US Opioid Epidemic Not Linked to Higher Mortality Rates in Patients with Sickle Cell Disease, Study Finds

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A national study has revealed that the US opioid epidemic has nothing to do with the higher inpatient hospital mortality rates in patients with sickle cell disease or SCD. Despite the opioid crisis that has been sweeping the nation for several years, there does not seem to be any link between the increased mortality rates and opioid use disorders.

With the rise of opioid overdose-related deaths in the United States, a study had to be conducted to see if it affected patients with Sickle Cell Disease. The opioid crisis has been reported since 2000, and it has had a significant impact in terms of the approach that doctors use when prescribing medications.

The researchers if the study did find increased hospitalization rates in young adult and elderly SCD patients. However, the deaths were not linked to the opioids that were used to control the disease-related pain.

“Opioid Use Is Not Associated with in-Hospital Mortality Among Patients with Sickle Cell Disease in the United States: Findings from the National Inpatient Sample” is the name of the study. It was recently presented at the 60th American Society of Hematology (ASH) Annual Meeting in San Diego.

The actual cause of the hospitalizations might surprise some of those who are not familiar with the disease. But most of the hospitalizations in SCD patients were actually due to vaso-occlusive pain crises. This means there is a blockage of small blood vessels that prevents oxygen supply to the tissues. This causes injury, and eventually, pain.

The main concern and the reason the study was conducted was the fact that opioids are the standard treatment for chronic pain in sickle cell disease.

Opioids are prescription painkillers that attach to the brain’s opioid receptors to block incoming pain signals. And while they have their place in the medical industry, there is no doubt that most of these medications are highly addictive.

Patients are always at risk of their side effects because many opioids are very potent. They are also habit-forming, meaning there’s a high risk of abusing these substances because of their euphoric effects.
In order to find out whether or not there is a connection between opioid treatment and the increased patient mortality rates, scientists with Boston University School of Medicine, Boston Medical Center, and Vanderbilt University Medical Center assessed the trends in hospitalization and in-hospital mortality rates in adults with SCD. They only focused on the SCD patients who received treatment at the onset of the opioid epidemic.

The researchers also studied the in-hospital mortality rates in SCD patients and compared it with the rates of opioid prescription-associated deaths in the general population.

They collected data from 1998 to 2013 from the National Inpatient Sample. They analyzed the whole SCD group as well as each subgroup categorized by age. This includes 0-17 years, 18-44 years, 45-64 years, and 65 years or older.

The study also examined specific US regions including the Northeast, Midwest, South, and West. Within this time period, a total of 1,755,220 hospitalizations was recorded among SCD patients.

The South was the only region with a significant rise in the SCD hospitalization rate, with an annual increase of 3.5% from 2001 through 2011.

There was no significant increase in deaths among hospitalized SCD patients. This is in sharp contrast with the 350 percent rise in opioid prescription-related death rate in the US between 1999 and 2013. So despite the prevalence of the opioid epidemic, SCD patients should not be worried about going through opioid treatment. Using these medications properly dramatically reduces the risk of addiction and adverse health effects.

If someone in the family is addicted to opioids, look for a drug rehab facility nearby and learn about how addiction treatment programs work.