Physicians for oral health

On behalf of the dentists of Ontario, I wish to commend you for emphasizing to Canadian physicians, through your public health column, the issue of dental caries.[1] It is reassuring to the dental profession when physicians are reminded of the importance of oral health as a major component of general health.

I suspect that the groups that Erica Weir identified as carrying the "burden of oral disease"[1] also bear a significant burden of systemic disease. Physicians probably see patients at risk for dental disease more frequently than dentists, and this opportunity to establish basic awareness of the need to prevent dental caries and periodontitis should not be missed.

Brian N. Feldman
Editor, *Ontario Dentist*
Toronto, Ont.

Reference

1. Weir E. Dental caries: a nation divided. *CMAJ* 2002;167(9):1035.

Pertussis control in Canada

The outbreak of pertussis in a refinery as described by John Hoey in a recent article on pertussis in adults[1] is interesting but pales in comparison with outbreaks recently reported from Vancouver Island, where well over 100 positive cases (by both culture and polymerase chain reaction) were diagnosed in adolescents and adults,[2] and from Quebec, where the severity of pertussis in older adults was well characterized.[3] Rarely, pertussis can lead to severe complications, even in a healthy adult.[4]

The case-fatality rate of 0.8% reported by Hoey actually represents cases in infants under 2 years of age admitted to hospital.[5] The overall case fatality rate is unknown but is undoubtedly lower.

There are a number of differences between the United States and Canada in recommendations for treatment and chemoprophylaxis of pertussis contacts. In Canada, treatment and chemoprophylaxis with erythromycin are recommended for 10 days rather than 14, and the maximum daily dose is 1 g rather than 2 g.[6] Also, chemoprophylaxis is recommended in this country only in households or other environments where there is an infant under 1 year of age. Canadian guidelines will soon be revised according to the recommendations of the National Consensus Conference on Pertussis (held in May 2002). On the basis of results from 4 randomized controlled trials, the recommended treatment for pertussis will be 7 days of erythromycin,[7] 5 days of azithromycin[8] or 7 days of clarithromycin,[9] and chemoprophylaxis will be limited to households with an infant under 1 year of age (because of lack of benefit in modifying the development of clinical disease in contacts[10]).

The recommendations for vaccination presented by Hoey were those of the US Centers for Disease Control and Prevention. In Canada, an adolescent/adult formulation of acellular pertussis vaccine combined with diphtheria and tetanus toxoids (known by the abbreviation TdaP; Adacel, Aventis Pasteur) is licensed for use in people 12 to 50 years of age. The National Advisory Committee on Immunization recommends that all adolescents receive TdaP in place of Td.[11] More extensive use of this vaccine beyond adolescence may be beneficial in controlling the increasing burden of disease in adults.

Scott A. Halperin
Head, Pediatric Infectious Diseases
Dalhousie University
IWK Health Centre
Halifax, NS

References

1. Hoey J. Pertussis in adults. *CMAJ* 2003;168 (4):453-4.
2. Skowronski DM, De Serres G, MacDonald D, Wu W, Shaw C, Macnabb J, et al. The changing age and seasonal profile of pertussis in Canada. *J Infect Dis* 2002;185:1448–53.
3. De Serres G, Shadmani R, Duval B, Boulianne N, Déry P, Fradet MD, et al. Morbidity of pertussis in adolescents and adults. *J Infect Dis* 2000; 182:174–9.

4. Skowronski DM, Buxton JA, Hestrin M, Keyes RD, Lynch K, Halperin SA. Carotid artery dissection as a possible severe complication of pertussis in an adult: clinical case report and review. *Clin Infect Dis* 2003;36:e1–4.
5. Halperin SA, Wang EL, Law B, Mills E, Morris R, Déry P, et al. Epidemiological features of pertussis in hospitalized patients in Canada, 1991–1997: report of the Immunization Monitoring Program–Active (IMPACT). *Clin Infect Dis* 1999;28:1238–43.
6. National Advisory Committee on Immunization, Advisory Committee on Epidemiology, and Canadian Paediatric Society. Statement on management of persons exposed to pertussis and pertussis outbreak control. *Can Commun Dis Rep* 1994;20:193-9.
7. Halperin SA, Bortolussi R, Langley J, Miller B, Eastwood B. Seven days of erythromycin estolate is as effective as fourteen days for the treatment of Bordetella pertussis infections. *Pediatrics* 1997;100:65–71.
8. Halperin SA, Langley JM, Boucher FD, Smith B. *Azithromycin is as effective as and better tolerated than erythromycin estolate for the treatment of pertussis* [abstract 169]. 40th annual meeting of Infectious Diseases Society of America; 2002 Oct 24–27; Chicago.
9. Lebel MH, Mehra S. Efficacy and safety of clarithromycin versus erythromycin for the treatment of pertussis: a prospective, randomized, single blind trial. *Pediatr Infect Dis J* 2001;20: 1149-54.
10. Halperin SA, Bortolussi R, Langley JM, Eastwood BJ, De Serres G. A randomized, placebo-controlled trial of erythromycin estolate chemoprophylaxis for household contacts of children with culture-positive Bordetella pertussis infection. *Pediatrics* 1999;104(4):e42. Available: www.pediatrics.org/cgi/content/full/104/4/e42 (accessed 2003 Apr 9).
11. National Advisory Committee on Pertussis. Pertussis. In: *Canadian immunization guide*. 6th ed. Ottawa: Canadian Medical Association; 2002. p. 169-76.

Safe use of acetaminophen

A safety update on acetaminophen[1] published in the Oct. 29, 2002, issue of *CMAJ* mentioned that "[t]he number of cases of hepatotoxicity that occur in Canada each year is not known, and Health Canada is not currently reviewing the packaging and warning labels for the drug in this country."

Health Canada issued a public advisory about acetaminophen[2] on Feb. 13, 2003. This advisory emphasizes that products with different names may contain the same active ingredients and that it is important to read the labels of all medications carefully to avoid unintentional overdose. Health Canada has also published a more general article on the safe use of medicines in the "It's Your Health" series.[3] Both articles are available online, for the benefit of physicians and their patients.

Kimby N. Barton
Marketed Pharmaceuticals Division
Health Canada
Ottawa, Ont.

References

1. Wooltorton E. Brief safety updates: acetaminophen, ASA and kava. *CMAJ* 2002;167(9): 1034.
2. *Health Canada is advising Canadians about the safe use of products containing acetaminophen* [advisory]. Ottawa: Health Canada; 2003 Feb 13. Available: www.hc-sc.gc.ca/english/protection/warnings/2003/2003_06.htm (accessed 2003 Apr 9).
3. *Safe use of medicines*. Ottawa: Health Canada; updated 2003 Mar 12. Available: www.hc-sc.gc.ca/english/iyh/medical/safe_medicine.html (accessed 2003 Apr 9).

Enlightening medical students

The recent report by Johane Patenaude and associates[1] about the levelling of moral reasoning among medical students during their years in medical school does not surprise me. The environment to which students are exposed in teaching hospitals might be one aspect of their training that inhibits the development of moral reasoning.

I work in the inpatient psychiatry unit of a teaching hospital. Every few months, all staff psychiatrists receive a compilation of length-of-stay statistics, "savable days" and other related data, listed by individual staff member. I believe that this practice is common in other departments and hospitals as well. Through this process, staff are openly ranked according to the speed with which they discharge their patients, the worst offenders (those who keep their patients in hospital the longest) appearing at the top of the list. These reports, masquerading as "information," represent an example of public shaming, a descendent of tarring and feathering, head shaving and public hanging. This practice encourages staff to regress in their moral development to Kohlberg's stage 3,[2,3] interpersonal conformity, the stage to which the students in Patenaude and associates' study tended to move (from lower or higher stages).

I wait in vain for rankings of humanistic parameters such as compassion, empathy and supportiveness toward patients, or even simpler measures such as providing good treatment or treating other staff well.

Is it any surprise that our students do not progress to higher moral levels?

Jonathan Pulman
Staff Psychiatrist
The Ottawa Hospital
Ottawa, Ont.

References

1. Patenaude J, Niyonsenga T, Fafard D. Changes in students' moral development during medical school: a cohort study. *CMAJ* 2003;168(7):840-4.
2. Kohlberg L. *The development of modes of moral thinking and choice in the years ten to sixteen* [dissertation]. Chicago: University of Chicago; 1958.
3. Kohlberg L. The psychology of moral development: moral stages, their nature and validity. Vol 2 of *Essays in moral development*. San Francisco: Harper & Row; 1984.

In their study on students' moral development, Johane Patenaude and associates[1] appropriately focus attention on an often-overlooked area of undergraduate medical education. Yet it seems a shame to spend time and money on yet another study confirming the deficiencies of undergraduate medical education. Instead, we should begin the more difficult task of making and assessing needed changes in the curriculum. As Peter Singer points out,[2] we know what needs to be done, but as yet "none of these strategies has been taken very far." Why the lack of progress?

Perhaps it has something to do with the reality that teaching remains undervalued. Yes, we need to create an "ethical learning climate" for our students, and we can begin by creating an ethical teaching environment for our teachers.

Stephen Liben
Associate Professor
Department of Pediatrics
McGill University
Montréal, Que.

References

1. Patenaude J, Niyonsenga T, Fafard D. Changes in students' moral development during medical school: a cohort study. *CMAJ* 2003;168(7):840-4.
2. Singer PA. Strengthening the role of ethics in medical education [editorial]. *CMAJ* 2003;168 (7):854-5.