The risk of death by suicide among patients with depression who have undergone psychiatric inpatient treatment has significantly decreased since 1991. These are the results of a large Finnish cohort study, which tracked 56,826 patients who had been hospitalised for depression for the first time between 1991 and 2011.

The study compared the risk of suicide in patients treated during different time periods. The risk of a depression patient to die by suicide after hospitalisation has been consistently on the decline, falling by half from the early 1990s. The hazard ratio for suicide among patients treated between 1996 and 2000 had fallen to 0.69 times that of patients treated between 1991 and 1995. Patients treated between 2001 and 2005 had a hazard ratio of 0.54 times that of the earliest group, and patients treated between 2006 and 2011, 0.48.

Based on national register data, deaths by suicide were investigated for an average of eleven years, up to 24 years, until 2014. Over the course of 24 years of monitoring, the risk of suicide was 6.1%. Men's risk of suicide (8.6%) was double that of women (4.1%). The study used the research data compiled by the National Institute of Health and Welfare in the MERTTU project.

Many underlying factors at play

The study shows for the first time that it is possible for the suicide mortality to decline markedly at the population level, and that it has decreased significantly under current care practices. Finland's suicide figures peaked in 1990, and have since halved by 2014. This study indicates that the suicide risk among patients with severe depression who have received psychiatric inpatient treatment has decreased similarly.

However, the study does not present the reasons for this decrease. There are several potential underlying factors at play, and they may have helped or hindered the process.

- The number of inpatient places has been cut by two-thirds from the early 1990s. At the same time, psychiatric outpatient treatment has been improved and made more accessible, and an emphasis on outpatient care is known to associate with fewer deaths by suicide among psychiatric patients.
- Alcohol consumption increased between 1990 and 2005, but has been on the decrease since 2007. Alcohol abuse increases the risk of suicide.
- Overall mortality by suicide and mortality by suicide among patients with depression who have been hospitalised have both been steadily declining since 1990, despite unemployment spikes.
- The general decline in deaths by suicide may be the result of a national suicide prevention project in the early 1990s.
- The treatment of depression has improved. Modern antidepressants entered the Finnish market in 1989, and their use has increased by a factor of eight in the country during the study period. At the same time, more people are seeking treatment for depression, the health care system has become better equipped to recognise depression, and access to psychotherapy has increased.

Depression is the most significant single mental health problem contributing to suicide, and approximately half of people who die by suicide have had depression. In December 2017, the Finnish Parliament granted funding to launch a new
suicide prevention programme in Finland. The Ministry for Social Affairs and Health has also granted separate funding to draft Current Care Guidelines for healthcare professionals to prevent suicides.


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