Does a diagnosis of schizophrenia reduce rates of mammography screening?

A Manitoba population-based study

Studies have estimated that mammography screening can reduce deaths from breast cancer by 20 to 35 percent for women aged 50 to 69, and by 20 percent for women aged 40 to 49. With this in mind, the Canadian Task Force on Preventive Health Care recommends that women in the 50 to 69 age group receive mammography screening every 1 to 2 years. Manitoba’s provincial Breast Screening Program states that screening at least 70 percent of women in this age group every 1 to 2 years would create the best chance of reducing breast cancer deaths in the province. Overall in Canada we are hitting this 70 percent target, but in Manitoba, self-reported mammography rates are significantly lower with only 65.5 percent of women in this age group reporting having had a mammography during the last 2 years.

Given the important role that mammography can play in helping to reduce the number of breast cancer deaths, researchers at the University of Manitoba, CancerCare Manitoba, and the Manitoba Centre for Health Policy wanted to know if women with a diagnosis of schizophrenia receive the same level of mammography screening as the general population. Among women diagnosed with schizophrenia, cancer screening may be even more important since studies have indicated that women diagnosed with schizophrenia experience higher incidence of breast cancer, and that female psychiatric patients have a 59 percent greater likelihood of dying from cancer than women in the general population.

When the researchers compared rates of mammography screening for women in Manitoba with and without a diagnosis of schizophrenia, they found that 44.8 percent of women diagnosed with schizophrenia had had a mammography within the last two years compared with 58.3 percent for all other Manitobans, a difference of more than 13 percent. The study also found that overall, women in households with higher incomes were more likely to receive mammography screening as were women receiving good continuity of care—meaning women who visited a doctor regularly and saw the same physician at least 50 percent of the time.

Women diagnosed with schizophrenia had lower rates of screening than the general population no matter which income level or continuity of care category they fell into; however, it is worth noting that the strongest relationship to mammography screening among women with schizophrenia was continuity of care. Women who had good continuity of care received 17 percent more mammography screening than those who did not see the same doctor regularly.

This finding reinforces the fact that continuity of care is extremely important for people with schizophrenia not only in the prevention of psychotic relapses, but also from the perspective of general health care. Given their important connection with women diagnosed with schizophrenia, psychiatrists are also in a good position to monitor and reinforce the importance of cancer prevention practices.

The full study is available in the journal *Schizophrenia Research*, volume 113, published in 2009 (pages 95-100).
Hippocampal abnormalities and memory deficits:
New evidence of a strong pathophysiological link in schizophrenia

Who's doing the research?
Patrice Boyer, University of Ottawa, Institute of Mental Health Research; Paris University; Jennifer L. Phillips, University of Ottawa, Institute of Mental Health Research; François L. Rousseau, University of Ottawa, Institute of Mental Health Research; and Susan Ilivitsky, University of Ottawa, Institute of Mental Health Research

What's the issue?
During the past few decades, researchers investigating the cause of memory impairment in people with schizophrenia have focused mainly on the processes in the brain known as executive functions—functions involved in attention, planning, sequencing, decision making, initiating, and inhibiting behaviours. These functions are associated with the prefrontal cortex section of the brain.

There is emerging evidence, however, that problems with long-term memory—whose functions are associated with the temporal lobes of the brain—are also an important characteristic of schizophrenia.

What have they found?
The fact that previous studies have focused on the executive function has led some researchers to conclude that it is mainly problems with attention that have led to memory deficits among people with schizophrenia. What this study suggests is that in people with schizophrenia, there are also problems with the parts of the brain that concern long-term memory processing, including the encoding stage.

Why does it matter?
Identifying which parts of the brain are involved with memory impairment is an important step towards understanding how schizophrenia affects memory and possible treatments or strategies to overcome the problem. The study researchers also recommend that further work should be done looking at the role of the temporal-frontal part of the brain in schizophrenia.

The full study is available in the journal Brain Research Reviews volume 54, published in 2007 (pages 92–112).

Schizophrenia and the incidence of cardiovascular morbidity:
A population-based longitudinal study in Ontario

People with schizophrenia tend to have disproportionately high rates of metabolic syndrome and diabetes, smoke at much higher rates, consume more alcohol, eat diets higher in fat and lower in fibre, and exercise less than the general population, all of which are risk factors for developing heart disease.

We already know that there are high rates of cardiovascular mortality among people with schizophrenia, but little is known about the frequency of cardiovascular morbidity. In plain terms, this means that it is clear that a significant number of people with schizophrenia die from heart disease (mortality), but few studies have looked at how many people with schizophrenia suffer from heart disease itself (morbidity).

With this knowledge gap in mind, researchers from various departments at the University of Toronto and the Centre for Addiction and Mental Health set out to assess the frequency of cardiovascular morbidity among people with a diagnosis of schizophrenia. The study started with people admitted to Ontario hospital emergency departments either for appendicitis or for schizophrenia between 2002 and 2006, and then looked at whether they were later readmitted for some kind of cardiovascular disease.

In the study, people admitted for appendicitis were considered the control group representative of the general population. This allowed the researchers to examine how often people with schizophrenia were admitted with heart disease compared to admissions for the general population.

The researchers determined that people with schizophrenia had a significantly greater risk of later being admitted for heart disease than did people in the appendicitis group—a 43-percent higher risk, in fact. The study also found that the incidence of heart disease during the 2002-to-2006 period was similar to that found by studies conducted before the widespread use of second-generation antipsychotic medications. Recently, some people have become concerned that second-generation antipsychotics may contribute to the development of obesity, metabolic syndrome, and diabetes, which may in turn result in higher levels of heart disease. While this study found a similar pattern of risk of heart disease for the periods before the widespread use of second-generation antipsychotics and after they became more popular, the research did not specifically compare outcomes for people taking different types of medication.

One of the reasons the study’s findings are important is the fact that recent US and Canadian research has shown that screening and monitoring for cardiovascular disease among people with schizophrenia and other severe mental illnesses is inferior to that of the general population, despite the elevated risk factors associated with the illness. Researchers working in the field of mental health have stated that the most important challenge for clinical psychiatric practice is integrating psychiatry with other medically-related fields with the goal of caring for the overall health—both physical and mental—of individuals with schizophrenia and other severe mental illnesses.

The full study is available in Schizophrenia Research, volume 115, published in 2009 (pages 325–332).