

of conditions, as the Chinese claimed as long ago as 2737 BCE,¹ with considerably fewer side effects for many people than other treatments.¹⁰ Marijuana could compete with established brand medications that are backed by powerful global economic, social and political forces and their legislative allies.

Thus there are at least 2 powerful obstacles to the decriminalization of marijuana, both arising from the vested interests that have grown up and taken hold under prohibition. Still, *CMAJ* is to be congratulated: better late than never.

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I read with interest the recent *CMAJ* editorial on marijuana.¹ The numerous contradictory reports on the effects of smoking marijuana can be easily clarified: marijuana is a crude herb that contains at least 10 psychotropics as well as several hundred long-chain hydrocarbons. Each "joint" has a different chemical makeup.

For the chemicals in marijuana to be

approved as medications they would have to be tested by means of the traditional, and only legally approved, methodology: gas chromatographic analysis of the plant and mass spectrometry. Once all of the chemicals were isolated, a large amount of each chemical would have to be synthesized so the appropriate toxicological and pharmacological studies in animals could be carried out.

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1. Marijuana: federal smoke clears, a little [editorial]. *CMAJ* 2001;164(10):1397.

As an emergency physician who spent 14 years in general practice in a rural area with lots of drug abuse, I am shocked at the ignorance of *CMAJ*'s editors concerning the health effects of marijuana use.¹

To say that the effects of this substance are "mostly irrelevant" to the users is at the very least irresponsible. What about the serious amotivational syndromes in youth? What about the behavioural changes and family problems created by the drug's effects on the psychoemotional makeup of many users? How can a substance that is more carcinogenic than tobacco products be advocated in such a manner? Maybe you don't know what substances might be contained in burning organic materials, or how marijuana use is accomplished.

For an editor to espouse such an opinion in our major journal is reprehensible. You've either been out of practice so long you're out of touch, or you need to stop smoking up now and clear your vision.

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Chemotherapy for older women with node-positive breast cancer

In their recent guideline on adjuvant systemic therapy for node-positive breast cancer, Mark Levine and colleagues state that postmenopausal women with estrogen receptor (ER)-positive tumours gain additional benefit from taking chemotherapy in addition to tamoxifen.¹ I have some concerns about this statement, based on my own analysis of the studies they cite in its support.

In the NSABP B-16 trial 20% of the patients had ER-negative tumours.^{2,3} The results may therefore have been influenced in favour of the combined therapy, because these patients would not be expected to derive any benefit from tamoxifen therapy alone.^{4,5} A preliminary report of another study showed overall benefit when chemotherapy was added to tamoxifen therapy, but only for ER-negative patients.⁶ The Ludwig study also combined patients with ER-positive and ER-negative status and thus had similar limitations.⁷

About 33% of the patients in a study using epirubicin in the chemotherapy arm had ER-negative tumours.⁸ Surprisingly, there was no interaction between treatment effect and receptor status (or age). The authors suggested that for the chemotherapy arm to be effective, an anthracycline should be included.

A review of randomized trials showed diminishing benefit with age when postmenopausal women with ER-positive tumours were treated with combination chemotherapy and tamoxifen.⁹ Very few patients over 70 years of age have been studied, and they seem to have been adversely affected by combined therapy.

The report by the International Breast Cancer Study Group appears to support the recommendations of Levine and colleagues, but there were small numbers of patients in the relevant study arms and the study included patients who received delayed chemotherapy.¹⁰

The Intergroup study appears to be the most significant to date that might justify a recommendation for chemo-endocrine therapy in postmenopausal patients with ER-positive tumours.¹¹ Unfortunately the full report has not yet been published. It would be useful to know whether there were differential benefits in this study in women aged 50–59, 60–69 and more than 69 years, for making decisions concerning the adjuvant treatment of otherwise healthy people at risk of iatrogenic disease but also at varying risk of developing metastatic disease if not optimally treated.

I should appreciate the authors' views on the use of chemotherapy, particularly in older women with ER-positive tumours, in light of these comments.

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[The author responds:]

David Ginsburg has conducted his own analysis of selected studies. The meta-analysis by the Early Breast Cancer Trialists' Collaborative Group, which included all the trials of chemotherapy plus tamoxifen versus tamoxifen alone in over 9000 postmenopausal women, demonstrated a statistically significant reduction in both breast cancer recurrence and mortality in favour of the combined chemohormonal therapy.¹ Ginsburg points out that some of the trials that compared chemotherapy plus tamoxifen with tamoxifen alone included a small number of patients with estrogen receptor (ER)-negative tumours. Tamoxifen would not be expected to be of benefit in such patients. The implication is that the demonstrated benefit of combination therapy is driven by the effect of chemotherapy in the ER-negative patients. We believe that this is a spurious hypothesis for several reasons. First, the numbers of ER-negative patients were balanced between treatment arms in these trials and these patients comprised a relatively small subgroup. Second, chemotherapy is effective in women with ER-positive tumours as well as ER-negative tumours. Finally, in trials that included only postmenopausal women with ER-positive tumours, a benefit was detected in favour of the addition of chemotherapy to tamoxifen. For example, the Intergroup recently up-

dated the results of their trial of anthracycline-containing chemotherapy plus tamoxifen versus tamoxifen alone.² There was a statistically significant improvement in survival in favour of the addition of chemotherapy to tamoxifen.

We agree with Ginsburg that there were very few patients over 70 years of age in the trials of adjuvant chemotherapy. We alluded to this in our guideline³ and we feel that our recommendations were balanced and did not overstate the case.

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Ammunition against malaria

The recent case series of malaria deaths in Canada illustrates the need for heightened awareness of tropical diseases by Canadian physicians.¹ I was recently involved in caring for a patient who died of malaria shortly after returning from Kenya. Unfortunately, the patient had not taken antimalarial prophylaxis.

While I was in Africa I had the opportunity to see the use of 2 powerful antimalarial agents, dihydroartemisinin and β -artemeter. Studies have shown that these drugs are highly effective plasmodicides, even in multidrug-resistant malaria. The World