Self-Harm in Oxford

2014

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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 2014. 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 2014 was 1664, one less than in 2013. There was a small increase in the number of presentations (episodes) by females (up 1.3%); the number of presentations by males decreased slightly (2.6%).
- The number of individual persons presenting in 2014 was 1203, an increase of 4.7% over 2013. The number of females increased by 10.8% while the number of males decreased by 5.4%.
- Person-based rates of self-harm have generally been slowly declining since a peak in 2003, although there was a slight upturn in rates in 2014 for females in all but the 15-24 year age groups. However, the highest rate of self-harm was in females 15-24 years. In males the highest rate in 2014 was in those aged 35-54 years in Oxford City but in those aged 15-24 years in an extended area of Oxfordshire.
- The percentage of patients repeating within a year of an episode in **2013** (24.0%) was a little higher than in recent years, especially in females: 28.2% of females and 17.2% of males. Of those who repeated within a year, 54.7% did so within three months of their first presentation in **2013,** and one-third (33.0%) re-presented within one month of their initial presentation. In 2014 nearly a quarter of assessed patients (31.8% of males and 19.3% of females) were presenting with self-harm for the first time.

Characteristics of assessed patients

- 1281 patients received a psychosocial assessment following their presentation, up from 1221 in 2013.
- Over one-fifth (22.2%) of assessed patients were unemployed (more than half for over a year).
- 32.6% of assessed patients were living alone, in lodgings, in an institution or were of no fixed abode. The remainder (67.4%) were living with family or friends.
- Misuse of alcohol in patients was recorded for 38.5% of males and 25.8% of females assessed. Drug misuse was recorded for 27.8% of male and 12.3% of female assessed patients.
- Alcohol was consumed in the 6 hours before self-harm in 43.8% of episodes and drugs in 5.1% of episodes.
- The five most frequent problems preceding self-harm in assessed males concerned difficulties with a partner, employment/studies, alcohol, psychiatric disorder and relationships with other family members. In females the five most frequent problems involved relationships with other family members, with a partner, psychiatric problems, employment/studies and alcohol.
- Suicide intent scores (a measure of the extent to which patients wished to die) were in the high or very high range in 22.5% of assessed episodes. Suicide intent scores (averaged for 2012-2014) increased with age. 34.4% 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, 65.6% involved self-poisoning, 24.9% self-injury and 9.6% both methods.
- The proportion of overdoses involving paracetamol (including compounds) in 2014 was 42.8%, similar to figures in recent years. Antidepressants were involved in 30.8% of overdoses in 2014. Of these, 56.7% involved SSRIs/SNRIs, 18.8% tricyclics, 24.5% other antidepressants and 13.1% mood stabilisers.
- There has been a major rise in recent years in overdoses involving other types of medication. This particularly includes opiates.
- In 2014, 34.5% of self-harm episodes involved self-injury (including some combined with self-poisoning). As in previous years, the most common method was self-cutting (76.6%). Use of hanging and other methods of asphyxiation remains high.

Clinical management of self-harm episodes

- In 1,260 or 75.7% of presentations the individuals were admitted to a general hospital bed. This was down from 78.4% in 2013.
- The number of patients assessed by members of the hospital psychiatric service in 2014 was 1,281 compared with 1,221 in 2013, an increase of 4.9%.
- A psychosocial assessment from the psychiatric services occurred in 77.0% of all presentations, up from 73.3% in 2013. This continues a recent rising trend.
- Almost three-quarters (73.5%) 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.
- In a total of 383 episodes the patients left the hospital without a psychosocial assessment. While in 130 cases patients took their own discharge, in 91 cases patients were not referred to the psychiatric service for assessment. Patients presenting with self-injury were particularly likely not to receive an assessment: 54.1% assessed compared with 84.0% for those who self-poisoned, and 88.7% for those who used both methods in the same episode of self-harm.

Self-harm in patients under 18 years of age

- 203 individuals in this age group (87.2% females) presented with 245 episodes of self-harm in 2014.
- The number of persons and episodes involving under-16 year-olds (109 patients and 135 episodes) was the highest recorded in recent years.
- 87.3% of under-18 year-olds were admitted to a general hospital bed. Of those under 16 years 92.6% were admitted.
- Psychosocial assessments occurred in 86.9% of episodes.
- Paracetamol was involved in 61.3% of all self-poisoning episodes and self-cutting in 84.8% of self-injuries.
- Relationship issues were the main problems faced by adolescents, especially problems with family.
- The majority of patients (77.7%) were offered psychiatric or psychological care, especially via CAMHS services.

Self-harm in older adults (65 years and over), 2011-2014

- Over the four years (2011-2014) 161 individuals in this age group were involved in 209 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 (87.6% of presentations).
- Self-poisoning was the most common method of self-harm (89.0%). 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 physical health, social isolation, difficulties with a partner and psychiatric disorder. One in eight (12.7%) of patients had a problem with chronic pain.
- Nearly a quarter of episodes resulted in admission to psychiatric inpatient care. In over half the episodes the patients were offered outpatient psychiatric aftercare.

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 2014 (2013)

	Males	Females	Total
Episodes of self-harm	565 (580)	1099 (1085)	1664 (1665)
Persons	422 (446)	781 (705)	1203 (1151)

The number of self-harm **episodes** in 2014 was almost identical to 2013 (-1 case) with cases involving males down slightly (-15) and those involving females up slightly (+14) (see Figure 1).

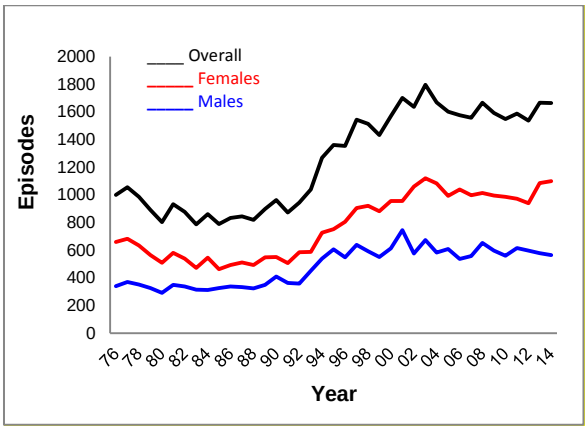
We compared the 2014 presentations with figures for a decade earlier: the number of presentations in 2014 overall was 1.4% lower than the average annual numbers presenting during 2003-2005, but with presentations by females now 3.1% higher and those by males 9.1% lower.

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 2014 five individual females and two males each presented more than 10 times in the year and were responsible for 121 episodes of self-harm between them.

Numbers of persons presenting represented a 4.5% increase on 2013. However, there was a 10.8% increase in the number of females and a 5.4% decrease in the number of males.

FIGURE 1

Episodes of self-harm presenting to the John Radcliffe Hospital 1976-2014

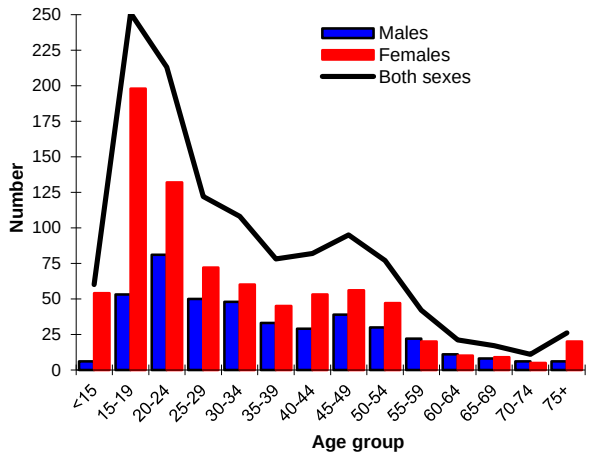


Age and sex

The **age distribution** of self-harm patients in 2014 was broadly similar to that in previous years, although there were higher numbers in the younger age groups in both sexes, with 62.7% of patients being under 35 years of age. The largest numbers of females were in the 15-19 (198 patients) and 20-24 (132 patients) year age groups. The largest numbers of male patients were aged 20-34 years (N = 81). There were 37 patients aged 65 years and over. The oldest patient was 97 years old (see pages 22-24 for section on older adults). In 2014 there were 109 individuals (135 episodes) under 16 years of age (84 individuals, 104 episodes in 2013). The youngest patients were aged 12 years (see pages 19-21 for section on children and adolescents).

FIGURE 2

Age groups of self-harm patients, by sex, in 2014

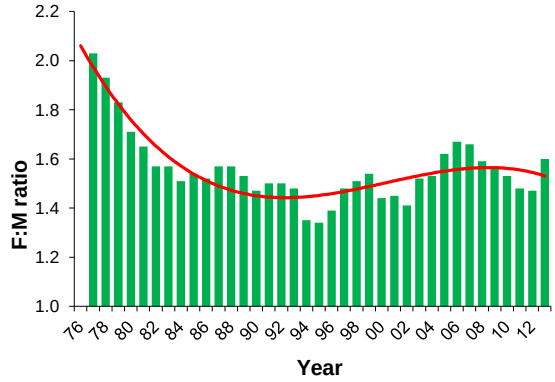


Sex Ratio

The sex ratio (female to male) for persons has increased from 1.47:1 in 2012 to 1.60:1 in 2013 and 1.85:1 in 2014. This reverses the steady decline in the moving average ratio seen since 2006 (Figure 3).

FIGURE 3

Sex ratio (F:M), persons, 1976-2014 (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: Oxford City and extended area

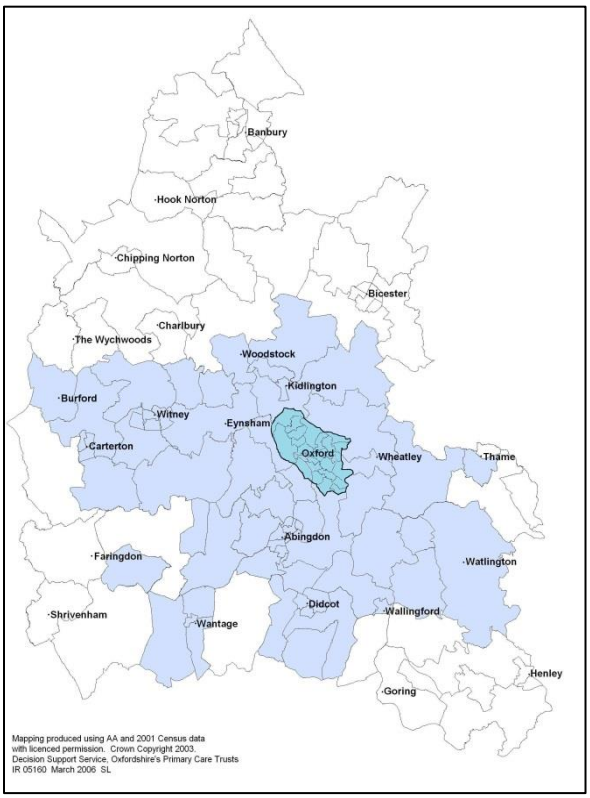
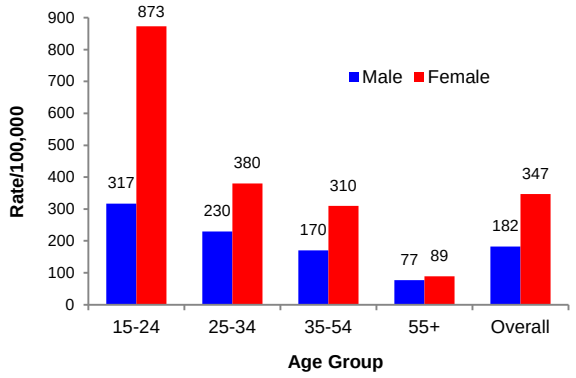


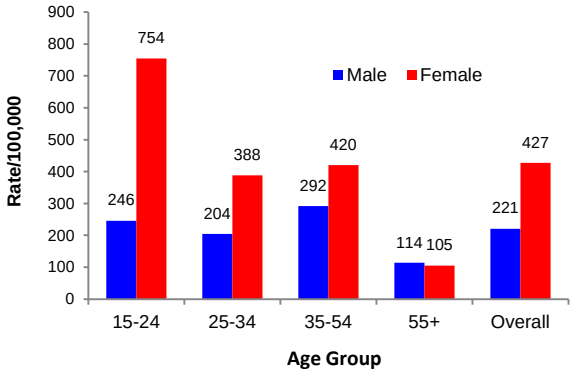
Figure 5 shows the 2014 self-harm rates by age groups and sex for both Oxford City and the extended area. Rates across Oxfordshire were slightly higher in the younger age group (15-24 years) in both sexes and in males aged 25-34 years but were higher in Oxford City for those aged 35 years and over. The overall self-harm rate was higher in Oxford City.

FIGURE 5

Self-harm rates in 2014 by age group and sex
a) Oxfordshire



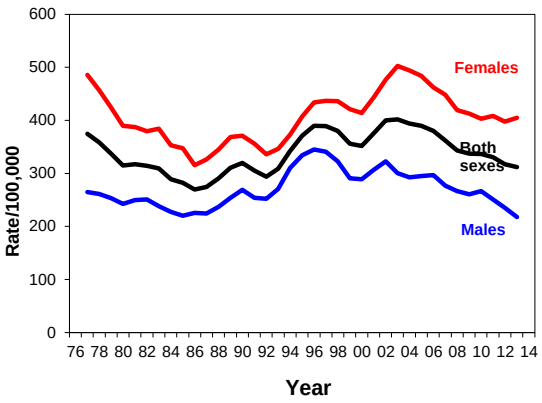
b) Oxford City



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, although there was a slight increase in the rate for females in 2014 (Figure 6).

FIGURE 6

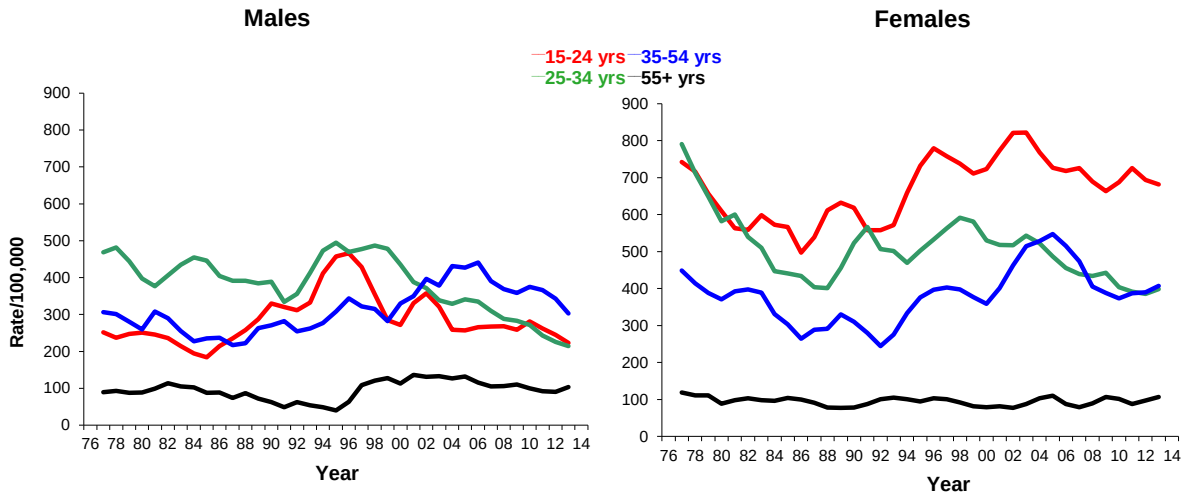
Rates of self-harm in Oxford City (aged 15+ years) 1976-2014 (3 year moving averages)



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, although there was a slight increase in those aged 55 and over in 2014. Rates in **females** increased in all age groups in 2014 except 15-24 year-olds.

FIGURE 7

Rates of self-harm in Oxford City, by age groups, 1976-2014 (3 year moving averages)



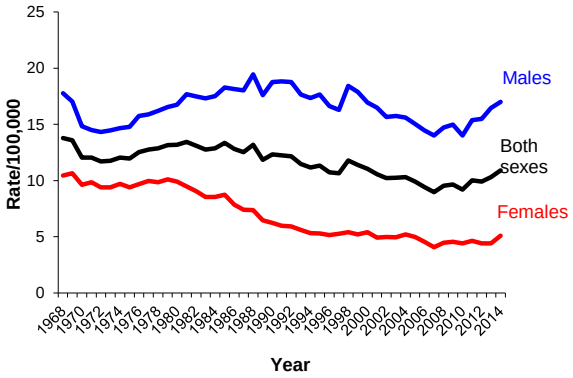
Suicide rates by sex and age groups in England and Wales

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 2014. Suicide rates had been declining steadily in both genders until 2007. Since then, rates have increased in males. They levelled off in females but increased in 2014.

Figure 9 show suicide rates (suicides and open verdicts) for England and Wales between 1968 and 2014 for specific age groups, by gender. In 2014, rates in males decreased in all age groups, but increased in females in all age groups.

FIGURE 8

Suicides and open verdicts in people aged 10 years and over (England and Wales), 1968-2014, by gender



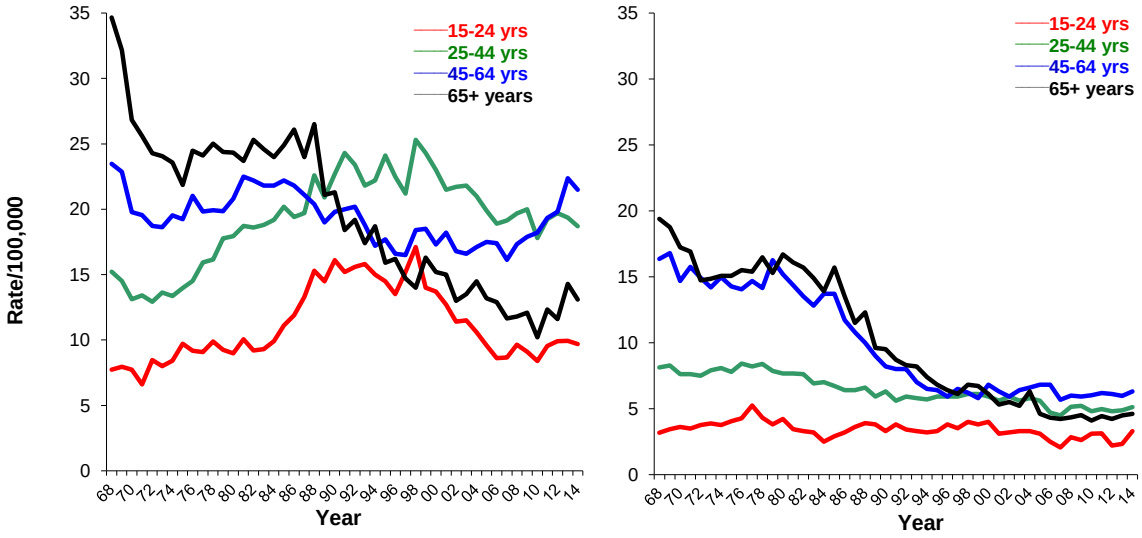
Source: Office for National Statistics
Data are for registrations of death in each calendar year

Rates standardised to the European standard population.

FIGURE 9

Rates of suicide and open verdicts in England & Wales, 1968-2014, by age groups

MALES **FEMALES**



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

Rates standardised to the European standard population

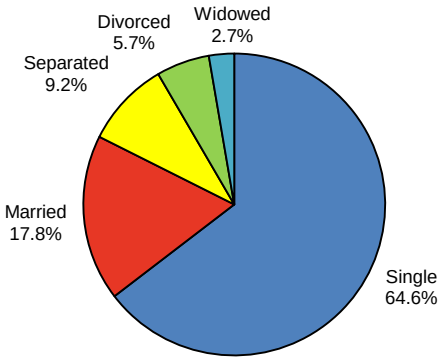
Demographic characteristics

Marital status

The majority of assessed self-harm patients in 2014 were single (Figure 10).

FIGURE 10

Marital status of assessed patients (aged 16+ years) in 2014

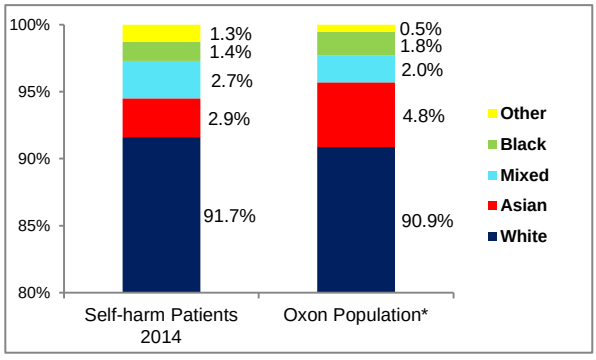


Ethnicity

In 2014, information on ethnicity was recorded for 97.7% 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 compared with ethnic distribution of Oxford District*



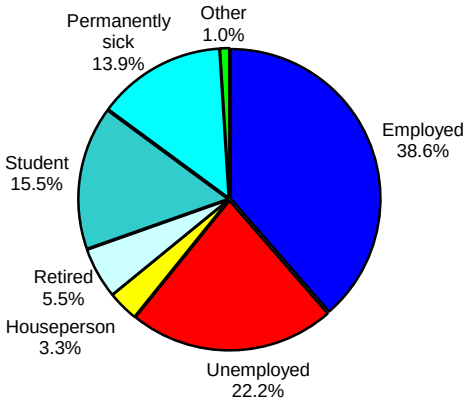
*Source: ONS 2011 Census

Employment status

In 2014, 22.2% of the self-harm patients (aged 16 years and over) were **unemployed** (Figure 12). This figure is similar to the past few years. 13.9% were registered sick or disabled, a similar figure to 2013 (14.2%). Of those persons for whom the duration of unemployment was known, 50.4% had been unemployed for **more than a year** and 14.4% for **less than one month**.

FIGURE 12

Employment status of assessed DSH patients (aged 16+ years) in 2014



University Students

Of the assessed self-harm patients in 2014, 130 were **students** (including school students). These included 35 **Oxford University students** (25 females and 10 males) and 20 **Oxford Brookes University students** (13 females and 7 males).

Living situation

The majority of assessed patients in 2014 lived with family members or friends (67.4%). The remainder (32.6%) lived alone, in lodgings, in an institution, or were of no fixed abode (Table 2). A larger proportion of males (43.3%) than females (26.9%) were living apart from family and friends (X^2 = 27.7, p<0.001).

TABLE 2

Living Arrangement for assessed patients

Living Situation	Males		Females		Total	
	N	(%)	N	(%)	N	(%)
Partner/Family	186	(56.4)	467	(73.1)	653	(67.4)
Alone	69	(20.9)	99	(15.5)	168	(17.3)
Lodging/hostel	44	(13.3)	54	(8.5)	98	(10.1)
Institution	10	(3.0)	12	(1.9)	22	(2.3)
No Fixed Abode	21	(6.4)	7	(1.1)	28	(2.9)

Clinical characteristics of self-harm patients

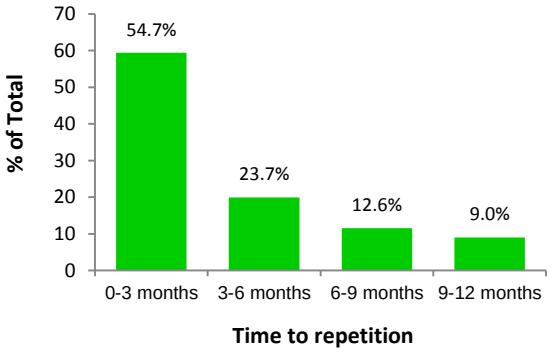
Repetition of self-harm

One measure of repetition is the ratio of the number of self-harm episodes to the number of persons. In 2014 the ratio was 1.4, the same as in 2013 and 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 1.37 and for females was 1.41.

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 (2013) and repetition will only be identified for those who present to the John Radcliffe hospital following subsequent episodes. Of patients who presented in **2013**, 24.0% had a repeat presentation to the same hospital for self-harm within 12 months (21.5% in 2013). The repetition rate for females was 28.2% and 17.2% for males. 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 one-third (33.0%) within one month of their initial presentation.

FIGURE 13

Patients who presented during 2013 and re-presented to the John Radcliffe hospital within one year: Time to repetition



Another relevant measure is the extent to which people are engaging in their first-ever reported episode of self-harm. In **2014**, 23.5% of the assessed patients whose self-harm history was known harmed themselves for the first time. This was 31.8% for males and 19.3% for females.

Of those patients who were assessed in **2013** and had no previous history of self-harm, 8.6% repeated within the following year (7.1% males, 9.8% females) compared with 28.5% of those who had a known previous history of self-harm (22.2% males, 31.9% 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 2014, 42.4% were reported as having a **major psychiatric disorder** (42.7% of males and 42.3% of females)**.** These figures will considerably under-represent the proportions with any type of psychiatric disorder.

Personality disorder was identified in 22.6% of patients in 2014, including 17.8% of males and 25.1% of females. These figures are likely to reflect those with more severe personality disorders.

Misuse of alcohol was recorded for 30.1% of assessed patients (38.5% of males and 25.8% of females). Those misusing alcohol included for males (females in brackets): **chronic alcoholism** 5.7% (1.3%), **alcohol dependence 7.3**% (3.9%) and known to be **drinking more than the recommended maximum safe number of units** 25.5% (20.5%).

Drug misuse was recorded for 17.5% of patients in 2014, including 27.8% of males and 12.3% 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** (67.5%). Difficulties with a partner was the most common problem, especially in males, 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 a **partner**, **alcohol, finances, housing and drugs,** whereas problems with **other family members were more common in females**. Problems due to **the consequences of childhood sexual abuse** were recorded in 6.9% of females and 4.5% of males and **consequences of childhood physical abuse** in 5.4% of males and 3.8% of females. Problems related to **chronic pain** were identified in 4.8% of males and 4.2% of females. **Eating disorders problems** were present in 3.6% of females.

TABLE 3

The most frequent problems[1] identified at assessment in 2014

Problem	Both sexes (N=968)	Males (N=331)	Females (N=637)	p
Partner	36.9%	42.9%	33.8%	<0.01
Other family members	35.6%	27.2%	40.0%	<0.001
Employment /studies	24.6%	27.8%	22.9%	n.s.
Psychiatric disorder	24.1%	25.7%	23.2%	n.s.
Alcohol	20.6%	27.5%	17.0%	0.001
Social isolation	16.8%	18.4%	16.0%	n.s.
Financial	16.0%	21.5%	13.2%	<0.01
Housing	15.0%	19.3%	12.7%	<0.01
Friends	11.9%	10.3%	12.7%	n.s.
Physical health	9.3%	9.7%	9.1%	n.s.
Bereavement	9.8%	10.3%	9.6%	n.s.
Drugs	8.8%	15.1%	5.5%	<0.001

[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 1121 episodes in 2014 (87.6% of episodes in which an assessment occurred). The median suicide intent score was greater in males (10) than in females (8) ($z = 2.550$, $p<0.05$).

The classification of scores into low, moderate, high and very high categories indicated that the scores of 22.5% of cases were in the high (13-20) or very high (21+) range. High or very high scores were recorded for 27.7% of males and 19.7% of females.

Suicide intent scores by age and sex for the years **2012-2014** combined (as in previous years) showed that the proportions of patients with relatively high scores increased significantly with age in both sexes (X^2 for linear trend = 9.18, $p < 0.01$ in males; X^2 for linear trend = 24.85, $p< 0.001$ in females). More than one-third (34.4%) of episodes in those aged 55 years and over involved relatively high scores (Figure 15).

FIGURE 15

Suicide intent by age and sex, 2012-2014
High and very high scores (SIS = 13-30)

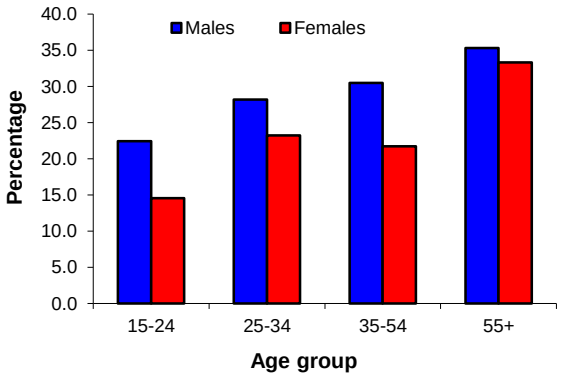
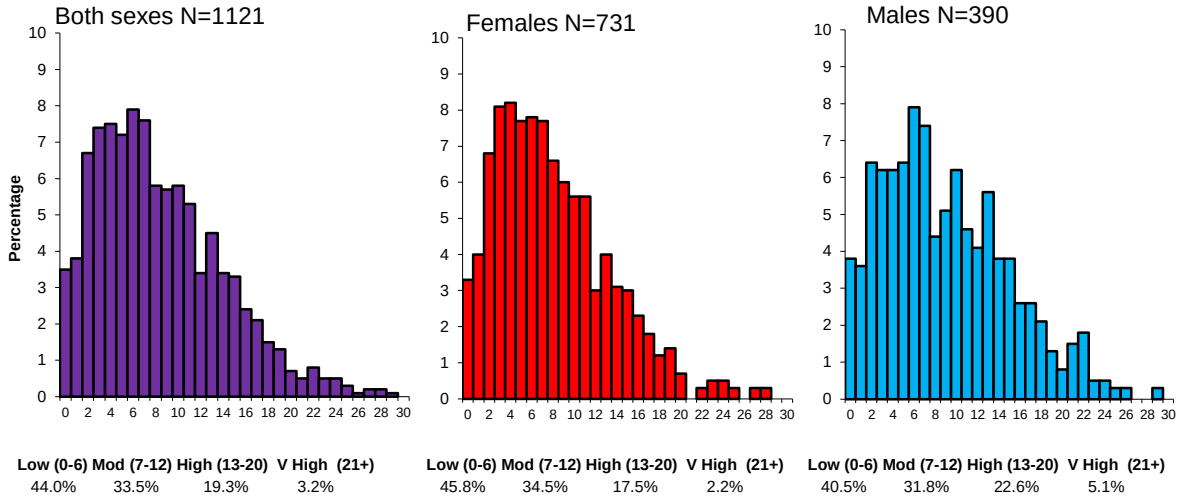


FIGURE 14

Suicide Intent Scale scores in assessed patients, overall and by sex, 2014



Methods used for self-harm

Drugs used for self-poisoning

In 2014, 65.6% of self-harm episodes involved **self-poisoning**, 24.9% **self-injury** and 9.6% **both methods**. Figure 16 shows the trends in percentages of overdoses involving specific groups of drugs.

There were 527 overdoses involving p**aracetamol** (including compounds) in 2014 (42.8% of all overdoses), including 98 (6.4% of all overdoses) involving **paracetamol and codeine combined preparations** (e.g. co-codamol).

Pure paracetamol was involved in 80.8% of all paracetamol overdoses and paracetamol in compound form in 24.6% (some overdoses involved both forms of paracetamol).

Non-steroidal anti-inflammatory drugs were involved in 195 (15.8%) of overdoses in 2014.

Antidepressants (including mood stabilisers) were involved in 30.8% of overdoses (compared with 28.9% in 2013). Of these overdoses, 56.7% involved **SSRIs/SNRIs**, 18.8% **tricyclics,** 24.5% **other antidepressants** (e.g. trazodone, mirtazapine) and 13.1% **mood stabilisers** (some overdoses involved more than one type of antidepressant).

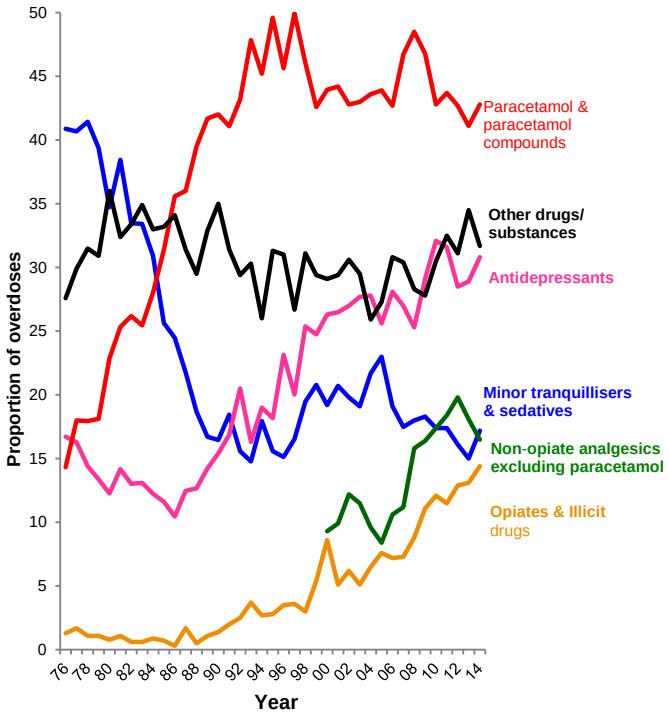
Minor tranquillisers and sedatives were involved in 17.2% of overdoses in 2014 (14.9% in 2013 and 16.1% in 2012).

Opiates were involved in 14.4% of overdoses in 2014. Overdoses with opiates have increased in frequency in recent years: common drugs in this category are tramadol, codeine and di-hydrocodeine. While many of these drugs are available on prescription, we do not know whether individuals taking them in overdose obtained the drugs on prescription or whether their availability was related to drug misuse.

Overdoses involving **other drugs** have shown a small increase in recent years. This category mainly includes prescribed medications not included in the other specific categories shown in Figure 16).

FIGURE 16

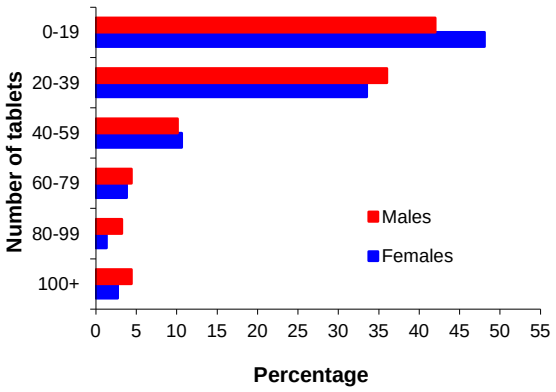
Substances used in self-poisoning 1976-2014



Information on the **number of tablets** taken in overdoses, for all drugs taken, was available for 947 cases in 2014. The mean number taken in overdose was 28.6 (SD 28.9, median = 20.0) tablets. As can be seen in Figure 17, the majority of overdoses involved less than 40 tablets (80.4%). In general, males took significantly larger numbers of tablets than females (median values: males 22, females 20; z = 1.72, n.s.).

FIGURE 17

Numbers of tablets taken in overdose in 2014, by sex



Methods of self-injury

Of the self-injuries, **self-cutting** was, as in previous years, the most common method, used by 76.6% (N = 439) of those self-injuring (70.3% males, 79.5% females) in 2014. Other methods included **hanging/strangulation/asphyxiation** (41), which has increased in recent years, and **jumping** from a height/in front of moving vehicles (14) (Figure 18).

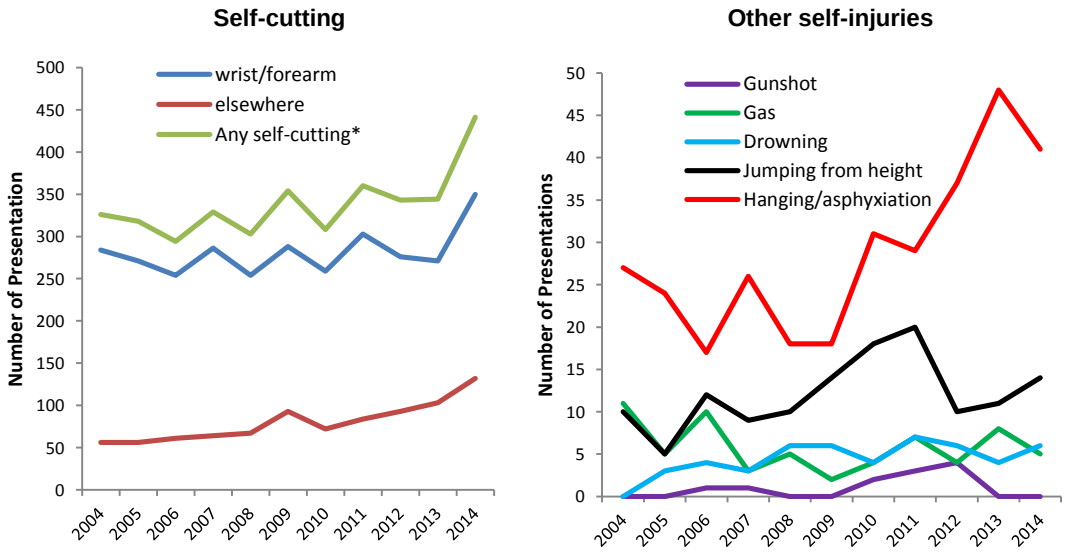
Alcohol or drug involvement

In 2014, as in previous years, **alcohol** was often consumed **at the time of self-harm** (28.5% of assessed individuals). This figure was higher in males than females (33.5% males, 25.8% females). Alcohol had very often been consumed **during the six hours before the episode** (43.8%), again more commonly by males (51.1%) than females (39.8%).

Alcohol involvement in self-harm (based on data for 2012-14) varied by age group. It was higher in those aged 25-64 in both genders than in those under 25 and over 64 years (Figure 19). 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 18

TRENDS IN METHOD OF SELF-INJURY



*Includes cutting involving multiple sites

FIGURE 19

Alcohol involvement in self-harm by age group

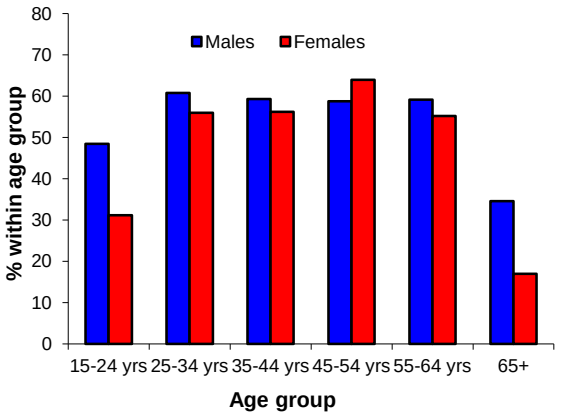
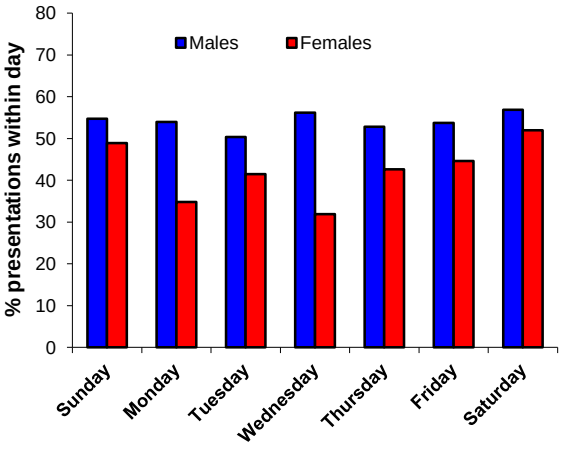


FIGURE 20

Alcohol involvement in self-harm by day of presentation



5.1% of assessed patients were under the influence of recreational drugs at the time of their self-harm (8.1% of males, 4.1% of females).

Recreational drug misuse was recorded for 27.8% of male and 12.3% of female assessed patients. 8.8 % 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

1281 **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 2014. This represents an increase compared with 2013 (+60 cases; 4.9%). Overall, 77.0% of episodes resulted in an assessment, while in only 33.7% of the non-admitted episodes was there an assessment (40.0% of males and 30.8% of females). This was a somewhat higher proportion than in 2013 (26.4%).

In 377 episodes **the patient left the hospital without being assessed** (114 males, 269 females). This was considerably lower (-67) than in 2013. Of those not assessed, 115 were current psychiatric inpatients, 130 took their own discharge before assessment and 41 refused assessment. The remaining 91 patients were not referred to the EDPS by the Emergency Department (Table 4). Six patients died before discharge and are not included in these figures.

TABLE 4
Reasons why patients were not assessed, 2014

	N	%
Took own discharge	130	33.9%
Refused assessment	41	10.7%
Policy decision not to assess – including those in current psychiatric care	121	31.6%
Not referred to EDPS for assessment	91	23.8%
Total	**383**	**100%**

The proportion of episodes in which a psychosocial assessment took place (77.0%) is far higher than in most general hospitals in England (58% based on a recent study in 32 hospitals[1]).

A total of 1260 self-harm episodes resulted in **admission to a bed in the general hospital** in 2014 (75.7% 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 84.0% of self-poisoning episodes; in 54.1% of self-injuries; and in 88.7% of episodes involving both self-poisoning and self-injury. Assessment occurred in 52.9% of episodes of self-cutting alone and 54.6% of episodes involving any other form of self-injury alone.

In 2014, 43.1% (N=552) of psychosocial assessments following self-harm were conducted by nurses or social workers and 56.9% (N=729) by doctors. A somewhat higher proportion of assessments were by doctors than in 2013 (51.4%) reflecting changes in the service, especially the introduction of a consultant-led service for patients admitted to a ward.

Time of presentation to the Emergency Department

In 2014, 26.5% of all patients (including those who were not assessed) presented between 9a.m. and 5p.m. and the remainder (73.5%) between 5p.m. and 9a.m. Time of presentation was not recorded for one case.

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 (see Figure 21, which shows the pattern for 2012-2014).

TABLE 5

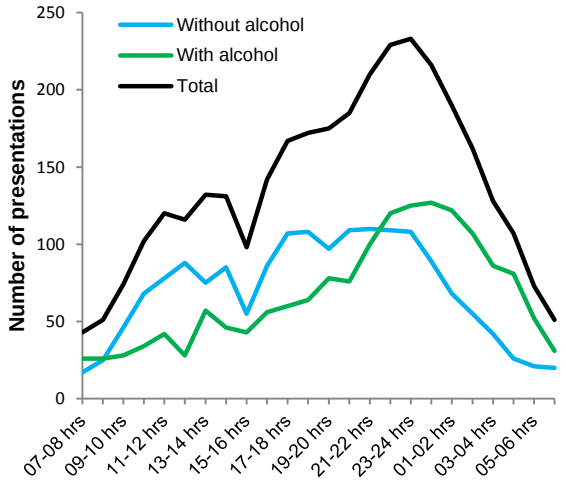
Presentations to the general hospital and those assessed by the hospital psychiatric service following self-harm in 2014 (N=1664)

		Admitted		Not Admitted		Overall	
		%	N	%	N	%	N
MALES	**Assessed**	71.0%	401	8.8%	50	79.8%	451
	Not assessed	29.0%	39	13.3%	75	20.2%	114
FEMALES:	**Assessed**	67.7%	744	7.8%	86	75.5%	830
	Not assessed	6.9%	76	17.6%	193	24.5%	269
BOTH GENDERS:	**Assessed**	68.8%	1145	8.2%	136	77.0%	1281
	Not assessed	6.9%	115	16.1%	268	23.0%	383

[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); 2012-2014



For patients who were admitted to a hospital bed in the general hospital, the time of presentation to the Emergency Department made no difference to whether or not they received a psychiatric assessment: 92.6% of those presenting between 9 a.m. and 5 p.m. were assessed compared with 91.0% of those presenting after 5 p.m. ($X^2 = 0.60$, n.s.). Both these figures were higher than in 2013.

However, for those patients not admitted, there was a difference in the proportions who received a psychosocial assessment. Only 26.7% of those presenting after 5pm were assessed whereas 54.4% of those presenting between 9am and 5pm received a psychosocial assessment ($X^2 = 26.3$, $p<0.001$). The proportion presenting between 9 am and 5 pm in which as assessment occurred was a big increase on 2013 (33.3%).

Aftercare

Of the assessed self-harm episodes which resulted in a referral for outpatient psychiatric aftercare (N = 649), in 55.2% 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, nearly all were with community mental health teams although in 7.9% of cases this included follow-up by the Emergency Department Psychiatric Service.

The proportion of assessed cases in 2014 in which **inpatient psychiatric care** in Oxford was arranged following discharge from the John Radcliffe was 5.5% (N = 70) (Table 6). 91.4% (64/70) were new admissions, the remainder (8.6%) being people who were already inpsychiatric patients at the time of their self-harm episodes. Thus an episode of new inpatient care was provided for 5.0% of all assessed patients.

In 192 (15.0%) 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.** This may have been in addition to referrals to other services.

280 assessed patients (21.9%) were **referred back to GP care** alone in 2014. (This figure is a considerable underestimate when account is taken of the number of patients discharged without a psychosocial assessment.)

TABLE 6

Aftercare accepted following assessment in 2014 (N=1281) and 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	5.5	(70)	5.0	(64)	0.5	(6)
Outpatient psychiatric care:						
Community MH Teams	38.3	(491)	16.8	(215)	21.5	(276)
EDPS follow-up	3.2	(43)	2.3	(43)	0.9	(11)
Step-up care	15.7	(201)	12.3	(158)	3.4	(43)
Day patient psychiatric care	1.3	(17)	0.5	(7)	0.8	(10)
GP care (alone or for GP-led services)	30.5	(391)				
PCAMHS	2.5	(32)				
IAPT	8.9	(114)				
Alcohol Services	9.2	(118)				
Other outcomes[2]	9.7	(124)				
Took own discharge	0.6	(8)				

[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*

Self-harm in patients less than 18 years of age

In 2014, 203 children and adolescents under 18 years of age accounted for 245 (208) presentations in 2014. This represented 22.3% (12.5%) of all episodes and 26.0% (14.9%) of all persons. As will be seen from Table 7, the majority of these younger patients were female (87.2%) and repeated presentations were almost exclusively by females.

TABLE 7
Presentations for self-harm and number of patients aged under 18 in 2014

	Females		Males		Overall	
	Patients	**Episodes**	**Patients**	**Episodes**	**Patients**	**Episodes**
Under 16 years	101	127	8	8	109	135
16 and 17 years	76	87	18	23	94	110
Total	177	214	26	31	203	245

The number of episodes increased in 2014 by 17.8% compared with 2013 and the number of individuals by 18.7%. However, over the seven years 2008-2014 there was considerable variation in annual numbers and the 2014 figures were just 3.8% higher than the mean for the previous six years (Figure 22). While it is not known whether this represents an underlying trend for increased hospital presentations for self-harm in this age group, the increases seen between 2012 and 2014 were in females and in under 16-year-olds. In 2014, 55.1% of all presentations by adolescents were by individuals under the age of 16. This is the largest proportion seen to date (Figure 23).

FIGURE 22

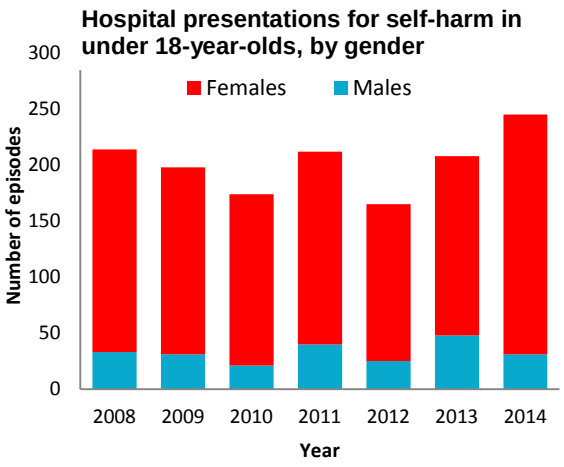
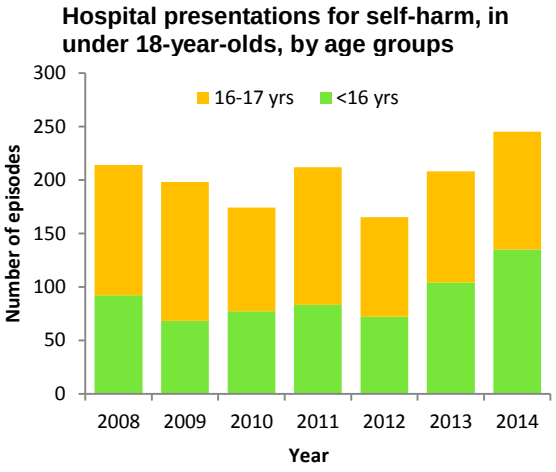


FIGURE 23



Admission to a general hospital bed occurred for most presentations (87.3%), including 92.6% of under 16-year-olds and 80.9% of 16-17 year-olds (Table 8). Overall, 86.9% of patients were assessed, although this figure was higher in younger patients (92.6%) than in older adolescents (80.0%). In 7 out of 11 cases where under 16-year-olds were neither admitted to a hospital bed nor assessed, they were already known to local psychiatric services (2 inpatients and 5 outpatients).

TABLE 8

Presentations by under 18-year-olds where patients were admitted to a bed in the general hospital and presentations where patients 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	92.1% (117)	100.0% (8)	92.6% (125)	92.9% (118)	87.5% (7)	92.6% (125)
16 and 17 yrs	77.0% (70)	95.7% (22)	80.9% (92)	75.9% (66)	95.7% (22)	80.0% (88)
Total	86.0% (187)	96.8% (30)	87.3% (217)	86.0% (184)	93.5% (29)	86.9% (213)

In terms of methods of self-harm, 66.1% of episodes involved self-poisoning, 18.8% self-injury and 15.1% both methods, with under-16 year-olds more often taking overdoses and 16-17 year-olds more likely to self-cut only. Paracetamol in any form was involved in 122 episodes, 61.3% of all self-poisonings (30.8% of males and 65.9% of females taking overdoses) in 2014 (Table 9). Of the self-injury episodes, 84.8% (56/66) involved self-cutting.

TABLE 9

Most common methods of self-poisoning in episodes for patients under 18 years of age (N = 199)

	N	% of self-poisonings
Pure paracetamol	109	54.8
Paracetamol-containing drugs	20	10.1
Non-steroidal anti-inflammatory drugs	49	24.6
SSRI antidepressants	18	9.0

The main problems faced by patients under 18 years of age were relationship issues with their families (Table 10). Other common problems included those with friends, partners, bullying and studies (or employment). The only significant difference between the age groups concerned problems with partner, and with social isolation, both being experienced more by the 16 and 17 year olds.

TABLE 10

Problems identified in assessed patients

Problem:	Under 16 yrs N = 93		16-17 yrs N = 78		p
	n	(%)	n	(%)	
Family	57	(56.4%)	39	(50.6%)	n.s.
Friends	25	(24.8%)	14	(18.2%)	n.s.
Bullying	25	(24.8%)	11	(14.3%)	n.s.
Partner	**12**	**(11.8%)**	**23**	**(29.9%)**	**<0.01**
Studies/employment	16	(15.8%)	16	(20.8%)	n.s.
Psychiatric problem	13	(12.9%)	18	(10.4%)	n.s.
Bereavement	10	(9.9%)	8	(10.4%)	n.s.
Sexual abuse	8	(7.9%)	7	(9.1%)	n.s.
Social isolation	**2**	**(2.0%)**	**10**	**(13.0%)**	**< 0.01**
Drugs	5	(5.0%)	9	(11.7%)	n.s.

Aftercare

Most 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 (CAMHS), with 77.7% receiving some form of psychiatric or psychological support, the majority with CAMHS or a CAMHS Crisis Team (Table 11).

Approximately 14% of individuals were allowed home with no further psychiatric follow-up agreed. We do not know in these cases whether treatment was offered but refused.

Where patients were referred back to their GP, in 40% of 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 = 102		16-17 yrs N = 77	
	n	**%**	**n**	**%**
CAMHS	46	(45.1%)	42	(54.5%)
CAMHS Crisis Team	43	(42.2%)	21	(27.3%)
PCAMHs	22	(21.6%)	6	(7.8%)
GP care	10	(9.8%)	15	(19.5%)
Social services	10	(9.8%)	3	(3.9%)

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

The data presented for older adults is for the 4-year period 2011-2014 (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 many more females than males. There was little difference between males and females in the risk of representing to the hospital following self-harm.

TABLE 12
Presentations for self-harm and number of patients aged 65 and over 2011-2014

	Presentations	Patients	Presentations: persons ratio
Females	105	82	1.28
Males	104	79	1.32
Total	209	161	1.30

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 2011-2014

	Females	Males	Total
Admitted to hospital bed	95/105 (90.5%)	91/104 (87.5%)	186/209 (89.0%)
Psychosocial assessment	89/105 (84.8%)	94/104 (90.4%)	183/209 (87.6%)

Self-poisoning was the most common method of self-harm (89.0%; see Table 14 for details). Only 34 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 Figure 15 (page 12) and Table 16). Thus, 20.6% of these self-injuries involved hanging, asphyxiation, attempted drowning or jumping from a height. A further 17.6% involved some form of self-stabbing or self-mutilation.

TABLE 14
Most common drugs taken in overdose

Drug taken in overdose (N=186)	% of all overdoses (n)	
Pure paracetamol	24.9	(52)
Other prescribed drugs	25.3	(47)
Antidepressants	24.7	(46)
Benzodiazepines and minor sedatives	15.3	(32)
Opiate pain killers	12.0	(25)
Other paracetamol-containing drugs	9.1	(17)
Major tranquilisers	4.8	(9)
Non-steroidal anti-inflammatory drugs	4.3	(8)

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

TABLE 15
Problems identified in assessed patients

Problem (N=134):	n	(%)
Physical health problem	57	(42.5%)
Social isolation	39	(29.1%)
Partner	28	(20.9%)
Psychiatric disorder	28	(20.9%)
Family	24	(17.9%)
Chronic pain	17	(12.7%)
Bereavement	21	(15.7%)
Alcohol	13	(9.7%)

Suicide Intent

The median Suicide Intent Scale score for males was 10 and for females was 12, the latter being markedly higher than found in females in the general self-harm population (median=8). The distribution of scores differs markedly from the overall distribution in the general self-harm population, with older adults having higher scores (see Table 16 and also Figure 14, page 12).

TABLE 16
Suicide intent in older adults, 2011-2014

SIS score range:	Males (N=68)	Females (N=64)
Low	35.3%	23.4%
Moderate	26.5%	29.7%
High	22.1%	32.8%
Very High	16.2%	14.1%

Aftercare

Almost one 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). 14.2% were offered other care, mainly general hospital inpatient care, alcohol services 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=183)

Aftercare offered:	**%**
CMHT Outpatient care, including Crisis Team	54.1%
Inpatient psychiatric care	23.5%
GP care only	14.2%
Other (mainly other medical referrals or social services)	14.2%

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

Epidemiology and trends in non-fatal self-harm in three centres in England, 2000–2012: findings from the Multicentre Study of Self-harm in England.

Geulayov, G., Kapur, N., Turnbull, P., Clements, C., Waters, K., Ness, J., Townsend, E., Hawton, K. (2016)

BMJ Open, **6**:e010538 doi:10.1136/bmjopen-2015-010538

Self-harm is a major public health problem in many countries, with potential serious consequences including death by suicide and early death by other causes. It is important to monitor changes in this behaviour nationally. In this study we examined changes in self-harm over time in England during 13 years from 2000 to 2012. We also examined changes in the management of self-harm behaviour in participating hospitals during the same period. The study was conducted the three centres of the Multicentre Study of Self-harm in England, which includes five general hospitals in Oxford, Manchester and Derby. We included individuals who attended the emergency departments in these hospitals due to self-harm. Only persons whose age was 15 years or over were included. During these 13 years, there were 84,378 presentations for self-harm by 47,048 individuals. Over half (58.6%) were females.

In females, self-harm declined between 2000 and 2012 while in males self-harm declined until 2008 and then increased until 2012. Death by suicide in England and self-harm in this study followed a similar path. Over 75% of self-harm presentations to the emergency departments were due to self-poisoning, mainly with painkillers (46%) and antidepressants (25%). There was a substantial increase in *self-injury* between 2007 and 2012. This was especially marked for self-cutting/stabbing and hanging/asphyxiation. A little over half of patients presenting to the hospital for self-harm received a psychosocial assessment (assessment of their risks and needs) by mental health staff. The majority of patients who attend the hospital for *self-injury* did not receive a psychosocial assessment.

Conclusions: Self-harm and suicide may be closely related. Self-injury as a form of self-harm has been increasing but this group of patients is often not assessed by a mental health professional. Clinicians should offer psychosocial assessment to all the individuals who attend the emergency department for self-harm.

Impact of the recent recession on self-harm: Longitudinal ecological and patient-level investigation from the Multicentre Study of Self-harm in England.

Hawton, K., Bergen, H., Geulayov, G., Waters, K., Ness, J., Cooper, J., & Kapur, N. (2016)

Journal of Affective Disorders, **191**, 132-138. doi:10.1016/j.jad.2015.11.001

Economic recessions are associated with increases in suicide rates but there is little information for non-fatal self-harm. We aimed to investigate the impact of the economic recession beginning in 2008 on rates of self-harm in England and on the problems faced by patients who self-harmed. We used data from the Multicentre Study of Self-harm in England for 2001 -2010 and local employment statistics for Oxford, Manchester and Derby. In order to investigate the effect of the recession on rates of self-harm we used a method called “interrupted time series”, through which one can investigate actual trends in rates of self-harm compared with those that would have been expected based on previous trends before a particular time point (i.e. the onset of the recession). Rates of self-harm increased in both genders in Derby and in males in Manchester in 2008 - 2010 compared with the preceding years, but not in either gender in Oxford. These results largely followed changes in general population and employment, with marked increases in Manchester and Derby following the onset of the recession but not in Oxford. More patients who self-harmed were unemployed in 2008 – 2010 compared to before the recession. The proportion of patients who were receiving sickness or disability allowances decreased. More patients of both genders had employment and financial problems in 2008 – 2010 and more females also had housing problems. Interestingly, these changes were largely also found in self-harm patients who were employed at the time of their self-harm.

Conclusions: It appears that the recent economic recession had an impact on rates of self-harm. Increased rates were found in areas where there were greater rises in rates of unemployment. Work, financial and housing problems became more common in people who self-harmed following the onset of the recession. These were apparent even in those who remained in employment. There was some indication that changes in availability of welfare benefits may have contributed to self-harm after the onset of the recession.

Rates of self-harm presenting to general hospitals: a comparison of data from the Multicentre Study of Self-Harm in England and Hospital Episode Statistics.

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Self-harm is a common causes of hospital admission and estimates of emergency department presentations for self-harm are high. To improve care for people who self-harm it is essential that clinicians, care providers and researchers have access to data that accurately captures hospital service use due to self-harm and changes over time. We compared rates of self-harm based on routinely collected Hospital Episode Statistics (HES) admission and emergency department data to rates based on detailed self-harm data collected by the Multicentre Study of Self-Harm in England. Nationally, HES underestimated overall rates of hospital presentations for self-harm by around 60% in comparison to rates based on data from the Multicentre Study. When we looked at these data in detail, using only HES data from people living within the areas covered by the Multicentre Study, the overall underestimate was confirmed. However, the size of the difference in rates varied between locations. We also found that HES data did not capture important trends in self-harm rates over time, such as the recent increase in self-harm by men.

Conclusions: The results of this study show that routinely collected hospital data, such as Hospital Episode Statistics, does not accurately capture all hospital presentations for self-harm – although this varies by hospital site and over time. It is important that researchers, policymakers, clinicians and the media are aware of this potential underestimate when using or quoting routinely collected hospital data, and may be particularly important in relation to commissioning services for people who self-harm.

Self-harm and life problems: findings from the Multicentre Study of Self-harm in England

Townsend, E., Ness, J., Waters, K., Kapur, N., Turnbull, P., Cooper, J., Bergen, H. & Hawton, K. (2016)

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It is important to understand the problems faced by those who self-harm in order to design effective clinical services, policies and prevention strategies. We investigated the life problems experienced by patients presenting to general hospital for self-harm. We used data from the Multicentre Study of Self-harm in England for 2000–2010 to investigate life problems associated with self-harm and their relationship to patient and clinical characteristics, including age, gender, repeat self-harm and employment status. Of 24,598 patients (36,431 assessed self-harm episodes), 92.6 % were identified as having at least one contributing life problem. The most frequently reported problems at a first episode of self-harm were relationship difficulties, especially with partners. Mental health issues and problems with alcohol were also very common, especially in patients aged 35–54 years. Those who repeated self-harm were more likely to report problems with alcohol, housing, mental health and dealing with the consequences of abuse.

Conclusions: Self-harm usually occurs in the context of multiple life problems. Clinical services for self-harm patients should be able to access appropriate care provision for relationship difficulties and problems concerning alcohol and mental health issues. Individualised clinical support (e.g. psychological therapy, interventions for alcohol problems and relationship counselling) for self-harm patients facing these life problems may play a crucial role in suicide prevention.

High volume repeaters of self-harm: Characteristics, patterns of emergency department attendance and subsequent deaths based on findings from the Multicentre Study of self-harm in England

Ness, J., Hawton, K., Bergen, H., Waters, K., Kapur, N., Cooper, J., Steeg, S., Clarke, M (2016)

Crisis (in press)

Self-harm is a behaviour which is often repeated and is associated with an increased risk of dying by suicide. In this study, we explored how common repeat attendance to the emergency department (ED) following self-harm was and the patterns of attendance amongst those who attended most frequently. Data collected as part of the Multicentre Study of Self-harm in England. High volume repetition was defined as ≥15 attendances to the ED following self-harm within four years. Every person with high volume repetition had an ED attendance timeline created. These timelines were then subjected to an executive sorting task and a hierarchical cluster analysis to try to identify similar groupings of patterns of presentations. We found that a very small number of people attending ED following self-harm did so frequently. Thus just 0.6% of patients fitted our high volume repeater definition, but they accounted 10% of all the self-harm attendances to ED. Three types of attendance patterns were identified: 1) Intermittent attendance with few clusters, 2) Intermittent attendance with multiple clusters, 3) Most frequent attendees. We also found that a greater proportion of those attending ED frequently subsequently died from external causes (e.g. accidental, suicide) compared to those who did not repeat self-harm frequently.

Conclusions: People who frequently attend ED following self-harm represent a very small proportion of self-harm patients but account for a large number of all self-harm attendances. The need for early intervention is highlighted by the large clustered nature of attendances and the higher frequency of death from external causes. The research methods used in this study offer a new way of exploring very frequent repeat self-harm behaviour, which could have both clinical and research benefits.

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