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Medical audit

Closing the feedback loop is vital

Good clinicians have always organised some kind of systematic review of their daily work, recording and assessing the accuracy of their diagnosis and the outcome of their treatment. We have learnt to call this kind of activity audit.

Everyone now has to become an auditor; the NHS Bill requires general practitioners and hospital staff to engage in regular audit by 1991, the royal colleges and faculties require evidence of audit before accrediting posts for specialist training, and hospital managers seem to believe that audit will be the key to achieving their prime challenge—a high quality service at the lowest possible cost.

A lot of thinking, talking, and writing about audit is still, however, ill focused and vague. The word audit is not some sort of magic talisman that will change practice simply by its repetition. There are some basic principles, now generally agreed.¹ This week (p 85) the *BMJ* begins publication of a new regular series, Audit in Practice, which will, we hope, help readers to understand those principles and see how other groups of clinicians have been achieving audit. The section will include some submitted articles accepted after the normal editorial process of assessment and peer review; but there will also be commissioned articles explaining practical aspects of audit and a news and diary section prepared by the King's Fund Centre.

In deciding whether or not to publish an article describing medical audit in a hospital or general practice setting we shall look for specific features. As with any research study we shall need clear statements of why the project was started, what was done, what was found, and how the data were analysed. But the essence of audit is that it should be designed to achieve change. This is true whether the audit is of process (examining records and other data to find out how patients are being treated) or of outcome (looking at the results of treatment). The first stage in the audit is defining the standard that should be achieved (the proportion of children vaccinated or of adults having their blood pressure recorded, for example) or the pattern of investigation and treatment to be followed for patients with a defined condition (such as haematemesis and melaena in a patient with no previous episodes of bleeding).

Next, the auditing group assesses how their performance has been measuring up to the agreed standard and the circumstances of any omissions or oversights.

From that assessment should come practical conclusions—how performance can be brought closer to the agreed standard or how the standard can be modified to improve outcome further. Next—and this is the crucial step so often omitted in reports submitted for publication—the conclusions should be agreed with the clinicians and put into practice. Finally, the audit must be repeated to ensure that change has occurred in the right direction. Without this “closing of the feedback loop” audit may be little more than a pious exercise in self congratulation.

Where do the standards come from? Sometimes they will be consensus statements, sometimes guidelines agreed by expert bodies such as colleges and faculties. In many cases the primary source will be the conclusions of formal prospective clinical trials. Sometimes a group of clinicians may find that the audit they had in mind cannot be started because there is no agreed protocol of management and their first task may then be to set up an appropriate trial. And what should be the priority topics for clinical audit? Here each group of doctors will make its own decisions, but data collected by community physicians will often provide a basis for identifying targets—in terms of patients to be screened or treated, mortality and morbidity, and so on.

All concerned have a lot to learn—and that includes the editorial team responsible for the new section. The format of audit articles seems likely to evolve, but at this stage we believe that most such articles should have a structured abstract setting out the purpose and design of the study, the conclusions reached, the action taken, and—ideally—the results of that action. The catchment population or number of participating hospitals or centres should also be given. Statements for revision of regional or district guidelines generally have less impact than recommendations to specified regional or national bodies. In addition, the first of this series includes a review of a clinical audit kit, and we shall be pleased to consider other similar material for future review in the section.

The whole process should be exciting and stimulating, and standards of care should improve simply by the process of being examined and questioned. Of course most clinical audits will not warrant publication as they will repeat work already done and reported elsewhere; but we should like to hear about any experiences—successes or failures—that may have practical lessons for others.

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Britain bans oral snuff

Government's action is tough and commendable

Just before Christmas the Department of Health announced a ban on oral snuff to come into effect in March 1990, under consumer protection legislation. The move will prohibit the supply of oral snuff (the best known brand is Skoal Bandits) and will mean the closure of the factory in Scotland originally built with the aid of a government grant. In announcing the ban the Secretary of State for Health, Kenneth Clarke,

expressed concern about the carcinogenicity of oral snuff and its appeal to children. In countries where it has been heavily promoted the prevalence of its use has increased sharply among young people. Since 1970 there has been a 15-fold increase in snuff use in the United States among 17-19 year old men, and in some states as many as 37% of schoolboys use smokeless tobacco.^{1,2}

In Western countries smokeless tobacco is available in two principal forms: chewing tobacco and snuff. Snuff has a much finer consistency than ordinary tobacco and is marketed in dry (oral and nasal) and moist (oral only) forms. When taken orally a small amount is held between the gum and cheek or lip without chewing ("snuff dipping"). Skoal Bandits are small teabag-like sachets filled with flavoured, moist snuff and have a high nitrosamine content. Packaging snuff in such bags is a less messy and thus more marketable way of presenting it to modern consumers.

Evidence for the carcinogenicity of oral snuff has been set out in detailed reports from the International Agency for Research on Cancer, the United States Department of Health, and the World Health Organisation.^{3,5} And the 1988 report of the United States surgeon general made "official" what tobacco researchers have maintained for decades—that nicotine is addictive. And oral snuff is simply a form of tobacco: it delivers nicotine to the bloodstream to give concentrations similar to those found in the blood of cigarette smokers^{6,7}; attempts to stop can result in withdrawal symptoms,⁸ and many users have difficulty breaking the habit.⁵

Comparative harm to health

Some commentators have suggested that oral snuff would be less harmful to health than cigarettes. This might be true if young people used it instead of smoking. In practice, however, users of smokeless tobacco are more likely to be smokers than non-users and in many cases smokeless tobacco use leads on to smoking.^{9,10} It has also been suggested that oral snuff is of little concern in Britain because of the rarity of its use. This is naive. Oral snuff was hardly promoted in Britain—but only because campaigners were so quick to warn of the dangers and prompt action was taken, including control of its promotion.¹¹ Evidence of a rapid increase of use in countries where promotion was permitted has already been mentioned. US Tobacco, which manufactures Skoal Bandits, has targeted young people in the United States with sales initiatives on college campuses. Student representatives have been paid to recruit new consumers through various approaches, including free sampling at major campus events.

Legislation is essential to counter such aggressive marketing. Bans are in force in Hong Kong, Ireland, the Isle of Man, Israel, New Zealand, Japan, Saudi Arabia, Taiwan, and Singapore, and one is being considered in Australia. But the tobacco industry does not take such setbacks lightly. US Tobacco made strong representations to the Hong Kong government in the hope of persuading it not to ban oral snuff. Four United States senators, one a presidential candidate, wrote to the Hong Kong government about the

proposed ban: "We believe such action would constitute an unfair and discriminatory restriction on foreign trade" and could cause "a potential barrier to our people's historic trade relationship." The Hong Kong government replied that this was an internal health matter not a trade issue.

Representations from interested parties

The British government first proposed a ban in February 1988 and invited interested parties to make representations. The response was similar to that experienced by Hong Kong. United States senators and congressmen wrote tough letters to the United States trade representative in Washington, urging him to "use the full force of the American Government in removing these discriminatory bans and employ every available legal method to achieve that objective." The congressmen's letter also suggested that the United States government should consider a section 301 action "to keep our markets open." Section 301 of the 1974 Trade Act provides for retaliatory trade measures against offending countries.

This time the government stood firm, and the European Commission will now propose a community-wide ban, following the lead given by Ireland and Britain. The government is to be congratulated. This is the most positive action on tobacco in Britain for over 20 years—though it should have been unthinkable to permit the promotion and marketing of a new tobacco product considered by many to be addictive and to cause oral cancer. We hope that more countries will follow suit and look forward to the British government applying such determination to the far more devastating problem of tobacco smoking.

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