**Self-harm and suicide: occurrence, risk assessment and management for general nurses**

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**Abstract**
Suicide is a tragic event that has traumatic and far-reaching effects on families, friends and healthcare professionals, for whom feelings of guilt, blame and regret are common. Although there have been reductions in suicide rates globally and in the UK over past decades, it remains one of the leading causes of death. Assessing and supporting people who present with self-harm and risk of suicide are essential aspects of all nurses’ clinical practice. This article explains the relationship between suicide, self-harm and other risk factors. It also provides guidance for general nurses on evidence-based approaches to managing self-harm and assessing suicide risk collaboratively with service users.

**Key points**
- Self-harm commonly involves harm by cutting or self-poisoning by the ingestion of a substance, typically an overdose of prescribed or over-the-counter medicines
- Suicidal thoughts are more common than many people realise and often these are not related to any recognised mental health condition
- Sensitive, compassionate and comprehensive risk assessment is essential when caring for people who present with self-harm and related mental health issues
- All nurses should be familiar with risk factors for suicide such as the presence of a mental health condition occurring alone or together with substance misuse, and any history of suicide attempts

**Introduction**
Suicide is a major public health issue, and each death by suicide is tragic yet potentially preventable. In 2019, suicide accounted for 703,000 or 1.3% of deaths worldwide (World Health Organization (WHO) 2021), making it the 15th leading cause of death (Ritchie and Roser 2019). Globally, suicide is a greater cause of annual deaths than malaria or breast cancer (WHO 2021), and in the UK from 2001 to 2018 it accounted for around 22% of deaths among people aged 20-34 years (Office for National Statistics (ONS) 2020).

Those who are bereaved may have complex, challenging and painful responses to deaths by suicide, with feelings of guilt, blame, confusion and shame commonly experienced (Peters et al 2016). For healthcare professionals, the death of a patient by suicide is also a challenging experience which can cause similar responses and trigger feelings of self-doubt about their competency (Draper et al 2014).

Understanding the range of factors associated with self-harm and suicide, and how these relate to risk, is important in demystifying and destigmatising these important health issues. This article seeks to enhance general nurses’ understanding, recognition and management of
suicide and self-harm so they can feel increasingly confident in providing evidence-based support and management.

**Terminology**

Several terms are used to describe suicide attempts and related acts, and it can often be challenging to differentiate between acts where there is intention to die and acts without such fatal intent. The term self-harm avoids assumptions about intentions, unlike other terms such as attempted suicide and deliberate self-harm.

It is important for healthcare professionals not to assume a specific motivation for an act of self-harm based on a person’s previous actions, because there may be ambivalence, concealment or uncertainty underlying this act, and the person’s intentions may have varied on different occasions (National Institute for Health and Care Excellence (NICE) 2012). Suicide is defined as the act of deliberately killing oneself – a fatal suicidal act – whereas self-harm is a broad term for self-injuring behaviours without a fatal outcome, irrespective of whether there is suicidal intention (NICE 2012).

**Self-harm**

Self-harm is an expression of personal distress. There may be many various reasons for such behaviour, although it is frequently described as a means of coping with overwhelming feelings (Royal College of Psychiatrists 2020). Most commonly, self-harm involves harm by cutting or self-poisoning by the ingestion of a substance, typically an overdose of prescribed or over-the-counter medicines (NICE 2012, Carr et al 2016).

National survey findings in England revealed that 8% of women and 5% of men reported they had self-harmed at some point in their lives, and that almost 14% of those aged 16-24 years reported self-harm compared with 1% of people aged 65-74 years (McManus et al 2019). The proportion of people reporting self-harm in England increased from around 2% in 2000 to more than 6% in 2014 (McManus et al 2019). This change may reflect greater willingness to disclose self-harm behaviour; however, because these changes were apparent across the whole population surveyed and are supported by other research (Geulayov et al 2016), there seems to be reliable evidence of an increasing trend over time.

Self-harm is more common among people who have had past experiences of physical, emotional or sexual abuse, those who have been bullied or victimised, and those who have experienced issues affecting their personality (NICE 2012). It is also more common in younger age groups, women and those in care (Carr et al 2016), as well as people who identify as lesbian, gay, bisexual or transgender (LGBT) – this appears to be related to their experiences of prejudice and discrimination (King et al 2008).

**Relationship between suicide and self-harm**

Suicidal thoughts are more common than many people realise and often these are not related to any recognised mental health condition. The Adult Psychiatric Morbidity Survey 2014 identified that one in five people (21%) in England reported having had suicidal thoughts at some time in their life, and this figure was slightly higher in women (around 22%) compared with men (around 19%) (McManus et al 2016).

Many more people undertake acts of self-harm than die by suicide, but a history of self-harm is an important risk factor for completed suicide, and is evident in around 40% of suicides (Hawton and van Heeringen 2009). Suicide rates have been estimated to be between 50 and 100 times higher for people who have self-harmed compared with those who have not (NICE 2012, Chan et al 2016). Despite self-harm and suicidal thoughts being more common among women, suicide rates are significantly higher among men than women in almost all regions of the world; in the UK and other high-income countries, around three quarters of suicides are among men (Freeman et al 2017, Haddad and Boyce 2017).
The risk of suicide is increased where a person has undertaken multiple repeated acts of self-harm (Hawton et al 2015), and for adolescents and young adults the risks of suicide are particularly high in the first year after self-harm (Olfson et al 2018). Where people have used violent and dangerous methods to harm themselves – such as hanging, using firearms or gas, jumping from heights or using particularly lethal poisons – there is also a higher risk of subsequent suicide (Olfson et al 2018).

Epidemiology of suicide

Suicide rates must be interpreted with some caution because there is potential for misreporting due to sensitivity regarding this cause of death. The WHO (2021) compiles records from national mortality data, noting that high-quality vital statistics are currently available from 67 of the 183 member states, with modelling methods used in many of the member states where data is of lesser quality.

Suicide rates have decreased markedly over the past two decades, with a decline of 36% in the global age-standardised suicide rate between 2000 and 2019 (WHO 2021). The largest decreases were in the European and Western Pacific Regions, where rates have reduced by 47% and 49% respectively. This decline in suicide mortality may in part be due to suicide prevention activities, as well as reflecting general improvements in population health (Naghavi 2019).

In the UK, mortality records show rising age-standardised suicide rates during the late 19th and early 20th century, peaking in 1934 at the height of the worldwide Great Depression (Thomas and Gunnell 2010). There has been a general reducing trend over the intervening years, although the 1980s and 1990s were characterised by an increase in suicide among men. There were further decreases thereafter until 2007, when suicide rates in men and overall increased, but still remained substantially lower than the rates in previous decades (ONS 2021). Figure 1 shows the age-standardised suicide rates by sex in England and Wales registered between 1981 and 2020.

Figure 1.

Age-standardised suicide rates by sex, England and Wales, registered between 1981 and 2020

Factors affecting suicide risk

In 2020, men and women aged 45-49 years had the highest age-specific suicide rates in England and Wales. The overall age standardised rate was 10.0 per 100,000 in 2020, with the rate being highest in the North East region (13.3 per 100,000) and lowest in London (7.0 per 100,000) (ONS 2021).

Many aspects of health are related to people’s social and occupational status, and this social gradient is evident for suicide. Analysis of national data over a five-year period for England (2011-15) demonstrated that the suicide rate for men working as low-skilled labourers was three times higher than the national male rate (ONS 2017). A twofold increased risk was evident for men working in building finishing trades such as plasterers, painters and decorators. This reflects a change in the risk associated with occupations: before the late 1990s, doctors, pharmacists, veterinarians and farmers were identified as high-risk occupational groups. Subsequently, suicide rates have diminished in these occupations and correspondingly increased among those in low-skilled and skilled manual occupations (Roberts et al 2013, ONS 2017).

Suicide rates among nurses

In England between 2011 and 2015, there was a lower suicide rate than the national average among male healthcare professionals (16% lower than the national average), particularly medical practitioners (37% lower than the national average) (ONS 2017). In contrast, a higher suicide rate was evident among female nurses (23% higher than the national average). This has led to further analysis by The National Confidential Inquiry into Suicide and Safety in Mental Health (2020). Analysis of six years of suicide reports (2011-16) identified that of the 281 nurses who died by suicide during this period, 204 (73%) were female. More than half (60%) of the female nurses who died by suicide were not in contact with mental health services, and of those who were, the most common diagnosis was mood disorder (59%). Additionally, 41% of the nurses had a history of alcohol misuse and two thirds (64%) had a history of self-harm.

The National Confidential Inquiry into Suicide and Safety in Mental Health (2020) report concluded that access to mental health support and referral processes need to be improved for nurses, and emphasised the importance of comprehensive, needs-based clinical care and approaches to prevention. Although the 77 male nurses who died by suicide over the 2011-16 period demonstrated a higher-than-average rate, the margin of confidence about the extent of difference was uncertain (The National Confidential Inquiry into Suicide and Safety in Mental Health 2020). However, a statistically significant increase in suicide rates was evident among men who worked in caring and personal services occupations; among this group the rate was 18% higher than population levels (ONS 2017).

Effects of suicide

Suicide affects individuals, families and communities. Those people most directly connected to the deceased such as spouses, parents, siblings and close friends will be most significantly affected, but a far wider circle of people – including co-workers or fellow students in school or college, teachers and healthcare professionals – will also be touched by such a loss. Research indicates that typically around 130 people will be connected with the deceased person, and that these ‘suicide-exposed’ individuals are around twice as likely to experience depression or anxiety compared with individuals who are not suicide-exposed (Cerel et al 2019, BMJ Best Practice 2022).

Suicide can also affect people who are not directly connected to the deceased person. For example, the death of celebrities by suicide can have widespread effects, triggering emotions
among people who may have previously contemplated suicide, as well as potentially normalising suicide as a way of responding to difficulties. A systematic review by Niederkrotenthaler et al (2020) found that the risk of suicide increased by 13% after media reports of a celebrity death by suicide, and when such reports included the suicide method used there was a 30% increase in deaths by the same method. Therefore, it is essential that the reporting of suicide is responsible and in accordance with the relevant guidelines.

Bereavement due to suicide involves particularly intense and challenging feelings, with grief often complicated by anger, confusion and guilt (Mind 2019). Furthermore, people bereaved in this way are themselves at increased suicide risk. Alongside general support and self-care, some specific services have been developed to provide support. A comprehensive guide to understanding and finding support has been developed and is available at: www.nhs.uk/livewell/suicide/documents/help%20is%20at%20hand.pdf

COVID-19, mental health and suicide

The coronavirus disease 2019 (COVID-19) pandemic has resulted in increased levels of anxiety and distress among people of all ages, negatively affecting the well-being of people with and without health issues. Fears about infection, together with the disruptions, restrictions and isolation imposed by lockdown measures, have resulted in economic hardship, trauma and loneliness (ONS 2022). Rates of domestic violence and bereavement have significantly increased (David et al 2021), while front-line workers have experienced multiple demands for an extended period, combined with reduced resources and workforce numbers.

A meta-review combined the results of 18 meta-analyses on the occurrence of mental health issues during the pandemic (de Sousa et al 2021). It showed an increased prevalence of features of stress, including insomnia and sleep disturbance, among healthcare workers (38%) compared with the general population (21%). An overall prevalence of 26% was found for psychopathology, with a prevalence of 28% for anxiety, 27% for depression and 20% for post-traumatic stress disorder (PTSD). These figures were similar for healthcare workers and the general population (de Sousa et al 2021).

Despite these many stressors and their negative effects on people’s mental health, large-scale research in England has not shown an increase in suicide following the initial national lockdown between April and October 2020 (Appleby et al 2021). This finding appears consistent with Pirkis et al’s (2021) review of data from 21 countries, which identified that suicide rates have remained unchanged or declined compared with the expected levels based on the pre-pandemic period. One suggested explanation for this was that national crises may exert a protective effect due to increased social cohesion, as demonstrated by greater attention and support from family members, neighbours and friends in response to the extraordinary pressures exerted by the COVID-19 pandemic (Botchway and Fazel 2021).

It is important to note that most of these findings relate to the first year of the COVID-19 pandemic, so there may be a time lag between this adverse event and effects such as self-harm and suicide. It is essential that nurses and other healthcare professionals are mindful of the increased distress identified by research, and that healthcare services as well as the wider community remain vigilant and ready to respond if risks and behaviours change as longer-term effects of the pandemic unfold. At the same time, as with the media reporting of suicide, it is important that caution is taken when reporting any predictions of escalation in suicide and self-harm rates in response to the pandemic.

Management of self-harm

Sensitive, compassionate and comprehensive risk assessment is essential when caring for people who present with self-harm and related mental health issues. The attitude and knowledge of staff about mental health issues is a key factor in their willingness and ability to provide effective, supportive assessment and care (Haddad et al 2012).
It has been found that some healthcare professionals’ responses to people who self-harm are inappropriate, and there appears to be an ongoing need for staff training to enhance their understanding of best practice in this area (Leather et al 2020). Staff in emergency departments, primary care, schools, prisons and hospital wards need to be aware of clinical guidance for this area of practice (NICE 2012), and show willingness to provide care when people present with self-harm. Such care will involve immediate attention to physical needs provided in a respectful and non-judgemental way. The specific care provided will depend on the type and severity of acts of self-harm and will most commonly involve wound care or the management of poisoning or overdose (NICE 2017).

**Risk assessment**

Risk assessment should be undertaken using a compassionate and therapeutic approach. In community or hospital settings, all nurses should be alert to indicators of suicide risk in patients, irrespective of whether or not they present with self-harm. Some of the main indicators of suicide risk are (BMJ Best Practice 2022):

- Onset of a physical illness – particularly if this is life-threatening, disfiguring or associated with severe pain or impairment of function.
- Recent loss or bereavement, or anticipation of such loss.
- Major relationship instability.
- Sudden unexplained changes in behaviour.
- Expressions of hopelessness.
- Indication of sustained low mood.

The experience, roles and responsibilities of general nurses in relation to this area of practice will vary greatly; however, all nurses are required to be competent in ascertaining important risk factors – such as the presence of a mental health condition, particularly depression occurring alone or together with substance misuse, and any history of suicide attempts (NICE 2012). Alongside this, all nurses should be able to conduct an initial suicide risk assessment by sensitively but directly eliciting a person’s thoughts and intentions. This requires asking clear questions such as:

- ‘Have you thought that life isn’t worth living?’
- ‘Have you wished that your life was over?’
- ‘Have you ever thought about ending your life?’
- ‘What has stopped you from acting on those thoughts so far?’

If a person expresses that they are having suicidal ideas, then the assessment must identify: the intensity and intention of these thoughts, including the extent of planning for a suicide act; if lethal means are available; whether the person seems to envisage a lack of future or if they have hope and can consider alternatives; and the extent to which the person is able to resist acting on their thoughts of suicide or self-harm (BMJ Best Practice 2022).

The use of a specific risk assessment tool or checklist is not recommended. This is because while such tools may be helpful in providing a structure for a comprehensive and collaborative assessment, they do not have predictive value and may detract from meaningful and individually focused engagement with the person (NICE 2012, Chan et al 2016).
Box 1. Risk assessment for individuals who present following self-harm

- Assess the person’s self-harm behaviour and clarify whether this was related to suicidal ideas. For example, was the person’s intention to die, and were lethal means used? Consider the content of any suicidal ideas and the level of conviction
- Review the person’s mental state – assess for mental health conditions, particularly depression, and for substance misuse
- Assess whether the person currently has suicidal ideas – do they have an intention to die and a plan?
- Review the person’s clinical history. For example, have they undertaken previous suicidal behaviours, and is there a family history of mental health issues, suicide or self-harm?
- Review family and relationship factors. For example, is the person experiencing relationship issues, loss or bereavement, or family discord? Have they experienced emotional, sexual and/or physical abuse? Are they experiencing any issues related to sexual or gender identity?
- Review social and environmental factors. For example, is the person in employment or attending education? Are they experiencing any issues at work or school, such as isolation, bullying or disaffection?
- Review support networks and any past treatment – consider the person’s engagement and motivation to change, as well as their ability to collaborate in the development of a personalised safety plan

(Adapted from Haddad and Boyce 2017)

Box 1 outlines the main elements of risk assessment for individuals who present following self-harm.

Irrespective of whether they have completed any specific mental health role or training, all nurses should have an understanding of the elements and principles of assessment, and be competent to engage in a collaborative initial assessment of suicide risk – within the limits of their organisational policies and procedures. If a nurse has concerns about their ability to conduct an adequate initial assessment, then it is crucial that they involve more senior and experienced colleagues. Where a preliminary assessment indicates immediate or considerable risk, for example if the person describes clear intentions, has made a plan or has a history of suicide attempts, then urgent referral to specialist mental health services is required (NICE 2012).

Where ongoing risk is evident, a collaborative and holistic assessment should be undertaken, typically by a nurse or other health professional with mental health training and responsibility. This assessment will incorporate the person’s medical and family history, the identification of any mental health issues, and an evaluation of psychosocial factors such as their current situation, life events and stressors, as well as their skills, strengths and sources of support. In addition to measuring risk, the focus of this engagement should be to develop an individualised safety plan for the person detailing practical ways to keep them safe (National Collaborating Centre for Mental Health 2018). Safety plans may be based on a template that outlines how to manage challenges, identify and use sources of support, and address issues related to mood, with clear details of who to contact at times of crisis. An example of a safety plan is available at: https://stayingsafe.net/sites/default/files/BlankSafetyPlan.pdf

A plan for follow-up care should also be in place for the person, which may combine telephone and face-to-face reviews, as well as indicators for urgent contact with healthcare services such as any deterioration in their condition, renewed consideration of suicidal ideas or plans, and
reduced or discontinued adherence to treatment. Healthcare professionals should seek to involve a person’s family members in support where possible. If concerns about a person’s risk are identified, for example in relation to their presentation, clinical history or the extent of adversity that they are experiencing, then referral to the local community mental health team for ongoing support will be appropriate.

**Conclusion**

Managing self-harm and the risk of suicide are areas of practice that nurses and other healthcare professionals often find challenging and can be sources of anxiety and uncertainty. There is a need for all nurses to take a clear, consistent and compassionate approach when caring for individuals who present with self-harm and/or suicide risk. This approach should be informed by an understanding of risk factors, the skills to undertake risk assessment effectively and knowledge of appropriate management strategies that can be implemented.

**Further resources**

Cruse Bereavement Group [https://www.cruse.org.uk/](https://www.cruse.org.uk/)


Staying Safe [https://stayingsafe.net/](https://stayingsafe.net/)

**References**


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