

zation (WHO) reported as it marked the drug's anniversary in November. About 120 million people have diabetes today, but WHO predicts an aging world population, unhealthy diets, obesity and a sedentary lifestyle will drive the number of diabetic patients to 250 million by 2025.

WHO considers insulin an essential drug but says its cost varies widely. The lowest mean cost of a vial of insulin is in the Middle East (US\$2.70) and Southeast Asia (US\$2.80); South and Central America are in the middle range (\$12.20) and in some parts of Africa a single vial can cost \$22, the equivalent of a month's salary.

Physicians target media violence

Before graduating from high school, says the American Medical Association (AMA), the average American child will have witnessed 8000 murders and 200 000 acts of violence on television. Now the AMA wants physicians to make media violence a counselling topic with young people and their parents.

As part of a new antiviolence initiative, the AMA recently published a *Physician Guide to Media Violence*, a 21-page booklet offering suggestions for taking a patient's "media history" as well as tips on how to monitor media viewing. The AMA said physicians have a unique opportunity and obligation to educate parents because "people who are victims of violence would rather tell their physician than any other person." Last year the AMA issued a national violence "report card"; it gave the media a D+.

Medical curriculum will include addiction, abuse

Five Ontario medical schools are integrating substance-abuse issues into their undergraduate curricula. With the assistance of the Lawson Foundation, the Addiction Research Foundation and the Max Bell Foundation, McMaster and Queen's universities and the universities of Ottawa, Toronto and Western Ontario are establishing a 5-year, \$650 000 initiative called CREATE (Curriculum Renewal and Evaluation of Addiction Training and Education).

Medical schools have traditionally

taught little about addiction and substance abuse, even though they are among the leading problems facing today's doctors personally and professionally, said the University of Ottawa. Its undergraduate course on addiction will be complemented by a physician-in-training health program to help students cope with the stress of medical education.

Research Update • Mise à jour de la recherche

Banking on umbilical-cord blood

Canadian physicians now have a precious supply of stem cells to draw upon for treating cancer or working to solve genetic puzzles.

This fall, University of Alberta Hospitals and the Canadian Red Cross opened the country's first umbilical-cord blood (UCB) bank, where cells capable of kick-starting the blood and immune systems of patients who have received aggressive chemotherapy or radiation therapy are cryogenically stored. Dr. John Akabutu, a pediatric hematologist and oncologist, is overseeing the project. He says UCB contains stem cells and progenitor cells, which can help patients recover from the damage caused by potent anticancer treatments. He says UCB transplants may eventually replace bone-marrow transplants. The use of UCB is becoming more popular because it is easier to find a UCB match than a bone-marrow transplant match, and graft-versus-host disease is unlikely.

Other uses for UCB include genetic therapies in which stem cells are trained to fight off viral infections before being transplanted into a host. Akabutu says technology that makes the use of UCB possible also raises new ethical questions for physicians. No one knows what to do if screening tests involving UCB donations uncover a genetic condition, such as Huntington disease, in the donor. Should physicians tell the parents of the newborn whose blood was saved? Such questions may be difficult to answer. — *R. Cairney*

