

Healthcare and Psychiatric Drug Utilization After a Suicide Attempt in Depression: A Population-Based Cohort Study in Sweden

3. Epidemiology and surveillance

Viktoria Johansson^{1, 2}, *Philip Brenner*³, *Pär Karlsson*¹, *Adina L Feldman*⁴, *Johan Reutfors*¹

¹ Centre for Pharmacoepidemiology, Department of Medicine Solna, Karolinska Institutet, Stockholm, Sweden

² Department of Clinical Sciences, Psychiatry Unit, Umeå University, Umeå, Sweden

³ Center for Psychiatry Research, Department of Clinical Neuroscience, Karolinska Institutet

⁴ Department of Clinical Sciences, Intervention and Technology, Karolinska Institutet, Stockholm, Sweden

Abstract text

Background

Depression is associated with high rates of healthcare utilization (HCU) and psychiatric drug utilization (PDU), representing a significant burden for patients and society. Suicide attempts (SA) are common among individuals with depression and may exacerbate this burden. However, limited research has explored long-term patterns of HCU and PDU following SA in patients with depression.

Methods

We conducted a matched cohort study on Swedish register data, including 359,276 patients with incident depression between 2006 and 2018. We then matched 16,748 patients who had a first-time index SA to 330,764 comparators with depression but no index SA, based on sociodemographic and clinical characteristics. HCU outcomes included psychiatric and non-psychiatric inpatient days and outpatient visits. PDU was assessed across major psychiatric drug classes (antidepressants, antipsychotics, antiepileptics, sedatives, substance use disorder drugs, and ADHD medications). Ratios of the estimated weighted means (MR) with 95% confidence intervals (CI) were calculated yearly up to five years after the matching date.

Results

In the first year following a first-time index SA, patients had nearly four times more psychiatric inpatient days (MR 3.8, 95% CI 3.6-4.0) and 70% more outpatient visits (MR 1.7, 95% CI 1.7-1.8) compared to comparators. PDU was higher for most drug classes, with the largest differences observed for anxiolytics and sedatives (MR 1.9, 95% CI 1.8-1.9) and antipsychotics (MR 2.1, 95% CI 2.0 - 2.2). Increased HCU and PDU persisted throughout the five-year follow-up period.

Conclusions

Patients with depression and SA had substantially higher HCU and PDU than comparators, with the most pronounced differences observed for psychiatric inpatient care and use of anxiolytics and sedatives, as well as antipsychotics. These findings highlight the severe and persistent burden of SA on both patients and the healthcare system, underscoring the need for targeted interventions and sustained support for this vulnerable population.