national centre for corporate social responsibility will be suspect.

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*Details of these policies can be found at the following websites:
www.research.cancer.ca/download/manual00.pdf?submit=manual00.pdf
www.heartfoundation.com.au/research/r2_01_info_book.html
www.tobacco-control.org/tcrc.nsf/4723e4b3bbc9362e802566e300360f8e/aad41ecf44fc5c818025688f00527525?OpenDocument
www.nswcc.org.au/cncrinfo/research/notices/resgrants/guidelines.htm

1 Cohen J. Tobacco money lights up a debate. *Science* 1996;272:488-94.
2 Cohen JE, Ashley MJ, Goldstein AO, Ferrence R, Brewster JM. Institutional addiction to tobacco. *Tobacco Control* 1999;8:70-4.
3 Sibbald B. U of A refuses tobacco-sponsored scholarship donation. *Can Med Assoc J* 2001;164:81.
4 University of California positions on tobacco industry external funding and investments. *Tobacco-Related Disease Research Program (TRDRP) Newsletter* March, 2001;4:4. www.ucop.edu/srphome/trdrp/nslttr301.pdf
5 Campbell C. For and against: should Nottingham University give back its tobacco money? Against. *BMJ* 2001;322:1119.
6 Smith R. For and against: should Nottingham University give back its tobacco money? For. *BMJ* 2001;322:1118.
7 Action on Smoking and Health. *BMJ Editor dumps Nottingham University in reader uprising against British American Tobacco sponsorship*. London: ASH, 2001.
8 Peto R. Smoking and death: the past 40 years and the next 40. *BMJ* 1994;309:937-9.
9 Glantz SA, Barnes DE, Bero L, Hanauer P, Slade J. Looking through a keyhole at the tobacco industry. The Brown and Williamson documents. *JAMA* 1995;274:219-24.
10 Sweda Jr EL, Daynard RA. Tobacco industry tactics. *Br Med Bull* 1996;52:183-92.
11 Ong EK, Glantz SA. Tobacco industry efforts subverting International Agency for Research on Cancer's second-hand smoke study. *Lancet* 2000;335:1253-9.
12 United States Department of Health and Human Services. *Reducing the health consequences of smoking: 25 years of progress. a report of the Surgeon General.* Rockville, MD: Office on Smoking and Health, 1989.

Cannabinoids for pain and nausea

Some evidence but is there any need?

This is an exciting time for cannabinoid research. The discovery of cannabinoid CB_1 receptors (expressed by central and peripheral neurones)[1] and CB_2 receptors (expressed mainly by immune cells)[2] and endogenous agonists[3] for these receptors has renewed the scientific community's interest. Independently of these developments society at large has continued an aggressive debate about the therapeutic use of cannabinoids, including demands for their more liberal availability.[4 5] Cannabinoids have been suggested to have therapeutic value as analgesics and in various conditions, including migraine headaches, nausea and vomiting, wasting syndrome and appetite stimulation in HIV-infected patients, muscle spasticity due to multiple sclerosis or spinal cord injury, movement disorders such as Parkinson's disease, epilepsy, and glaucoma.[6] When new therapeutic indications are suggested, two major factors should be taken into account: what are the adverse effects of the treatment and how does its effectiveness compare with that of existing alternatives?

In this week's issue two high quality systematic reviews shed light on the therapeutic potential of cannabinoids in the management of pain (p 13)[7] and the nausea and vomiting induced by chemotherapy (p 16).[8] Campbell et al sought and examined all randomised controlled trials that compared the efficacy and safety of cannabinoids with those of conventional anaglesics.[7] The nine trials included 222 patients, of whom 128 had cancer (five studies), two chronic non-malignant pain (two studies, one patient per trial), and the rest postoperative pain. Cannabinoids were no more effective than codeine in controlling acute and chronic pain and they had undesirable effects in depressing the central nervous system. These studies are mostly from the 1970s. Since then we have learnt to use non-steroidal anti-inflammatory analgesics alone and in combination with opioids in both cancer related and postoperative pain. There is thus no need for cannabinoids for these indications.

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In chronic non-cancer pain, however, we do need more effective analgesics than those currently available. Cannabinoids have anti-inflammatory effects, but it is difficult to believe that they would beat the anti-inflammatory drugs available today. Neuropathic pains, particularly those with spastic components, are one area where cannabinoids may have potential.

In the second systematic review Tramèr et al analysed the effectiveness of cannabinoids in chemotherapy induced nausea and vomiting among 1366 patients in 30 randomised controlled trials.[8] Across all trials cannabinoids showed some antiemetic efficacy compared with active comparators (prochlorperazine, metoclopramide, chlorpromazine, tiethylperazine, haloperidol, domperidone, and alizapride) and placebo. Cannabinoids were antiemetic when the control patients suggested a medium emetogenic setting. In highly emetogenic settings, however, they did not show any efficacy. Most of these studies were performed in the 1980s. The serotonin receptor antagonists were introduced in the 1990s and they have changed the practice of antiemesis in chemotherapy induced nausea and vomiting. The American Society of Clinical Oncology guidelines recommend no routine antiemetic before chemotherapy with low emetic risk, a corticosteroid for patients being treated with agents of intermediate emetic risk, and the combination of a serotonin receptor antagonist and a corticosteroid before chemotherapy with high emetic risk.[9] Serotonin receptor antagonists and corticosteroids have shown the highest therapeutic index whereas cannabinoids share a lower therapeutic index with dopamine antagonists, butyrophenones, and phenothiazines—that is, those agents against which they were compared in the systematic review.

As the currently available cannabinoids clearly loose the battle in both efficacy and safety with the

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competitors of today one can still ask whether a lower price would be a reason for their use. Yet if a healthcare system can afford high technology surgery and expensive chemotherapy it certainly can afford safe and effective pain relief and antiemetic therapy.

Future research may provide us with better cannabinoid compounds with potential new therapeutic applications.[10] However, the current information is that the adverse effects of cannabinoids outweigh their effectiveness.[11 12] About a year ago in the *BMJ* Strang et al asked for a more informed debate about the therapuetic use of cannabinoids,[13] and this week's two systematic reviews contribute to this debate. On current evidence cannabinoids can be recommended only for use in controlled clinical trials in carefully selected conditions for which there is no effective treatment. The launch of the first large multicentre trial on cannabis in the control of pain and tremors in multiple sclerosis[14] is the first step on this way.

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1 Matsuda LA, Lolait SJ, Brownstein MJ, Young AC, Bonner TI. Structure of a cannabinoid receptor and functional expression of the cloned cDNA. *Nature* 1990;346:561-4.
2 Munro S, Thoms KL, abu-Shaar M. Molecular characterization of a peripheral receptor for cannabinoids. *Nature* 1993;365:61-5.
3 Mechoulam R, Ben-Shabat S, Hanus L, Ligumsky M, Kaminski NE, Schatz AR, et al. Identification of an endogenous 2-monoglyceride, present in canine gut, that binds to cannabinoid receptors. *Biochem Pharmacol* 1995;50:83-90.
4 Kassirer JP. Federal foolishness and marijuana. *N Engl J Med* 1997;336:366-7.
5 Bosch X. Catalan parliament pushes for legalisation of cannabis as therapy. *BMJ* 2001;325:511.
6 British Medical Association. *Therapeutic uses of cannabis*. London: BMA, 1997.
7 Campbell FA, Tramèr MR, Carroll D, Reynolds DJM, Moore RA, McQuay HJ. Are cannabinoids an effective and safe treatment option in the management of pain? A qualitative systematic review. *BMJ* 2001;323:13-6.
8 Tramèr MR, Carroll D, Campbell FA, Reynolds DJM, Moore AR, McQuay HJ. Cannabinoids for control of chemotherapy induced nausea and vomiting: quantitative systematic review. *BMJ* 2001;323:16-21.
9 Gralla RJ, Osoba D, Kris MG, Kirkbridge P, Hesketh PJ, Chinnery LW, et al. Recommendations for the use of antiemetics: evidence-based, clinical practice guidelines. *J Clin Oncol* 1999;17:2971-94.
10 Piomelli D, Giuffrida A, Calignano A, de Fonseca FR. The endocannabinoid system as a target for therapeutic drugs. *Trends Pharmacol Sci* 2000;21:218-24.
11 Institute of Medicine. *Marijuana and medicine*. Washington, DC: National Academy Press, 1999.
12 Hall W, Solowij N. Adverse effects of cannabis. *Lancet* 1998;352:1611-6.
13 Strang J, Witton J, Hall W. Improving the quality of the cannabis debate: defining the different domains. *BMJ* 2000;320:108-10.
14 Dyer O. Cannabis trial launched in patients with MS. *BMJ* 2001;322:192.

Supporting primary care with ethics advice and education

Implications of clinical ethics support and clinical ethics committees for primary care trusts

It would be a pity to miss an early opportunity to consider how to build clinical ethics support into the structure of the new primary care groupings in the United Kingdom. Neither standard ethical precepts nor guidelines from national bodies like the General Medical Council[1] or the British Medical Association[2] can cover all the intricacies and nuances of any given clinical situation. Best practice requires the interpretation and application of ethical principles in the local context, so primary care trusts will have to recognise, as acute trusts have started to do, that they have a responsibility to support clinicians and managers alike as ethical problems arise in their day to day work.

Primary care can draw on experience of clinical ethics support in secondary care, as well as on international experience, which is collated in a recent Nuffield Trust report on the subject[3] and was the subject of a recent conference in London. Some 20 hospital trusts in the United Kingdom now have clinical ethics committees, which may help to bridge the interprofessional gap arising from different backgrounds in ethics approaches. Other trusts depend on guidance from retained ethicists or from university departments of ethics. Some make their clinical governance team, or professional advisory committee, responsible for providing clinical ethics support. However, a dedicated resource was the preferred option of the managerial and clinical leaders in the survey performed by the Nuffield Trust, 79% of whom perceived a need for clinical ethics support within their hospital. The report recommends that local research ethics committees, which are primarily decision making bodies, should not take on the mainly advisory role of clinical ethics support.[3]

It helps to be clear about what sort of service is required of the committee or individual designated to provide ethics support. Is the role proactive, interactive, or reactive? The first is best suited to a multidisciplinary committee, which can draw on its collective experience to consider the likely ethical dilemmas facing individual clinicians and the trust corporately. Committees can find and disseminate suitable frameworks for approaching such situations as rationing decisions or end of life dilemmas. The interactive role sees clinical ethics committees looking at the actual dilemmas that arise in the course of trust business or clinical practice and entering discussion with management and individual clinicians. This role predicates an independent committee able to consider difficult issues from an ethical standpoint, separately from clinical governance[4] or budgetary considerations.

The last, reactive, role, may best be considered in two contexts: immediate and delayed. Immediate reaction to the needs of a clinician or manager in an ethical predicament requires an accessible individual, like an ethicist or experienced clinical ethics committee chairperson, rather than a committee. Although it is unlikely that an "ethics flying squad" could support primary care clinicians in the consulting room or patients' homes, it is generally feasible to provide a hotline to experienced ethical counsel.

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