were consistent with those of college level students (Table 1).

We intend to continue this study over the next few years to track our current first-year undergraduate cohort, to see if these preliminary data are replicated in the future. If so, we as medical educators will need to consider how to promote the development of moral reasoning skills within the medical profession and other health care professions, to keep pace with growing demands for sophistication in this area.

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#### Bryan Magwood

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## MCC evaluating examination and the international medical graduate

The information pamphlet on the Medical Council of Canada

(MCC) evaluating examination states that "Without exception, for eligibility to sit the MCC Qualifying Examination Part I, an IMG [international medical graduate] must have a valid pass on the MCC Evaluating Examination."

Given that the qualifying examination is designed and promoted as representing a minimal standard of the knowledge and problem-solving skills needed for general practice in Canada,2 I do not understand the need for the evaluating examination. The IMGs who must take the evaluating examination include physicians who have completed residencies and fellowships in the United States with specialty and subspecialty certifications. Having these fellowship-trained and board-certified physicians go through the evaluating examination as a prerequisite for the qualifying examination seems redundant and unnecessary.

I am one such IMG. Originally from Pakistan, I have a total of 7 years of postgraduate training (including a US residency and a 2-year fellowship at Yale University). After earning neurology and clinical neurophysiology certifications in the United States, I worked as an assistant professor at the University of Manitoba for over 2 years. I successfully wrote my Royal College of Physicians and Surgeons of Canada examination in neurology in 2001 and was granted an unrestricted licence in Manitoba. However, when I filed a written request to write the MCC qualifying examination part I with a waiver of the evaluating examination, my request was turned down. I eventually wrote all of the required MCC examinations for the sake of obtaining a permanent Canadian licence, but at the cost of having to cancel clinics and make some patients wait even longer for care.

What is the MCC's objective in having such physicians complete the evaluating examination? Is this really a way of standardizing the delivery of health care, or is it a way of deterring qualified medical practitioners from entering into practice in Canada?

I suggest that the MCC seriously reconsider the objectives of the evaluating

examination and define circumstances in which qualified physicians would be exempted.

#### S. Nizam Ahmed

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- Information pampblet on the Medical Council of Canada evaluating examination (MCCEE) 2003. Ottawa: Medical Council of Canada; 2003. Available: www.mcc.ca/pdf/PamphletENG.pdf (accessed 2003 Oct 7).
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### [The MCC's Executive Director responds:]

Nizam Ahmed raises an important question: Why doesn't the MCC exempt IMGs who have received specialty training and been certified in a general clinical specialty in the United States from its initial evaluating examination and allow them to proceed directly to the 2 steps of the MCC qualifying examination?

The current requirement is that all candidates who have graduated from a medical school not accredited by the US Liaison Committee on Medical Education or the Committee on Accreditation of Canadian Medical Schools must pass the evaluating examination before undertaking the qualifying examinations.1 This has been part of the MCC bylaws for over 25 years. Thus, it is not possible for the executive director or any other officer of the MCC to exercise discretion and "excuse" a candidate from the exam. Any change in admission eligibility would require a change in the bylaws. The policies and procedures that affect recruitment and licensure of IMGs are currently being reviewed by a national task force, which is due to report to the deputy ministers of health in December 2003.

Through the task force, issues such as those raised by Ahmed will be identified for all organizations concerned, including the appropriate ministries and the several bodies involved in the recruitment, hiring and licensure of IMGs. More specifically, Ahmed's concern has been noted by MCC staff and

will be referred to the MCC Executive Board at its meeting in October 2003.

We expect that this example and other "disconnects" in licensure and immigration policies of the "federation of partners" will be studied, so that when the anticipated recommendations of the task force are made public, they can be acted upon by the MCC and other bodies in a coordinated and timely manner.

#### W.D. Dauphinee

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#### Reference

 Information pamphlet on the Medical Council of Canada evaluating examination (MCCEE) 2003. Ottawa: Medical Council of Canada; 2003. Available: www.mcc.ca/pdf/PamphletENG.pdf (accessed 2003 Oct 7).

#### A university's name

In contrast to the information in Table 1 of Patrick Sullivan's article about medical students' debt on graduation, the correct name for our university is Memorial University of Newfoundland.

#### **June Harris**

Associate Professor of Anatomy Director, MedCAREERS Faculty of Medicine Memorial University of Newfoundland St. John's, Nfld.

#### Reference

 Sullivan P. Mortgage-sized debt the new normal for medical students. CMAJ 2003;169(5):457-8.

#### SARS in health care workers

I wondered if Monica Avendano and associates¹ were planning a follow-up report on the 14 health care workers who were treated for severe acute respiratory syndrome (SARS) at the West Park Healthcare Centre. At the time of publication of that report, all of the patients had recovered suffi-

ciently to go home, but only one had returned to work.

I am interested and concerned as to how these patients have progressed in the past few months.

#### **Gordon Farrow**

Tax Accountant Scarborough, Ont.

#### Reference

 Avendano M, Derkach P, Swan S. Clinical course and management of SARS in health care workers in Toronto: a case series. CMAJ 2003; 168(13):1649-60.

#### [The authors respond:]

Te have continued to follow the patients described in our article after their discharge from the SARS unit. They have undergone chest radiography, pulmonary function testing, chest CT, sleep studies and graded exercise tests. By the eighth week after discharge, the results of chest radiography were normal for all patients. However, CT of the chest showed abnormalities in some patients for up to 6 months after discharge. Convalescent serum antibody tests have been performed for all patients, but the results are not yet available.

Most of the patients have returned to work, the initial group going back 2 months after the onset of acute illness. Fatigue, dyspnea on exertion and insomnia are the most common persisting symptoms. Most of the patients have demonstrated symptoms indicative of the psychological impact of SARS. We are planning a follow-up review for next spring, 1 year after the onset of illness.

# Monica Avendano Peter Derkach Susan Swan West Park Healthcare Centre Toronto, Ont.

#### Reference

 Avendano M, Derkach P, Swan S. Clinical course and management of SARS in health care workers in Toronto: a case series. CMAJ 2003; 168(13):1649-60.

## Ziprasidone — not an option for serotonin syndrome

A recent article concerning serotonin syndrome¹ contained an inaccuracy that might result in clinicians attempting a misguided, if not fatal, treatment option. While correctly noting the presumed role of 5-HT<sub>IA</sub> receptor activation in the pathophysiology of the syndrome, the authors twice surmise that ziprasidone, an atypical antipsychotic, might warrant study as a therapeutic option because of its potent blockade of 5-HT<sub>IA</sub> receptors.

The reference that the authors use as the pharmacologic basis for this assertion does acknowledge the potent binding of ziprasidone at the  $5\text{-HT}_{1A}$  receptor; however, the high affinity of the drug for this receptor is as an agonist, not as an antagonist. Other effects of ziprasidone on the serotonergic system include potent antagonism of  $5\text{-HT}_{1D}$ ,  $5\text{-HT}_{2A}$  and  $5\text{-HT}_{2C}$  receptors, as well as moderate inhibition of serotonin reuptake. 3.4

The net result of ziprasidone on serotonergic neurotransmission makes it an inappropriate candidate for treating serotonin syndrome. Aside from the overt problem of directly stimulating 5-HT<sub>1A</sub> receptors, there is also the more subtle, yet still concerning, matter of indirectly stimulating these same receptors via antagonism of 5-HT<sub>2A</sub> receptors and inhibition of serotonin reuptake. In fact, there have been reported cases of serotonin syndrome precipitated by the use of other atypical antipsychotics, which are also 5-HT<sub>2A</sub> receptor antagonists, in combination with serotonergic drugs.<sup>5</sup>

Thus, the use of ziprasidone for treatment of serotonin syndrome seems ill-advised and could prolong or worsen the patient's symptoms. In cases in which the clinician seeks treatment with serotonin antagonists, purported options include methysergide, cyproheptadine and propranolol.<sup>6</sup>

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