

Diabetes Patients at Risk From Rising Insulin Prices

A Yale study found that one in four patients admitted to cutting back on insulin use because of cost. The consequences can be deadly.

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A surprisingly large number of people with diabetes are using less insulin than prescribed because of the rising cost of the drug, putting themselves in danger of serious complications. Those are the findings of a small new study by researchers at Yale University, who found that at one clinic in New Haven, Conn., one in four patients admitted to cutting back on insulin use because of cost.

Everyone with Type 1 diabetes needs to take insulin, while about a third of those with Type 2 diabetes do. Not getting enough insulin can have severe consequences for someone with diabetes who does not produce enough of the hormone, which regulates levels of glucose in the blood. Within a week or so without insulin, people with Type 1 diabetes die.

Between 2002 and 2013, the price of insulin jumped, with the typical cost for patients increasing from about \$40 a vial to \$130. The amount of insulin a person needs varies, but one vial typically lasts about a week or two.

The Yale team launched the recent study to assess how many people are affected by the rising prices. They surveyed 199 patients in the New Haven area who had either Type 1 or Type 2 diabetes, asking them six questions about their ability to afford insulin, including “Did you use less insulin than prescribed because of cost?” and “Did you not fill an insulin prescription because of cost?” A positive response to any of the six questions counted as insulin underuse.

The researchers also used medical records to determine participants’ HbA1c level, a measure of blood sugar control. Unsurprisingly, those who reported underusing insulin because of cost were more likely to have dangerous blood glucose levels compared with those who said they did not underuse.

Patients who reported an income between \$25,000 and \$100,000 were more likely to be cutting back on insulin compared with those who said they earn over \$100,000. Darby Herkert, one of the study’s leading investigators who worked on the study while an undergraduate at Yale, suspects that middle-income patients are often hit hardest because they are ineligible for Medicaid, the

government insurance program for the poor, but do not earn enough to afford better health insurance or pay out of pocket for insulin. She presented the findings at the American Diabetes Association Scientific Sessions on Friday in Orlando, Fla.

The new study focused on a single clinic, but researchers said it likely reflects what is happening nationwide.

Last year, Alec Raeshawn Smith, who had Type 1 diabetes, reduced his insulin dosage to stretch out his medicine. He was 26 and had recently been removed from his parent's insurance plan. Mr. Smith was found dead in his home in Minneapolis last June.

His mother, Nicole Smith-Holt, said he had been shopping for health plans but could not find one he could afford. When he went to pick up his insulin and glucose strips, he was told it would cost \$1,300.

"He realized maybe too late, or he never realized he was in such danger and couldn't make a rational decision to even call for help," she said.

Sara Theeler, a 41-year-old mother of three in Akron, Iowa, with Type 1 diabetes said she started rationing insulin after her divorce in 2010, when she lost her health insurance. She cut back on insulin and tried to manage her blood sugar levels by eating less.

"I was hospitalized every couple of months with an infection on my foot and hand," said Ms. Theeler. She had to have hand surgery when her uncontrolled sugar levels led to serious infections. She recently lost her job and is now on Medicaid, making insulin more affordable.

Unlike many other drugs, there are no generic versions of insulin. Since the 1980s, drug makers have tweaked various versions of the drug that act for either a short or long duration, patenting these innovations along the way. Without competition among generics, prices have skyrocketed.

In the past decade, a global network of patient activists pushed for legislation to reduce the cost of diabetes treatment. This June, The American Medical Association issued a statement calling for price transparency and for the Federal Trade Commission and the Justice Department to monitor insulin pricing.

A spokesman for Eli Lilly, which makes the drug, said that the firm offers several reimbursement plans, but some patients do not have good options because they do not have insurance or they have health plans with high deductibles.

Kristin Sikes, a pediatric endocrine nurse at Yale University, said the situation has gotten worse in the last five years. "Families are making decisions," she said. "Do I feed my family or stretch the bottle of insulin as long as possible?"