Dr Ella Arensman
Dr Helen S Keeley

Defining intent

With preparations underway for DSM-5, is there a case for a new diagnostic category of non-suicidal self-injury?

THE RECENTLY PROPOSED diagnostic category for inclusion in the *Diagnostic and Statistical Manual of Mental Disorders* (DSM-5), 'non-suicidal self-injury' (NSSI), has generated extensive debate among clinicians and researchers with regard to the available evidence base and implications for assessment, treatment and prevention. It is timely to review the evidence base and highlight potential implications.

Background

In the US, preparations are underway for the next edition of the DSM (DSM-5) which will be published in 2013. One of the newly proposed diagnostic categories for inclusion is non-suicidal self-injury (NSSI). NSSI refers to intentional destruction of one's own body tissue (eg. cutting, burning, hitting) without suicidal intent and for purposes not socially sanctioned.[1-3]

Researchers and clinicians working in the area of self-harm and suicide have expressed concerns about the lack of transparency in the development of new diagnostic categories for DSM-5.[4,5] In addition, concerns have been reported in relation to the proposal to include a diagnostic category for NSSI due to lack of sufficient evidence[5,6] and potential negative implications for assessment, treatment and prevention.[5]

Terminology and definition

Research into the epidemiology and aetiology of suicidal and self-harming behaviour is hampered by the lack of agreement on terminology and definitions. For example, over the years different terms, such as 'self-injury', 'parasuicide', 'attempted suicide', 'deliberate self-harm' and 'self-harm' have been used to indicate varying types of intentional self-harming behaviours (eg. self-cutting, intentional overdose) with varying degrees of suicidal intent and varying underlying motives. Reaching agreement on the terminology and definition is further complicated by the varying levels of suicidal intent and heterogeneity of motives reported by people engaging in self-harming behaviour.[7,9]

In many studies in Ireland and internationally the following definition of deliberate self-harm is used: *An act with non-fatal outcome in which an individual deliberately initiates a non-habitual behaviour that, without intervention from others, will cause self-harm, or deliberately ingests a substance in excess of the prescribed dosage, and which is aimed at realising changes that the person desires via the actual or expected physical consequences.*[10] The definition includes acts involving varying levels of suicidal intent and various underlying motives, such as loss of control, self-punishment or cry for help.

Suicidal intent and motives

Varying levels of suicidal intent and motives are reported by people engaging in self-harming behaviour presenting to hospital[7,11] and those with less lethal self-harm who do not come to the attention of health services.[8,9] Motives associated with self-harming behaviour include wish to die, self-punishment, revenge, escape from an unbearable situation, seeking attention and tension relief.[8,9,11]

Recent research among young people engaging in self-harm revealed that the majority report multiple and often contradictory motives underlying this.[8,9] The majority of young self-harmers reported both death-oriented and non-death-oriented motives (eg. seeking attention) at the time of their self-harm act, which reflects ambivalence rather than a static condition.[8] Consequently, the need to improve assessment procedures to determine the degree of suicidal intent among people engaging in self-harm has been highlighted as a key priority rather than the need to distinguish between those with and without suicidal intent.[7-9] This view is further supported by evidence that suicidal intent is a fluid rather than

a dichotomous concept.[12,13] This raises the question about the validity and clinical relevance of classifying self-harm patients into 'yes/no suicidal categories'.

Heterogeneity versus homogeneity

A major challenge so far in self-harm and suicide research has been to identify homogeneous subgroups of self-harm patients in terms of socio-demographic, behavioural and clinical characteristics. Various studies have distinguished *a priori* subgroups of self-harm patients, for example based on use of different self-harm methods, eg. self-cutting versus intentional overdose[14] or self-harm patients who engage in repeated self-harm acts versus those who don't.[15,16] Evidence has been reported for subgroups of self-harm patients characterised by mild versus those with severe self-harm representing the opposite poles of a dimensional concept of severity. Low severity was associated with low (not 'zero') suicidal intent, low degree (not 'absence') of suicidal preoccupation, low lethal self-harm methods, trying to influence someone and wish to seek help.[16,17] Even though research into self-harm subgroups has identified statistically significant and clinically meaningful differences, consistent evidence on homogeneous typologies of self-harm is lacking. The dimensionality of self-harm severity reflects the complexity of self-harm and contradicts a dichotomous concept.

Research into non-suicidal self-injury

Compared to self-harm in general, limited research has been conducted into NSSI. According to Nock et al (2006) and Stanley et al (2010), NSSI is poorly understood and many fundamental aspects of NSSI are unknown. The need for more epidemiological data on NSSI is underlined by Klonsky (2011).[18-20]

Research into NSSI has focused on psychiatric inpatients[18,19] and the general population.[20,21] Nock and colleagues (2006) investigated diagnostic correlates of adolescents with a recent history of NSSI and examined the relation between NSSI and suicide attempts among 89 adolescents admitted to an inpatient psychiatric unit who had engaged in NSSI in the previous 12 months. The majority (70%) reported a lifetime suicide attempt and 55% reported multiple attempts. Characteristics of NSSI associated with engaging in suicide attempts included a longer history of NSSI, use of a greater number of self-harming methods and an absence of physical pain during NSSI. The authors conclude that there is significant overlap between NSSI and suicide attempts, which underlines the need to clarify the relationship between non-suicidal and suicidal self-injury.[18] A large follow-up study of people who presented to hospital with self-harm demonstrated that completed suicide is predicted by both NSSI and suicide attempts as the index presentation, with no difference in the likelihood of future suicide between baseline suicidal and non-suicidal self-harm.[22]

Historically, NSSI has been associated with borderline personality disorder.[23] However, recent studies have provided evidence for wider diagnostic heterogeneity among people with NSSI.[25,26] Psychological problems including depression, suicidality and anxiety were also found to be associated with NSSI.[26,27] Stanley et al (2010) examined the role of endogenous opioids and monoamine neurotransmitters in NSSI, comparing 29 people with a history of NSSI to 29 matched controls without NSSI. All patients had a history of one or more suicide attempts.[19] The NSSI group had significantly lower levels of b-endorphin and met-enkephalin compared to those without NSSI, and severity of depression, hopelessness and overall psychopathology was greater in the NSSI group.

Even though the studies used internationally validated interview schedules or questionnaires to obtain information on NSSI, internationally validated tools to assess level of suicidal intent were often not included. This raises questions about the degree of certainty that suicidal intent was absent during acts of self-injury that were classified as NSSI.

Implications

The research as summarised above does not support the inclusion of NSSI as a new diagnostic category. The available evidence indicates that NSSI is a behavioural phenomenon that may be associated with various psychiatric disorders, but there is no convincing evidence that NSSI in itself is a psychiatric disorder that requires inclusion in a classification system for mental disorders.

From a pragmatic point of view, it may be desirable and advantageous to have access to an NSSI diagnostic category. However, a patient receiving an NSSI diagnosis may conceal fluid suicidal intent which, by being labelled as NSSI, may increase the risk that suicidality may go undetected and consequently also increase the risk of not receiving the appropriate clinical attention which prevents low suicidal intent developing into moderate or high suicidal intent.

The assumption that all episodes labelled as NSSI are not suicidal behaviours cannot be tested at the epidemiological level. Therefore, such behaviours which have previously been included under the category of deliberate self-harm or self-harm would not be included. Given the association between NSSI and suicide attempts described above, this could prevent the identification of a significant group of people who are at risk for further suicide attempts and who could benefit from targeted interventions. On an individual level, identifying self-cutting as a coping mechanism can be very effective with adolescent self-harmers who are more likely to show problem-solving deficits.[28] However, NSSI even without suicidal ideation is a marker for distress among people who have difficulty expressing emotions[29] and care needs to be taken not to underestimate their distress and therefore induce higher-risk behaviours.[30]

In summary, while the proposed NSSI category appears to be a pragmatic solution to a longstanding issue among psychiatrists regarding repetitive self-harming behaviour that clinically needs to be distinguished from suicide attempts, the distinction is not clear-cut, with significant overlaps in terms of past history and future risk of suicidal behaviour. In addition, the proposed category is likely to become intrinsically and probably excessively linked with borderline personality disorder, with consequent underestimation of the degree of distress and treatment needs of those involved. Therefore, at present the evidence would not support NSSI as a separate diagnostic category but it may have a useful place as a subtype of self-harm at an individual clinical level.

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References available on request

Dr Ella Arensman, director of research, the National Suicide Research Foundation, and honorary senior lecturer, Department of Epidemiology and Public Health, University College Cork; Dr Helen S Keeley, consultant child and adolescent psychiatrist, Child and Adolescent Mental Health Services, HSE South, North Cork Area