Targeting MALE MACHISMO

by ELLEN ASHTON-HAISTE

Men need to be encouraged to be proactive about health

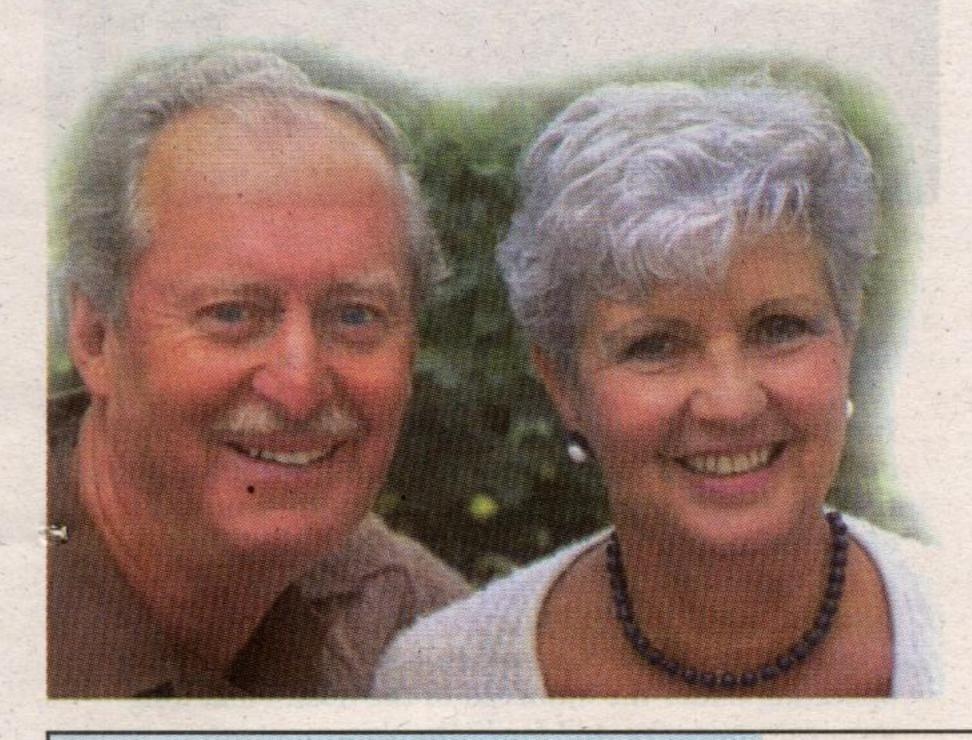
Men don't take very good care of themselves in the health arena. At least not compared to women.

That probably won't come as any surprise to wives and mothers. Nor was it a revelation to behavioural scientist Ross Gray who recently completed a research study, comparing health practices of Ontario men and women aged 40 to 60 years.

"What we found was partly what we expected based on (similar studies) in the U.S. and Europe, which is that men do more poorly than women on a variety of indicators of health behaviour, staying healthy and preventing problems," says Gray, who is co-director of the psychosocial and behavioural research unit at the Toronto-Sunnybrook Regional Cancer Centre.

The study, first of its kind in Canada and undertaken under the auspices of the Canadian Cancer Society, hoped to shed some light on why men are 26 per cent more likely than women to get cancer and, when they do get it, are 48 per cent more likely to die from it.

"No one really knows why, so we're suggesting it's likely linked to health behaviour on both counts," Gray says.



Certainly the study, which surveyed 300 men and 300 women, indicated men are less likely to limit fat intake, less likely to eat fruits and vegetables regularly, less likely to wear sunscreen and more likely than women to be overweight. "And when they are overweight, they're more likely to think that they're not," Gray adds.

Men are also less likely to have had a check-up from a doctor in the past year and less likely to check themselves for testicular cancer, compared with women self-examining for breast lumps.

"All those paint the picture that men aren't as proactive around their health as women are," Gray concludes.

The results also came as no real surprise to Cancer Society representatives.

"It's really more an affirmation of what (we) suspected," says Sylvia Leonard, director of cancer control for the society's Ontario branch. "But at least it gives us something more concrete to be able to deal with.

"It's clear that we need to take a look at how we develop our messages and materials (to determine) is there a better way to deliver that information to men so that it raises the profile for them."

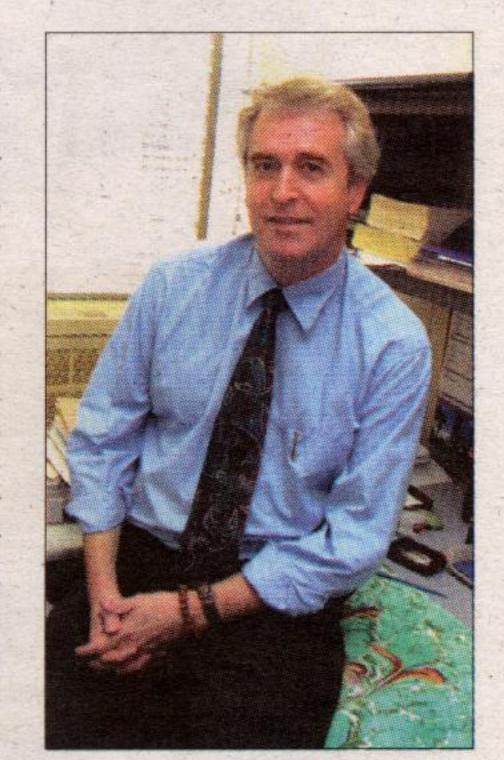
Gray says one surprising result revealed by the study was that at least three-quarters of the men were having discussions with their family physicians about prostate cancer screening, something that's not yet even recommended by major medical bodies.

The scientist surmises that this impetus is coming from the patient rather than the doctor. "We did a study a few years ago with family physicians across Canada and, at that time, very few were spontaneously raising (that issue) with their patients," he says. "I don't see that they would have changed that behaviour a lot, given that their major advisory bodies aren't suggesting they do it. It's most likely that men are being proactive about it."

Leonard says the cancer society is also determined to target family doctors with information and education campaigns. "We know the presence of a family doctor has a direct correlation to

an individual's involvement in health, so (we need to determine) how we can work more closely with doctors to deliver key messages to patients as well, so that they are engaged in the process."

One area where the information from the gender survey may have an impact on future planning is in the implementation of the society's recently released Cancer 2020 report, an action plan for cancer prevention strategies over the next 17 years. Armed with statistics like cancer is the Number One health issue in Ontario and new cases will increase by two-thirds by the year 2020, and that over half of those cases can be prevented yet less than one per cent of the province's cancer budget is spent on prevention, the report implementation board is set for an aggressive cam-



Toronto behavioural scientist Ross Gray
was not surprised that men fared poorly in
his study of how men and women deal
with their health issues.

paign. It will target tobacco use ("the evidence is pretty clear...it's one area where we know it's going to make a difference," says Leonard) and promote such good habits as more physical activity, responsible alcohol consumption and healthy diet and body weight.

While the board was set to meet for the first time in late October, Leonard stated her intention to bring the results to the gender study to the table. "I think it's something we should be looking at as we move forward with the action plan."

WHAT YOU NEED TO KNOW ABOUT SARS

A severe respiratory infection, known as SARS, took Canada and much of the rest of the world by surprise last winter and spring, resulting in a clamp-down in regulations governing hospital patients and visitors.

Though the infection has been contained and some hospital restrictions eased, many remain in place and medical experts are on the lookout for a re-occurrence of the disease as this winter's cold and flu season approaches.

Canadians should be on guard as well and aware of the symptoms so that if any occur, doctors can make a speedy diagnosis and move to contain the spread.

SARS SYMPTOMS:

- fever (usually higher than 38 C)
- respiratory symptoms, such as a cough, shortness of breath or difficulty breathing
- possibly muscle aches, headaches, and sore throat.

Because the symptoms closely mimic the flu Canadians are accustomed to dealing with, particularly in the winter, it's important to be checked by a doctor if the above combination occurs. Other precautions include frequent hand-washing with soap and warm water.

Health Canada keeps a surveillance watch on respiratory viruses year round and informs the public through its FluWatch reports, published weekly during the peak flu season (October-May). SARS information is updated in Health Canada's FluWatch report as developments occur. For the most recent information about SARS, influenza and other respiratory viruses, visit the Flu Watch website at hcsc.gc.ca/pphb-dgspsp/fluwatch/index.html.

Canada takes a lead in the SARS vaccine race

by ELLEN ASHTON-HAISTE

With the scourge of SARS still fresh in memory and scientists the world over scrambling to prepare for a possible re-occurrence, Canada is emerging as a front runner in the race for a vaccine.

PHOTO courtesy of Health Canada

The most recent breakthrough comes from Hamilton researchers at McMaster University, led by Jack Gauldie, director of the Centre for Gene Therapeutics. Using two cloned SARS genes, they have developed a two-pronged vaccine that is ready for animal testing.

"We believe we're probably the first to have this form of a vaccine, for these two genes, ready to go,"

Gauldie says. "We're really

But he credits the collaborative effort of labs across the country for Canada's speedy success in this area.

"This is really a true demonstration that you can, in Canada, collaborate. We can pick up the telephone and ask for a piece of information and get it provided. Three or four or five labs working together, we've been able to generate this material."

The success story began in British Columbia where scientists at the SARS Vaccine Initiative of the B.C. Centres for Disease Control initially sequenced the SARS DNA, giving researchers all the genetic information contained in the virus.

Then a Hamilton team, led by professor Jim Mahoney, cloned one of the SARS genes. Gauldie's team took that clone and inserted it into a common cold virus manipulated so that it cannot replicate causing illness.

This cold virus, called a vector, can carry the SARS genetic information into the body, which would use it to create a protein to stimulate an immune response.

And, the researchers haven't stopped with just one gene. A second gene, cloned by a Montreal group and provided to the McMaster researchers, has undergone the same process and is ready for separate testing. If both prove successful, the genes would eventually be combined in one vector to provide the vaccine.

The genes have very different functions and together it's hoped they would provide maximum protection, Gauldie explains. The Montreal gene sits on the outside of the virus so an antibody against it should block it from entering the cells. But viruses are particularly good at sneaking into cells and hiding there, he says, so the McMaster gene is a molecule that would be on an infected cell and therefore a target for the body's infection fighting white blood cells.

"If we combine those two, we should have targets that would elicit a response that might block the uptake and a second one that would give protection even if we did get uptake and would kill an infected cell population."

The potential vaccine is now at the animal testing stage and it would normally take one to two years to progress to human trials. But should there be a new SARS outbreak in the meantime, there would be a push to complete the animal tests that could speed up the process, Gauldie says. However he stresses that human testing is still at least one year down the road.

Jack Gauldie, researcher at McMaster University,

led the team that has two cloned SARS virus genes ready for testing in a vaccine form.

PHOTO courtesy of McMaster University