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Suicide

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Suicide is in decline. Globally, the age-standardised mortality rate for suicide decreased by 32.7% between 1990 and 2016, albeit with variations between countries[1]. The largest outlier is the United States of America, where the age-adjusted suicide rate increased by 33% between 1999 and 2017[2].

Despite the overall improvement, however, approximately 800,000 people still die by suicide each year around the world. This means that suicide remains a key public health problem, even in countries with decreasing rates. Even one death by suicide is one too many. Fazel and Runeson, in a recent review in the *New England Journal of Medicine*, point out that suicide is the foremost cause of death worldwide among people aged between 15 and 24 years[3]. Clearly, there is still much to be done.

In their review, Fazel and Runeson go on to examine various risk factors for suicide across the life-course, ranging from predisposing factors to risk-factors seen chiefly in older adults. They note that individual factors, especially mental illnesses, have the strongest effect on suicide rates across the life-course. Conditions such as depression, bipolar affective disorder, schizophrenia-spectrum disorders, substance use disorders, epilepsy and traumatic brain injury increase the odds of completed suicide by a factor greater than three. Risk is also increased if there is a previous suicide attempt, sexual abuse in childhood, a family history of suicidal behaviour and the death of a parent by suicide in early childhood[3].

A range of other factors are also relevant to varying degrees: genetics, epigenetics, early life adversity, personality disorders, physical health problems, lack of social support, economic factors, life events, effects of the media and access to lethal means[3].

While it is important to be aware of these risk factors, Fazel and Runeson point out that risk models for suicide used in emergency departments to assess people who have harmed themselves generally have a poor balance between sensitivity and specificity and do not provide probability scores. As a result, such tools may increase clinical workloads by requiring psychiatric assessment or hospitalisation in cases of false positive risks of suicide[3]. Therefore, while structured tools can help with assessment, they should not be interpreted as estimates of the probability of suicide.
In terms of prevention, Fazel and Runeson point to various population-based measures including limiting access to lethal means, such as erecting barriers at potential suicide spots, restricting paracetamol pack sizes and restricting access to guns (all of which have been proven effective). Other measures include removing ligature points in psychiatric hospitals and prisons, early intervention in psychosis and, possibly, raising awareness more generally[3].

The evidence base for pharmacological treatments to reduce suicide is generally limited, chiefly because most randomised clinical trials are insufficiently powered to study suicide as an outcome. As a result, most studies tend to focus on proxy outcomes, such as suicidal ideas and depressive symptoms. The most convincing evidence to date is for lithium in bipolar disorder and depression and, possibly, certain medications for opiate use disorders in people with addictions[3].

Fazel and Runeson also point to evidence for psychological therapies, noting that trials of cognitive-behaviour therapy have shown reductions in suicidal thoughts, and trials of dialectical behavioural therapy have shown small reductions in self-harm. In conclusion, Fazel and Runeson recommend a comprehensive approach to the assessment and treatment of suicidality, including regular follow-up, brief psychological therapy and, for people with symptoms of mental illness, pharmacologic treatment as appropriate. Environmental safety is also important, along with assessment by specialist mental health services when indicated[3].

In the European context, it is worth noting that Ireland's overall rate of suicide is not high compared to other European countries: it is the 11th lowest rate of 34 countries, according to the National Office for Suicide Prevention (NOSP)[4]. Ireland's overall figure, however, masks increased rates among certain population groups such as the Traveller community and young people: NOSP points out that Ireland's rate of suicide in young people (aged 15-19) is among the highest in Europe.

Overall, then, despite the fact that Ireland's overall suicide rate is below the European average, suicide and self-harm still remain substantial problems[5]. And while it is not possible to predict suicide at the individual level, it is likely that good primary care, good secondary mental health care and good social care all reduce risk.

In terms of targeted interventions, public health measures such as paracetamol pack size regulations have the most evidence to support them. In addition, Ireland's "National Clinical Programme for the Assessment and Management of Patients Presenting to the Emergency Department following Self-Harm" was introduced to the first emergency department in 2014 to better address management of self-harm, a key risk factor for suicide[6]. This programme aims to ensure that all patients who present to emergency departments following self-harm or with suicidal ideation receive a prompt biopsychosocial assessment; their next of kin receives support and advice on suicide prevention; the patient is linked with the next appropriate care; and both the patient and their general practitioner receive a written plan of care. This programme continues to expand.

Overall, it remains important that there is continued focus on providing greater support to those at risk of suicide and those bereaved. A coordinated, effective and compassionate approach is needed, linking community and state resources with each other[5]. Strategies rooted outside mental health services are vital: identifying and treating alcohol problems and other forms of addiction, addressing homelessness, improving social care, and resolving relevant issues within the criminal justice system[7].

Improving child and adolescent mental health services is an especially pressing priority in relation to suicide in Ireland. The relatively high rate of suicide among young people demonstrates yet again the need for enhanced services for this particularly vulnerable population.

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