People suffering from treatment resistant depression are at a higher risk of developing substance use disorders than other patients with depression, reports a study by researchers at Karolinska Institutet in Sweden published in the journal *Addiction*. The risk is highest for sedatives or opiates, which includes the analgesic morphine and heroin.

Major depressive disorder – *clinical depression* – is a common and frequently recurrent form of *depression* that has major consequences for both the individual patient and society as a whole. Antidepressants help many but far from all *patients* with clinical depression. According to a Swedish study from 2018, 13 per cent of specialist psychiatry patients had treatment *resistant depression* that did not respond to different antidepressant drug regimens.

Researchers at Karolinska Institutet now show that people with treatment resistant depression are at a higher risk of developing substance use syndrome (formerly known as *substance abuse* or addiction) than other patients with clinical depression. The study was conducted in collaboration with pharmaceutical company Janssen Pharmaceuticals.

"We observed a generally higher risk of substance use syndrome both in people who have no history of substance use syndrome and in those who have had such problems," says corresponding author Philip Brenner, doctor and researcher at the Department of Medicine, Karolinska Institutet (Solna). Amongst patients with no history of substance use syndrome, the risk of substance abuse – regardless of kind – was 51 per cent higher in treatment resistant patients in the year following the onset of antidepressive treatment, than it was for other patients with clinical depression. The risk was highest for opiates (analgesic opioids or heroin) and sedatives – almost two and three times as high respectively. In patients with a history of substance abuse, the increase in risk was 23 per cent, with an elevated risk in the sub-categories of sedatives and multiple substance use.

The study was based on data from over 121,000 Swedish patients between the ages of 18 and 69 with a diagnosis of clinical depression, who were prescribed antidepressants at least once between 2006 and 2014. The data was gathered from national health and healthcare registries. Patients who had begun at least three treatments during one and the same disease episode were counted as treatment resistant. Patients with treatment resistant depression were then compared with the group as a whole as regards the risk of being diagnosed with substance use syndrome or prescribed drugs to counter it.

"Our results shed light on the consequences that
people with insufficiently treated depression may be at higher risk for, and the importance of quickly identifying those who do not respond to antidepressants in order to provide the most intense therapy needed to avoid these consequences," says Dr. Brenner.

Dr. Brenner notes that as the study was observational it cannot provide answers as to the causes of the correlations found.


Provided by Karolinska Institutet