has to work hard to remain valuable to the employer.

I do not mean to suggest that physicians respond only to these incentives, but it should be recognized that incentives exist and that they modify behaviour.

The success or failure of a particular system in a particular environment needs to be examined in the light of the physicians' belief concerning whether there are too many or too few physicians and their sense of security within the system. It also means that it is probably impossible to design a single system that will work optimally in both a rural and a metropolitan environment, let alone one that will work equitably across Canada.

Ben R. Wilkinson, MB, MBA
Nanaimo, BC

Hep to hepatitis C

On behalf of the Hepatitis C Society of Canada, I would like to express our appreciation for the excellent articles "Hepatitis C" (*Can Med Assoc J* 1997;156:1427-8), "Viral hepatitis: know your D, E, F and Gs" (*Can Med Assoc J* 1997;156:1735-6) and "The Krever inquiry: time to drop the appeals" (*Can Med Assoc J* 1997;156:1401-2), by Dr. John Hoey.

We echo resoundingly your call for the Krever inquiry to continue unfettered by legal challenges from the Red Cross and its coappellants and for the Krever inquiry report to be released as soon as possible. We anxiously await the report's release and its recommendations to improve Canada's blood supply system. Justice Horace Krever alone knows what has to be done.

We would like to add some new information. As early as 1981 the Ontario Ministry of Health knew of the contamination of the nation's blood supply by hepatitis C virus and warned the Red Cross that it would publicize this information.

Furthermore, a historically and epidemiologically interesting argument can be made that the contamination of the nation's blood supply was largely preventable from 1973 onward, if surrogate liver-function tests on donor blood and imported blood products had been performed by the Red Cross. This appalling failure led to hepatitis C "spilling over" into the population at large through other forms of blood-to-blood contact.

Thank you for your encouraging realization of the significance of hepatitis C as a current and future health crisis facing all Canadians and all public health systems.

Alan T.R. Powell, PhD
Founding President
Board of Directors
Hepatitis C Society of Canada
Toronto, Ont.

A look at 350 years of physicians' fees in Quebec

The earliest available records reveal that Estienne Bouchard, a master surgeon, came to Montreal (then Ville Marie) in 1653. He was to serve as physician to a military company for 5 years for 146 livres a year. In addition, he contracted with 42 families to provide treatment for an annual sum of 5 livres each. (Treatment of plague, smallpox, leprosy and epilepsy was not covered, nor was the provision of lithotomy.) He could take on 1 apprentice at a time for 150 livres per year. At the time, the annual salary of a young unskilled worker was 30 to 40 livres. Assuming that Bouchard had a trainee and earned an extra 120 livres a year from treating other individual patients, his annual income of around 500 livres would have been about 17 times that of the lowest salary of a young unskilled labourer.

About 70 years later, Michel Sarrazin of Quebec City, the first actual physician in New France, was earning 2000 livres per year. He also received an annuity of 400 livres that allowed his son to study medicine. At the time, the starting salary of unskilled labourers was 40 livres for local men and 50 livres for those engaged from France. Thus, his income of 2400 livres was 60 times that of a starting unskilled labourer.

In the 19th century many medical societies established recommended fee schedules to prevent physicians from undercutting each others' fees. In 1872 the one proposed by the Quebec College of Physicians and Surgeons listed $2 as the fee for a home visit within half a mile, with an additional 50 cents per mile. The fee was the same for an office visit, but rose to $4 between 9 pm and 8 am for home visits, and to $3 for office visits. Vaccinations, venesections, hypodermic injections and tooth extractions cost $1, and a first catheterization was $3. Health certificates were $5, routine deliveries $15. Fractures, dislocations and surgical procedures were relatively expensive; closed reduction of a thigh fracture cost $25 and of a dislocation $50, and a mastectomy was $50. At the time, a starting male labourer was lucky to make $5 a week. Thus, a visit from a physician would cost such a worker almost 2 days' wages. Counting only office or home visits, 10 visits a day during a 6-day week gave physicians an annual income 24 times that of a starting labourer.

Finally, consider the fees now paid to Quebec physicians, which are among the lowest in Canada. In my specialty (plastic and reconstructive surgery), consultations in the office earn $35, in the hospital $28. I receive $15 for routine office visits, $13.50 for hospital visits and $12 for hospital clinic visits. Principal examinations, allowed once a year, earn $30 in the office and $28 in the hospital.

In 1995 Quebec's minimum wage was $6.85 per hour. A routine office visit is reimbursed the equivalent of less than 2.5 hours' wages, compared with almost 2 days' wages in the 1870s. The income ceiling for almost all physicians in Quebec is $300 000. Someone working a 40-hour week at minimum wage would earn $14 250 a year. Thus, physicians reaching the ceiling earn about 21 times as much as someone earning minimum wage.

It is difficult to compare the incomes of physicians and nonphysicians over the last 350 years, but it is interesting to note that Sarrazin earned 60 times the wage of the lowest-paid labourers, whereas his present-day counterparts earn a maximum that is only about 21 times that of someone employed at minimum wage. It is also worth remembering that, until early this century, there was no income tax.

Jack Cohen, MD
Montreal, Que.

The population explosion revisited

Dr. Klaus D. Teichmann deserves credit for reminding us of "the population bomb" in his letter "Immunization and global ecology" (*Can Med Assoc J* 1997;156:1698). Most of the world's ecologic problems are caused by increasing numbers of humans seeking an affluent lifestyle. Teichmann concludes by proposing that physicians consider themselves responsible for the consequences of the human population explosion in the same manner that scientists who researched the nuclear bomb should be considered responsible for the consequences of its use. He should reconsider.

The population has increased because of a relatively recent paucity of devastating wars and civil disorder, and because of better agriculture, transportation to move food to areas of need, water and sewage treatment, housing and medical intervention. The population explosion was well under way decades or centuries before the introduction of effective vaccines in the 1950s. Currently, some areas that have very high vaccination coverage (for example, Germany, Denmark and Quebec) have a fertility rate much below the replacement level. The reverse situation is also true in areas like sub-Saharan Africa. Overall, the outlook for restraining human population growth has brightened in the last 30 years, mostly because of countries that decided to provide birth control and education to women.

The responsibility to limit human fertility to replacement levels rests with politicians, not physicians. Individually and through our organizations we should encourage politicians to provide all women the means to limit their fertility and the motivation to do so — equal access to education and jobs.

Robert Shepherd, MD, CM
Gatineau, Que.

Remembering Jimmy Quayle

Your brief death notice for BC plastic surgeon Jimmy Quayle (*Can Med Assoc J* 1997;157:115) gave short shrift to a fine physician.

While at McGill University during World War II, he and 2 classmates were commissioned into the Royal Canadian Regiment (RCR). In December 1943 the regiment had 3 weeks of vicious fighting defending the Allied approach to Ortona, Italy, which later became known as Royal Canadian Avenue. It was here that Captain Mitch Sterlin and Lieutenant Jimmy Quayle wrote themselves into the regimental annals because of their defence of "Sterlin Castle," a farmhouse of strategic importance. Their platoon, reduced to 6 men, battled all day to hold it before being forced to pull back.

Quayle's 2 classmates, Sterlin and Ian Wilson, were to die within months of one another. "I was destined to carry on," Quayle recalled, "but things were never the same after their deaths. A part of my youth vanished in wartime Italy."

By the time the war ended, Jimmy Quayle had been wounded 4 times — a regimental record — and was still only 21. He graduated from McGill in 1950 and may have decided to specialize in plastic surgery because of his war service. In 1957 he settled in New Westminster, becoming the first plastic surgeon in BC to practise outside Vancouver.

In 1995, when the Dutch marked the 50th anniversary of their liberation, Quayle returned to Holland, where the town of Apeldoorn still remembers the RCR. In 1945 a German V-1 rocket had been flying over the city as Quayle, by then a captain, was marching his company into town. It suddenly dove to earth a few hundred yards away. With the company sergeant major marching backward to keep a stern eye on the men, Jimmy Quayle led his troops through the smoke and dust of the explosion without breaking step. The incident, suitably embellished, soon entered regimental lore.

Today's physicians would do well to remember doctors like Jimmy Quayle with admiration and pride.

John O'Brien-Bell, MB, BS
Chief of Staff
Surrey Memorial Hospital
Surrey, BC