

or might not accept fractions of plasma or cellular components. Respecting the conscientious choices of their patients is an intrinsic professional duty of physicians.<sup>2</sup> Since it is *patients* who will primarily be affected by the treatment they receive, it is rightfully *patients* who should make the value-laden decisions about their care according to their religious beliefs, personal conscience and the medical facts and uncertainties.

John Doyle's comments about saving lives are uncomplimentary to the specialist physicians worldwide who utilize life-saving blood conservation techniques. Moreover, a recent Canadian study demonstrated that a liberal blood transfusion strategy led to increased morbidity and mortality.<sup>3</sup> Most investigators now accept that allogeneic blood impairs immune system defences and leads to higher rates of cancer recurrence and postoperative infection.<sup>4,5</sup> The potential for transmission of dis-

ease cannot be eliminated and has been a force driving the development of red-cell substitutes and bloodless surgery programs. The Health Sciences Centre in Winnipeg announced the first such program in Canada.<sup>6</sup>

Doyle evidently relied on information from a source that purports to present the position of Jehovah's Witnesses. Information on the Internet sometimes has an aura of credibility that it does not deserve. Physicians seeking accurate and authoritative information about the position of Jehovah's Witnesses regarding medical care may refer to our Web site at [www.watchtower.org](http://www.watchtower.org) or contact Hospital Information Services for Jehovah's Witnesses (Canada) at 800 265-0327.

**Zenon M. Bodnaruk**

Director

Hospital Information Services (Canada)  
Watch Tower Bible and Tract Society  
Halton Hills (Georgetown), Ont.

1. Watch Tower Bible and Tract Society. Questions from readers. *The Watchtower* 2000 June 15;29-31.
2. Post SG, Puchalski CM, Larson DB. Physicians and patient spirituality: professional boundaries, competency, and ethics. *Ann Intern Med* 2000;132(7):578-83.
3. Hébert PC, Wells G, Blajchman MA, Marshall J, Martin C, Pagliarello G, et al. A multicenter, randomized, controlled clinical trial of transfusion requirements in critical care. *N Engl J Med* 1999;340(6):409-17.
4. Klein HG. Immunomodulatory aspects of transfusion: a once and future risk? *Anesthesiology* 1999;91(3):861-5.
5. Vamvakas EC, Carven JH. Allogeneic blood transfusion, hospital charges, and length of hospitalization. *Arch Pathol Lab Med* 1998; 122(2):145-51.
6. *Winnipeg Free Press* 2000 June 29;Sect A:1-2.

## Comparing international infant mortality rates

A report in *CMAJ* provided an international comparison of infant mortality rates based on data recently published by the Organization for Economic Cooperation and Develop-

ment (OECD).<sup>1</sup> Although the OECD and other international organizations such as UNICEF publish international comparisons using data they obtain from Statistics Canada and other national bodies, their estimates are sometimes erroneous.<sup>2</sup> For instance, the OECD reported the 1996 infant mortality rate in Canada to be 6.0 per 1000 live births. In fact, in 1996 the infant mortality rate in Canada was 5.6 per 1000 live births,<sup>3</sup> whereas that in the United States was 7.3 per 1000 live births.<sup>4</sup> In 1997, infant mortality rates in Canada and the United States were 5.5 and 7.2 per 1000 live births respectively.<sup>5,6</sup>

International comparisons of infant mortality are compromised by a lack of standardization with regard to birth registration practices. Studies have documented wide variation in the rate at which extremely small babies at the borderline of viability (e.g., < 500 g) are registered in different countries.<sup>7,8</sup> In fact, recent secular trends and inter-provincial comparisons of infant mortality within Canada are also affected by such differences in birth registration.<sup>9</sup> As a potential solution, the World Health Organization has recommended that international comparisons of infant mortality be restricted to live births in which the newborn weighs 1000 g or more.<sup>10</sup> Such a restriction would eliminate a substantial proportion of neonatal deaths from the infant mortality counts of most industrialized countries, however. This and other challenges inherent in birth-weight-specific comparisons mean that international infant mortality rankings will continue to be based on crude rates and will favour industrialized countries, which tend not to register extremely small live births.

#### K.S. Joseph

Perinatal Epidemiology Research Unit  
Department of Obstetrics & Gynecology  
and Pediatrics  
Dalhousie University  
Halifax, NS  
and  
Associate Editor, *CMAJ*

#### References

1. Martin S. Canada among leaders in OECD health results. *CMAJ* 2000;162(7):1032.

2. Joseph KS. The state of the world's children 1996 [book review]. *Chron Dis Can* 1996;17:77-8.
3. Health Statistics Division. *Births and deaths 1996*. Ottawa: Statistics Canada; 1999. Cat no 84F0210XPB.
4. Peters KD, Kochanek KD, Murphy SL. Deaths: final data for 1996. vol 47 (no 9) of *National vital statistics reports* series. Hyattsville (MD): National Center for Health Statistics; 1998.
5. Health Statistics Division. *Births and deaths 1997*. Ottawa: Statistics Canada; 1999. Cat no 84F0210XPB.
6. Hoyert DL, Kochanek KD, Murphy SL. Deaths: final data for 1997. vol 47 (no 19) of *National vital statistics reports* series. Hyattsville (MD): National Center for Health Statistics; 1999.
7. Howell EM, Blondel B. International infant mortality rates: bias from reporting differences. *Am J Public Health* 1994;84:850-2.
8. Sepkowitz S. International rankings of infant mortality and the United States vital statistics natality data collecting system — failure and success. *Int J Epidemiol* 1995;24:583-8.
9. Joseph KS, Kramer MS. Recent trends in Canadian infant mortality rates: effect of changes in registration of live newborns weighing less than 500 g. *CMAJ* 1996;155(8):1047-52.
10. *International statistical classification of diseases and related health problems*. vol 2. 10th rev ed. Geneva: World Health Organization; 1993. p. 129-33.

### Youngest medical graduate

I too was only 22 years old when I graduated from medical school<sup>1</sup> in Scotland in 1966. After a 1-year rotating internship (this was before the start of family medicine training programs), I became a rural family physician in a group practice when I was aged 23 years.

#### Ann C. Macaulay

Department of Family Medicine  
McGill University  
Montreal, Que.

#### Reference

1. Sullivan P. Paras Naik, MD: How Scotland produced Canada's youngest physician. *CMAJ* 2000;162(6):870.

### The last trial of a Nazi doctor

We read with great interest the news item on the last trial of a Nazi doctor.<sup>1</sup> The following question arises in this connection: What is the role of the political and medical community? Health professionals working in situations of widespread human rights abuses can face significant personal risks in carrying out their duties.

In the early 1980s in Central America numerous health care workers were targeted because of their professional activities.<sup>2,3</sup> In 1994 in Iraq, doctors were required by law to amputate the ears and brand the foreheads of deserters. They were told that if they refused, they would suffer the same fate. One doctor was executed and many were imprisoned for their refusal to exercise medicine punitively.<sup>4</sup> This example underlines the vulnerability of the individual health care practitioner in the absence of strong collective refusal to compromise ethical and professional standards.

Is Dr. Heinrich Gross really the last physician of his "kind"? What about physicians who have contributed or still contribute to corporal punishment? There should be more precise international standards including but not limited to medical associations taking steps against the participation of medical staff in corporal punishment and in carrying out the death penalty.

Some steps have been taken by the World Medical Association,<sup>5</sup> but a much more active commitment by professional bodies to defend human rights and oppose abuses is required, such as the establishment of human rights representatives in each national medical association who would visit and report on a regular basis to the World Medical Association and the Amnesty International medical office.

#### Siroos Mirzaei

Department of Nuclear Medicine  
Wilhelminenspital  
and

Hemayat (Organisation for the support of survivors of torture and war)  
Vienna, Austria

#### Peter Knoll

Department of Nuclear Medicine  
Wilhelminenspital  
Vienna, Austria

#### References

1. Kezwer G. World's "last trial" involving Nazi doctor ends in Austria after suspect declared demented. *CMAJ* 2000;162(11):1599.
2. Amnesty International. El Salvador: further reports of violations of medical and health care rights. London: Amnesty International; 1981. Report no.: AMR 29/19/81.
3. Amnesty International. Medical staff victims of death squads in Guatemala. London: Amnesty