

# Type 2 diabetes before 40 tied to mental illness hospitalizations

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(HealthDay)—People who develop type 2 diabetes before they turn 40

are twice as likely to be hospitalized for mental illness as those who develop the blood sugar disease after 40, a new study shows.

About 37 percent of all hospitalization days in the under 40 group were due to mental illness, the researchers noted. Mood and psychotic disorders were the most common conditions. Mood disorders includes depression, bipolar depression and self-harm. Psychotic disorders include delusions, hallucinations and schizophrenia, according to the U.S. Department of Health and Human Services.

Not surprisingly, physical conditions also landed this group in the hospital more often. The study showed rates of kidney disease that were nearly seven times higher in younger people with type 2 diabetes. The risk of hospitalization for heart disease or stroke was twice as high, and the risk of hospitalization from infection was nearly doubled in the young-onset group.

The study authors suspect there are a number of reasons why the younger group with type 2 diabetes is more at risk of hospitalizations for mental and physical illness.

"The early onset of disease, long disease duration, poor control of risk factors [in part due to delayed treatment intensification] and suboptimal self-care are some of the factors that contribute to this high risk of hospitalization in youth-onset diabetes," explained study co-author Dr. Juliana Chan.

She said the psychological burden that comes with managing diabetes may activate stress hormones, which can worsen control of blood sugar, add to obesity and cause inflammation.

Inflammation can affect the central nervous system and may "worsen psychological well-being," Chan said. She's director of the Hong Kong

Institute of Diabetes and Obesity at the Chinese University of Hong Kong and the Prince of Wales Hospital.

Chan said there's a known connection between diabetes and depression. But it's not clear which condition comes first. It's also possible that the conditions contribute to each other.

Dr. Joel Zonszein, director of the clinical diabetes center at Montefiore Medical Center in New York City, said this study is "a wake-up call. What's going on in Hong Kong is what's going to be taking place in this country."

Zonszein added that "type 2 diabetes is becoming more prevalent in younger people, and it's more aggressive and harder to treat than in the past. It used to be extremely rare to see diabetes in someone under 65."

Type 2 diabetes is a condition that causes high blood sugar levels. If untreated, high blood sugar can lead to a number of complications, such as heart disease, kidney disease, infections and vision problems, according to the U.S. Centers for Disease Control and Prevention. Two major risk factors for the disease are obesity and not getting enough physical activity.

For the new study, Chan and her colleagues looked at health information on more than 400,000 people with type 2 diabetes in Hong Kong. Nearly 21,000 were diagnosed with type 2 diabetes before the age of 40. Just over 200,000 were diagnosed between 40 and 59 years, and just under 200,000 were diagnosed at age 60 or older.

The researchers found that someone diagnosed before age 40 could expect to spend nearly 100 days in the hospital by his or her 75th birthday.

Good control of modifiable risk factors was associated with a decrease to 65 estimated days in the hospital up to age 75. Modifiable risk factors are things such as blood sugar levels, cholesterol and blood pressure.

According to Zonszein, "These are people who are getting very sick from complications of diabetes and mental illness compared to people that get type 2 diabetes when they're older. We need to keep young people healthier."

Chan explained that "diabetes is a complex disease and it is not just about medications and medical follow-up. Diabetes imposes a lot of demands on a person who needs to be educated, empowered and engaged in order to change their lifestyle and learn how to cope with the disease."

She added that health care providers, governments, insurers and society need to work together to help "support these individuals to make the management of this lifelong condition more user-friendly, affordable and sustainable."

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