

Characteristics of suicide after treatment in addiction services – A nationwide registry study

Myhre M. Ø.¹, Kildahl, A. T. ¹, Walby, F. A. ¹

¹National Centre for Suicide Research and Prevention, University of Oslo, Oslo, Norway

Introduction: Substance use disorders are conditions with an increased risk of suicide. Despite this, there is a lack of large representative studies on contact with addiction services before suicide.

Aim: Describe characteristics and treatment utilization of patients who died by suicide within 1 year after contact with addiction services.

Methods: Data was obtained from the historical cohort of the Norwegian Surveillance System for Suicide, which consists of a linkage between *the Cause of Death Registry* (CDR) and the *Norwegian Patient Registry* (NPR) between 2009 and 2015. All suicides who had been in contact with addiction services within the last year were extracted from this cohort.

Results: Of the 3953 suicides in the general population, 8.9 % were in contact with addiction services within the last year. Of these 68.6 % were male and 31.4 % female. Alcohol use disorder (30.3 %), opiate use disorder (13.0 %) and polysubstance use disorder (10.1 %) were the most common primary diagnoses. Method of suicide differed between the genders, with poisoning being most common in females (43.2 %), and strangulation (46.7 %) in males. Within the last year, 47.0 % received inpatient treatment in mental health services and 41.7 % in addiction services. 64.5 % had contact with both addiction- and mental health services the year before suicide, with 31.1 % having their last contact with mental health services. We found significantly higher rates of contact with mental health services, hospitalization, and outpatient contacts the last year in females compared to males.

Conclusion: 8.9 % of all suicides in Norway had contact with addiction services within the last year. Alcohol abuse disorder was the most prevalent diagnosis. Results showed significant and important gender differences in utilization of services. Due to a large overlap in service utilization, prevention efforts should be developed in cooperation between mental health and addiction services.