

Artists 'better protected' against dementia, study finds

Music and art are less vulnerable to cognitive decline, Canadian neurologists say

[CBC News](#)

Posted: Aug 22, 2013 5:03 PM ET

Last Updated: Aug 22, 2013 10:58 PM ET

Art and music are less vulnerable to cognitive decline, a new Canadian study suggests.

Neurologists at St. Michael's Hospital in Toronto found that artists suffering from vascular dementia may still be able to draw spontaneously and from memory, despite being unable to complete simple, everyday tasks.

"We discovered that there is a disproportion between the degree that artists lose some of their memory function, their orientation and other day-to-day cognitive functions. But at the same time, some of their art form is preserved," Dr. Luis Fornazzari, a neurological consultant at St. Michael's Hospital memory clinic and lead author of the paper, told CBC News.

Artists compared with non-artists are better protected, he added. "Due to their art, the brain is better protected [against] diseases like Alzheimer's, vascular dementia, and even strokes. They have more reserve in their brain in order to give functions.

"So [we know], based on other neuroscience studies, that art in any of its forms uses different neuronal avenues inside the brain to do their work. And the activity, the talent and the art per se gives reserve when the brain requires that reserve."

'Exceptional' artistic skills

The study, released Thursday in the Canadian Journal of Neurological Sciences, looks at the last few years of the late Mary Hecht, an internationally renowned sculptor, who was able to draw spontaneously as well as complete detailed sketches of faces and figures, from memory, despite suffering from severe vascular dementia.

"Mary Hecht was a remarkable example of how artistic abilities are preserved in spite of the degeneration of the brain and a loss in the more mundane, day-to-day memory functions," Fornazzari said.

'Art should be taught to everyone. It's better than many medications and is as important as mathematics or history.'

—Dr. Luis Fornazzari, St. Michael's Hospital memory clinic

Hecht, who died in April 2013 at the age of 81, was wheelchair-bound due to previous strokes. She was unable to tell time, name certain animals or remember any words she was asked to recall.

But she could quickly sketch an accurate portrait of a research student from the hospital's memory clinic. She could also draw a free-hand sketch of a lying Buddha figurine and reproduce it from memory a few minutes later — as well as an accurate sketch of famed cellist Mstislav Rostropovich after learning of his death earlier on the radio.

While she was drawing and showing medical staff her drawings, Hecht spoke articulately without hesitation about art, the researchers found.

"This is the most exceptional example of the degree of preservation of artistic skills we've seen in our clinic," said Dr. Corinne Fischer, director at the St. Michael's Hospital memory clinic.

"Most of the other studies that have been done in this area looked at other kinds of dementia such as Alzheimer's disease or frontal temporal dementia, while this is a case of cognitive reserve in a patient with fairly advanced vascular dementia," she added.

Alzheimer's patients also studied

Fornazzari told CBC that details from previous cases of patients suffering from Alzheimer's disease, including one musician who could still play the piano and learn new music, were also included in the study.



One of Hecht's drawings after being diagnosed with advanced vascular dementia. (St. Michael's Hospital)

"We noticed for instance that some of the artists lost their speech. They couldn't talk," he said. "But at the same time, the art was totally preserved. The same [results occurred] not only with painters but with musicians."

In a separate study in 2011, Fischer also looked at bilingual patients with Alzheimer's and discovered they had twice as much cognitive reserve as their counterparts who only spoke one language.

Fornazzari said he believes educators should take the findings seriously and encourage schools to teach the arts – whether sculpture, painting or music – rather than cutting back on them.

"Art opens the mind," he said. "It should be taught to everyone. It's better than many medications and is as important as mathematics or history."