

# Adolescent self-harm

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### Welcome

Self-harm is a particularly adolescent phenomenon. It does affect all age groups, but studies have consistently shown a peak in mid adolescence<sup>1</sup>. The majority of people who self-harm are aged between 11 and 25 years.<sup>2</sup> It is also a critical public health issue. It reflects and creates emotional distress. What do we know, and what can we do?

What we have done in our series of Research Updates is to pull together some themes emerging from the literature with a selection of new research work on each topic. Topics covered by earlier updates in this series include attention deficit and hyperactivity disorder, new technologies, adolescent sleep, long-term conditions, accidents and injuries, health inequalities, disability, physical activity, alcohol and substance use, teenage pregnancy and sexual health, and mental health and emotional wellbeing. You can obtain an extended version of this paper, along with copies of all our past and future Research Updates by joining AYPH ([www.ayph.org.uk](http://www.ayph.org.uk)).

### What is self-harm?

Self-harm refers to the deliberate self-infliction of damage to body tissue.<sup>3</sup> In the USA the usual term is non-suicidal self-injury (NSSI), whereas in Europe it is more usually referred to as deliberate self-harm (DSH)<sup>4</sup>. The latter may include suicidal intent, and some object to the 'deliberate' part of the term, suggesting that some people affected by self-harm do not feel in control of their actions. Self-harm does not usually refer to substance misuse or abuse, or eating disorders, and we have excluded these behaviours from this briefing.

The usual method of self-harm in community samples is cutting and scratching, although young men may also self-bruise or use self-battery. But the usual problem for those admitted into hospital is paracetamol overdoses.

Self-harm is a private behaviour, which makes it difficult to estimate how common it is. Much of the literature relates to young people who end up in the emergency departments of hospitals, when in fact most young people who self-harm do not present at hospital.

### How many young people are affected by self-harm?

Because it is such a sensitive topic, there is a shortage of reliable information about young people who self-harm but do not make use of services. As a result, estimates of the proportion of secondary school aged children who self-harm vary enormously and we cannot be sure what is closest to the real level. Some studies find around 6-8% of adolescents and young adults reporting current, chronic self-injury<sup>5</sup>; others suggest higher figures of 12-20%<sup>6</sup>, but the proportion who may have tried it once or twice could be much higher; perhaps over half<sup>7</sup>. A Scottish self-report survey in schools found self-harm reported by 14% of pupils aged 15-16 years.<sup>8</sup> It is more common in young women (3.4 times more likely in the Scottish schools survey), although again estimates of the ratio between them and young men vary<sup>9</sup>, and in the later teen years the ratio may be more similar.<sup>10</sup>

#### Common characteristics of self-harm behaviours

- compulsive, ritualistic
- episodic (every so often)
- repetitive (on a regular basis)
- Sometimes occurs with depression and anxiety, but sometime occurs without
- Serves a purpose to the young person

*Source: Whitlock (2010)*

### Why do young people self-harm?

It is clear that self-harm is primarily a coping mechanism for young people; a way of releasing tension and managing strong feelings. Marginalised young people - those in custody, victims of abuse, or those affected by sexual exploitation, for example - are clearly more at risk, at least in part because they are more at risk of depression and anxiety and perhaps have fewer role models demonstrating effective, alternative coping strategies. They may also be more likely to know others who use self-harm themselves or attempt suicide, factors that have been identified as a risk in a number of studies.

### Key issues:

- **Why is self-harm more prevalent in adolescence?** Some have suggested this might be due to changes in brain development in adolescence<sup>11</sup>. In addition, adolescents (particularly young women) have higher rates of anxiety and depression than younger children<sup>12</sup>, and self-harm is clearly associated with these kinds of mental health problems.
- **What is the meaning of self-harm for young people** and how can we use that information to design better interventions?<sup>13</sup>
- **How many will resolve the problems without intervention?** And how many will go on to get worse and potentially become suicidal? Estimates suggest around 1 in 8 adolescents who self-harm will end up in emergency care at hospital.<sup>14</sup>
- **What are the perceptions and experiences of those with self-harm who go for help?** Self-harm is often misunderstood and young people may feel stigmatised and ashamed.<sup>15</sup>

- **How much is adolescent self-harm affected by contagion effects and other peer influences?** The role of social media is often raised as a concern, but social media may also help those in need of information and support.<sup>16</sup>
- **What works?** The evidence base on interventions for self-harm is not very conclusive,<sup>17</sup> but it seems likely that interventions based on cognitive behavioural therapy or ‘problem-solving therapy’, which teach new methods of coping and that offer brief but swift response to crisis, will prove helpful. Pharmacological interventions for this age group are generally discouraged. Also ensuring young people know where to go for quick access to help if they are hurt is very important.

## Recent reports

### *Talking self-harm*

#### **Young Minds and Cello (2012)**

A report in the Cello group ‘Talking Taboos’ initiative, looking at self-harm symptoms, statistics, causes and interventions, particularly challenging public attitudes. Also includes interesting social media monitoring and netnographies (the study of communication patterns and content between/within social groups on the Internet), tracking real-time mentions and on-line conversations around self-harm.

[http://www.cellogroup.com/pdfs/talking\\_self\\_harm.pdf](http://www.cellogroup.com/pdfs/talking_self_harm.pdf)

### *Suicide and self-harm in the South West: Briefing Paper*

*South West Public Health Observatory, 2011*

Commissioned by NHS South West for commissioners and providers of health and social care, analysing the data on suicide and self-harm in the South West, demonstrating that the trends in different regions vary greatly. Between 2001/02 and 2008/09 there were 68,136 self-harm admissions of residents aged 15 and over, with increasing rates in more recent years and with the fastest rises in young women aged 15-19 and 20-24 years. The report draws attention to concerns over the role of recession, employment opportunities, social networking sites and online news in exacerbating trends.

### *Self-harm, suicide and risk: helping people who self-harm: Final report of a working group*

#### **Royal College of Psychiatrists College Report CR158 (2010)**

Provides background information on self-harm in the UK, describes some of the public policy issues, and explores the results of a survey and consultations with healthcare professionals and others working with young people who self-harm. Makes a series of recommendations, including development of a common curriculum on self-harm for front-line health professionals, more research funding on relevant therapies, and more recognition of the crucial contribution of the third sector in dealing with self-harm and suicide.

<http://www.rcpsych.ac.uk/files/pdfversion/cr158.pdf>

### *Truth hurts: Report of the National Inquiry into Self-harm among Young People.*

#### **Mental Health Foundation and the Camelot Foundation (2006)**

Although this is more dated than the other reports we usually include in our Research Updates, it represents a benchmarking report that has not been updated, and is widely cited as the source of information on prevalence rates in the community.

[http://www.mentalhealth.org.uk/content/assets/PDF/publications/truth\\_hurts.pdf](http://www.mentalhealth.org.uk/content/assets/PDF/publications/truth_hurts.pdf)

## Useful reviews

### *Self-harm and suicide in adolescents*

Hawton K, Saunders K and O'Connor (2012) *The Lancet* 379, 2373-82

[http://www.thelancet.com/journals/lancet/article/PIIS0140-6736\(12\)60322-5/abstract](http://www.thelancet.com/journals/lancet/article/PIIS0140-6736(12)60322-5/abstract)

An excellent and thorough review of what we know about self-harm in the teenage years, from a public health perspective. Draws attention to the lack of evidence for effectiveness of different kinds of treatment, and the need to understand the role of new media. Summarises the risk factors for self-harm and suicide and looks at the overlap. Outlines the key challenges to prevention, including need for more understanding, need to develop and assess new interventions, and need to improve prevention including perhaps using on-line tools.

### *Self-injurious behaviour in adolescents*

Whitlock J (2010) *PLoS Medicine*, Downloadable from

<http://www.plosmedicine.org/article/info%3Adoi%2F10.1371%2Fjournal.pmed.1000240>

Janis Whitlock is an authoritative international expert in adolescent self-harm based at the Family Life Development Center at Cornell University. This admirably brief review about what we know about non-suicidal self-injury (NSSI) in adolescents is a very useful overview. American data suggest lifetime prevalence of what Whitlock terms 'common NSSI' ranges from 12-37% in secondary school populations and 12-20% in late adolescents. While NSSI can occur with mental health problems such as depression or anxiety, it also presents independently, unrelated to other mental health difficulties.

### *Psychosocial and pharmacological treatments for deliberate self-harm*

Hawton K, Townsend E, Arensman E, Gunnell D, Hazell P, House A and Heeringen K (2009) *The Cochrane Collaboration; Cochrane Review*

An important landmark assessment of the research on what works in intervening with self-harm, undertaken by the UK's experts on the topic, and utilising the robust Cochrane review methodology. Results from 23 trials of interventions were equivocal, mainly due to the fact that there were few replications and small numbers of patients for each kind of treatment. The authors concluded that "more evidence is required to indicate what the most effective care is for this large patient population", although what they term 'promising' results were shown for problem-solving therapy, giving people an emergency contact card, and drug (antipsychotic) treatment or long term psychological therapy for repeaters of self-harm.

## Recent research

### *Service user perspectives on psychosocial assessment following self-harm and its impact on further help-seeking: A qualitative study*

Hunter C, Chantler K, Kapur N, Cooper J (2013) *Journal of Affective Disorders*, 145, 315-323

<http://www.ncbi.nlm.nih.gov/pubmed/22925352>

This team based in Manchester in the UK used in depth, qualitative interviews to explore service user experiences of being assessed following hospital admission for self-harm. The patients were not very clear on the purpose of assessment, and if it offered or suggested follow-up care that that was not forthcoming, it could lead to feelings of hopelessness and disengagement from services.

***International prevalence of adolescent non-suicidal self-injury and deliberate self-harm***

**Muehlenkamp J, Claes L, Havertape L and Plener P (2012) *Child and Adolescent Psychiatry and Mental Health*, 6, <http://www.ncbi.nlm.nih.gov/pubmed/22462815>**

Looks at the overlap between non-suicidal self-injury (NSSI, usual American usage) and deliberate self-harm (DSH, usual European/Australian usage). The latter can include acts where suicide was intended. Use of different terms and definitions may lead to conflicting prevalence rates. The authors reviewed research on all possible types of self-harm, focusing on 11-18 year olds in community and school settings. Across all the studies, mean lifetime prevalence for NSSI was 18%, and for DSH was 16%. Prevalence rates were higher in studies using multi-item checklists. They note that “the type of assessment tools used are contributing potential bias to estimates of self-injury within adolescent populations” (p3).

***The natural history of self-harm from adolescence to young adulthood: a population-based cohort study.* Moran P, Caffey C, Romaniuk H, Olsson C, Borschmann R, Carlin J and Patton G (2012) *The Lancet*, 379, 236-43. Downloadable from <http://blogs.rch.org.au/cah/files/2011/11/The-natural-history-of-self-harm-from-adolescence-to-young.pdf>**

An Australian study of 1,800 adolescents at 44 schools, followed up from an average age of 16 years to 29 years, with seven waves of data collection. During the adolescent phase (14-19 years), 8% reported self-harm (more girls than boys), associated with depression and anxiety, antisocial behaviour, and substance use. Rates went down during late adolescence. Cutting was the most common method during adolescence, but by young adulthood no one method predominated. The authors concluded that most self-harming behaviour in adolescents resolves spontaneously.

***Bullying victimisation and risk of self-harm in early adolescence: longitudinal cohort study.***

**Fisher H, Moffit T, Houts R, Belsky D, Arseneault L, Caspi A (2012) *British Medical Journal*, 344**  
Downloadable from <http://www.bmj.com/content/344/bmj.e2683>

From the Environmental Risk longitudinal study of 1,116 UK twin pairs born in 1994/5, looking at the relative risk of children’s self-harming behaviour in the 6 months before their 12<sup>th</sup> birthday (3%). Of the 62 who had self-harmed, over half were victims of frequent bullying. Victimised twins were more likely to self-harm than their non-victimised sibling. Again, as in other studies, familiarity with a family member who had committed suicide was a risk, as well as physical abuse. The authors concluded that a substantial proportion of self-harm could be attributed to bullying.

***Distinguishing adolescents who think about self-harm from those who engage in self-harm.***

**O’Connor R, Rasmussen S and Hawton K (2012) *British Journal of Psychiatry*, 200, 330-335**  
Copy can be requested from <http://strathprints.strath.ac.uk/36483/>

The authors propose a new theoretical model, the integrated motivational-volitional model, which distinguishes between those who think about it and those who actually self-harm. Enactors were more likely to have experience of a friend/family member who had self-harmed, more likely to have recent life stress, more likely to think their peers self-harmed, and more likely to be impulsive.

***Epidemiology and nature of self-harm in children and adolescents: findings from the multicentre study of self-harm in England.* Hawton K, Bergen H, Waters K, Ness J, Cooper J, Steeg S and Kapur N (2012) *European Child and Adolescent Psychiatry*, 7, 369-377**

Results from this important survey undertaken in six hospitals between 2000 and 2007. There were 7,150 episodes of self-harm by 5,205 individuals. In those aged 10-14 years, the rate averaged at 302 per 100,000 for girls, and 67 per 100,000 boys, with a ratio of 5:1. In those aged 15-17 years, the rates were

1,423 and 466, with a female:male ratio of 2.7:1. Of those presenting, over half had a history of self-harm. Relationship problems were the key trigger. Remembering that this was a hospital sample, not a community sample, the most common type of self-harm was paracetamol overdose.

***Suicide and deliberate self-harm in Oxford: University students over a 30 year period.***

**Hawton K, Bergen H, Mahadevan S, Casey D and Simkin S (2012) Social Psychiatry and Psychiatric Epidemiology** <http://www.ncbi.nlm.nih.gov/pubmed/21076914>

Over this 30 year period a total of 602 university students presented at a general hospital in Oxford with deliberate self-harm. Overall the rates were no higher in Oxford students than others of the same age group in the city, but there were more incidents in the exam term.

***Psychological characteristics, stressful life events and deliberate self-harm: findings from the Child and Adolescent Self-harm in Europe (CASE) Study.***

**Madge N, Hawton K, McMahon E, Corcoran P, De Leo D, Jan de Wilde E, Fekete S, van Heeringen K, Ystgaard M and Arensman E (2011) European Child and Adolescent Psychiatry, 10, 499-508**

Downloadable from

<http://www.console.ie/userfiles/file/2011%20Psychological%20characteristics,%20stressful%20life%20events%20and%20deliberate%20self%20harm.pdf>

Over 30,000 15-16 year olds completed questionnaires in schools in Belgium, England, Hungary, Ireland, the Netherlands, Norway and Australia. Overall, 80% said they had experienced thoughts of self-harm, 15% had thought about harming themselves but had not done so, 2.6% reported single harm episodes in the last year, and 3% reported multiple episodes. Females were twice as likely to have experienced any of these. Increased severity of self-harm was linked with greater depression, anxiety, impulsivity and lower self-esteem. Single incidents were more common in females, people with higher impulsivity scores, people who had experience of family/friend suicide, physical & sexual abuse, or worries about sexual orientation. Rates were particularly low in the Netherlands.

***'Well it's like someone at the other end cares about you' A qualitative study exploring the views of users and providers of contact-based interventions following self-harm***

**Cooper J, Hunter C, Owen-Smith A, Gunnell D, Donovan J, Hawton K, Kapur N (2011) General Hospital Psychiatry, 2011, 33, 166-176** <http://www.ncbi.nlm.nih.gov/pubmed/21596210>

Contact-based interventions included letters, telephone calls or crisis cards following emergency admissions at hospital for self-harm. The time immediately after discharge was identified as critical. Any kind of contact was viewed by service users as indicating 'care'. Users preferred telephone contact from mental health specialists, but other methods were also welcomed, as long as any offers to help were followed through. The authors suggest that immediate provision of leaflets, a phone call after discharge, and then letters thereafter would provide a useful intervention package.

***Group therapy for adolescents with repeated self-harm: randomised controlled trial with economic evaluation.***

**Green J, Wood A, Kerfoot M, Trainor G, Roberts C, Rothwell J, Woodham A, Ayodeji E, Barrett B, Byford S, Harrington R (2011) British Medical Journal 342.** Downloadable from <http://www.bmj.com/content/342/bmj.d682>

More than 350 adolescents aged 12-17 years who had self-harmed at least twice in 12 months were randomly assigned to group therapy or to routine care. The study took place in the north west of the UK. The cohort improved overall (in fact more than had been expected), and against this context group therapy did not make a difference to outcomes.

***The functions of self-injury in young adults who cut themselves: Clarifying the evidence for affect-regulation.***

**Klonsky E D (2009)**

A slightly older piece of research, but addressing a topic that is of rising interest; the meaning and function of self-harm for the individuals who cut themselves. Emphasises that although there are elements of self-punishment, self-injury is also associated with improvements in mood and release of emotional pressure, and with people feeling relieved and calm after the event; feelings that run the risk of reinforcing the behaviour. This needs to be part of how we understand and try to treat self-harm.

## **Policy and guidelines**

**Department of Health (2012)** *No health without mental health: a cross government outcomes strategy for people of all ages*

[http://www.dh.gov.uk/en/Publicationsandstatistics/Publications/PublicationsPolicyAndGuidance/DH\\_123766](http://www.dh.gov.uk/en/Publicationsandstatistics/Publications/PublicationsPolicyAndGuidance/DH_123766)

**National Institute for Health and Clinical Excellence (NICE, 2009)** *The short-term physical and psychological management and secondary prevention of self-harm in primary and secondary care.*

National Clinical Guideline 16. Report available at

<http://www.nice.org.uk/nicemedia/pdf/CG16FullGuideline.pdf>

**National Institute for Health and Clinical Excellence (NICE, 2011)** *Self-harm: longer-term management. NICE Clinical Guideline 133.* Report available at

<http://www.nice.org.uk/nicemedia/live/13619/57179/57179.pdf>

**Scottish Government, policy on reducing self-harm and suicide;** a new national strategy is due for publication in late 2013

<http://www.scotland.gov.uk/Topics/Health/Services/Mental-Health/Suicide-Self-Harm>

**The Welsh Government,** 'Talk to me: A national action plan to reduce suicide and self harm in Wales 2008-2013'. <http://wales.gov.uk/consultations/healthsocialcare/talktome/?lang=en>

## **Examples of useful resources (extended list in our full research update)**

- Self-harm – Get connected. [www.getconnected.org.uk](http://www.getconnected.org.uk)
- National Self Harm Network, [www.nshn.co.uk](http://www.nshn.co.uk)
- Harmless, [www.harmless.org.uk](http://www.harmless.org.uk)
- The Site.org.uk, <http://www.thesite.org/healthandwellbeing/mentalhealth/selfharm>
- Youthscape, [www.selfharm.co.uk](http://www.selfharm.co.uk)
- YoungMinds  
[http://www.youngminds.org.uk/for\\_children\\_young\\_people/whats\\_worrying\\_you/self-harm](http://www.youngminds.org.uk/for_children_young_people/whats_worrying_you/self-harm)

## Conclusion

The majority of self-harm by young people does not come to the attention of services, and so estimating the extent of the problem has proved difficult. However, it is clear that it is an important issue affecting a significant proportion of young people, particularly around 14-15 years of age, and particularly young women. Most self-harm in this age group does not result in hospitalisation, but it should still be regarded as a problematic coping strategy reflecting emotional distress.

Understanding more about the meaning and function of self-harm for this age group would help us to design more effective public health strategies to prevent problems arising, and may help to clarify which individual interventions work best. In addition, those reaching services often feel misunderstood, stigmatised and ashamed. Improving public attitudes, and supporting professionals who are at the front line of service provision, should help to improve the perceptions and experiences of those seeking help.

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## For more information

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