

Suicide within one year after contact with substance misuse services from 2009 to 2017

– a nationwide registry study from Norway

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English Summary

Background

Persons with substance use disorders have an increased mortality compared to the general population, with suicide being one of the main causes of death. While many studies have described suicide during and after contact with mental health services, suicide after contact with substance misuse services has received less attention in the international literature. In Norway, there has been no systematic data collection of people who die in suicide during or after contact with substance misuse services, and thus limited knowledge of these patients and the treatment they have received in the year before suicide. In this report, we present the results from the first national registry study of suicide among persons in contact with substance misuse services during the last year before death in the period 2009–2017. The registry study is based on data that was collected as part of our work to establish a national surveillance system for suicide in mental health and substance misuse services in Norway, which was implemented in March 2019. To our knowledge, it is also the first study in an international context that investigates this specific patient group in a nationwide sample.

Method

By using data from the Norwegian Cause of Death Registry, all deaths coded as suicide in the period 2009–2017 were linked to the Norwegian Patient Registry using the unique personal identification number. People of all ages who had direct contact with substance misuse services in the year preceding death were included in the study.

Main findings

- From 2009 to 2017, 480 persons died in suicide within one year after contact with substance misuse services in Norway. This equals 9.3 % of all suicide deaths in the population during the same period.
- There were 1.93 suicide deaths per 1000 patients treated in substance misuse services in the study period.
- Twice as many men as women died by suicide during or after contact with substance misuse services, but the proportion in contact before suicide was similar for both genders.
- The majority (43 %) of persons in contact with substance misuse services before suicide died by hanging or strangulation, while 23 % died by poisoning/intoxication. Since it can be challenging to determine whether an intoxication was intended, some suicide deaths will be classified as accidental overdoses when they should have been classified as suicides. The number of intoxications in the current study should therefore be regarded as an underestimate.
- A considerable proportion (64 %) of the persons in contact with substance misuse services did also have contact with mental health services in the year before death.

- More than 90 % of the persons who died in suicide within one year after contact with substance misuse services had been outpatients during the last year. The number of outpatient contacts was however low – with a median of six contacts last year.
- Of the persons in contact with substance misuse services, 68 % had been admitted to an inpatient unit at least once during the last year: 40 % in substance misuse services and 49 % in mental health services. Approximately 30 % of the admissions in substance misuse services lasted less than a week while 50 % of the admissions in mental health services lasted less than a week.
- The majority (91 %) were diagnosed with a substance use disorder last year. Alcohol use disorder was the most prevalent diagnosis (45.6 %), followed by multiple drug use disorder (27.7 %) and opiate use disorder (22.1 %).
- A third (32.9 %) of the men and almost half (46.9 %) of the women in our sample had been diagnosed with depression or anxiety disorder in addition to a substance use disorder last year before suicide.
- Less than five persons died in suicide during an admission in substance misuse services.
- Persons who had contact with both substance misuse- and mental health services last year died closer in time to last contact (median = 12 days) than those who only had contact with substance misuse services last year (median = 31 days).

Conclusion

Approximately 10 % of the persons who died by suicide in Norway had been in contact with substance misuse services in the year before death. This shows the importance of increased attention on suicide prevention in services that provide specialized treatment for substance use disorders. Persons who die in suicide after contact with substance misuse services usually have complex problems, which typically includes a combination of drug misuse and mental disorders. Further, this group of patients tend to utilize both mental health- and substance misuse services concurrently. It is thus important to ensure cooperation and coordination between these services and provide integrated treatment in both substance misuse- and mental health services. The importance of accessible services, in addition to increased focus on both relapse prevention and follow-up after discharge, should also be emphasized.

Available registry data is well suited to describe the number and proportion in contact with different services, but the existing registries include no sociodemographic information, details of the treatment given and the patients' previous suicidal behavior. Data from the Norwegian surveillance system, which was implemented in the beginning of 2019, will contribute to more future knowledge about suicide in relation to substance use treatment.

