

## Editorial

Non-suicidal self-injury v. attempted suicide:  
new diagnosis or false dichotomy?<sup>†</sup>

Navneet Kapur, Jayne Cooper, Rory C. O'Connor and Keith Hawton

**Summary**

Non-suicidal self-injury (NSSI) is a term that is becoming popular especially in North America and it has been proposed as a new diagnosis in DSM-5. In this paper we consider what self-harm research can tell us about the concept of NSSI and examine the potential pitfalls of introducing NSSI into clinical practice.

**Declaration of interest**

N.K. was Chair of the National Institute for Health and Clinical

Excellence (NICE) guideline development group for the longer-term management of self-harm, of which R.O.C. was also a member. N.K. currently chairs the NICE Topic Expert Group that is developing quality standards for self-harm services. N.K. and K.H. are members of the National Suicide Prevention Strategy Advisory Group and R.O.C. is a member of the Scottish Government's National Suicide and Self-harm Monitoring and Implementation Group. K.H. is a National Institute for Health Research (NIHR) senior investigator.

Nav Kapur (pictured) is Professor of Psychiatry and Population Health at the Centre for Suicide Prevention, in the Centre for Mental Health and Risk at the University of Manchester. Jayne Cooper is Senior Research Fellow at the Centre for Mental Health and Risk, University of Manchester. Rory C. O'Connor is Professor of Psychology at the Stirling Suicidal Behaviour Research Laboratory in the Centre for Health and Behaviour Change at the University of Stirling. Keith Hawton is Professor of Psychiatry and Director of the Centre for Suicide Research at the University of Oxford.

Diagnostic precision is a fine thing. Its potential benefits are considerable – improved communication between health professionals, better research into causes and prevention, and the development of specific treatments. But is the time really right to create a new diagnosis of non-suicidal self-injury (NSSI), or are we simply in danger of creating a false dichotomy?

### Non-suicidal self-injury – where did it come from and what does it mean?

In this issue Butler & Malone discuss the current criteria for NSSI in some detail.<sup>1</sup> However, the concept is not new – in the 1960s clinicians in the USA described seeing increasing numbers of people who cut themselves in order to feel better rather than seeking to die.<sup>2</sup> Recent developments in terminology have occurred in the context of a growing recognition that some individuals, young people in particular, were injuring themselves but did not meet the criteria for borderline personality disorder or psychiatric illness. A diagnosis of NSSI would mean that adolescents might avoid a potentially inappropriate personality disorder label, while still having a formal diagnosis for which they could receive treatment. So, the motives behind the introduction of NSSI were admirable. Unfortunately, the evidence base is weak. Few studies have been carried out in adults, the majority of work has been conducted in North America<sup>3</sup> and there is a lack of high-quality, large-scale longitudinal data. Despite this, the term NSSI has gained popularity, especially in the USA, and it has been proposed for inclusion in DSM-5, with the Childhood and Adolescent Disorders Work Group developing the diagnostic criteria. Whether NSSI makes its way into the published version

of DSM-5 in May 2013 or not, there are potential problems with the term itself.

First and most importantly, the prefix 'non-suicidal' is misleading because of the strong association between NSSI and suicidal behaviour – in one study of a community sample of adults, over a third of respondents reported that they had engaged in NSSI while actually experiencing suicidal thoughts.<sup>4</sup> Longitudinal research has identified NSSI as one of the most important risk factors for suicide attempts.<sup>5</sup> Self-cutting is the most common method of NSSI and a behaviour that is often regarded as being of limited seriousness by clinical services. However, there is evidence that self-cutting that results in hospital treatment is actually associated with greater risk of eventual suicide than self-poisoning in both adults<sup>6</sup> and adolescents.<sup>7</sup> Of course, these findings may not apply to individuals who cut themselves and do not present to clinical services.

Second, there is the paradox that self-poisoning can never be included as NSSI, even when patients report episodes as categorically non-suicidal.<sup>5</sup> Hospital-based studies suggest that as many as 25–50% of those who self-poison may report no suicidal intent.<sup>8,9</sup> Non-suicidal self-injury is restricted to methods such as cutting, burning, stabbing, hitting or excessive rubbing, which leaves non-suicidal self-poisoning in the classificatory wilderness.

Third, there is the point that methods of self-harm change over time. Those with index episodes of NSSI may subsequently poison themselves and vice versa. In a large cohort study of over 7344 individuals presenting to general hospitals in England and followed up for an average of 9 months, 1234 repeated self-harm and a third of these switched methods.<sup>10</sup> Method switching was particularly common in people who cut themselves at their index episode – over 60% changed methods, most frequently to poisoning.

### How can research into self-harm help us?

Terms for non-fatal suicidal behaviour such as 'parasuicide' and 'attempted suicide' were superseded in the 1970s in the UK by 'deliberate self-harm' in recognition that not all episodes involved definite suicidal intent. More recently, the prefix 'deliberate' has been largely dropped because of concerns that it was judgemental and because the extent to which the behaviour is intentional is not

<sup>†</sup>See pp. 324–325, this issue.

always clear.<sup>11</sup> Self-harm refers to self-injury or self-poisoning regardless of apparent motivation.<sup>12</sup> Can research using such intent-free definitions shed any light on the phenomenon of NSSI?

If NSSI exists as a discrete entity one might expect suicidal intent in people who have self-harmed to show a bi-modal distribution, with some individuals clearly 'suicidal' and others clearly 'non-suicidal'. In fact, suicidal intent appears to be continuously distributed in clinical populations with no easily identifiable cut-offs. Figure 1 shows the distribution of scores on the Suicidal Intent Scale for over 700 individuals presenting to hospital in Oxford with self-harm.<sup>13</sup> However, a continuous distribution does not necessarily preclude there being discrete groups, and statistical techniques (for example, taxometric analyses or latent class analysis) might help to determine the extent to which NSSI and attempted suicide are qualitatively different or not. There is also the related issue of ambivalence. In one study, over 40% of young people said they did not care whether they lived or died at the time of the self-harm episode.<sup>14</sup>

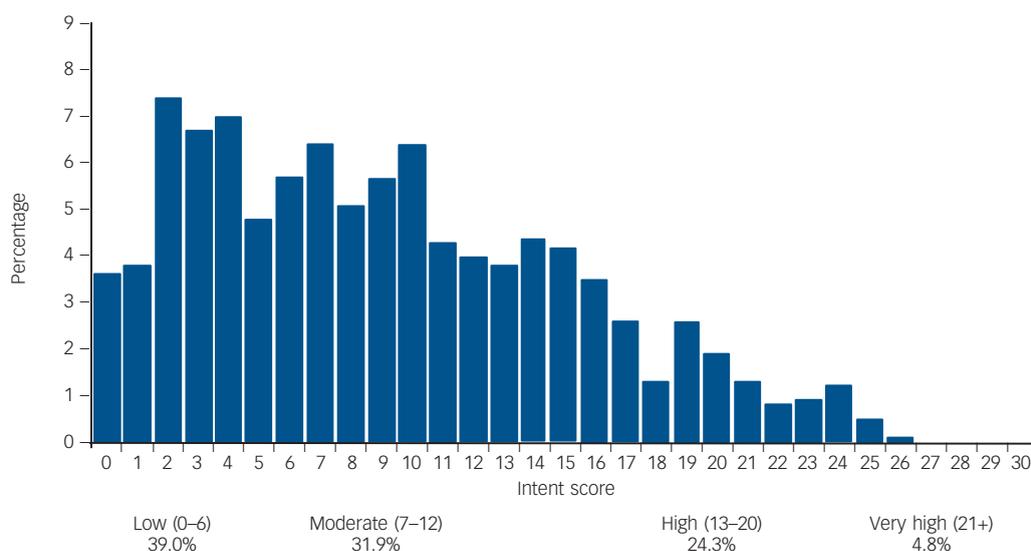
We might also reasonably expect to be able to distinguish between NSSI and 'genuine' suicide attempts on the basis of outcome. However, the best evidence suggests that even episodes of self-harm with no reported suicidal intent are related to an elevated risk of repeat self-harm and suicide compared with the general population.<sup>6,8</sup> In a cohort study of nearly 8000 individuals presenting with overdose or self-injury to four emergency departments in Greater Manchester, there was no significant difference in subsequent suicide mortality between individuals who indicated that they did or did not wish to die at the time of the attempt.<sup>6</sup>

There is an argument that one of the main distinctions between suicidal and non-suicidal self-injury is the motivation underlying the act – a wish to die as opposed to seeking relief from distressing symptoms. However, self-injury as a whole is often characterised by multiple motivations existing simultaneously. In a study of over 30 000 adolescents in seven countries, over 80% of those who had harmed themselves in the previous month reported more than one reason for self-harm.<sup>15</sup> Common reasons included wanting to get relief from a terrible state of mind, wanting to die and wanting to punish oneself. Motivations may

also change from one episode to the next. This will be familiar to clinicians and is explicitly acknowledged in UK guidance that stresses that each episode of self-harm should be assessed in its own right.<sup>11</sup> This guidance recommends that the presence/absence of suicidal intent associated with both current and past episodes of self-harm should be assessed. Self-reported motivation may even change within the same episode. The quotes in the Appendix from a qualitative study of individuals who had self-harmed in Manchester<sup>16</sup> help to illustrate this. Underlying motivations may be unclear even to the person who has harmed themselves and clinicians and service users may have very different views on the degree of suicidal intent associated with the same episode of self-harm.<sup>14</sup> One important question is whose view – the doctor's or the patient's – should determine whether a behaviour is NSSI or not? Basing a diagnosis on a construct as fluid as motivation is clearly problematic.

## Conclusion

Much of the literature on NSSI has focused on young people. Comparatively few studies have been carried out in adults. Self-harm research suggests that the NSSI concept may have limited usefulness in practice but much of this work has been carried out in secondary care or emergency department settings. It is certainly possible that NSSI has greater validity in community samples of young people. What nearly everyone seems to agree on is that we need more research. Could the creation of a new diagnostic category help us to understand the incidence and natural history of this phenomenon and ultimately inform better treatment? Perhaps, but this would be particularly challenging in the context of the changing motivations and methods that characterise self-injury. There is also the well-rehearsed argument that whether we prefer the terms self-harm, or NSSI, or suicidal behaviour disorder (that has recently appeared in the proposed draft of DSM-5), these are all behaviours and not disorders. This is part of a criticism of disease classification systems that goes much wider than the current debate. We think that there are potential problems with creating a new diagnosis of NSSI for



**Fig. 1** The distribution of scores on the Beck Suicide Intent Scale in 771 individuals presenting consecutively to a single general hospital in Oxford with self-harm in 2009.<sup>13</sup>

The sample included all ages (range 11–91 years), 60% were aged under 35 years, and 61% of individuals were female.

which we have no proven treatments and which could stigmatise large numbers of young people unnecessarily.<sup>17</sup> This is a risk that is all the more dubious given the fact that self-harming behaviour mostly ceases as adolescents mature.<sup>18</sup>

There are also obvious difficulties in labelling behaviours as definitively non-suicidal when they greatly increase the risk of future self-inflicted death. Given the pressure on front-line clinical services, the danger of an attempted suicide/NSSI dichotomy is that those with NSSI will be given lower priority and receive poorer treatment than other patients. Although self-harm is not a perfect descriptor, we might well be better off sticking with the terminology we currently have.

**Navneet Kapur**, FRCPsych, MD, **Jayne Cooper**, PhD, Centre for Suicide Prevention, Centre for Mental Health and Risk, University of Manchester; **Rory C. O'Connor**, PhD, Stirling Suicidal Behaviour Research Laboratory, Centre for Health and Behaviour Change, University of Stirling; **Keith Hawton**, FRCPsych, DSc, Centre for Suicide Research, University of Oxford, Department of Psychiatry, Warneford Hospital, Oxford, UK

**Correspondence:** Nav Kapur, Centre for Suicide Prevention, Centre for Mental Health and Risk, University of Manchester, Jean McFarlane Building, Oxford Road, Manchester M13 9PL, UK. Email: nav.kapur@manchester.ac.uk

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## Appendix

### Changing suicidal intent between episodes and within episodes from a qualitative study of self-harm

Motivations change between episodes:

'So basically the first time I did it I didn't have, I don't think I had, suicidal intent if I'm honest, but it was definitely more a cry for attention really, I needed help . . . But when I took the second overdose that was with suicidal intent, I had had enough I was burned out so that's why I took as much drugs as I could physically tolerate.' (Male respondent, aged 20)

but also within episodes:

'At first it was about ending . . . life. But then I started thinking about my Gran and thinking my mum letting me down in the last day and my Nan leaving me when she promised me she wouldn't . . . all these other things that I was thinking – why me, you know? . . . then [I] started to take the pills in anger.' (Female respondent, aged 26)

These data are unpublished and were collected as part of a qualitative study described in Cooper *et al.*<sup>16</sup> The sample consisted of 11 service users (6 female, 5 male, age range 18–53 years).

## References

- Butler AM, Malone K. Attempted suicide v. non-suicidal self-injury: behaviour, syndrome or diagnosis? *Br J Psychiatry* 2013; **202**: 324–5.
- Graff H, Mallin R. The syndrome of the wrist cutter. *Am J Psychiatry* 1967; **124**: 36–42.
- Muehlenkamp JJ, Claes L, Havertape L, Plener PL. International prevalence of adolescent non-suicidal self-injury and deliberate self-harm. *Child Adolesc Psychiatry Ment Health* 2012; **6**: 10.
- Klonsky ED. Non-suicidal self-injury in United States adults: prevalence, socio-demographics, topography and functions. *Psychol Med* 2011; **41**: 1981–6.
- Andover MS, Morris BW, Wren A, Bruzese ME. The co-occurrence of non-suicidal self-injury and attempted suicide among adolescents: distinguishing risk factors and psycho-social correlates. *Child Adolesc Psychiatry Ment Health* 2012; **6**: 11.
- Cooper J, Kapur N, Webb R, Lawlor M, Guthrie E, Mackway Jones K, et al. Suicide after deliberate self harm: a cohort study. *Am J Psychiatry* 2005; **162**: 297–303.
- Hawton K, Bergen H, Kapur N, Cooper J, Steeg S, Ness J, et al. Repetition of self-harm and suicide following self-harm in children and adolescents: findings from the Multicentre Study of Self-harm in England. *J Child Psychol Psychiatry* 2012; **53**: 1212–9.
- Kapur N, Cooper J, King-Hele S, Webb R, Lawlor M, Rodway C, et al. The repetition of suicidal behaviour: a multicenter cohort study. *J Clin Psychiatry* 2006; **67**: 1599–609.
- O'Connor RC, Whyte MC, Fraser L, Masterton G, Miles J, MacHale S. Predicting short-term outcome in well-being following suicidal behaviour: the conjoint effects of social perfectionism and positive future thinking. *Behav Res Ther* 2007; **45**: 1543–55.
- Lilley R, Owens D, Horrocks J, House A, Noble R, Bergen H, et al. Hospital care and repetition following self-harm: multicentre comparison of poisoning and self-injury. *Br J Psychiatry* 2008; **192**: 440–5.
- National Collaborating Centre for Mental Health. *Self-Harm: Longer-Term Management (CG133)*. NICE, 2011.
- Hawton K, Harriss L, Hall S, Simkin S, Bale E, Bond A. Deliberate self-harm in Oxford, 1990-2000: a time of change in patient characteristics. *Psychol Med* 2003; **33**: 987–96.
- Hawton K, Casey D, Bale E, Rutherford D, Bergen H, Simkin S, et al. *Deliberate Self-Harm in Oxford 2009*. Centre for Suicide Research, University of Oxford, 2012.
- Hawton K, Cole D, O'Grady J, Osborn M. Motivational aspects of deliberate self-poisoning in adolescents. *Br J Psychiatry* 1982; **141**: 286–91.
- Scoliers G, Portzky G, Madge N, Hewitt A, Hawton K, De Wilde JE, et al. Reasons for adolescent deliberate self-harm. A cry of pain/or a cry for help. Findings from the child and adolescent self-harm in Europe (CASE) study. *Soc Psychiatry Psychiatr Epidemiol* 2009; **44**: 601–7.
- Cooper J, Hunter C, Owen-Smith A, Gunnell D, Donovan J, Hawton K, et al. "Well it's like someone at the other end cares about you." A qualitative study exploring the views of users and providers of care of contact-based interventions following self-harm. *Gen Hosp Psychiatry* 2011; **33**: 166–76.
- De Leo D. DSM-V and the future of suicidology. *Crisis* 2011; **32**: 233–9.
- Moran P, Coffey C, Romaniuk H, Olsson C, Borschmann R, Carlin JB, et al. The natural history of self-harm from adolescence to young adulthood: a population-based cohort study. *Lancet* 2011; **379**: 236–43.