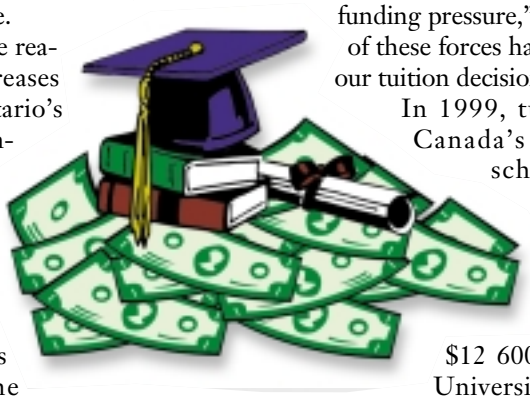
Tuition fees up 27% at U of T

The bad news for students entering medical school at the University of Toronto this year is that their tuition fees are rising by 27%. The good news, says Dean David Naylor, is that further large increases are "extremely unlikely." The U of T now has the highest fees in Canada, although this may change as other schools announce increases this summer.

New medical students at the U of T will pay $14 000 in tuition fees this year, up from $11 000 in 1999; students already registered in the program will face a 5% increase.



Naylor says the reasons for the increases are simple. "Ontario's provincial government has been balancing its budget, and it has taken a very tough line on university funding. This means that more of the costs of professional programs must be borne by students. As well, the block-funding formula for universities includes only partial allowances for differences in program costs. This means that, compared with a large lecture-based course in the humanities or social sciences, small professional programs have high per-student costs."

Naylor added that, paradoxically, universities that are successful in winning research awards — as the U of T is — face a further funding squeeze because overhead costs are not included in the awards. "This is a further indirect funding pressure," he added. "All of these forces had an impact on our tuition decision."

In 1999, tuition fees at Canada's 16 medical schools ranged from a low of $2452 at the University of Montreal to a high of $12 600 at McMaster University. Tara Mastracci, president of the Canadian Federation of Medical Students, says medical students are "gravely concerned" about tuition fee trends. "Although the University of Toronto is the most recent increase, similar decisions are being made from Dalhousie to UBC," she said. "The most recent increase in Toronto has come in complete ignorance of an outcry for a need to evaluate the effect that rising tuition has on the demographics of the physician population. For many young Canadians, it is impossible to even contemplate an education that would incur such high debts, and as a result the pool of talented students who would be physicians is getting shallower."

Naylor acknowledges that the U of T is concerned about rising fees, but says data about their impact are conflicting and inclusive. "On the preventive front, we are continuing to increase the number and level of our bursaries and interest-free loans. Our faculty's commitment is simple: once accepted, no students should ever have to leave any of our programs as a result of personal financial problems." — *Patrick Sullivan*, CMAJ

Physicians must close the gap in asthma care

More than 1 million Canadians with asthma required urgent medical care last year, according to a recent national survey. Not surprisingly, the Asthma in Canada survey report also revealed that 57% of Canadians with asthma do not have the disease under adequate control.

The survey of 1001 adults with asthma or parents of children with asthma and 266 physicians was conducted by the Angus Reid Group and endorsed by the Asthma Society of Canada (ASC), the Lung Association and the Canadian Thoracic Society. Asthma affects 2 million Canadians, including 10% to 15% of children, and claims the lives of 10 Canadians a week.

In a related survey, the ASC found that asthma care is falling far short of the national standards set in the 1999 Canadian Asthma Consensus Guidelines (*CMAJ* 1999;161[11 Suppl]).

Those guidelines state there should be minimal need for urgent medical care, yet 51% of respondents required it at some time. The guidelines also say there should be no sleep disruption, but 35% of respondents said they awaken with breathing problems at least once a week. Finally, 37% of respondents exceed the recommended weekly use (maximum 3 doses) of "rescue" drugs.

"There is a gap in care," explains Dr. Mark Greenwald, a Toronto asthma specialist and vice-president of the ASC. "To patients, 'control' means that they are out of the acute state. Now we've raised the bar. People with asthma need routine chronic care follow-up."

Follow-up includes asking how often patients use their short-acting bronchodilators, watching them take their medications, asking about peak flows and following up with environmental-control measures, such as dust-proof bedding. "GPs, who treat most asthma sufferers, need a mindset shift from acute to chronic disease," says Greenwald.

The ASC has created a Web site with educational information, the guidelines, pamphlets and the opportunity to "talk" to a certified specialist in asthma education (**www.asthma.ca**). — *Barbara Sibbald*, CMAJ

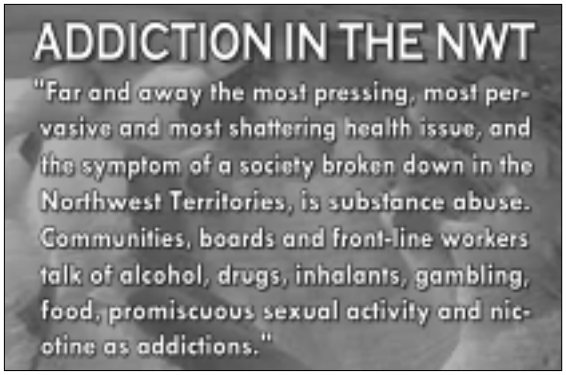
NWT report urges recognition for aboriginal healers

Recognition for traditional aboriginal healers and increased involvement of nongovernmental organizations are among the recommendations from a government-appointed committee that investigated health care issues across the Northwest Territories.

Our Communities, Our Decisions: Let's Get On With It!, the final report of the Minister's Forum on Health and Social Services, also calls on the territorial government to remove itself from delivery of health services unless specifically asked for help by health boards.

The suggested changes constitute a complete restructuring of a system that, in just 10 years, has been transferred from the federal government to the territorial government and then to 9 health and social services boards.

The report points out that the territorial government has produced 4 major reviews of its health care system during the past 5 years, resulting in about 200 recommendations, many of which have yet to be acted upon. "No more reviews, studies or reports are needed," the authors stated. "Action is wanted today." The report says that the territorial government should retain responsibility for legislation, standards and enforcement, but responsibility for program delivery should be transferred from regional boards to local communities over the next 5 years. Territorial funding should not be program specific, and boards should be free to negotiate among themselves for shared services. The forum visited 12 communities across the NWT and received input from more than 800 individuals and organizations.



Repeating a recommendation from a 1998 consultant's report commissioned by the territorial government, the new report suggests that health boards "be encouraged to hire competent traditional healers in situations where their expertise and knowledge may be beneficial in treating a patient."

According to the report, nongovernmental organizations and other agencies are now prevented from working harmoniously with health care providers by "obsolete territorial and federal funding arrangements and inappropriate lines of authority." These include groups devoted to mental health, the aged, disabled, and a wide range of conditions and disabilities, which should be supported by multiyear funding through regional boards.

Substance abuse remains the NWT's most serious health concern, the authors said. "Communities, boards and front-line workers talk of alcohol, drugs, inhalants, gambling, food, promiscuous sexual activity and nicotine as addictions. Substance-abuse problems in our communities are deeply rooted and of long standing. People are beset with feelings of hopelessness, despair and impotent rage. From this comes violence, suicide and sexual abuse." — *David Helwig*, London, Ont.

Beware of all types of bat exposure, BC MDs warned

British Columbia has joined some other provinces in recommending rabies postexposure prophylaxis (RPEP) when direct patient contact with a bat cannot be ruled out. The US Centers for Disease Control and Prevention (CDC) recommends the same action.

Dr. Danuta Skowronski, physician epidemiologist at the BC Centre for Disease Control, says that such action should be taken when people awaken to find a bat in the room, or when unattended children and mentally handicapped or impaired persons are found in the presence of a bat (see *CMAJ* 1997;157[1]:55). In such cases, she says, RPEP should be offered even if a bite or scratch is not obvious. "All bat contact should be assessed very cautiously," says Skowronski says. "We're beginning to recognize that cases we couldn't specify previously were actually bat rabies."

A check with some other provinces showed that CDC guidelines are also being followed in Alberta and Ontario, but not in New Brunswick.

Although the last rabies death in Canada occurred in 1985, there have been 36 such deaths in the US since 1980, and 21 were due to bat-variant rabies. More troubling is that "a bite was identified in only 1 or 2 of them."

Experts aren't certain why the contact has been so hard to pin down, but there are several possibilities. Bat teeth are thin and needle-like and it's possible individuals are bitten without realizing it. Bats are also inclined to lick their claws and wings, and may deposit infected saliva there that can be transferred through a scratch or by touching an existing wound rather than by biting. (Aerosol transmission is not a con-

Fourth-year medical student takes Donner Prize

When the winner of the Donner Prize for the best book on public policy was announced prematurely last month, many people couldn't believe who had won — including the author himself. It took a call from a Toronto reporter to convince 25-year-old David Gratzer, who graduated from the University of Manitoba's medical school this spring, that he had won the $25 000 first prize. His competition included 6 professors, 1 of them a federal cabinet minister.

Gratzer's book, *Code Blue: Reviving Canada's Health Care System*, takes an insider's look at problems besetting that system: hallway medicine, long waiting lists for cancer treatment, a shortage of high-tech equipment, the movement of Canadian doctors to the US. Gratzer's brother, a psychiatrist, has already relocated to the US.

Gratzer said family discussions about the poor state of medicine in Canada and his own rotations in medical departments prompted him to write the book. His articles on health care in Canada have already appeared in several newspapers.

A major theme in his book is the need to improve health care in Canada by improving the doctor–patient relationship. "The way we've structured medicare has corrupted this relationship by allowing patients to overconsume health services, doctors to overprovide services and health administrators to be accountable to no one," Gratzer says.

David Square

Dr. David Gratzer: patients overconsume, doctors overprovide

To resuscitate this "very bureaucratic, very expensive system," he suggests a system of individual medical savings accounts that is already in use in parts of China, Singapore, parts of the US, and South Africa. "In Canada, instead of spending $700 per year on health services for a young, healthy male, the Canadian government would give me that money to put into a savings account. Out of this account I would pay for minor day-to-day expenses such as seeing my family doctor or getting an x-ray."

Gratzer said there would then be incentive to spend the money wisely: at the end of the year, money left in the account might be rolled over into a retirement savings plan that would continue to grow. People would also be required to purchase catastrophic health insurance to cover extraordinary medical expenses.

Gratzer plans to spend part of his $25 000 prize on gifts and birthday parties for his niece and nephew; the rest will go toward covering costs during his psychiatry residency at Mount Sinai Hospital in Toronto. — *David Square*, Winnipeg

cern, except for individuals who receive extended or severe exposure, perhaps by spending time in a cave filled with bats.)

But while the method of transmission may be up for debate, the response is clear. Once exposure has been verified, patients should be offered the standard prophylaxis even if it is many days after the exposure, because the incubation period for rabies varies.

Although bats are not the only carriers of rabies in Canada — skunks, foxes and, more recently, raccoons in Ontario are all vectors for the disease — their ability to get into homes and cottages makes them a special concern. Although the prevalence of rabies in bats is less than 1% in random surveys, it is somewhere between 5% and 10% in bats submitted for testing, probably because sick bats are more likely to come into human contact.

Still, the message is not always getting through to physicians. Last year, an 11-year-old BC girl was bitten on the lip by a bat when it flew in her bedroom via an open skylight. Two hospitals failed to advise the girl's parents that she should receive immediate RPEP. Fortunately, the parents contacted their local health unit and the girl received prophylaxis. The bat tested positive for rabies.

"We clearly need to get the information out to more health care workers," Skowronski says of the case. "Rabies is not a disease you take chances with." — *Daphne Gray-Grant*, Vancouver

On the Net

Raving on the Internet

Few groups are as aware of the potential of the World Wide Web as Canada's computer-literate rave community (see pages 1843-8). The Internet's most predominant rave sites have grown out of the tight-knit communities within cities possessing a large rave subculture. These sites, which provide an important voice for individual ravers, often include discussion groups, party reviews that allow members to decide which rave promoters to avoid, and a strong sense of community. In Ottawa, Techno XVI (**www.techno.xvi.com**) is the dominant site, with more than 4000 members from across North America. In Toronto, Purerave (**www.purerave.com**) provides an immense contact list of ravers to supplement its discussion groups.

The online rave community is well aware of the drug use that exists at raves, as evidenced by harm-reduction groups based across the country. From Alberta's Ravesafe group (**www.freezingman.com/ravesafe/**) to the Ottawa Association for Teaching Safety (**www.oats.xvi.com**), there are sites providing contacts for those wishing to help ensure the safety of ravers.

There are also several international harm-reduction sites, the most vocal of which are DanceSafe (**www.dancesafe.org**), an international site, and RaveSafe (**www.ravesafe.org/home.htm**), by a harm-reduction group in South Africa.

DanceSafe's site reflects its mission of educating ravers to the dangers of drug use. It provides information on specific drugs, their ingredients, their effects and the potential dangers they pose, including contraindications and precautions to take before choosing to drive home. DanceSafe maintains an open mind and tries to make the act of attending a rave as safe as possible.

RaveSafe's site is less thorough than DanceSafe's in providing information about ecstasy and other drugs, but it does have extensive testimonials from drug users that provide a revealing look at why people use (and continue to use) ecstasy. RaveSafe also provides an extensive and useful list of harm-reduction links (**www.ravesafe.org/linx-harmreduction.htm**), mainly articles in medical journals and documents provided by groups and associations with an interest in harm reduction. — *Greg Sullivan*, Ottawa

Raves worry Edmonton MDs, police

Like other Canadian cities, Edmonton is trying to deal with the fallout from the increasingly popular all-night parties known as raves. The city has 4 rave clubs and the events attract thousands of people every month. Nine people were taken to a hospital emergency room during the city's last big rave, and Constable Rick Abbott of the Edmonton police predicts that the city's first rave-related death may occur this year.

Dr. Gregg Scheirer, an emergency physician at the Royal Alexandra Hospital in downtown Edmonton, agrees. Scheirer saw his first rave patients this January, when 4 young people arrived in his ER within 3 hours. One person who had taken the drug ecstasy ended up in the intensive care unit with cerebral edema. Following a rave in March, several people had seizures and one became hyperthermic and developed rhabdomyolysis. The main challenge, he says, is that the drugs produce different symptoms in different people. He is trying to educate other emergency physicians through rounds at the hospital.

The rave ideal is PLUR — peace, love, unity and respect — and ravers are quick to point to the lack of alcohol and violence at most events. However, ravers frequently use drugs such as ecstasy to achieve the heightened sensitivity needed to "see the music and hear the light."

"Without ecstasy," says Abbott, "there is no rave."

The drug problem is compounded because of an upper middle class demographic, aged 13 and up, "that normally, probably wouldn't be found using hard drugs."

He says idealistic ravers don't understand the increasing presence of drug dealers jockeying to control the flow of drugs at raves, and the growing potential for gang violence. "It's expensive to be a raver," says Abbott, with one tablet of ecstasy costing about $25. Abbott estimates that at least 50% of people attending raves take drugs; many smoke marijuana and do not take ecstasy.

The rave clubs are presenting police

Pulse

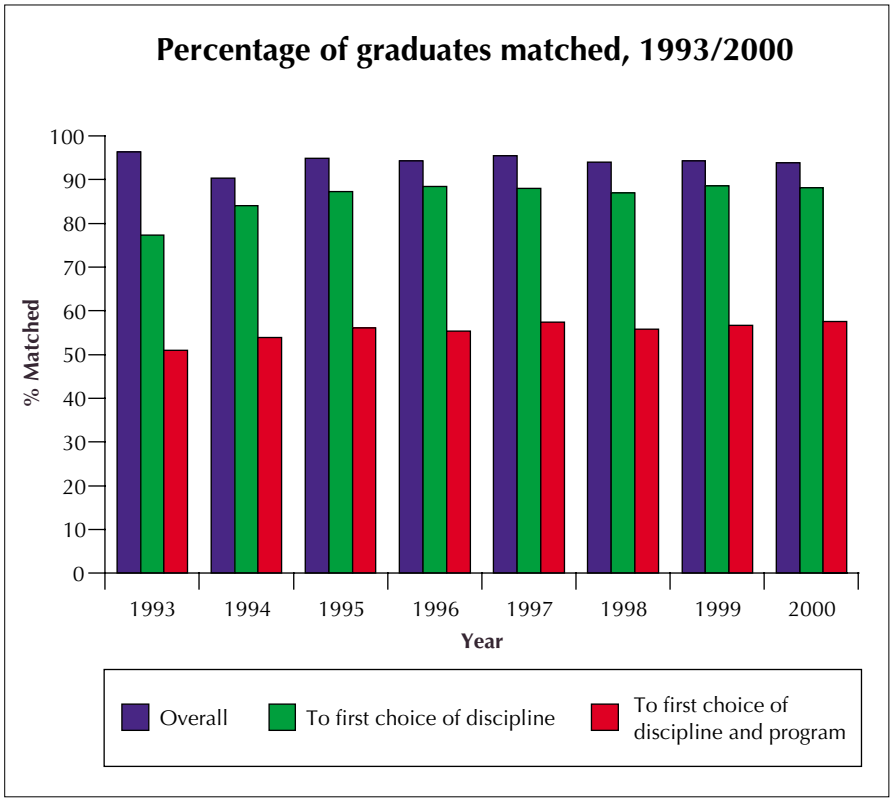
Where do medicine's job opportunities lie?

More than 80% of graduating medical students matched to a program within their top 3 choices in this year's Canadian Resident Matching Service (CaRMS) match. The overall success rate of the service (94%) has remained relatively stable in recent years.

Excluding applicants whose schools do not participate in the match (Laval, Sherbrooke, Montreal), 58% of graduates matched to a postgraduate training program at a faculty that wasn't the same as the one they graduated from. There was a significant increase in the number of couples (35) that entered the match, up 40% from last year. By contrast, the number of applicants sponsored by National Defence fell from 25 to 30 graduates in the early 1990s to 6 this year, a reflection on the military's recruiting woes.

Of those who matched this year, 88% received their first-choice discipline, although perhaps not in the location they wanted. The percentage of graduates choosing family medicine is down from 35% of the total in 1997 to 29% in 2000, even though the percentage of positions available for family medicine has remained relatively constant at around 38% of the total.

All program directors surveyed by CaRMS said that job opportunities in radiology, medical genetics, general surgery and thoracic surgery will improve in the next 5 years. Specialties in which the majority of program directors thought that opportunities would either remain constant or deteriorate were occupational medicine (100%), neurosurgery (77%), pediatrics (54%) and community medicine (50%).



In selecting students for their programs, a student's grades in electives in the program director's specialty rated as the most important academic achievement, followed by grades in mandatory clerkship rotations.

When asked to select the most important qualities of the ideal candidate, the qualities mentioned most often by program directors were a sense of responsibility (70%), integrity (54%) and communication skills (50%). — *Lynda Buske*, buskel@cma.ca

with the major challenges, because they require only a business licence to operate. Since they are not licensed to serve alcohol, they are exempt from gaming and liquor act bylaws. However, Abbott says that because the clubs often open after licensed premises have closed, many patrons arrive inebriated. Police would like the clubs to be regulated by bylaws, such as those that set age limits and legislate hours of operation. The police recently met with city officials, who are looking at creating such bylaws. Mayor Bill Smith has been "overwhelmingly supportive" and has visited raves to see the problems first-hand, says Abbott.

Meanwhile, without bylaws to enforce, the police are limited to parking a mobile command unit near the rave clubs and talking to teenagers about the differences between hard and soft drugs. Abbott is frustrated with harm reduction groups such as RaveSafe, which simply hand out literature about rave drugs. "Kids don't understand how dangerous [the drugs] are. They just see a cute little pill that you can swallow and you're high." — *Heather Kent*, Vancouver

Research Update

Is cloning the fountain of youth?

Scientists from the British Columbia Cancer Agency have discovered that cloned calves are younger, on the cellular level, than normal calves the same age (*Science* 2000;288:665-9). The finding contradicts a previous discovery that Dolly, the sheep cloned in Scotland 3 years ago, was biologically older than a normal lamb.

The startling discovery centres around telomeres, DNA threads that "tie up" the ends of chromosomes to protect the genetic coding information of the DNA. Telomeres generally become shorter with each cell division: the older the cell, the shorter the telomeres. When scientists examined the telomeres of Dolly, they discovered that the clone's cells were the same age as those of the 6-year-old sheep from which Dolly was cloned, meaning that Dolly was prematurely "old" and would probably not enjoy a normal lifespan.

However, the BC researchers have found that the telomeres in cloned cows are elongated compared with newborn and age-matched normal animals, meaning that the clones are more youthful than their normal counterparts. "Previously, it was thought that only the cells that produce sperm and eggs, as well as cancer cells, could elongate or maintain telomeres. But our findings clearly show that telomeres can be elongated by cloning as well," says Dr. Peter Lansdorp, senior scientist at the Terry Fox Laboratory.

Lansdorp proposes 2 possible explanations for the longer telomere length in the cows. "It may be that our notions about telomere maintenance in normal biology were wrong. We have evidence that telomeres are maintained in the male germ line, but in the female germ line, we actually never looked. It's possible that there is a need to restore telomere length because the female chromosomes have short telomeres. . . . Alternatively, there may be a safety mechanism, if the telomeres are too short in the fertilized egg."

Lansdorp noted that "the increase in telomere length in the cloned cells from cattle corresponds precisely to an increased ability of the cells to divide in Petri dishes. This research suggests that cloned cows might actually live longer than cows conceived naturally."

There is growing medical research on telomeres, because telomeres do not shorten in cancer cells, making them immortal. A promising approach to eventual cancer treatment in humans may be to inhibit telomerase, which appears to maintain telomeres, in order to reverse the immortality of tumour cells.

Meanwhile, in the burgeoning field of therapeutic cloning, scientists are trying to create embryonic stem cells that can be differentiated to grow replacement tissues or organs in the laboratory. Such differentiated cells already exist in laboratory mice, says Lansdorp. — *Heather Kent*, Vancouver

Death and tax brackets: link between income inequality and mortality holds true in US, but not in Canada

The income gap between the haves and have-nots is not strongly linked to death rates in Canada, unlike in the US, according to recently published international research (*BMJ* 2000;320: 898-902).

When Michael Wolfson and colleagues compared income inequality and all-cause mortality at the state or provincial and at the metropolitan level, they found no association in Canada. There was a strong relation, on the other hand, in the US data — confirming results from previous studies.

The research team defined income inequality as the proportion of total family income received by the less well-off 50% of households. Mortality data were grouped and adjusted by age. Wolfson's study compared 50 US states and 10 provinces, as well as 282 US and 53 Canadian metropolitan areas.

"We were quite surprised by the findings," said Michael Wolfson, director general of the analysis and development branch at Statistics Canada. "We had hypothesized that we would find the same association here as in the United States, just not as steep a slope."

Although the team's findings show that the strong association between income inequality and mortality in the US is absent here, Wolfson is quick to point out that the research provides no evidence why this is so. Possible explanations include the more equitable distribution of wealth and the greater heterogeneity of communities in Canada, says Wolfson. "There appears to be something going on in Canada that has allowed us to grow more 'sharing' cities, which seem to have quite positive health effects." While Canada's health care system likely plays a significant role in dampening the effects of income disparity, Wolfson believes it is not the sole reason for the marked difference between the 2 countries.

In looking at the combined figures for North America, the researchers estimate that if the relationship between income disparity and mortality were causal, a 1% increase in the share of total income for the bottom half of households would prevent 21 deaths per 100 000 population. — *Greg Basky*, Saskatoon

Public Health

Drowning in Canada

Epidemiology

There were 566 deaths from drowning in Canada in 1997. Most of these were related to boating activities (176, 40%), swimming (103, 23%) and unintended falls into water (104, 23%). Populations that appear to be at particularly high risk of drowning include toddlers aged 1–4 years (1.85 drownings/100 000), youth aged 15–19 years (1.28/100 000), people with seizure disorders (8–20/100 000), recreational fishermen aged 65–74 (0.72/100 000) and aboriginal men aged 25–34 (25.6/100 000).[1]

"Drowning" is death by suffocation after submersion in a liquid medium. "Near drowning" occurs when a patient recovers, at least temporarily, from a drowning episode. Patients who initially recover but then die within 24 hours are classified as drowning victims.[2] "Secondary drowning" refers to death from complications of submersion at least 24 hours after the episode.[3] "Immersion injury" is a generic term that refers to all patients who have experienced submersion,[2] while "immersion syndrome" refers to sudden death after contact with cold water.[3] Immersion injuries have a high case-fatality rate.[4]

Clinical management

Cerebral hypoxia is the common final pathway in drowning victims. Whereas approximately 15% of victims have acute laryngospasm, resulting in "dry drowning" from profound obstructive asphyxia, most drowning victims aspirate.[2]

Aspiration of even small amounts of fluid (1–3 mL/kg body weight) can lead to severe abnormalities in gas exchange. In the 1970s it was believed that hypertonic sea water would draw plasma volume into the interstitial space while fresh water would have the opposite effect, leading to hypervolemia and dilutional hyponatremia. It later became clear that volumes far greater than what is normally aspirated in drowning are required to create these proposed blood volume changes.

Both fresh and sea water wash out surfactant and create the potential for noncardiogenic pulmonary edema.[2] Near drowning in icy water results in a higher chance of survival, perhaps because of the diving reflex that preferentially shunts blood to the brain.[3] Contaminants in the water, such as chlorine and bacteria, contribute to the common complications of acute respiratory distress syndrome and pneumonia.[2]

Cardiopulmonary resuscitation (CPR) should be instituted as soon as possible. In the hypothermic patient, sinus bradycardia or atrial fibrillation may be present, making the pulse difficult to palpate, so rescuers should take a full minute to assess vital signs. The patient should be extricated rapidly from the water, with spinal cord precautions being observed. The Heimlich manoeuvre is of unproven benefit.[2]

As soon as possible, supplemental oxygen and bag and mask ventilation with proper positioning of the jaw and tongue should be administered; prehospital tracheal intubation and the administration of drugs (i.e., epinephrine) should be carried out when indicated.

Resuscitative efforts in the emergency department may involve the application of positive end expiratory pressure and the correction of acidosis, hypovolemia and hypothermia.[3] Since drowning victims often experience multiple organ failure, admission to the intensive care unit is usually indicated.

Patients who are conscious on arrival at the hospital after successful resuscitation have an excellent chance of recovery, but a child who requires CPR in the emergency department will almost certainly die or experience significant neurologic sequelae.[4] Children who present to the emergency department with a Glasgow coma scale ≥13, undergo a normal physical exam and have normal respiratory effort and an oxygen saturation of at least 95% on room air 4–6 hours after arrival in the emergency department can be safely discharged home.[5]

Prevention

Generally, children are not developmentally ready for swimming lessons until after their fourth birthday.[6] Aquatic programs for infants and toddlers have not been shown to decrease the risk of drowning, and parents should not feel that their child is safe after participating in such programs.[6] Parental supervision and appropriate application of barriers around pools, including four-sided fencing with self-closing and self-latching gates and doors, and pool safety covers, may prevent some accidents involving toddlers.[2]

In 71% of boating fatalities, the victim was not properly wearing a flotation device; in 46% of these fatalities, alcohol was known to be involved.[1] The alarmingly high rate of drowning among aboriginal groups signals the need for culturally appropriate and community-endorsed interventions to reduce harm. — *Erica Weir*, CMAJ

References

1. *Canadian Red Cross Drowning Report 2000*. Available www.redcross.ca/english/watersafety/watersafety.html (accessed 2000 May 30).
2. DeNicola L, Falk J, Swanson M, Kissoon N. Submersion injuries in children and adults. *Crit Care Clin* 1997;13:477-502.
3. Sachdeva R. Near drowning. *Crit Care Clin* 1999;15:281-96.
4. Rivara F. Pediatric injury control in 1999: Where do we go from here? *Pediatrics* 1999; 103:883-8.
5. Causey A, Tilelli J, Swanson M. Predicting discharge in uncomplicated near-drowning. *Am J Emerg Med* 2000;18:9-11.
6. Committee on Sports Medicine and Fitness and Committee on Injury and Poison Prevention, American Academy of Pediatrics. Swimming programs for infants and toddlers. *Pediatrics* 2000;105(4pt1):868-70.

Alberta launches country's first peer-support network for MDs in legal trouble

Barbara Sibbald

In the face of a civil suit or a college disciplinary hearing, many physicians simply don't know what to do. "Some become devastated," says Dr. Stanley Kolber.

He ought to know. Not only is Kolber a lawyer and a physician, he's also in charge of Alberta's new Medical-Legal Peer Support Network, the first of its type in Canada. And he's seen it all.

"Those who don't know what to do — their practices fall apart, their families fall apart, their lives fall apart," says Kolber. "This [support network] allows them to put it back together." It also helps those who are merely overwhelmed by the stress created by the legal process.

The network, a new effort by the Alberta Medical Association's Physicians' Assistance Committee, was launched Mar. 1 by 10 volunteers who have themselves been through legal or disciplinary proceedings. "They have a feel for what's involved, for why you need a support group," says Kolber, a family physician in Sherwood Park.

The network's one-on-one approach may be unique in North America. Some US states offer group sessions to provide support, but Kolber thought the individual approach would better suit Canadians. "They don't want others to know or they don't want to show their weakness," he says. "Nobody wants to admit [that he or she] allegedly made a mistake."

The Alberta peer-support volunteers pay house calls to provide an "arm around the shoulder" but they also help the physician answer a crucial question: Why me? Using the "culture-of-error concept," which is common in the aviation industry, the volunteers are trained to look at the total event and its possible causes.[1]

The culture-of-error concept focuses on what can be done to eliminate errors rather than focusing on individual physicians' problems. "The physician is just the end result of a whole mess of problems: education, budgetary constraints and the like," says Kolber.

At the end of the process, there will likely be evidence of turmoil in the system, evidence that "you can't practise without relief, without money, without staff." The volunteers "try to reassure, educate and put it all in perspective."

However, they do not go into the details of the case because a plaintiff's lawyer could then subpoena them to testify. Instead, they give examples of similar cases so that physicians have something to relate to their own case.

The Canadian Medical Protective Association says this type of service is needed. Dr. Indu Gambhir, assistant secretary-treasurer at the CMPA, says physicians need both legal help and personal support when facing a lawsuit or similar difficulties. "Physicians report that when they could speak to a trusted colleague or family member, it was helpful," she said.

The CMPA has documented the stressful effects of disciplinary actions and civil suits. A 1995/96 survey of 73 CMPA members looked at the effects of stress on doctors after a complaint was launched against them at a provincial college.[2] Pressure was most intense immediately following notification of the complaint, with 75% of respondents experiencing significant levels of stress. The intensity lessened as the physicians prepared to respond and awaited the college decision, but more than 40% of respondents still experienced significant stress throughout the entire process. After the complaint was resolved, only 25% of the respondents felt that their stress had been eliminated.

These physicians reported that reviewing records, talking to trusted colleagues and being reassured by peers helped them deal with the stress. The most helpful strategies were discussing the issues with their family, making contact with the CMPA and receiving CMPA assistance.

Dr. Arlene Rosenbloom, an Ottawa physician who, along with her practice partner, faced a wrongful-birth malpractice suit, says she would have welcomed a peer-support service.[3] "It would have been nice to have had some support." She says she would have liked some reassurance about procedures and likely outcomes. "The whole secrecy surrounding a lawsuit contributes to the anxiety you feel. It was a private trauma you carried."

Since her case ended in 1996, with a $3-million award for the family involved, Rosenbloom has helped 3 other physicians cope with civil suits. "There is a need for a formal network because of the increase in frequency and severity [of lawsuits]," she says. "Having a service in place helps and validates the problem. Doctors tend to suffer on their own. . . . It's a control issue. If you ask for help, it means you aren't coping well."

Kolber, who would welcome new volunteers or suggestions, can be reached by fax, 780 449-3110.

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References

1. Leval MR. Human factors and surgical outcomes: a Cartesian dream. *Lancet* 1997;349:723-5.
2. Gambhir IB. Stress and the college complaint. *CMPA Information Letter* 1999;June.
3. Cohen L. Code of silence hardest part of being sued, FPs say. *CMAJ* 1999;160(1):97-8

Cheap prescription drugs creating new brand of US tourist in Canada, Mexico

Milan Korcok

By the busload, thousands of American seniors are crossing over into Canada and Mexico to stock up on the one valuable commodity they can't seem to find at home — affordable prescription drugs.

Armed with sturdy American greenbacks and lured by price differentials that save some of them thousands of dollars a year, the list of treks being made by these day trippers is growing: from Maine to Quebec and New Brunswick, from the state of Washington to Calgary or Vancouver, from Arizona, Texas and California to Mexico.

According to US Senator Slade Gorton of Washington, the stomach acid medication omeprazole costs US$129 for a 30-pill order in his state, but only US$53 in Canada. The antihyperglycemic agent metformin costs $52 in the US, but only $12 in Canada, while conjugated estrogens cost $26 in Washington and $7 in Calgary. Overall, the survey found that for the 10 most commonly prescribed drugs, average prices were 64% lower in Canada than in Washington state. (All prices provided are in US dollars and are based on the lowest dosage available for each drug.) To American seniors, many of whom have health plans (including Medicare) that do not cover prescription drugs, these savings could make a huge difference.

The plight of these pharmaceutical nomads has clearly inflamed the passions of federal and state politicians during this election season, particularly because the issue of expanding prescription drug benefits to 38 million Medicare beneficiaries and 44 million uninsured Americans has zoomed to the top of the political agenda. Everybody, it seems, is looking for a solution to the high cost of prescription drugs. But forcing seniors to hop the border to Canada or Mexico to fill shopping bags with drugs, many of which were manufactured in the US, is not a politically appealing one.

Industry representatives generally attribute lower drug prices in foreign countries to consumer drug price controls, such as those provided by Canada's Patented Medicines Prices Review Board. Drug manufacturers and their US wholesalers have to sell at a great discount if they want to make their products available abroad. Even in the US, large bulk buyers of drugs like HMOs, insurance companies and the Veterans Administration get huge discounts for their volume purchases. However, the folks who buy retail are out of luck.

To level out this playing field, Gorton has introduced the Prescription Drug Fairness Act, which is designed to spread out the costs of research and development internationally. His bill would prohibit drug companies from selling any product in foreign countries at a lower price than in the US. Passage of the act would be bad news for Canadians, who will face higher prices, but Americans would enjoy lower prices. The Pharmaceutical Research and Manufacturers of America, a trade group representing the industry, doesn't buy his reasoning, but it also opposes the price controls that exist in Canada and many other countries on grounds that they dampen innovation, research and development.

Meredith Arp, an association spokesperson, told *CMAJ* that it takes 12 to 15 years for an experimental drug to go from lab to patient, at an average cost of US$500 million; only a small proportion of these drugs actually make it to market. "We do oppose the Gorton bill," she said. "It is draconian. It is a price-control bill, and all patients would suffer." She said the bill would place control of American drug pricing in the hands of foreign government bureaucrats and would set prices below those of foreign countries that ration health care and limit access to medicines.

"It is not my intent to harm the research going on in the US," says Gorton. "Drug companies should be able to recoup the research and development of both unsuccessful and successful new drugs. But my constituents in Washington and other Americans should not be forced to pay all of those costs for the rest of the world." Gorton's bill is scheduled for committee hearings during the summer.

But perhaps more significant than Gorton's initiative is the recent passage of the nation's first drug price control law in Maine. It is designed to bring drug prescription prices more in line with those being paid in Canada by thousands of Maine seniors, who regularly trek across the border to Quebec and New Brunswick to make their purchases. The sponsor of that measure, Maine's Senate Majority Leader Chellie Pingree, told *CMAJ* that drug manufacturers will have until 2003 to bring wholesale prices down to the levels they charge Canadian or European wholesalers, or other bulk buyers like HMOs and the US federal government. If they don't, state-mandated price controls will kick in. Initially, Mainers who lack prescription insurance coverage will be given a prescription card that will entitle them to 12% to 15% drug discounts. These will be increased annually until prices are roughly comparable with Canadian ones. "What we're saying to manufacturers is 'give us the same prices you give to all the others,' " she said. Pingree also noted that a similar legislative measure is being considered in Vermont, where 50% of the state's population is within a 90-minute drive of Quebec. Legislators from Pennsylvania and New York State are also

showing interest. Drug manufacturers have vowed to fight the new law in the courts.

Pingree said that Maine seniors' groups regularly organize drug-shopping bus trips to Quebec for their members. But should pharmacists here serve them?

Reneé Couturier, communications and issues manager for the Canadian Pharmacists Association, said that according to the association's standards and practices, pharmacists can only dispense a drug if they have a script written or cosigned by a doctor licensed to practise in Canada. But it's clear, she said, that "there probably are pharmacists who are choosing to avoid the law. We've even seen cases where pharmacists have openly admitted filling scripts [for Americans] during television interviews."

She said the association gets many calls from American seniors asking how they might buy drugs in Canada. They ask which pharmacies they can go to or which doctors might write prescriptions. "We tell them what the rules are and that they will have to do their own homework." But it's clear, she admitted, that they do their homework and they usually get what they want.

Ditto on America's southern border. The *Arizona Republic* notes that in the Mexican border town of Algodones, 28 *farmacias* are clustered in a 3-block area well known to thousands of Americans who venture in regularly for their medications. Many claim they save US$500 to $600 per trip. One bus company from the Lake Havasu City-Kingman area now takes up to 200 seniors weekly on the "Colorado river run." Other companies claim greater numbers. Near each *farmacia* there are doctors' offices where, for US$15 to $25, shoppers can get all the scripts they need. And quite often even that need is overlooked by a *farmacia* clerk who might charge an extra $20 to make an unscripted sale.

Where there's a will when it comes to buying cut-rate drugs, there seems to be a way.

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