



Medicines Evidence Commentary

commentary on important new evidence from Medicines Awareness Weekly

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Self-harm in older people: incidence, management and risk of suicide

A large UK observational study in people aged 65 years and over, found that the risk of suicide was markedly increased in people who had a previous self-harm episode compared with those who did not. Self-poisoning through ingestion of drugs was the most common means of self-harm. After an episode of self-harm 59.3% of people were prescribed an antidepressant and 11.8% of people were prescribed a tricyclic antidepressant. The NICE guidelines on depression in adults and long-term management of self-harm, advise that prescribers consider toxicity in overdose when choosing an antidepressant for people at significant risk of suicide. Tricyclic antidepressants are associated with the greatest risk of toxicity in overdose and should not be prescribed for people with a history of self-harm.

Overview and current advice

Suicide is more likely in people who have a history of self-harm. It is usually an expression of personal distress, and there are many varied reasons for a person to harm themselves (NICE guideline on [self-harm in over 8s: long-term management](#) and [self-harm in over 8s: short-term management](#)). In 2017, approximately 6,000 people took their own life in the general population in the UK ([Office for National Statistics, 2017](#)). People who have mental health problems are at particular risk of suicide. In 2016, there were 1,612 suicides among people in the UK who had been in contact with specialist mental health services in the previous 12 months ([National Confidential Inquiry into Suicide and Homicide by People with Mental Illness, 2018](#)).

People who self-harm may have associated mental health conditions that need treatment. When prescribing drugs for these associated conditions, NICE recommends that the prescriber takes into account the toxicity of the prescribed drugs in overdose. Tricyclic antidepressants, such as dosulepin, should not be prescribed because they are more toxic in overdose than other antidepressants ([NICE guideline on self-harm in over 8s: long-term management](#)). The NICE guideline on [depression in adults](#) also recommends that prescribers should take into account toxicity in overdose when choosing an antidepressant for people at significant risk of suicide.

To find out what NICE has said on self-harm and related topics, see the NICE web pages on [self-harm](#) and [depression](#), and the NICE guideline on [preventing suicide in community and custodial settings](#). The NICE Pathway on [self-harm](#) brings together all related NICE guidance and associated products in a set of interactive topic-based diagrams.

New evidence

A 3-part study was performed using UK general practice data from the [Clinical Practice Research Datalink](#) (CPRD), linked with hospital and mortality records. The study aimed to determine: incidence of self-harm in older people, clinical management in the year following an episode of self-harm, prevalence of physical and mental health problems before and after the episode of self-harm, and risk of death from unnatural causes including suicide ([Morgan et al. 2018](#)).

During the observation period (2001 to 2014), 4,124 adults aged 65 years and over had a self-harm episode and these were matched by age, gender and registered practice to controls with no record of self-harm (n=48,921). The authors reported an overall incidence of self-harm in people aged 65 years and older of 4.08 (95% [confidence interval](#) CI 3.95 to 4.20) per 10,000 person-years. Self-poisoning through ingestion of drugs was the most common means of self-harm (80.7%), followed by self-cutting (5.7%) and other means (2.9%); 10.6% had no method specified.

A diagnosis of previous mental health problems was twice as [prevalent](#) in the self-harm group compared with the control group (prevalence ratio 2.10, 95% CI 2.03 to 2.17) and the prevalence of diagnosis with a previous physical health condition was 20% higher in the self-harm group compared with the control group (prevalence ratio 1.20, 95% CI 1.17 to 1.23).

Within the year following the self-harm episode, 335 (11.7%) people were referred to specialist mental health services; more women were referred than men (13.1% compared with 9.7%, p=0.005). Psychotropic medicines, including antidepressants, antipsychotics, hypnotics and anxiolytics, were prescribed in 2,032 (71.2%) people in the year following the self-harm episode. Women were more likely to be prescribed psychotropic medicines than men (75.1% compared with 65.4%) and prescribing decreased in the older age groups. Antidepressants were the most frequently prescribed class of psychotropic medicine (prescribed in 59.3% of people) and 336 (11.8%) people were prescribed a tricyclic antidepressant within a year of the self-harm episode.

Over the study follow-up period, 37.0% (908/2,454) of people died in the self-harm group compared with 25.9% (12,683/48,921) in the control group. In the self-harm group, 5.9% of deaths were unnatural compared with 2.2% in the control group. Risk of unnatural death was higher in the year following the self-harm episode and the risk was 20 times greater in the self-harm group compared with the control group ([hazard ratio](#) [HR] 19.65, 95% CI 11.69 to 33.05). The risk of death by suicide over the 13 year period was markedly increased in the self-harm group compared with the control group (HR 145.43, 95% CI 53.91 to 392.29).

The study was limited by the accuracy of the diagnoses recorded within the CPRD and by the accuracy of mortality outcomes reported in the linked secondary care data. The authors identified people in the self-harm group using data recorded in primary care, therefore it is possible that incidences of self-harm presenting in secondary care were not all captured in this data set.

Commentary

Commentary provided by Nigel Barnes, Chief Pharmacist, Birmingham & Solihull Mental Health Foundation Trust

This study is the one of the first major studies conducted in primary care to investigate the implications of self-harm in older people. The study found that older people who self-harm were twice as likely to have a previous diagnosis of mental health problems and more likely to have physical health problems. Those who self-harm are more likely to attempt suicide than those who do not. This has important implications because suicide attempts in older people are more likely to result in death.

The most common method of self-harm was poisoning through ingestion of drugs. This is an important finding and has implications for all professionals who prescribe for older people. Prescribing rates are much higher for older people because of the higher prevalence of long-term conditions. Mental health problems often co-exist alongside long-term conditions and each has implications for management and prognosis of the other.

Prescribers and health care professionals should ask people presenting with signs of self-harm about suicidal ideation. When this is found, urgent referral to specialist mental health teams should be made.

Choice of medication and length of prescription along with assessments of the hoarding of medicines in the home are important for all older people with a history of self-harm or those with potential risk factors such as previous mental health diagnoses.

Prescribers should take particular care with those medicines with more toxic profiles in overdose such as tricyclic antidepressants, opiates and paracetamol. Toxic combinations such as opiates with benzodiazepines or gabapentinoids should also be prescribed with caution.

This study has highlighted an important issue for all those who care for and manage medicines for older people with mental health problems. It should inform safer prescribing for older people as well as those conducting medication reviews in older people.

Declaration of interests:

Nigel Barnes declared no interests.

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References

Morgan C, Webb R, Carr M et al. (2018) [Self-harm in a primary care cohort of older people: incidence, clinical management, and risk of suicide and other causes of death](#) The Lancet 5: 905-912

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