Self-Harm in Oxford

2013

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Ethical Approval

This work has approval from the NHS Health Research Authority (NRES Committee South Central – Berkshire) as well as from the Health Research Authority Confidentiality Advisory Group under Section 251 of the NHS Act 2006. The work fully complies with the requirements of the Data Protection Act, 1998.

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A pdf of this report and further information about the work of the Centre for Suicide Research are available at our website: http://www.cebmh.warne.ox.ac.uk/csr.

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Report on presentations to the John Radcliffe Hospital

Background and Introduction

The Oxford Monitoring System

This report is based on data collected by the Oxford Monitoring System for Self-harm, which was first established in 1976. Information is collected on all cases of self-harm presenting to the John Radcliffe Hospital. Detailed information (e.g. concerning socio-economic and clinical characteristics) is available for patients assessed by the Emergency Department Psychiatric Service (Barnes Unit) and the Oxford University Hospitals Liaison Psychiatry Team. This report includes information on patients coming to the hospital in 2013. Comparison is usually made with previous years. We collect a considerable amount of additional information not contained in this report and will be happy to discuss provision of further details if requested.

Aims of the Monitoring System

We aim to find out how many people present to hospital following self-harm and to monitor trends in self-harm over time. We examine demographic and clinical factors relating to patients who present after self-harm in order to inform clinical services and provide better patient care.

Advisory Group

We have an advisory group made up of service users, carers, clinical staff and researchers, which gives stakeholders an opportunity to shape current and future research.

Multicentre Monitoring of Self-harm project

As part of the *National Suicide Prevention Strategy for England,* multicentre monitoring of self-harm was established with funding from the Department of Health. The *Multicentre Study of Self-harm in England* is being co-ordinated by the Centre for Suicide Research at the University of Oxford using data from the Oxford Monitoring System for Self-harm, with collaborating centres at the University of Manchester and Derbyshire Healthcare NHS Foundation Trust. There is more information about this project on page 25.

Definition of Self-harm

Self-harm is defined as intentional self-injury or self-poisoning, irrespective of type of motivation or degree of suicidal intent. This definition, which is used widely in a similar way in countries in Europe and elsewhere, thus encompasses both 'suicide attempts' and acts with other motives or intentions. This reflects the often mixed nature of intentions associated with self-harm and also the fact that suicidal intent is a dimensional rather than unitary phenomenon. Self-poisoning is defined as the intentional self-administration of more than the prescribed or recommended dose of any drug (e.g. analgesics, antidepressants), and includes poisoning with non-ingestible substances (e.g. household bleach), overdoses of 'recreational drugs', and severe alcohol intoxication where clinical staff consider such cases to be acts of self-harm. Self-injury is defined as any injury that has been deliberately self-inflicted (e.g. self-cutting, jumping from a height).

Summary of trends and findings of note

Numbers of persons/episodes, rates of self-harm and repetition

- The total number of self-harm presentations to the John Radcliffe Hospital in 2013 was 1665, an increase of 8.2% over 2012. The increase was wholly due to a rise in presentations by females (up 15.4%); the number of presentations by males decreased slightly (3.0%).
- The number of individual persons presenting in 2013 was 1151, an increase of 2.2% over 2012. The number of females increased by 7.3% while the number of males decreased by 5.1%.
- Person-based rates of self-harm have been slowly declining since a peak in 2003. The highest rate of self-harm is in females 15-24 years; in males it is in those 35-54 years.
- The percentage of patients repeating within a year of an episode in **2012** (21.5%) was similar to recent years; 22.4% of females and 20.3% of males. Of those who repeated within a year, 59.1% did so within three months of their first presentation in **2012,** and one-third (35.1) re-presented within one month of their initial presentation. One fifth (21.4%) of assessed patients were presenting with self-harm for the first time.

Characteristics of assessed patients

- 1221 patients received a psychosocial assessment following their presentation.
- A quarter (25.5%) of patients were unemployed (more than half for over a year).
- 29.8% of assessed patients were living alone, in lodgings, in an institution or were of no fixed abode. The remainder (70.2%) were living with family or friends.
- Misuse of alcohol in patients was recorded for 37.3% of males and 31.2% of females assessed. Drug misuse was recorded for 25.3% of male and 10.4% of female assessed patients.
- Alcohol was consumed in the 6 hours before self-harm in 45.0% of episodes and drugs in 6.9% of episodes.
- The five most frequent problems preceding self-harm in assessed males concerned difficulties with a partner, employment/studies, alcohol, relationships with other family members, and finances. In females the five most frequent problems involved relationships with a partner, with other family members, alcohol, psychiatric problems, and drugs.
- Suicide intent scores (a measure of the extent to which patients wished to die) were in the high or very high range in 21.3% of assessed episodes. Suicide intent scores (averaged for 2011-2013) increased with age. Almost 28% of episodes in those aged 55 years or over were of high or very high intent.

Methods used in self-harm

- Of all self-harm episodes, 69.8% involved self-poisoning, 23.3% self-injury and 6.9% both methods.
- The proportion of overdoses involving paracetamol (including compounds) in 2013 was 42.0%, similar to figures in recent years. Antidepressants were involved in 28.9% of overdoses in 2013 (28.5% in 2012). Of these, 60.7% involved SSRIs/SNRIs, 16.8% tricyclics, 21.7% other antidepressants and 9.2% mood stabilisers. There has been a major rise in recent years in overdoses involving medication other than analgesics and psychotropics.
- In 2013, 31.2% of self-harm episodes involved self-injury (including some combined with self-poisoning). As in previous years, the most common method was self-cutting (68.4%). Use of hanging and other methods of asphyxiation has increased markedly in recent years.

Clinical management of self-harm episodes

- In 1,305 presentations (78.4%) the individuals were admitted to a general hospital bed. This was up from 73.2% in 2012.
- The number of patients assessed by members of the hospital psychiatric service in 2013 was 1,221 compared with 1,057 in 2012, an increase of 15.5%.
- A psychosocial assessment from the psychiatric services occurred in in 73.3% of all presentations, up from 68.8% in 2012.
- Almost three-quarters (72.1%) of the presentations to the hospital occurred between 5pm and 9am. As in previous years, presentations in the late evening and early hours of the morning were more likely to involve consumption of alcohol shortly before and/or as part of the act.
- Of all assessed patients offered community psychiatric aftercare in 2013, for 7.9% this involved follow-up with the Emergency Department Psychiatric Service (Barnes Unit).
- In a total of 444 episodes patients left the hospital without a psychosocial assessment. While in 170 cases patients took their own discharge, in 235 cases patients were not referred to the psychiatric service for assessment. Patients presenting with self-injury were particularly likely not to receive an assessment (49.5%) compared with 80.5% for those who self-poisoned, and 81.7% for those who combined both methods at the same episode of self-harm.

Self-harm in patients under 18 years of age

- 171 individuals in this age group (74.9% females) presented with 208 episodes of self-harm episodes in 2013.
- The number of persons and episodes involving under-16 year-olds (84 patients and 104 episodes) was the highest recorded in recent years.
- 87.0% of under-18 year-olds were admitted to a general hospital bed.
- Psychosocial assessments occurred in 83.2% of episodes.
- Paracetamol was involved in 52.8% of overdoses and self-cutting in 83.3% of all self-injury.
- Relationship issues were the main problems faced by adolescents, especially problems with family.
- The majority (77.6% of under-16s, and 83.9% of 16-17 year-olds) were offered psychiatric or psychological care, especially via CAMHS services.

Self-harm in older adults (65 years and over), 2010-2013

- 155 individuals in this age group were involved in 198 episodes of self-harm.
- Half the individuals were male.
- In most cases patients were admitted to a general hospital bed (89.0% of presentations) and received a psychosocial assessment (84.8% of presentations).
- Self-poisoning was the most common method of self-harm (89.4%). Other methods often involved particularly dangerous acts, in keeping with the relatively high suicidal intent of most of these patients.
- The most frequent problems concerned social isolation, physical health and difficulties with a partner. One in five (19.8%) of patients had a problem with chronic pain.
- A quarter of episodes resulted in admission to psychiatric inpatient care (Table 15). In over half the episodes patients were offered outpatient psychiatric care.

Number of persons and episodes

The total numbers of episodes of self-harm presenting to the John Radcliffe Hospital in 2013 are shown in Table 1, together with the numbers of individual persons involved.

TABLE 1

Numbers of episodes, and persons involved, in 2013 (2012)

	Males	Females	Total
Episodes of self-harm	580 (598)	1085 (940)	1665 (1538)
Persons	446 (470)	705 (657)	1151 (1126)

The number of self-harm **episodes** in 2013 was higher than in 2012 (+127 cases; +8.3%) (see Figure 1). This increase was only seen in females, where there was a 15.4% increase in the number of presentations and 7.3% increase in individuals presenting. In males there was a small decrease in both presentations (-3.0%) and individuals (-5.1%).

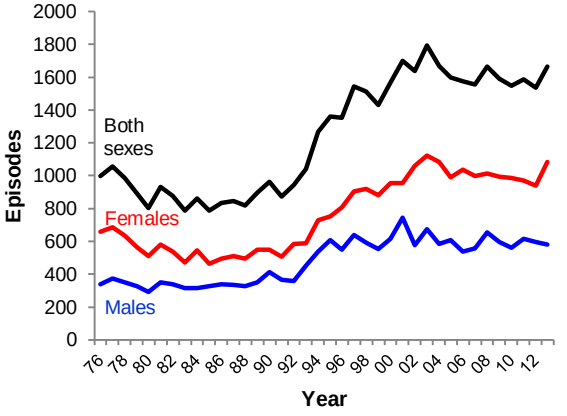
We compared the 2013 presentations with figures for a decade earlier: the number of presentations in 2013 was 2.0% lower than the average annual numbers presenting during 2002-2004, when numbers peaked. This was true for presentations both by males (5.2% lower) and females (0.3% lower).

In interpreting findings for the number of episodes it must be emphasised that a few patients may account for a large number of episodes: for example, in 2013 three individual females were responsible for 18, 17 and 15 episodes respectively, with several having more than 10 episodes during the year. One male was responsible for 20 episodes during the year.

There was an increase in the overall number of **persons** who presented in 2013 compared with 2012 (+2.2%). The number of females increased by 7.3% although the number of males decreased by 5.1%.

FIGURE 1

Episodes of self-harm presenting to the John Radcliffe Hospital 1976-2013

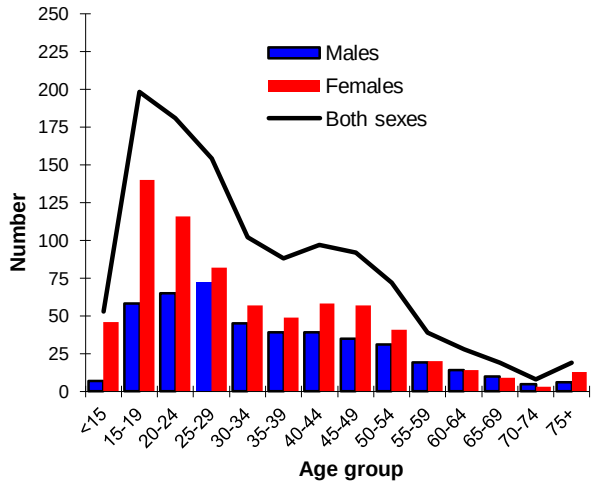


Age and sex

The **age distribution** of self-harm patients in 2013 was broadly similar to that in previous years, with 59.8% of patients being under 35 years of age. The largest numbers of females were in the 15-19 (140 patients) and 20-24 (116 patients) year age groups. The largest numbers of male patients were aged 25-29 years (N = 72). There were 46 patients aged 65 years and over. The oldest patient was 97 years old (see pages 22-24 for section on older adults). In 2013 there were 84 individuals (104 episodes) under 16 years of age; up from 52 patients (72 episodes) in 2012. The youngest patient was aged 11 years (see pages 19-21 for section on children and adolescents).

FIGURE 2

Age groups of self-harm patients, by sex, in 2013

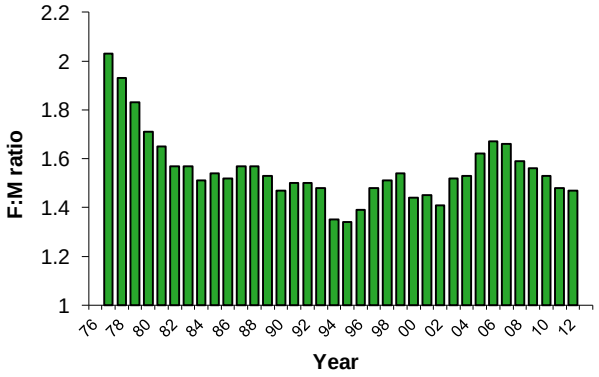


Sex Ratio

The sex ratio (female to male) for persons increased from 1.4:1 in 2012 to 1.6:1 in 2013, although the moving average ratio has been steadily decreasing since 2006 (figure 3).

FIGURE 3

Sex ratio (F:M), persons, 1976-2013 (3-year moving averages)



Rates of self-harm

Oxford City and extended area self-harm rates

We usually calculate rates just for people living in Oxford City because almost all self-harm cases presenting to hospital from the city are seen at the John Radcliffe Hospital. As in recent years, we also present rates for an extended area, including beyond the city (see Figure 4) from where we know at least 90% of hospital-admitted self-harm patients will go to the John Radcliffe Hospital. This provides a more accurate picture of rates of self-harm in Oxfordshire.

FIGURE 4

Areas of Oxfordshire used to calculate self-harm rates

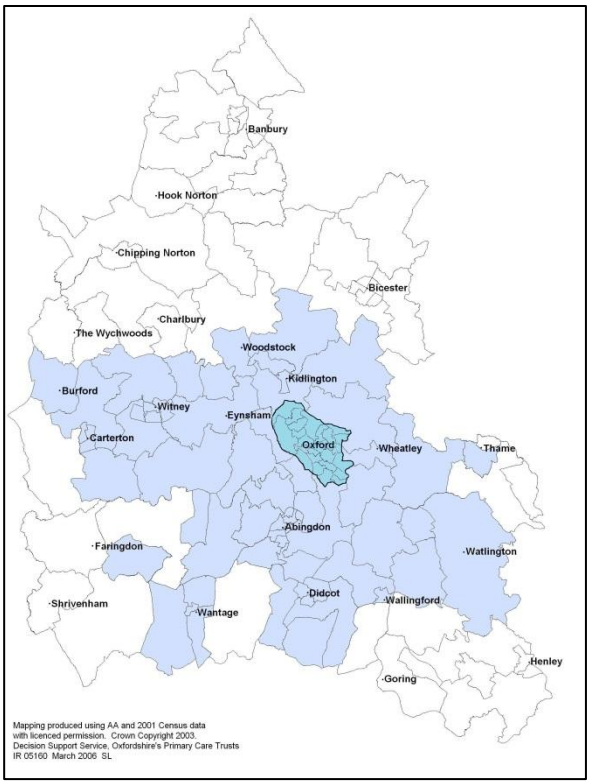
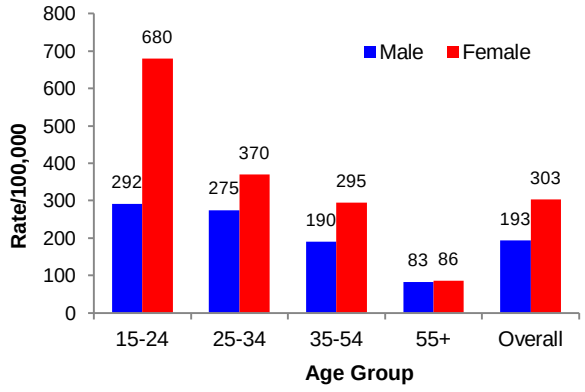


Figure 5 shows the 2013 self-harm rates by age groups and sex for both Oxford City and the extended area. Rates across Oxfordshire were higher in the younger age groups (15-24 and 25-34) but were higher in Oxford City for 35 years and over age groups. The overall self-harm rate was higher in Oxford City.

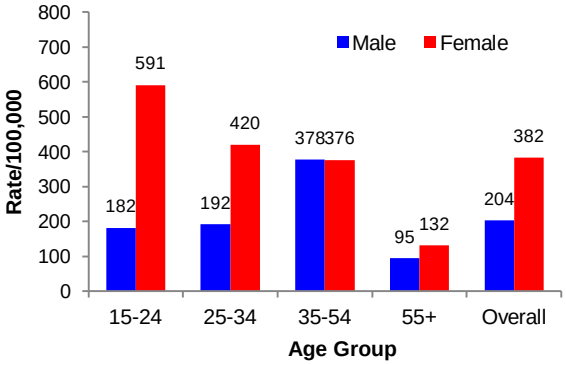
FIGURE 5

Self-harm rates in 2013 by age group and sex

a) Oxfordshire



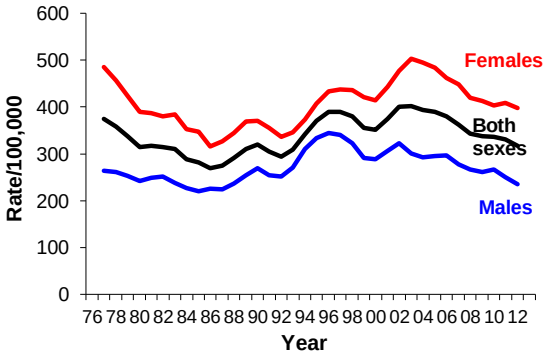
b) Oxford City



For Oxford City we have also presented 3-year moving averages (which smooth out annual variations to show underlying trends), for the whole period for which data has been collected. Rates peaked around 2003, and have been decreasing on average, since then (Figure 6).

FIGURE 6

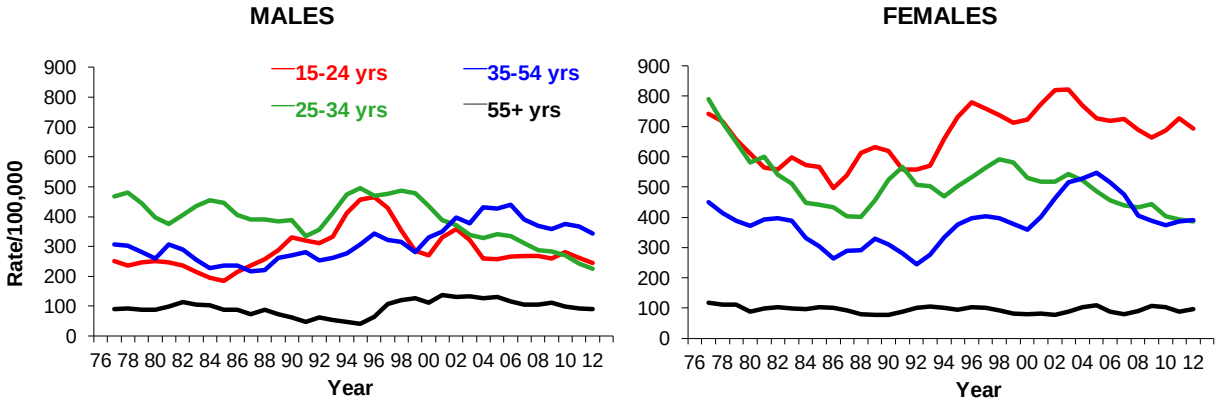
Rates of self-harm in Oxford City (aged 15+ years) 1976-2013 (3 year moving averages)



The **age group and sex-specific 3-year moving average rates for males and females** in Oxford City are shown in Figure 7. Rates of self-harm have decreased in **males** in recent years in all age groups. Rates in **females** have decreased recently in 15-24 and 25-34 year-olds, but shown a small increase in 35-54 year-olds.

FIGURE 7

Rates of self-harm in Oxford City, by age groups, 1976-2013 (3 year moving averages)



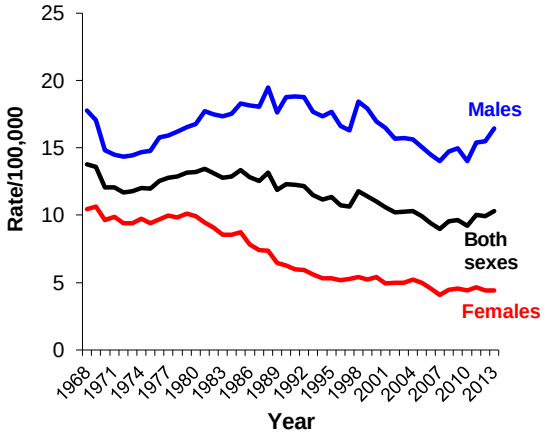
Suicide rates by sex and age groups in England and Wales

Figure 8 shows overall rates of suicide (including open verdicts) by gender, in persons aged 10 years and over, for England and Wales between 1968 and 2013. Suicide rates had been declining steadily in both genders until 2007. Since then, rates have increased in males and levelled off in females.

Figure 9 show suicide rates (suicides and open verdicts) for England and Wales between 1968 and 2013 for specific age groups, by gender. In 2013, rates in males increased in all age groups except 65 years and over. Rates remained steady for females.

FIGURE 8

Suicides and open verdicts in people aged 10 years and over (England and Wales), 1968-2013, by gender

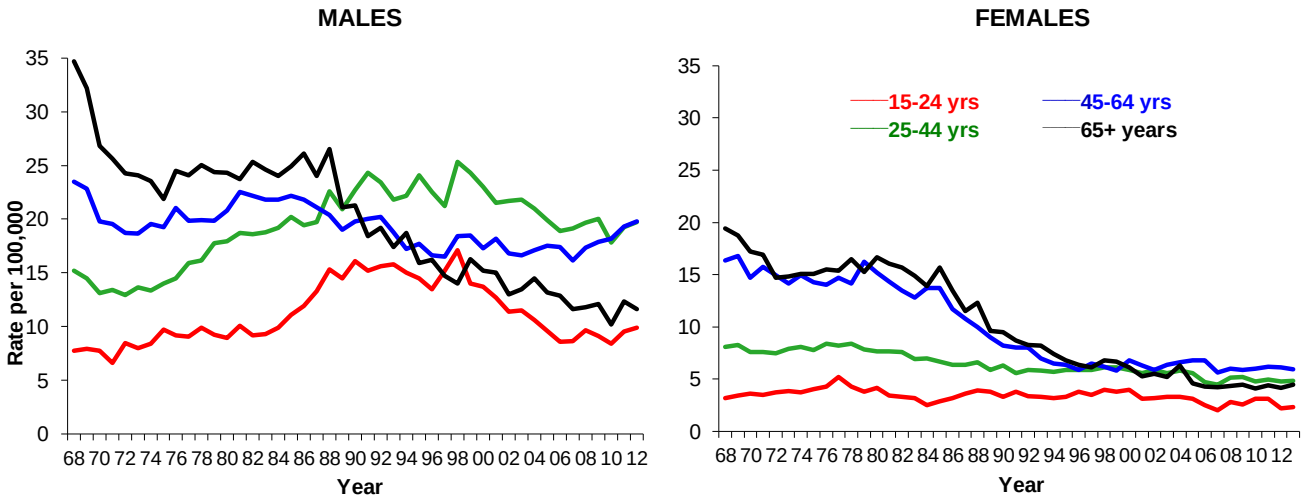


Source: Office for National Statistics
Data are for registrations of death in each calendar year

Rates standardised to the European standard population.

FIGURE 9

Rates of suicide and open verdicts in England & Wales 1968-2013 by age groups



Data are for registrations of death in each calendar year
Source: Office for National Statistics

Rates standardised to the European standard population

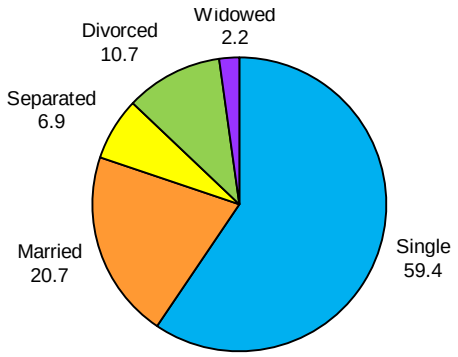
Demographic characteristics

Marital status

The majority of assessed self-harm patients in 2013 were single (Figure 10).

FIGURE 10

Marital status of assessed patients (aged 16+ years) in 2013

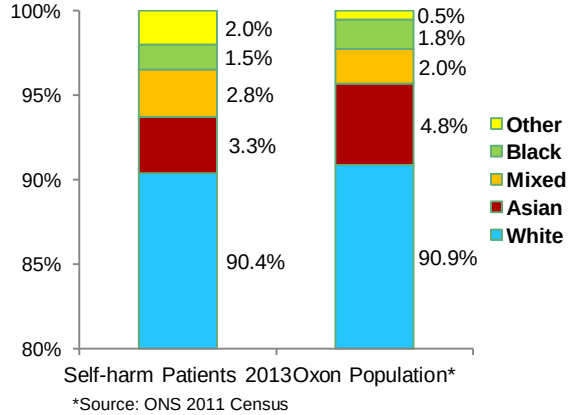


Ethnicity

In 2013, information on ethnicity was recorded for 97.9% of assessed self-harm patients. Overall, the proportion of white patients roughly reflected that found in the 2011 Census for Oxfordshire. However, Asian and Black groups were under-represented and Mixed and Other groups were somewhat over-represented compared with the general population of Oxfordshire (Figure 11).

FIGURE 11

Ethnicity in assessed Oxfordshire self-harm patients vs. ethnic distribution of Oxford District*



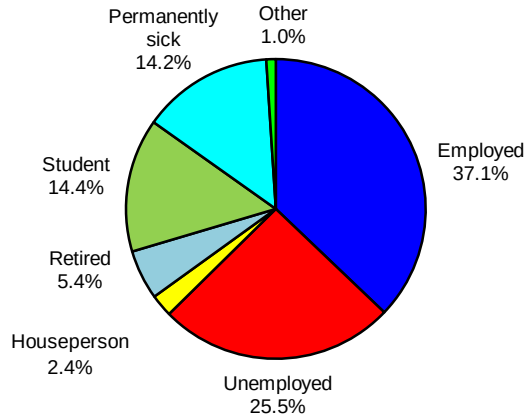
*Source: ONS 2011 Census

Employment status

In 2013, 25.5% of the self-harm patients (aged 16 years and over) were **unemployed** (Figure 12). This figure is similar to the past few years. 14.2% were registered sick or disabled, a similar figure to 2012 (15.1%). Of those persons for whom the duration of unemployment was known, 54.4% had been unemployed for **more than a year** and 10.9% for **less than one month**.

FIGURE 11

Employment status of assessed self-harm patients (aged 16+ years) in 2013



University Students

Of the assessed self-harm patients in 2013, 113 were **students** (including school students). These included 27 **Oxford University students** (22 females and 5 males) and 17 **Oxford Brookes University students** (14 females and 3 males).

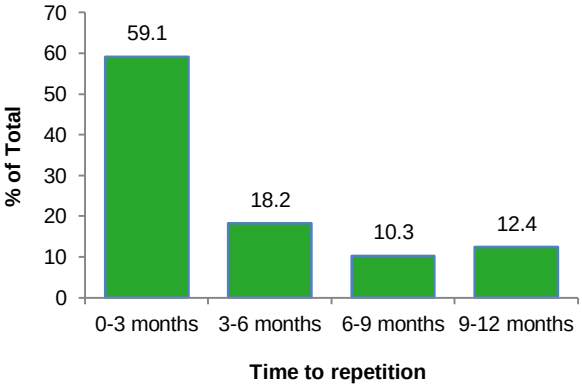
Living situation

The majority of assessed patients in 2013 lived with family members or friends (68.2%). The remainder (31.8%) lived alone, in lodgings, in an institution, or were of no fixed abode (Table 2). More males (38.9%) than females (27.3%) were living apart from family and friends (X^2 = 12.40, p<0.001).

TABLE 2
Living Arrangement for assessed patients

Living situation	Males N (%)	Females N (%)	Total N (%)
Partner/Family	207 (61.1)	391 72.7)	598 (68.2)
Alone	72 (21.2)	90 (16.7)	162 (18.5)
Lodging/hostel	35 (10.3)	39 (7.2)	74 (8.4)
Institution	7 (2.1)	9 (1.7)	16 (1.8)
No Fixed Abode	18 (5.3)	9 (1.7)	27 (3.1)

FIGURE 13
Patients who presented during 2012 and re-presented to the John Radcliffe hospital within one year: Time to repetition



Clinical characteristics of self-harm patients

Repetition of self-harm

One measure of repetition is the ratio of the number of self-harm episodes to the number of persons. In 2013 the ratio was 1.4, the same as in 2012. However, it should be noted that individual patients having very large numbers of episodes could distort this figure. The episodes to persons ratio for males was 1.3 and for females was 1.4.

Another measure of repetition is the proportion of patients who repeat self-harm within twelve months of their first episode in a calendar year. We can of course only measure this for patients who presented in the previous year (2012) and repetition will only be identified for those who present to the John Radcliffe hospital following subsequent episodes. Of patients who presented in **2012**, 21.5% repeated self-harm within 12 months. The repetition rate for females was 22.4% and for males 20.3%. Figure 13 shows the timing of these episodes; nearly 60% of patients who re-presented to the general hospital within a year did so within three months and more than one-third (35.1%) within one month of their initial presentation.

Another relevant measure is the extent to which people are engaging in their first-ever episode of self-harm. In **2013**, 21.4% (27.2% males, 18.1% females) of the assessed patients whose self-harm history was known harmed themselves for the first time.

Of those patients who were assessed in **2012** and had no previous history of self-harm, 11.8% repeated within the following year (9.9% males, 13.7% females) compared with 26.3% of those who had a known previous history of self-harm (28.9% males, 24.8% females). These figures are in keeping with many research findings showing that a history of previous self-harm is the best predictor of future repetition.

Psychiatric disorder and substance misuse

In patients who were assessed in 2013, 38.4% were reported as having a **major psychiatric disorder** (38.0% of males and 38.6% of females)**.** These figures will considerably under-represent the proportions with any type of psychiatric disorder.

Personality disorder was identified in 22.5% of patients in 2013, including 20.2% of males and

24.0% of females. These figures are likely to reflect those with more severe personality disorders.

Misuse of alcohol was recorded for 33.5% of assessed patients (37.3% of males and 31.2% of females). Those misusing alcohol included for males (females in brackets): **chronic alcoholism** 4.2% (3.3%), **alcohol dependence** 8.0% (4.3%) and known to be **drinking more than the recommended maximum safe number of units** 25.1% (23.6%).

Drug misuse was recorded for 16.2% of patients in 2013, including 25.2% of males and 11.2% of females.

Problems at the time of self-harm

A 'problem' is defined as a factor that was causing current distress for the patient and/or contributing to the episode of self-harm. As in previous years, the most frequent problems identified at the time of the self-harm episodes were **relationship difficulties** (59.6%). Difficulties with a partner was the most common problem, with a similar frequency in males and females, followed by problems with a family member, which were more common in females than males (Table 3).

Males were more likely to have problems with **alcohol, employment, finances and drugs,** whereas problems with **other family members, friends, and childhood sexual abuse** were more frequent in females. **Eating disorders problems** were present in 4.9% of females. Problems due to **the consequences of childhood physical abuse** were recorded in 4.4% of females and 3.2% of males. Problems related to **chronic pain** were identified in 4.4% of males and 3.3% of females.

TABLE 3

The most frequent problems[1] identified at assessment in 2013

Problem	Both sexes (N=886)	Males (N=339)	Females (N=547)	p
Partner	35.0%	37.5%	33.5%	n.s.
Other family members	30.9%	25.7%	34.2%	<0.01
Alcohol	23.5	26.8%	21.4%	0.05
Employment /studies	22.8	31.6%	17.4%	<0.001
Psychiatric disorder	22.1%	23.3%	21.4%	n.s.
Financial	18.4%	24.8%	14.4%	<0.001
Social isolation	15.1%	15.0%	15.2%	n.s.
Housing	14.8%	18.6%	12.4%	<0.01
Physical health	9.4%	10.6%	8.6%	n.s.
Relationship with friends	9.4%	5.6%	11.7%	<0.01
Bereavement	8.2%	8.3%	8.2%	n.s.
Drugs	7.3%	12.4%	4.2%	<0.001
Childhood sexual abuse	6.0%	3.8%	7.3%	<0.05

[1] *Multiple problems are recorded for most patients*

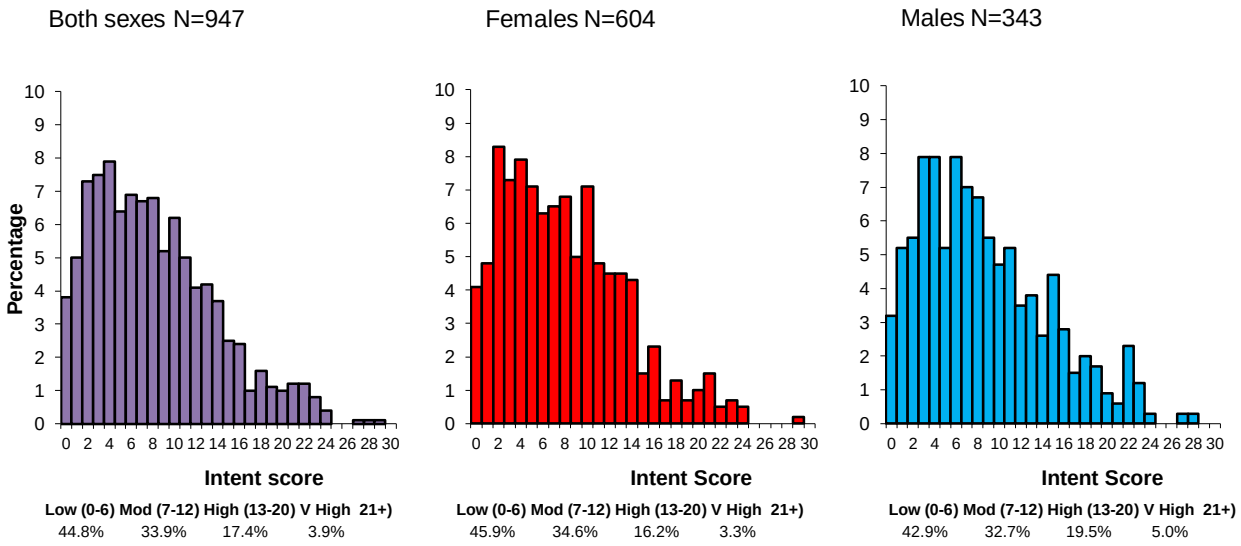
Suicide intent

The **Suicide Intent Scale,** which measures the extent to which patients appeared to want to die (Figure 14), was completed by the clinical assessors for 947 episodes in 2013 (77.6% of episodes in which an assessment occurred). The median suicide intent score for males was 10 and for females was 9.5 (z = 1.457, n.s.).

Suicide intent scores by age and sex for the years **2011-2013** combined (as in previous years) showed that the proportions of patients with relatively high scores increased with age in both sexes. This was significant in females (X^2 for linear trend = 5.022, p < 0.05) though not in males (X^2 for linear trend = 3.339, n.s). Almost 28% of episodes in those aged 55 years and over involved relatively high scores (Figure 15).

FIGURE 14

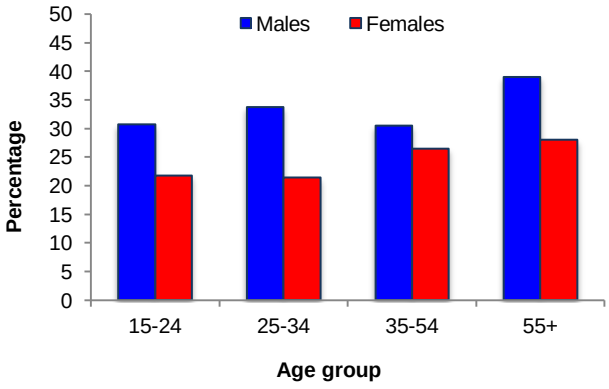
Suicide Intent Scale scores in assessed patients, overall and by sex, 2013



The classification of scores into low, moderate, high and very high categories indicated that the scores of 21.3% of cases were in the high (13-20) or very high (21+) range. High or very high scores were recorded for 24.5% of males and 19.5% of females.

FIGURE 15

Suicide intent by age and sex, 2011-2013
High and very high scores (SIS = 13-30)



Methods used for self-harm

Drugs used for self-poisoning

In 2013, 69.8% of self-harm episodes involved **self-poisoning**, 23.3% **self-injury** and 6.9% **both methods**. Figure 16 shows the trends in percentages of overdoses involving specific groups of drugs.

There were 526 overdoses involving p**aracetamol** (including compounds) in 2013 (41.1% of all overdoses), including 119 (9.3% of all overdoses) involving **paracetamol and codeine combined preparations** (e.g. co-codamol).

Pure paracetamol was involved in 80.0% of all paracetamol overdoses and paracetamol in compound form in 26.0% (some overdoses involved both forms of paracetamol).

In 2013, for the for the second year running, there were no overdoses involving **co-proxamol** (paracetamol with dextropropoxyphene). In January 2005 the Medicines and Healthcare Products Regulatory Agency announced withdrawal of co-proxamol from January 2008, with a three year withdrawal phase (2005-2007), when no new patients could be prescribed this drug. In 2000-2004 an average of 53.6 co-proxamol overdoses per year were seen in Oxford.

Non-steroidal anti-inflammatory drugs were involved in 197 (15.4%) of overdoses in 2013.

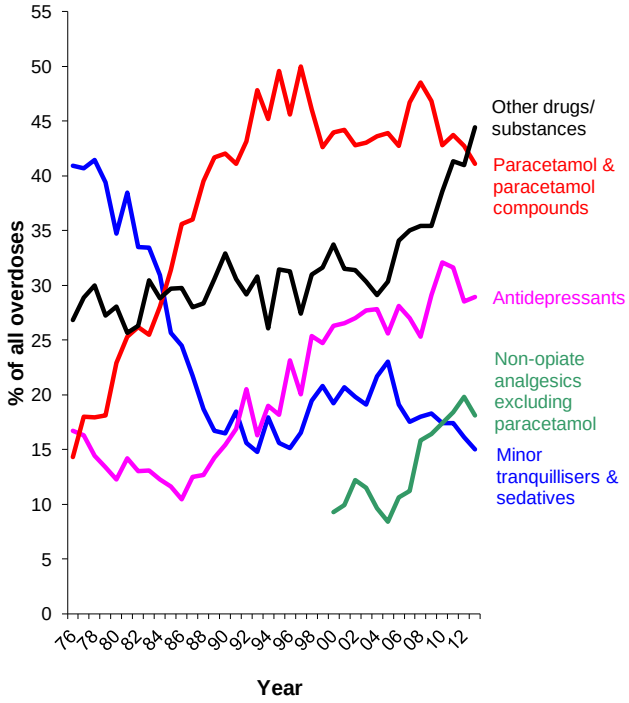
Antidepressants (including mood stabilisers) were involved in 28.9% of overdoses (compared with 28.6% in 2012). Of these overdoses, 60.7% involved **SSRIs/SNRIs**, 16.8% **tricyclics,** 21.7% **other antidepressants** (e.g. trazodone, mirtazapine) and 9.2% **mood stabilisers** (some overdoses involved more than one type of antidepressant).

Minor tranquillisers and sedatives were involved in 14.9% of overdoses (16.1% in 2012).

Overdoses involving **other drugs** have been rising in recent years. This increase has been mainly due to increases in overdoses involving other prescribed medications, (i.e. those not included in the specific categories shown in Figure 16).

FIGURE 16

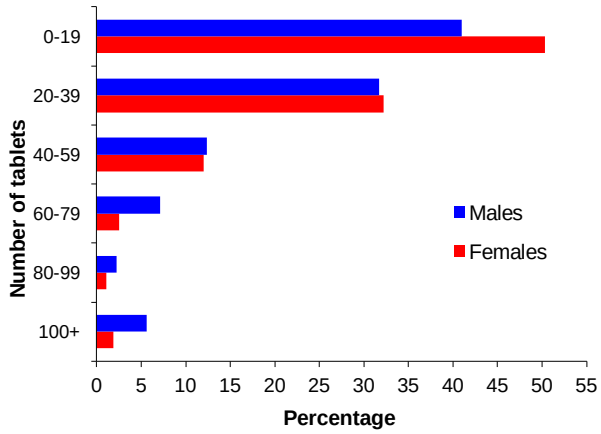
Substances used in self-poisoning 1976-2013



Information on the **number of tablets** taken in overdoses was available for 962 cases in 2013. The mean number taken in overdose was 27.9 (SD 27.9, median = 20.0) tablets. As can be seen in Figure 17, the majority of overdoses involved less than 40 tablets (79.2%). In general, males tended to take larger overdoses than females (median values: males 25, females 20; $z = 4.048$, $p < 0.001$).

FIGURE 17

Numbers of tablets taken in overdose in 2013, by sex

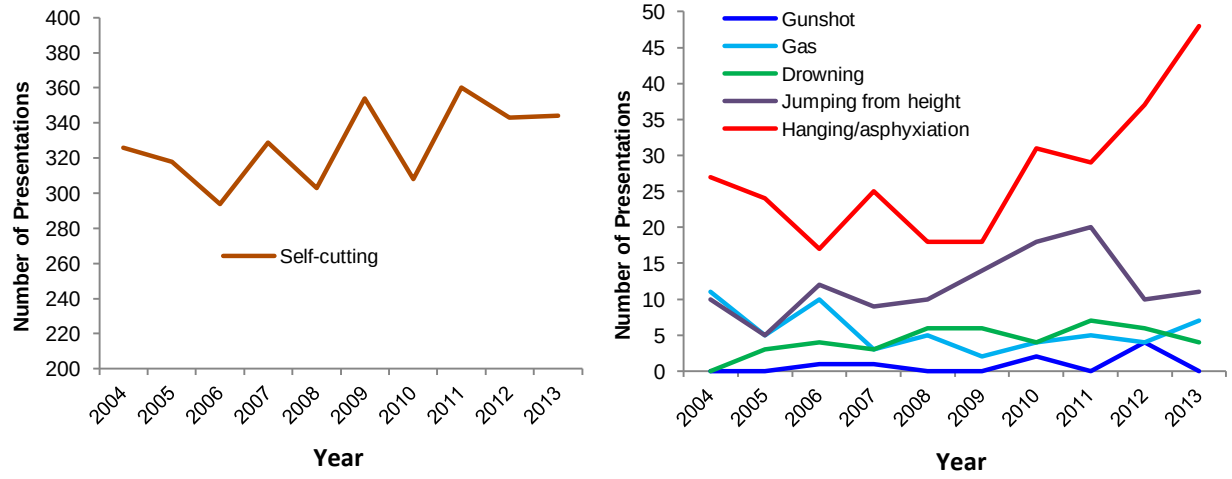


Alcohol or drug involvement

In 2013, as in previous years, **alcohol** was often consumed **at the time of self-harm** (25.6% of assessed individuals). This figure was higher in males than females (29.8% males, 23.1% females). Alcohol had very often been consumed **during the six hours before the episode** (45.0%), again more commonly by males (52.0%) than females (40.6%).

FIGURE 18

TRENDS IN METHOD OF SELF-INJURY



Methods of self-injury

Of the self-injuries, **self-cutting** was, as in previous years, the most common method, used by 68.4% (N = 344) of those self-injuring (59.4% males, 72.4% females) in 2013. Other methods included **hanging/strangulation/asphyxiation** (48), which has increased in recent years, and **jumping** (16). (Figure 18).

Alcohol involvement in self-harm (based on data for 2011-13) varied by age group (see Figure 19). In males it peaked in the 35-44 year age group, whereas in females it was most prevalent in the 45-54 age group. In females, alcohol involvement was more common in those presenting at weekends. Levels of alcohol involvement in males remained high all week (Figure 20).

FIGURE 19

Alcohol involvement in self-harm by age group

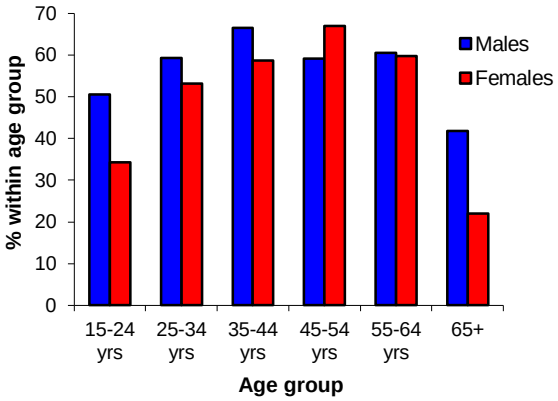
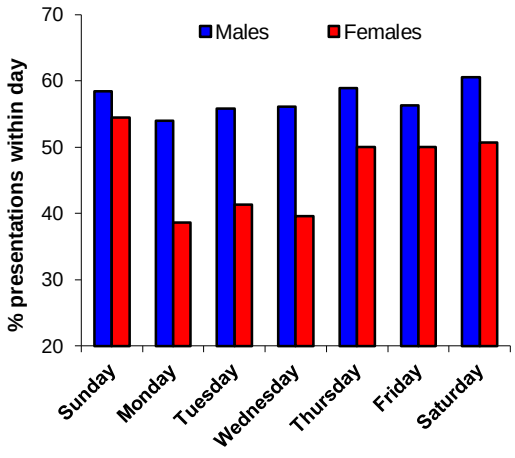


FIGURE 20

Alcohol involvement in self-harm by day of presentation



6.3% of assessed patients were under the influence of recreational drugs at the time of their self-harm (10.9% of males, 3.5% of females).

Recreational drug misuse was recorded for 25.3% of male and 10.4% of female assessed patients. 7.3 % of assessed patients had a drug problem that was thought to be a contributory factor to their self-harm.

Clinical Management of self-harm patients

Assessments by the psychiatric service

1221 **assessments of self-harm patients** were conducted by members of the Emergency Department Psychiatric Service and by the Oxford University Hospitals Liaison Psychiatry Service in 2013. This represents a substantial increase compared with 2012 (+164 cases; 15.5%). Overall, 73.3% of episodes resulted in an assessment. In only 26.4% of the non-admitted episodes was there an assessment. There was little difference between males and females in the proportions assessed.

In 444 episodes the patient **left the hospital without being assessed** (133 males, 311 females). Of those not assessed, 106 were current psychiatric inpatients, 16 current psychiatric outpatients and 1 was not assessed for another reason. The remaining 128 patients were not identified for assessment by the Emergency Department (Table 4). One patient died before discharge and is not included in these figures.

TABLE 4
Reasons why patients were not assessed

	N	%
Took own discharge	170	38.3%
Refused assessment	23	5.2%
Policy decision not to assess – including those in current psychiatric care	123	27.7%
Not referred for assessment by the Emergency Department	128	28.8%
Total	**444**	**100%**

The proportion of episodes in which a psychosocial assessment took place is far higher than in most general hospitals in England (58% based on a recent study in 32 hospitals[1].

A total of 1305 self-harm episodes resulted in **admission to a bed in the general hospital** in 2013 (78.4% of all episodes; Table 5). It should be noted that for the purpose of our monitoring, admission to the Emergency Assessment Unit is counted as a hospital admission.

An assessment was conducted in 80.5% of self-poisoning episodes; in 49.5% of self-injuries; and in 81.7% of episodes involving both self-poisoning and self-injury. 60.9% of episodes of self-cutting alone resulted in an assessment whereas an assessment occurred in only 39.1% of episodes involving any other form of self-injury alone.

In 2013, 48.6% (N=594) of self-harm episodes resulted in assessment by nurses or social workers and 51.4% (N=544) by doctors. These proportions are almost identical to those in 2012.

Time of presentation to the Emergency Department

In 2013, 27.9% of all patients (including those who were not assessed) presented between 9 a.m. and 5 p.m. and the remainder (72.1%) between 5 p.m. and 9 a.m. Time of presentation was not recorded for three presentations.

In the majority of episodes presenting outside the working day, especially in the late evening and early hours of the morning, alcohol was consumed shortly before and/or as part of the act (Figure 21, which shows the pattern for 2011-2013).

TABLE 5

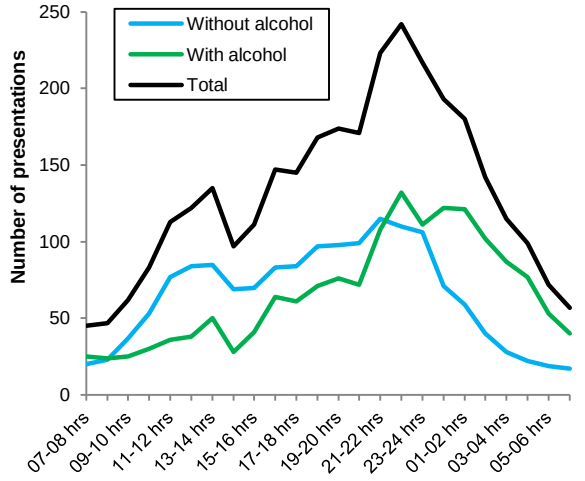
Referrals to the general hospital and those assessed by the hospital psychiatric service following self-harm in 2013 (N=1665)

		Admitted		Not Admitted		Overall	
		%	N	%	N	%	N
MALES:	**Assessed**	86.9%	412	33.0%	35	77.1%	447
	Not assessed	13.1%	62	67.0%	71	22.9%	133
FEMALES:	**Assessed**	85.9%	714	23.6%	60	71.3%	774
	Not assessed	14.1%	117	76.4%	194	28.7%	311
BOTH GENDERS:	**Assessed**	86.3%	1126	26.4%	95	73.3%	1221
	Not assessed	13.7%	179	73.6%	265	26.7%	444

[1] *Cooper, J., Steeg, S., Bennewith, O., Lowe, M., Gunnell, D., House, A., Hawton, K., Kapur, N. (2013)* ***Are hospital services for self-harm getting better? An observational study examining management, service provision and temporal trends in England*** *BMJ Open; 3: doi: 10.1136/bmjopen-2013-003444*

FIGURE 21

Time of presentation to the Emergency Department for all assessed episodes, and those with or without alcohol involvement (during 6 hours beforehand and/or as part of act); 2011-2013



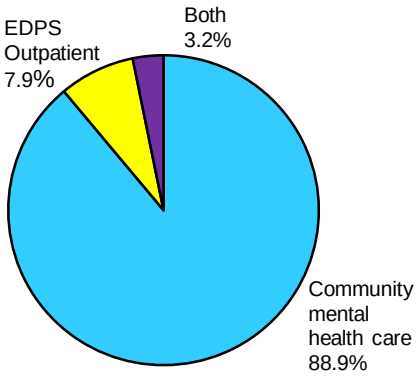
For patients who were admitted to a hospital bed in the general hospital, the time of presentation to the Emergency Department made no significant difference to whether or not they received a psychiatric assessment: 87.2% of those presenting between 9 a.m. and 5 p.m. were assessed compared with 86.8% of those presenting after 5 p.m. (X^2 = 0.033, n.s.). Time of presentation also made no major difference to assessment of those not admitted to a hospital bed in that 33.3% of those who presented in the daytime were assessed compared with 24.0% of those who presented after 5 p.m. (X^2 = 3.113, n.s.).

Aftercare

Of the assessed self-harm episodes which resulted in a referral for outpatient psychiatric aftercare (N = 707), in 55.3% of cases patients were known to be already receiving psychiatric care at the time of their episode, and were generally referred back to that care. For those patients offered outpatient/community psychiatric care, the type of care offered is shown in Figure 22. In 11.1% of cases this included follow-up by the Emergency Department Psychiatric Service.

FIGURE 22

Type of community and psychiatric outpatient care offered



The proportion of assessed cases in 2013 in which **inpatient psychiatric care** in Oxford was arranged following discharge from the John Radcliffe was 7.0% (N = 86) (Table 6). 88.4% (76/86) were new admissions, the remainder (11.6%) being people who were already psychiatric patients at the time of their self-harm episodes. Thus an episode of new inpatient care was provided for 6.2% of all assessed patients.

TABLE 6

Aftercare accepted following assessment in 2013 (N=1221) according to whether or not patients were in current psychiatric care

	Overall		New patient		Current patient	
	%[1]	(n)	%[1]	(n)	%[1]	(n)
Inpatient psychiatric care	7.0	(86)	6.2	(76)	0.8	(10)
Outpatient psychiatric care:						
Community MH Teams	39.2	(479)	15.2	(185)	24.1	(294)
EDPS follow-up	5.7	(69)	5.1	(62)	0.6	(7)
Crisis Team	13.4	(164)	10.2	(124)	3.3	(40)
Day patient psychiatric care	1.1	(14)	0.9	(11)	0.2	(3)
GP care (alone or for GP-led services)	27.8	(340)				
PCAMHS	2.5	(31)				
IAPT	4.1	(50)				
Alcohol Services	9.0	(110)				
Other outcomes[2]	5.7	(70)				
Took own discharge	0.7	(9)				

[1] *The percentages total more than 100% because some patients have more than one outcome e.g. outpatient care and referral to voluntary agency.*

[2] *Other includes e.g. Social Services, voluntary agencies, Elmore team and probation or custody*

340 assessed patients (27.8%) were **referred back to GP care** alone in 2013. (This figure is a considerable underestimate when account is taken of the number of patients discharged without a psychosocial assessment.)

In 106 (31.2%) of assessed cases, patients were referred back to GP care with a recommendation for primary care-led treatment (e.g. counselling) or GP referral for psychological treatment.

Self-harm in patients under 18 years of age

171 children and adolescents under 18 years of age accounted for 208 presentations in 2013. This represented 12.5% of all episodes and 14.9% of all persons. As will be seen from Table 7, the majority of these younger patients were female (82.7%) and repeated presentations were almost exclusively by females.

TABLE 7

Presentations for self-harm and number of patients aged under 18 in 2013

	Females		Males		Overall	
	Patients	**Episodes**	**Patients**	**Episodes**	**Patients**	**Episodes**
Under 16 years	69	86	15	18	84	104
16 and 17 years	59	74	28	30	87	104
Total	128	160	43	48	171	208

Numbers of episodes increased in 2013 by 24.6% compared with 2012 and the numbers of individuals by 34.6%. However, there is a wide variation in annual numbers and the 2013 figures are similar to those seen in previous years (Figures 23, 24) and do not appear to represent a trend for increased hospital presentations for self-harm in this age group. The majority of presentations are by females. In 2013, 50.0% of all adolescent presentations were by patients under the age of 16. This is the largest proportion seen to date (Figure 24).

FIGURE 23

Hospital presentations for self-harm in under 18-year-olds, by gender

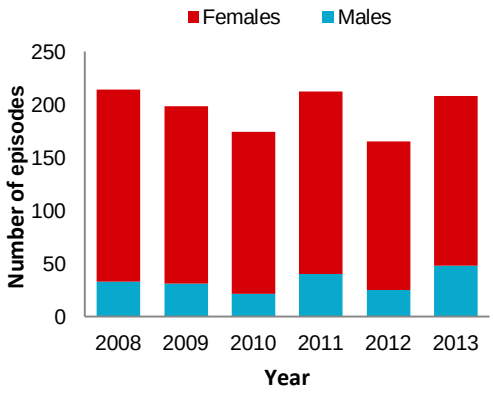
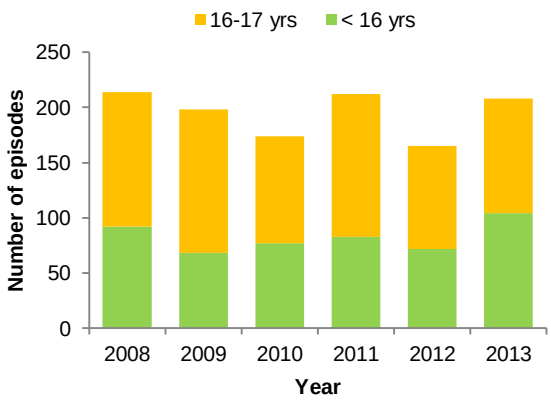


FIGURE 24

Hospital presentations for self-harm, by age groups



Admission to a general hospital bed occurred for most presentations (87.0%), including 88.4% of under 16-year-olds and 85.6% of 16-17 year-olds (Table 8). Overall, 83.3% of patients were assessed, although this figure was higher in younger patients (91.3%) than in older adolescents (75.0%). In 5 out of 9 cases where under-16 year-olds were neither admitted to a hospital bed nor assessed, they were already psychiatric inpatients.

TABLE 8

Presentations where patient was admitted to a bed in the general hospital and presentations where patient received a psychosocial assessment

	Admitted to hospital bed			Psychosocial assessment		
	Females % (N)	Males % (N)	Overall % (N)	Females % (N)	Males % (N)	Overall % (N)
Under 16 yrs	87.2% (75)	94.4% (17)	88.4% (92)	90.7% (78)	94.4% (17)	91.3% (95)
16 and 17 yrs	85.1% (63)	86.7% (26)	85.6% (89)	74.3% (55)	76.7% (23)	75.0% (78)
Total	86.3% (138)	89.6% (43)	87.0% (181)	83.1% (133)	83.3% (40)	83.2% (173)

71.2% of episodes involved self-poisoning, 15.4 self-injury and 13.5% both, with no major differences between methods used by under-16 year-olds and 16-17 year-olds. Paracetamol was involved in 53.4% of self-poisoning episodes (Table 9). Of the self-injury episodes, 83.3% (50/60) involved self-cutting.

TABLE 9

Most common methods of self-poisoning in episodes for patients under 18 years of age (N = 137)

	N	%
Pure paracetamol	66	48.2
Paracetamol-containing drugs	12	8.8
Non-steroidal anti-inflammatory drugs	30	21.9
SSRI antidepressants	17	12.4

The main problems faced by patients under 18 years of age were relationship issues with family or friends. The only significant difference between the age groups concerned bullying, suffered more by under-16 year-olds. (Table 10).

TABLE 10

Problems identified in assessed patients

Problem:	Under 16 yrs N = 93		16-17 yrs N = 78		p
	n	(%)	n	(%)	
Family	58	(62.4%)	42	(53.8%)	n.s.
Friends	25	(26.9%)	119	(24.4%)	n.s.
Psychiatric problem	14	(15.2%)	17	(21.8%)	n.s.
Partner	13	(14.0%)	17	(21.8%)	n.s
Bullying	**21**	**(22.6%)**	**5**	**(6.4%)**	**< 0.01**
Studies/employment	10	(10.8%)	15	(19.2%)	n.s.
Social isolation	10	(15.5%)	10	(12.8%)	n.s.
Sexual abuse	6	(6.5%)	8	(10.3%)	n.s.
Drugs	5	(5.4%)	8	(10.3%)	n.s.
Emotional abuse/neglect	5	(5.4%)	4	(5.1%)	n.s.

Aftercare

More than half of all young people who received a psychosocial assessment following self-harm were referred to or returned to outpatient care with Child and Adolescent Mental Health services, with 83.0% receiving some form of psychiatric or psychological support. Of these, 61 (91.3%) were referred for new or additional psychiatric care with CAMHS or CAMHS Crisis Team (Table 11).

In approximately 10% of episodes the individuals were allowed home with no further follow-up agreed. We do not know in these cases whether treatment was offered but refused.

Where patients were referred back to their GP only, in half these cases it was with advice to refer the patient to community mental health services.

TABLE 11

Aftercare agreed before discharge from hospital

	Under 16 yrs N = 98		16-17 yrs N = 78	
	n	%	n	%
CAMHS	52	54.7%	45	57.7%
CAMHS Crisis Team	32	33.7%	29	37.2%
PCAMHs	74	77.9%	68	87.2%
GP care	5	5.3%	14	7.9%
Social services	6	6.3%	2	2.6%

Self-harm in older adults (age 65 years and over)

The data presented for older adults is for the 4-year period 2010-2013 (because numbers presenting each year are relatively small).

As will be seen from Table 12, similar numbers of presentations occurred in both genders, unlike in younger adults where there are significantly more females than males. Older females had a lower risk of re-presenting to hospital following repetition of self-harm than males.

TABLE 12
Presentations for self-harm and number of patients aged 65 and over 2010-2013

	Presentations	Patients	Presentations: persons ratio
Females	93	76	1.2
Males	105	76	1.4
Total	198	155	1.3

The majority of episodes by older patients resulted in admission to a bed in the general hospital and in most cases there was a psychosocial assessment (Table 13).

TABLE 13
Proportion of presentations where patients were admitted or assessed 2010-2013

	Females	Males	Total
Admitted to hospital bed	86/93 (92.5%)	92/105 (87.6%)	178/198 (89.0%)
Psychosocial assessment	77/93 (83.0%)	91/105 (86.7%)	168/198 (84.8%)

Self-poisoning was the most common method of self-harm (89.4%; see Table 14 for details). Only 30 episodes over the 4 year period involved any form of self-injury. However, the methods used often suggested particularly dangerous acts, in keeping with the higher suicidal intent in older self-harm patients (see page Figure 15 (page 12) and Table 14). Thus, 26.7% involved hanging, asphyxiation, attempted drowning or jumping from a height. A further 20.0% involved some form of self-stabbing or mutilation.

TABLE 14
Most common drugs taken in overdose

Drug taken in overdose (N=177)	% of all overdoses (n)	
Other prescribed drugs	26.6	(47)
Pure paracetamol	25.4	(45)
Antidepressants	24.3	(43)
Benzodiazepines and minor sedatives	23.2	(41)
Opiate pain killers	13.0	(23)
Other paracetamol-containing drugs	10.2	(18)
Major tranquilisers	4.5	(8)
Non-steroidal anti-inflammatory drugs	4.0	(7)

The main problems faced by older patients concerned social isolation, physical health and problems with partner or other family member, although relationship problems were less frequently cited as a factor than in younger adults (Table 15). Chronic pain and bereavement were more commonly mentioned.

TABLE 15
Problems identified in assessed patients

Problem (N=126):	n	(%)
Social isolation	33	(26.2%)
Physical health problem	29	(23.0%)
Partner	29	(23.0%)
Family	25	(19.8%)
Psychiatric disorder	21	(16.7%)
Chronic pain	16	(19.5%)
Bereavement	15	(12.6%)
Alcohol	13	(10.3%)

Suicide Intent

The median Suicide Intent Scale score for males was 10.5 and for females was 11, which are both higher than found in the general self-harm population. The distribution of scores differs markedly from the overall distribution, with more older adults having higher scores (see Figure 16 and also page 12).

TABLE 16
Suicide intent in older adults, 2010-2013

SIS score range:	Males (N=68)	Females (N=55)
Low	33.8%	28.6%
Moderate	26.5%	35.7%
High	25.0%	30.4%
Very High	14.7%	5.4%

Aftercare

A quarter of older adults were admitted to inpatient psychiatric care following psychiatric assessment and more than half were referred to or returned to community mental health teams (Table 17). 10.7% were offered other care, mainly general hospital inpatient care or social services. Three patients died before medical discharge and the remainder were referred back to their GP (patients may have received more than one type of aftercare so numbers total more than 100%).

TABLE 17
Aftercare offered (N=168)

Aftercare offered:	**%**
CMHT Outpatient care, including Crisis Team	51.8%
Inpatient psychiatric care	24.4%
GP care only	17.2%
Other (mainly other medical referrals or social services)	10.7%

Multicentre Monitoring of Self-harm in England: a project in support of the *National Suicide Prevention Strategy for England*

As part of the first *National Suicide Prevention Strategy for England* (Dept of Health 2002, 2012), multicentre monitoring of self-harm is supported with funding from the Department of Health. This study is being co-ordinated by the Centre for Suicide Research at the University of Oxford using data from the Oxford Monitoring System for Self-harm, with collaborating centres at the University of Manchester and Derbyshire Healthcare NHS Foundation Trust. The programme of research includes four broad areas:

- Epidemiology and trends in self-harm;
- Clinical management of self-harm;
- Outcomes of self-harm, including repetition and mortality;
- Provision of information relevant to healthcare costs of self-harm;
- Pharmaco-epidemiology, including drug toxicology and impacts of changes in prescribing legislation and trends.

For further information, see the study website: http://cebmh.warne.ox.ac.uk/csr/mcm/

References

Department of Health (2002) *National Suicide Prevention Strategy for England.* London: Department of Health.

Department of Health (2012) *Preventing Suicide in England*. London: Department of Health

Recent research findings using information from the Oxford Monitoring System for Self-harm and the Multicentre Study of Self-harm in England

Below are brief summaries of some projects based on data collected through the monitoring system which have recently been published. The abstracts have been modified from those in the original publications.

Suicidal intent and method of self-harm: a large-scale study of self-harm patients presenting to a general hospital

Haw, C., Casey, D., Holmes, J., & Hawton, K. (2015) *Suicide and Life-Threatening Behaviour* April 2015 doi:10.1111/sltb.12168

We used information from the Oxford Monitoring System for Self-harm for 2004 to 2011 to study 4,840 hospital presentations for self-harm in which patients were scored on the Suicide Intent Scale (a measure of the extent to which an individual seemed to want to die). Higher suicide intent scores found in males and were associated with increasing age, self-poisoning versus self-injury, multiple methods of self-harm versus self-injury alone, use of gas (mainly carbon monoxide), dangerous methods of self-injury (including hanging, gunshot), and use of alcohol as part of the act. In patients who took overdoses, higher suicide intent was found where more tablets were taken. There was relatively little difference in suicide intent scores between overdoses of different drugs. Use of alcohol within 6 hours of self-harm was associated with lower suicide intent score scores.

Conclusions: Certain methods of self-harm, particularly dangerous methods of self-injury and self-poisoning with gas, were associated with high intent and should alert clinicians to potential higher risk of suicide. However, apart from use of gas, it is important for clinicians to note that a patient's level of suicidal intent cannot be inferred from the type of drug used for self-poisoning.

Self-harm in Oxford, England: epidemiological and clinical trends, 1996-2010

Hawton, K., Haw, C., Casey, D., Bale, L., Brand, F. & Rutherford, D. (2015) *Social Psychiatry and Psychiatric Epidemiology* **50**, 695-704. doi:10.1007/s00127-014-0990-1

We analysed data on all self-harm presentations to the general hospital in Oxford between 1996 and 2010 using the Oxford Monitoring System for Self-harm in order to investigate trends in prevalence, methods and repetition of self-harm, and receipt of psychosocial assessment by a mental health specialist. Psychosocial assessment includes investigation of patient's problems and needs, together with future risks. For patients receiving a psychosocial assessment, we investigated trends in alcohol use and misuse, prior psychiatric treatment, problems, and suicidal intent. Rates of self-harm rose in both genders between 1996 and 2002/2003, after which they declined. There was evidence of a possible cohort effect, whereby higher rates in younger males in earlier years transferred over time to older age groups. Self-cutting, hanging and jumping became more common. Paracetamol ingestion was a common method of self-poisoning. Overdoses of antidepressants also increased. Alcohol use in relation to self-harm, and also alcohol-related problems, became more common. History of prior psychiatric treatment and, especially, of prior self-harm, also increased from 2008, as did the proportion of patients with employment problems. Despite national guidance on the need for psychosocial assessment the proportion of patients receiving an assessment declined.

Conclusions: Major changes in the extent and nature of self-harm occurred over the study period, some suggestive of increased psychiatric problems, and others reflecting prescribing practices and changes in drinking patterns. The findings emphasise the need for psychosocial assessment following self-harm, to identify treatment needs and reduce repetition.

General hospital-treated self-poisoning in England and Australia: Comparison of presentation rates, clinical characteristics and aftercare based on sentinel unit data.

Hiles, S., Bergen, H., Hawton, K., Lewin, T., Whyte, I. & Carter, G. (2015). *Journal of Psychosomatic Research* **78**, 356-362

Hospital-treated deliberate self-poisoning is common but existing national monitoring systems are often deficient. Clinical practice guidelines in the UK and Australia recommend universal psychosocial assessment of patients presenting to general hospitals. In this study we compared presentation rates, patient characteristics, psychosocial assessment and aftercare in self-poisoning patients in England and Australia. We used data collected in Oxford in England (3,042 patients) and Newcastle in Australia (3,492 patients) between 1997 and 2006. The rates of presentation for self-harm were considerably higher in Oxford than Newcastle in both males and females. In both centres approximately 70% of presentations occurred outside the normal working day. Most patients (95%) were admitted to a bed in a general hospital. There were differences in the pattern of drugs used for self-poisoning, although paracetamol, minor tranquilisers and antidepressants were the most frequent. Co-ingestion of alcohol occurred in 24% of patients in Oxford and 32% in Newcastle. Ninety three per cent of patients in Newcastle received a psychosocial assessment in hospital compared with 80% in Oxford. A far higher proportion of patients were transferred to psychiatric inpatient care after discharge from the hospital in Newcastle than in Oxford

Conclusions: This is the first study we are aware of comparing self-poisoning between centres in the UK and in Australia. Rates of self-poisoning appear to be higher in the UK than in Australia, although many other characteristics of patients are quite similar. A vast majority of self-poisoning patients received a psychosocial assessment while in hospital but there were differences in aftercare, especially inpatient psychiatric admission. This study shows that sentinel monitoring of routine care of self-poisoning patients can provide valuable comparisons between countries.

Alcohol use and misuse, self-harm and subsequent mortality: an epidemiological and longitudinal study from the multicentre study of self-harm in England

Ness, J., Hawton, K., Bergen, H., Cooper, J., Steeg, S., Kapur, N. Clarke, M., Waters, K. (2015) *Emergency Medicine Journal* (January 2015) doi:10.1136/emermed-2013-202753

Alcohol use, misuse and related harm have been increasing in the UK. Alcohol use and misuse are strongly associated with self-harm and increased risk of future self-harm and suicide. In this study we used data from the Multicentre Study of Self-harm in England to examine how common alcohol use and misuse is within the self-harm patient population presenting to general hospitals and whether use increased between 2000 and 2009. We also looked at the impact of such misuse on the likelihood of repetition of self-harm and death. We found that 58% of patients used alcohol within 6 hours of their self-harm act and 36% were using alcohol excessively or were dependent upon it (alcohol misuse). Alcohol misuse was most common in men, those aged 35–54 years and those from white ethnicities. The frequency of alcohol misuse in self-harm patients increased between 2000 and 2009, especially in women. Patients who misused alcohol were more likely to repeat self-harm within one year and suicide was more common in women misusing alcohol.

Conclusions: Alcohol and alcohol misuse are very common in self-harm patients. Alcohol misuse is related to subsequent repetition of self-harm and, in this study future suicide in women (other studies have also found this for men). The increase in alcohol misuse within the self-harm population, especially in women, underlines the need for clinicians to routinely investigate alcohol use in self-harm patients and for close integration of self-harm services with alcohol misuse services

Suicide following self-harm: Findings from the Multicentre Study of Self-harm in England, 2000-2012.

Hawton, K., Bergen, H., Cooper, J., Turnbull, P., Waters, K., Ness, J., & Kapur, N. (2015) *Journal of Affective Disorders* **175**, 147-151 doi:10.1016/j.jad.2014.12.062

Self-harm is a key risk factor for suicide and it is important to have up-to-date information on the extent of this risk. We followed up 40,346 self-harm patients identified in the three centres of the Multicentre Study of Self-harm in England between 2000 and 2010. By the end of 2012, 2704 individuals had died. Nearly one in five of the deaths were by suicide (including open verdicts), which occurred in 1.6% of patients (2.6% of males and 0.9% of females). Overall, 0.5% of individuals died by suicide in the first year (including 0.82% of males and 0.27% of females), during which time the risk was 49 times greater than the risk of suicide in the general population. Risk of suicide increased with age. While self-poisoning had been the most frequent method of self-harm, hanging was the most common method of subsequent suicide, particularly in males. The number of suicides was probably a considerable underestimate as there were also a large number of deaths recorded as accidents, the majority of which were poisonings (these often involving psychotropic drugs).

Conclusions: The findings underline the importance of suicide prevention initiatives focused on the self-harm population, especially during the initial months following an episode of self-harm. Estimates of using suicide and open verdicts may underestimate the true risk of suicide following self-harm and inclusion of accidental poisonings may be warranted in future risk estimates.

Switching methods of self-harm at repeat episodes: Findings from a multicentre cohort study.

Owens, D., Kelley, R., Munyombwe, T., Bergen, H., Hawton, K., Cooper, J., & Kapur, N. (2015). *Journal of Affective Disorders*, **180**, 44-51. doi:10.1016/j.jad.2015.03.051

It is recognised that people who self-harm more than once may switch from one method of self-harm to another. In this study we aimed to find out the frequency, pattern, determinants and characteristics of changes in methods of self-harm in individuals presenting to general hospitals. We used information on over 33,000 consecutive self-harm episodes identified in six general hospitals in Manchester, Derby and Oxford between 2003 and 2007. Over an average of 30 months of follow-up, 23% of people repeated self-harm and one-third of them switched method, often with a very short time interval between episodes, and especially where the person was male, younger, or had self-harmed previously. Self-poisoning was far less likely than other methods to be followed by switching of method.

Conclusions: When self-harm is repeated the method used often changes, but the nature of the change may be relatively unpredictable, except that this less often occurs following self-poisoning. Clinicians should therefore avoid potentially misleading assumptions about risks or needs of patients based simply on the method of harm.

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