



## Disease has staggering mortality rate

September 22, 2010

Bill Taylor

Special to the Star

**Catching it early is key**

**Diabetes drug to treat lung cancer?**



Aaron Harris/Toronto Star

It's the pink elephant in the room:

Everyone knows it's there, everyone's afraid of it, but no one wants to be the first to point it out.

Roz Brodsky was a long-time smoker. She diagnosed with lung cancer early enough to catch it.

Roz Brodsky bucked the odds and beat the beast. But it still hangs around in the shadows of her day.

Lung cancer kills more women than any other form of cancer; more than breast cancer and colon cancer combined.

What's almost as frightening is how few people realize that.

There's a stigma to it — it's seen to be the smoker's cancer — that prejudices public perception and means funding for research lags well behind other forms of cancer.

"Our treatments are probably about 10 years behind where they should be," says Dr. Sunil Verma, a medical oncologist at Sunnybrook's Odette Cancer Centre, who also treats breast cancer.

"We need to focus on how to reduce the staggering mortality rates."

Studies show that in 2007, breast cancer research garnered more than \$25 million, while lung cancer research attracted about a third of that, just over \$8 million, even though the 10-year survival rate in Canada is four times higher for breast cancer than for lung cancer.

One in 16 Canadian women is predicted to develop lung cancer in her lifetime and one in 18 to die of it.

According to the Canadian Cancer Society, more than 11,000 women will be diagnosed with lung cancer this year, and it will kill more than 9,000 of them.

"This is unacceptable," says Verma.

Every week, dozens who have never smoked are told they have the disease.

"About 2,500 women a year," he says. "This is above and beyond second-hand smoke. We're not sure what the other risk factors are: hormonal, genetic, environmental. We don't have an answer."

Most patients have an advanced stage of the disease by the time it's detected.

"If it's found early, it can be cured," Verma says. "We need to do a better job of screening to detect it."

A recent survey done for the Global Lung Cancer Coalition found that one in five Canadians feel less sympathetic toward lung-cancer patients because of its association with tobacco products.

"But if someone who smokes has a heart attack, we don't blame smoking," Verma says, even though it may have contributed to it.

It's six years since Brodsky was treated for a rare "giant-cell" lung cancer that made itself known when she coughed blood.

"I'd recently stopped smoking," says Brodsky, 51, of Thornhill. "I'd just had a physical and I felt great. But I knew something had to be very wrong.

"My cancer was detected early. I had chemo and radiation to shrink it, but it actually doubled in size. So they went straight to surgery.

"I don't want to jinx myself, but I'm considered cured. But I still have regular checkups.

"I remember my doctor telling me, 'I think we can get a cure here.' Someone else in the office told me she only gets the chance to say that once or twice a year."

Brodsky says wryly that lung cancer gets "tarred and feathered. It isn't a politically correct cancer. People should realize smoking can contribute to other cancers, too, including breast cancer.

"I think the five-year survival rate for breast cancer is about 85 per cent. That's the five-year *mortality* rate for lung cancer."

Verma believes real progress demands the committed support of "government, health-care workers and the general public, so we can fight it and not just label it 'smoker's cancer.' "

"Smoking isn't a habit," Brodsky says.

"It's an addiction. I loved smoking. I still miss it and crave it. But I'm very proud that I beat it."

Lung cancer is seldom diagnosed in people aged under 40, according to the Public Health Agency of Canada.

Reportedly up to one in four lung-cancer victims may show no symptoms, with the disease perhaps being revealed by a chest X-ray done for another reason.

Primary symptoms include chest pain, shortness of breath, a cough and coughing up blood. A smoker or former

smoker who develops a new cough should be concerned.

Hoarseness or wheezing can be caused by inflammation in the lungs as a result of cancer.

Persistently recurring infections, such as bronchitis and pneumonia, can also signal cancer.

Lung cancer can metastasize to other parts of the body, most often the liver, adrenal glands (neither of which may show early symptoms), brain and bones. The latter may be indicated by a persistent ache in the spine, ribs and legs.

Bill Taylor

New research

Among drugs now being studied for possible use to treat lung cancer is an old drug used for decades to treat type 2 diabetes.

Metformin is chiefly being tested in breast cancer, but researchers, including Dr. Pamela Goodwin at Mount Sinai Hospital and Dr. Vuk Stambolic at Princess Margaret, are hopeful it will also prove beneficial in treating lung cancer.

One study reports that when mice, given a common carcinogen found in tobacco, were also given metformin, they developed up to 73 per cent fewer tumors.

"It appears to have two ways of impacting cancer," says Stambolic.

One involves insulin levels. Many cancers have insulin receptors which stimulate growth cells.

Metformin may also attack the cancer cell directly, Stambolic says, "to turn off the protein-building and proliferation quite independent of insulin and lifestyle."

Goodwin calls metformin a safe, cheap generic drug — a two-pill-a-day treatment would cost "an unheard-of" 50 cents — with few side effects.

But she cautions, "The evidence in my view is that it should be tested, not that it will work. Cancers develop compensatory mechanisms. We may find the cancers are smarter than we think."

Firm data could be five years away. Patients, she says, should not be asking their own doctors to prescribe metformin.

Goodwin says some small studies with animals in the 1960s suggested a possible anti-cancer effect. "But nothing was done."

Bill Taylor