measured nasal-airway resistance. Adverse events in adults were rare, the most frequent being insomnia. No suitable trials of decongestant use in children were identified. The authors concluded that decongestants provide safe, short-term relief of nasal obstruction for adults suffering from the common cold, but are not recommended for children under the age of 12 years.

Brief interventions consistently produced reductions in alcohol consumption

Kaner EFS, Beyer F, Dickinson HO, et al.

Effectiveness of brief alcohol interventions in primary care populations. Cochrane Database Syst Rev 2007; issue 2

Excess alcohol contributes significantly to social problems, physical and psychological illness, injury and death, and is linked with increased levels of violence, accidents and suicide. Most alcohol-related harm is

caused by excessive drinkers whose consumption exceeds recommended drinking levels, not the drinkers with severe alcohol dependency problems. From a dental perspective, trauma to the face, jaw and teeth and an increased risk for oral cancer are a concern.

One way to reduce consumption levels in a community is to provide a brief intervention in primary care. This consists of one to four sessions of engagement with a patient and the provision of information and advice that is designed to achieve a reduction in risky alcohol consumption or alcohol-related problems.

In this review of trials, the sessions were provided by healthcare workers such as general physicians, nurses or psychologists. In general practice, patients are routinely asked about alcohol consumption during registration, general health checks and as part of health screening (using a questionnaire). People tend not to be seeking help for alcohol problems when presenting.

The interventions took place within a standard consultation of 5–15 min with a general physician (longer for a nurse), and included feedback on alcohol use and harms, identification of high-risk situations for drinking and coping strategies, increased motivation and the development of a personal plan to reduce drinking.

Twenty-eight controlled trials from various countries were identified, 21 trials (7286 participants) being included in a meta-analysis. Brief interventions consistently reduced alcohol consumption with an average drop of four standard drinks per week. At 1 year's follow up (17 trials), people who had received the brief intervention drank less alcohol (a difference of 6–25 g/week; mean, 41 g). For men (some 70% of participants), the benefit of brief intervention was a reduction of 57 g/week (range, 25–89 g; six trials). The benefit was not clear for women. The reduction in drinking was similar in the normal clinical setting as in a research setting with greater resources. Longer counselling had little additional benefit.

UK recommendations for alcohol consumption are as follows: Men should drink no more than 21 units of alcohol per week (and no more than 4 U in any 1 day). Women should drink no more than 14 units of alcohol per week (and no more than 3 U in any 1 day). Pregnant women are advised not to drink alcohol.

The percentage alcohol by volume (% abv) of any drink equals the number of units in 1 l of that drink. For example, strong beer at 6% abv has six units in 1 l. If you drink 500 ml — just under a pint — then you have had 3 units. One unit of alcohol is 10 ml (1 cl) by volume, or 8 g by weight, of pure alcohol.

Hand hygiene

Gould DJ, Chudleigh JH, Moralejo D, Drey N.

Interventions to improve hand hygiene compliance in patient care. Cochrane Database Syst Rev 2007; issue 2

Handwashing is an essential element of clinical dental practice and hand hygiene is considered essential in reducing healthcare-associated infection (HCAI). This review highlights the costs of HCAI: in the UK it causes 5000 deaths and costs £930 million annually. In Canada, the authors estimate that there are 220 000 HCAI annually with 8000 related deaths: in the US, an estimated 5% of patients suffer HCAI at an estimated cost of US\$4.5 billion.

The aim of this review was to identify all studies investigating the effectiveness of interventions intended to increase hand hygiene compliance in the short and longer-term, and to determine the success of these interventions in terms of hand hygiene compliance and subsequent effect on rates of HCAI. A wide range of study designs were included, namely randomised controlled trials (RCT), controlled clinical trials, controlled before and after studies, and interrupted time series analyses, all meeting explicit entry and quality criteria used by the Cochrane Effective Practice and Organisation of Care Group. Studies reporting proxy indicators of hand hygiene compliance were considered and studies to promote compliance with universal precautions were included providing data relating specifically to hand hygiene were presented separately.

Only two studies met the criteria for review. One was a RCT, the other a controlled before and after study. Both were poorly controlled. A statistically significant postintervention increase in handwashing was reported in one study up to 4 months after the intervention whereas in the other there was no postintervention increase in hand hygiene compliance.

Because both studies were of low quality and looked at the effects of strategies over very short periods of time (<6 months) there is little robust evidence to inform the choice of interventions to improve hand hygiene. It appears that single interventions based on short, one-off teaching sessions are unlikely to be successful, even short-term. Consequently there is a need to undertake methodologically robust research to explore the effectiveness of soundly designed interventions to increase hand hygiene compliance.