

The Manchester Self-Harm Project

Self-Harm in Manchester

January 2010 to December 2011

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Ethical approval

MaSH is part of a clinical audit system and has been ratified by local research ethics committees. MaSH is fully compliant with the UK Data Protection Act 1998 and has support under Section 251 of the NHS Act 2006 regarding the use of patient-identifiable information.

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Note: this report is based on combined data from three Emergency Departments (EDs): Manchester Royal Infirmary at Central Manchester University Hospitals NHS Foundation Trust, North Manchester General Hospital at Pennine Acute Hospitals NHS Trust, Wythenshawe Hospital at University Hospital of South Manchester NHS Foundation Trust, and data from the Manchester Mental Health and Social Care Trust. Data on ED presentations at each individual Emergency Department are available on request.

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Summary of findings

Rates of self-harm in Manchester

There were 7,334 self-harm presentations to Emergency Departments in Manchester from 1st January 2010 to 31st December 2011, by 5,141 individuals. The rate of self-harm presentations was 424 per 100,000 in 2010 and 452 per 100,000 in 2011. The rate by females decreased between 2003 and 2009 from 601 to 449 per 100,000 (-25%), but increased thereafter to 495 per 100,000 in 2011 (+10%). Male rates decreased between 2003 and 2008 from 449 to 318 per 100,000 (-29%) but increased thereafter to 408 per 100,000 in 2011 (+28%).

Rates among males aged 15-54 increased between 2009 and 2011. Among males aged 55+ the rate increased between 2009 and 2010, but decreased between 2010 and 2011.

Rates among females increased for all age groups between 2009 and 2010. Between 2010 and 2011, rates increased among those aged 15-34, but decreased among those aged 35+.

Demographic characteristics of individuals who self-harm

Fifty-five percent of the cohort was female, though the ratio between females and males decreased compared with previous years. Sixty-nine percent of individuals were single, and 22% lived alone. Fifteen percent of individuals were from BME (Black and Minority Ethnic) groups; 6% South Asian and 4% Black.

Forty-six percent of individuals were unemployed, an increase of 6% since our previous report (Dickson et al., 2011).¹

Precipitants to self-harm:

The most frequently cited precipitating factor was relationship problems with a partner/ex-partner.

Clinical characteristics of individuals who self-harm

Repetition of self-harm:

- In 2010 22% of individuals re-presented with an episode of self-harm within 12 months (allowing a 12 month follow-up period into 2011)
- 64% reported previous self-harm in their lifetime and 33% reported self-harm within the past year

¹ The previous MaSH report covers the two-year period January 2009 to December 2010.

Alcohol and substance misuse:

Clinicians identified 32% of individuals as currently misusing alcohol (38% of males, 27% of females). Twenty percent were identified as misusing drugs (30% of males, 12% of females).

Characteristics of self-harm presentations

Method of harm:

- 69% of episodes involved self-poisoning with drugs²; of these:
 - 61% involved analgesics
 - 26% involved antidepressants
 - 29% involved other drugs (inc. street drugs)
- 18% involved self-cutting
- 11% involved self-injury other than self-cutting e.g. hanging, traffic related, head-banging (a rise of 2% since the previous report) (Dickson et al., 2011)¹

Time of presentation:

Presentations were most frequent on Monday (15% of all presentations) and peaked between 8pm and 2am (38%).

Management by ED staff:

- 49% were admitted to a medical bed
- 22% were referred to psychiatric services but were not admitted to a medical bed
- 17% were either discharged or self-discharged without a referral

Management by psychiatric staff:

- 42% of all presentations were assessed by a mental health specialist, of these:
 - 23% were referred to their GP (as the only referral)
 - 34% were referred to mental health services (including outpatients, community drug/alcohol teams, day hospital, duty psychiatrist)
 - 9% were referred to other organizations (e.g. social services, counselling, voluntary organizations)
 - 12% (5% of all presentations) were admitted to a psychiatry ward/unit, almost double that in 2008 to 2009

² More than one type of drug may be involved for each episode.

1. Introduction

Although data on all presentations of self-harm have been collected since 2003, this report focuses on findings from the Manchester Self-Harm (MaSH) Project for the years 2010 and 2011. Section 2 reports on rates between 2003 and 2011. Previous MaSH reports can be accessed at www.manchester.ac.uk/mash.

'Self-harm' is defined as '*intentional self-injury or self-poisoning, irrespective of ... motivation or degree of suicidal intent*', and encompasses both suicide attempts and acts with other motives or intentions (Hawton et al., 2013).

The Manchester Self-Harm (MaSH) Project is a collaboration between the University of Manchester and four NHS Trusts:

- **Manchester Mental Health and Social Care Trust** which includes mental health liaison teams covering the three Emergency Departments (EDs) in Manchester

Three Emergency Departments (EDs) located at:

- **Manchester Royal Infirmary**
Part of Central Manchester University Hospitals NHS Foundation Trust
- **North Manchester General Hospital**
Part of Pennine Acute Hospitals NHS Trust
- **Wythenshawe Hospital**
Part of University Hospital of South Manchester NHS Foundation Trust

The aims of the MaSH Project are to:

- Monitor rates of self-harm
- Evaluate and inform clinical services
- Provide evidence on which service development and training may be based
- Provide an infrastructure for research on patterns of self-harm, clinical management and risk factors
- Inform and make recommendations on national suicide prevention initiatives

The Manchester Self-Harm Project collaborates with self-harm monitoring centres in Oxford and Derby, through the Multicentre Study of Self-Harm in England (Bergen et al., 2010a). Multicentre monitoring is an integral component of the National Suicide Prevention Strategy for England, and provides an indicator for self-harm nationally (DoH, 2002; DoH, 2012; Royal College of Psychiatrists, 2005a; Royal College of Psychiatrists, 2005b).

1.1 Data collection

The MaSH Project collects data on presentations of self-harm to the three participating EDs. When a patient presents to the ED, a brief assessment form (MaSH form, Appendix) is sometimes completed by the treating medic.

Table 1: Information collected from self-harm presentations

Patient Data	Management Data
Socio-demographic characteristics, psychiatric history, details of the self-harm, precipitating events, mental state, suicidal intent	Risk assessment, communication with GP, follow-up arrangements

When no MaSH form is received, information is obtained from electronic records and medical notes held at the hospital. In addition, information from psychiatric assessments is collected for patients seen by a mental health specialist. During the report period, data from psychiatric assessments were also obtained from electronic notes.

1.2 Numbers of self-harm episodes and individuals

Patients presenting to the ED with self-harm may have re-attended with one or more repeat self-harm episodes during the reporting period. In Sections 2, 3 and 4 we present results based on an individual's first episode during the study period for which data was available. Section 5 reports on findings based on all episodes during the 2010 to 2011 period.

The total number of episodes, and the number of individuals accounting for these, is shown below (Table 2).

Table 2: Episodes and individuals presenting to the three hospitals

All Study Hospitals	2010	2011
Episodes (F:M)	3,550 (1,922:1,628)	3,784 (2,088:1,696)
Individuals (F:M)	2,689 (1,485:1,204)	2,850 (1,563:1,287)

2010: The female to male ratio (individuals) was 12:10. Twenty-four percent of episodes were repeat presentations of self-harm within 2010, i.e. 24% of episodes in 2010 were by people who had previously presented in 2010.

2011: The female to male ratio (individuals) was 12:10. Twenty-five percent of episodes were repeat presentations of self-harm within 2011.

The ratio for individuals presenting per year was around 14 females for every 10 males for 2006 to 2008. This compares to a ratio of around 12 females for every 10 males for 2009 to 2011.

1.3 Numbers of self-harm presentations treated and assessed

After presenting to the ED, not all patients will wait to be treated. Among those who do receive treatment in the ED, not all will receive a psychosocial assessment by either ED or psychiatric staff (Table 3).

Table 3: Management of self-harm episodes³

All Study Hospitals	2010 N=3,550 (%)	2011 N=3,784 (%)
Treated	3,323 (94)	3,705 (98)
Psychosocial assessment (by ED and/or psychiatry)	1,832 (52)	2,236 (59)
Mental health specialist assessment	1,243 (35)	1,873 (49)
Admission to medical ward	1,753 (49)	1,671 (44)
Specialist mental health follow-up (excluding psychiatric admission)	418 (12)	612 (16)
Referral to non-statutory mental health/voluntary/other services	132 (4)	115 (3)
Referral to GP only	272 (8)	494 (13)
Psychiatric admission	156 (4)	210 (6)

The percentage of self-harm presentations that were treated increased significantly from 91% in 2008 to 98% in 2011.

2010: In 6% (227) of presentations patients did not wait for treatment.

2011: In 2% (79) of presentations patients did not wait for treatment.

Self-harm presentations by males were less likely to receive a psychosocial assessment than females in 2008 to 2009 (Dickson et al., 2011). There was no significant difference in 2010 to 2011.

Episodes with a primary method of self-injury (by cutting or other self-injury) were less likely to receive a psychosocial assessment (46%) compared with those episodes with a primary method of self-poisoning (by medication or non-medication) (60%). This was also apparent in 2008 to 2009 (Dickson et al., 2011; Kapur et al., 2008).

Those who did not wait for treatment in the ED were less likely than those who stayed for treatment to have self-harmed using self-poisoning by medication (58% vs. 70%), and more likely than those who stayed for treatment to have self-harmed by cutting or stabbing (31% vs. 17%).

³ The patient may have been referred to more than one service.

2. Rates of Self-Harm in Manchester

2.1 Self-harm rates by gender and age

Table 4: Annual rates of self-harm in Manchester per 100,000 population, aged 15 years and over, by gender, 2009 to 2011⁴

	2009	2010	2011
Overall	397	424	452
Females	449	474	495
Males	349	376	408

The overall rate of self-harm significantly increased by 14% since 2009. This was accounted for by an increase in both the female and male rate. Female rates were consistently higher than male rates of self-harm.

The overall increase masks a decrease in rates for some gender and age groups (see Section 2.2 below).

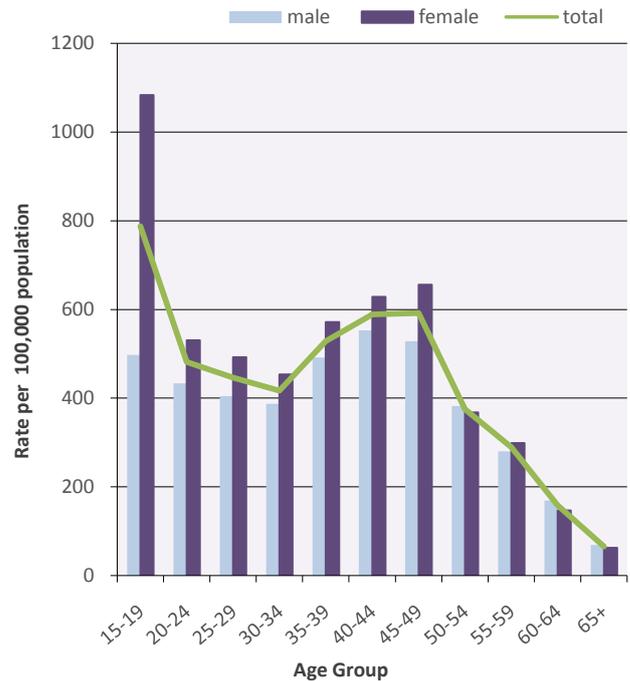
Gender and age differences

Overall, individuals aged 15-19 had the highest rate of self-harm (787 per 100,000), followed by individuals aged 45-49 (591 per 100,000).

Females had higher rates of self-harm than males across all age groups, with the exception of individuals aged 50-54 (f:368 vs. m:382 per 100,000), 60-64 (f:147 vs. m:169 per 100,000) and 65 and over (f:63 vs. m:69 per 100,000). In females aged 15-19, the rate of self-harm was equivalent to around one percent of the population (1,083 per 100,000).

The highest male rate of self-harm was in those aged 40-44 (553 per 100,000). This is a change from the previous report, with the highest male rate being in those aged 15-19 (Dickson et al., 2011).

Figure 1: Average rates of self-harm in Manchester per 100,000 population, aged 15 years and over, by gender, 2010 to 2011 combined



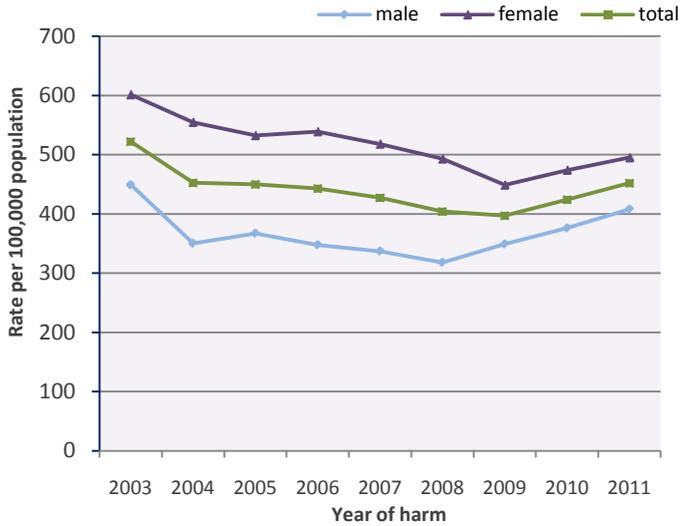
2.2 Nine year trends in self-harm rates in Manchester

From 2003 to 2008, rates of self-harm decreased for both men and women, matching trends seen in Multicentre Study of Self-Harm data (Bergen et al., 2010a). There was a significant upward linear trend in the male rate between 2008 and 2011, from 318 to 408 per 100,000 (+28%), and a significant upward linear trend for females between 2009 and 2011, from 449 to 495 per 100,000 (+10%).

From 2008 to 2011, there was a significant upward linear trend in self-harm among men aged 25-34, from 350 to 446 per 100,000 (+27%) and 35-54, from 363 to 510 per 100,000 (+40%). Our last report identified a non-significant 14% increase in self-harm in males aged 15-24 from 2008 to 2009, which may have indicated an emerging trend (Dickson et al., 2011). While the upward trend did continue in this group in 2010 to 2011, from 447 to 464 per 100,000 (+4%), the increase was not significant. Between 2009 and 2011, there was a significant increase of self-harm in men aged 25-34, from 326 to 446 per 100,000 (+37%), which was not seen in the previous years. This may indicate a cohort effect; it may be that this generation has a higher rate of self-harm which remains consistent as they age.

⁴ Rates per 100,000 populations are based on the index (first chronological) episode in each year for individuals aged 15 and over residing in the City of Manchester Postcode area (i.e. Manchester Local Authority area), presenting to any of the three Manchester Emergency Departments following self-harm (including patients who did not wait for treatment). Whether an individual resided in the City of Manchester Postcode area was identified via their postcode using GeoConvert (ONS, 2010). The denominators used to calculate the rates were the corresponding age and gender population groups in the Manchester Local Authority area (ONS, 2009; ONS, 2013a).

Figure 2a: Rates of self-harm by gender, 2003 to 2011



The upward trend in overall self-harm rates in females between 2009 and 2011 was accounted for by a non-significant increase in rates in those aged 15-24, from 667 to 763 per 100,000 (+14%). This group accounts for a large proportion of the self-harm cohort in this report (see Section 3.1). The rate of self-harm decreased between 2010 and 2011 in females aged 35-54, from 574 to 557 per 100,000 (-3%).

Figure 2b: Rates of self-harm among males, by age group, 2003 to 2011

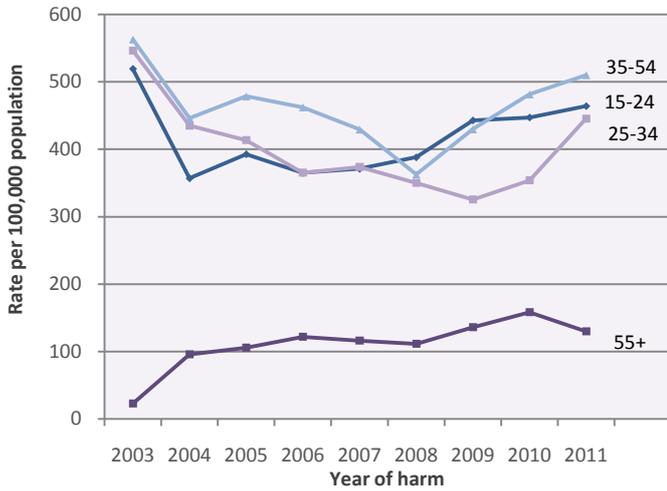
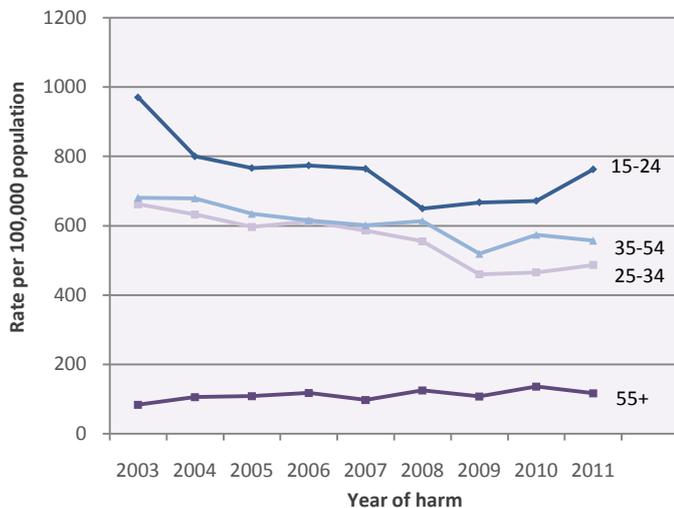


Figure 2c: Rates of self-harm among females, by age group, 2003 to 2011



3. Social and Demographic Characteristics of Individuals who Self-Harm

In the two year study period from 2010 to 2011, 5,141 individuals presented with self-harm.⁵

3.1 Age and gender

Table 5: Age and gender of individuals who self-harm, 2010 to 2011

Gender	N = 5,141 (%)	Age in years Mean (Range)
Male	2,302 (45)	34 (6 - 91)
Female	2,839 (55)	31 (6 - 96)

Fifty-five percent of individuals presenting with self-harm were female, 45% male. The mean age was 32, ranging from 6 to 96 years. Forty-four percent of females were aged under 25, in comparison with 31% of males.

3.2 Marital status

Table 6: Marital status of individuals who self-harm, 2010 to 2011

Marital Status	N=4,936	(%)
Single	3,412	(69)
Partnered	1,024	(21)
Separated/divorced	429	(9)
Widowed	71	(1)

⁵ Demographic characteristics are calculated using the individual's 1st chronological episode during the study period 2010 to 2011 where data were available.

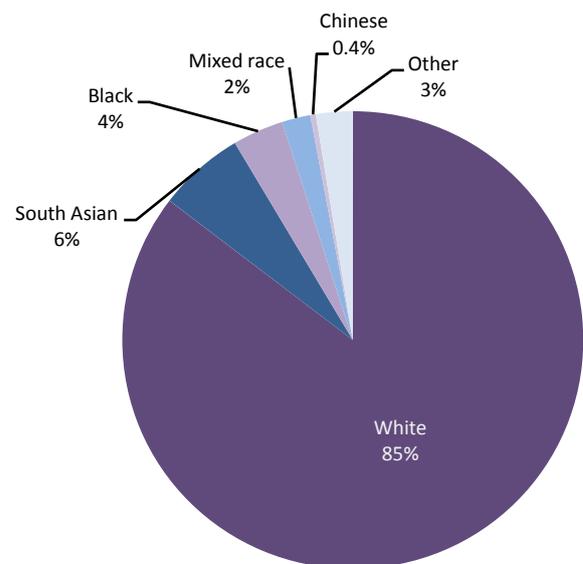
3.3 Living arrangements

Table 7: Living arrangements of individuals who self-harm, 2010 to 2011

Living Arrangement	N=2,457	(%)
Partner/spouse	643	(26)
Parent/sibling	611	(25)
Alone	550	(22)
Friends/other relatives	229	(9)
Homeless/hostel/lodgings	97	(6)
Children only	188	(8)
Other	48	(2)
Supported home	36	(1)

3.4 Ethnicity

Figure 3: Ethnicity of individuals who self-harm, 2010 to 2011 (N=4,550)



In the present study period, BME (Black and Minority Ethnic) groups accounted for 15% of the Manchester self-harm cohort. The largest BME groups were those of South

Asian origin (Indian, Pakistani or Bangladeshi) (6%), and Black individuals (4%). This compares to population estimates for Manchester, with 33% of the population made up of BME groups (12% South Asian, 9.5% Black, 4.5% mixed race, 3% Chinese and 5% other) (ONS, 2013b). These population estimates are taken from the 2011 Census, and are higher than those used in the last MaSH report, which were based on the 2001 Census (Dickson et al., 2011, ONS, 2003). ONS reported that BME estimates based on 2001 Census data tended to underreport BME figures in areas with an above average proportion of residents who were not White British, such as Manchester (ONS, 2013c).

Table 8: Ethnicity of females who self-harm, 2010 to 2011

	Female within group	
	N=4,550	(%)
Chinese	18	(89)
Mixed Race	91	(76)
South Asian	276	(68)
White	3,886	(54)
Black	162	(52)
Other e.g. Iranian, Turkish	117	(49)

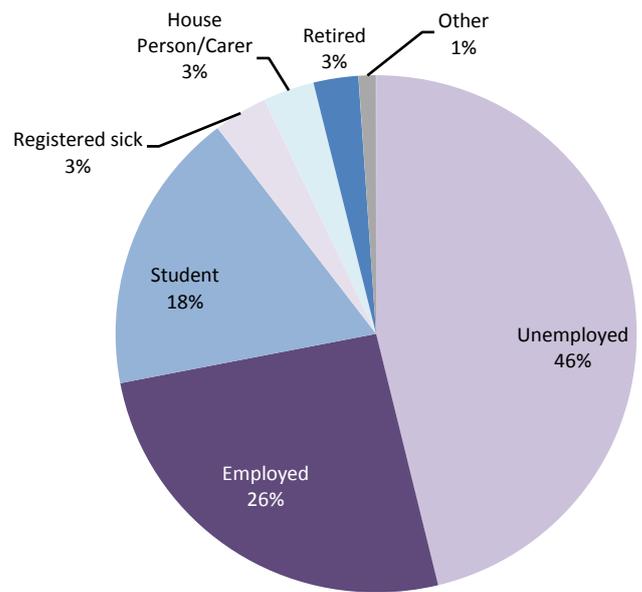
With the exception of the ‘other’ ethnic group, all groups had more female self-harm presentations than male. Eighty-nine percent of all Chinese self-harm presentations were female, though this group had small numbers, meaning that a difference of just one or two individuals would have a large impact on male to female proportions.

In comparison with the previous MaSH report on 2008 to 2009, 2010 to 2011 saw a lower proportion of female self-harm presentations in both the Black (52% vs. 64%) and the ‘other’ ethnic groups (49% vs. 57%), and a higher proportion in the Chinese group (89% vs. 58%). The proportion of females in both the Mixed Race and the South Asian groups was similar to that in our previous report (Dickson et al., 2011).

3.5 Employment status

Of the individuals who self-harmed, 1,915 (46%) were registered unemployed. This compares with 40% in 2008 to 2009 and 35% in September 2005 to August 2007. Of the total number unemployed in the present study period, 11% had been unemployed for 26 weeks or less and 23% had been unemployed for more than 26 weeks. The remaining 66% had no record of how long they had been unemployed.

Figure 4: Employment status of individuals who self-harm, 2010 to 2011 (N=4,147)



3.6 Precipitants of self-harm

Information on factors precipitating the first episode of self-harm during the study period was recorded for 2,818 individuals; 55% of all individuals and 95% of those with a psychosocial assessment.

Seventy-two percent of individuals reported more than one precipitant, 71% of females and 74% of males.

The most frequent precipitating factor for both genders was interpersonal problems with a partner/ex-partner.

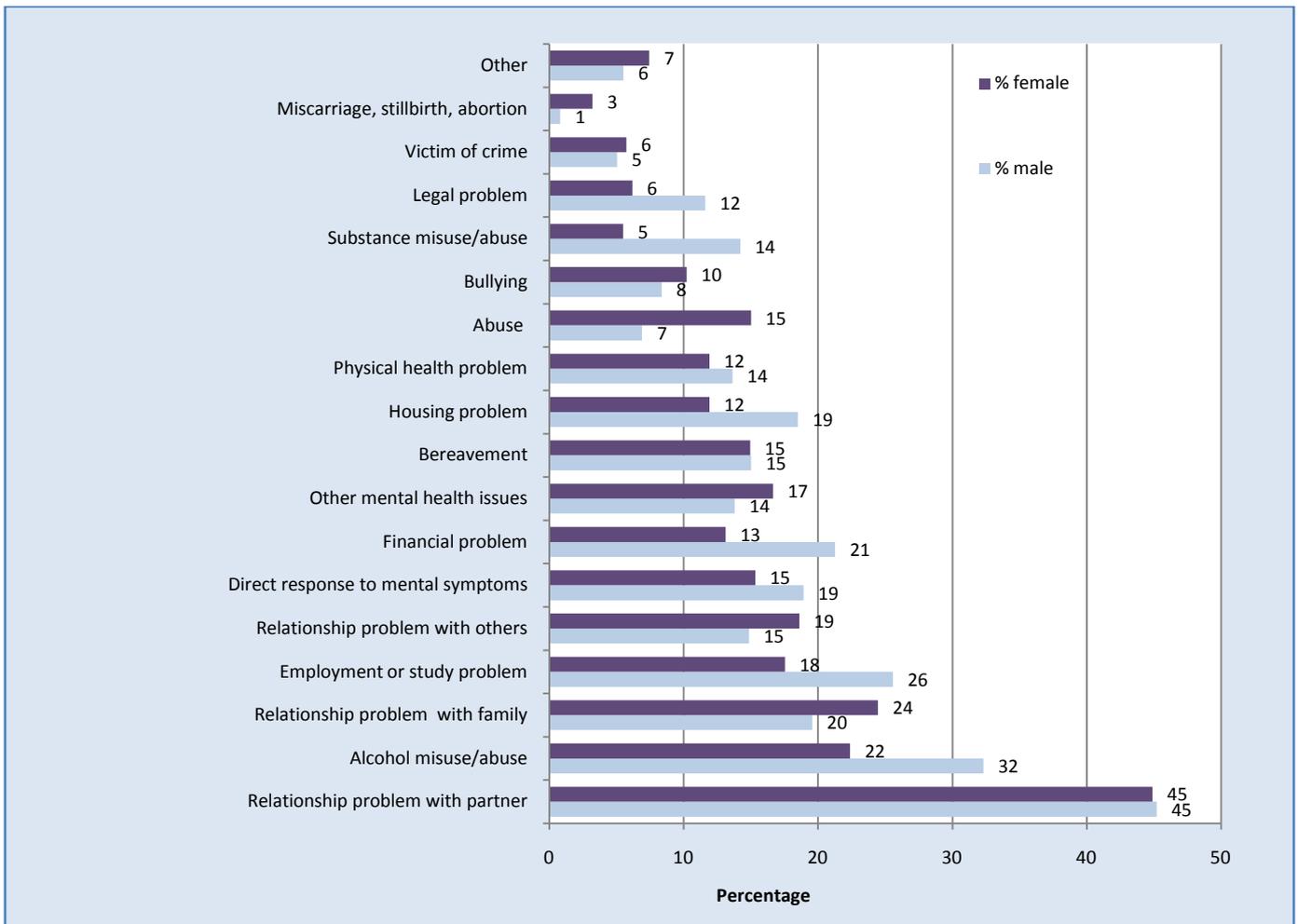
Females were proportionately more likely to report problems due to abuse (physical, mental or sexual), relationship problems with family and relationship problems with 'others'. Males were more likely to report problems with substance or alcohol misuse/abuse, money, housing, employment and the law. This is in line with our

previous report (Dickson et al., 2011). Additionally, males were more likely to report self-harm as a direct response to mental health symptoms, e.g. hearing voices.

Recent published research

Our Multicentre Study of Self-Harm examined premature death after self-harm (Bergen et al., 2012a). Individuals presenting to emergency departments following self-harm had a greater risk of death from any cause than the general population. This equated to 30 years of life lost per individual. There was an association between socioeconomic deprivation, all-cause and natural-cause mortality. This study emphasises that physical health should be assessed and treated in conjunction with mental health.

Figure 5: Precipitants of self-harm by gender, 2010 to 2011 (female N=1,586, male N=1,232)



4. Clinical Characteristics of Individuals who Self-harm

Current and previous psychiatric treatment⁶

Details of current and past psychiatric treatment were available for 50% (2,589) of all individuals.

Of these, 53% (1,385) were currently receiving psychiatric treatment, including from their GP. Around one in five (19%, 495) had received psychiatric treatment in the past but were no longer doing so.

4.1 Repetition of self-harm

Percentage of repeat episodes⁷

2010: Between 1st January 2010 and 31st December 2010, 2,689 individuals presented with 3,550 episodes of self-harm. Twenty-four percent of these episodes were repetitions; 26% among men and 23% among women.

2011: Between 1st January 2011 and 31st December 2011, 2,850 individuals presented with 3,784 episodes of self-harm. Twenty-five percent of these episodes were repeats, 24% among men 25% among women.

6 month repetition rate⁶

Between 1st January 2010 and 30th June 2011 (allowing all individuals a six month follow up period), 3,947 individuals presented with self-harm. Sixteen percent re-presented within 6 months of the first episode, 16% of males and 15% of females.

12 month repetition rate⁶

Between 1st January and 31st December 2010 (allowing all individuals a 12 month follow up period), 2,689 individuals presented with self-harm. Twenty-two percent of individuals re-presented with an episode of self-harm within 12 months of the first episode, 23% of males and 21% of females.

Self-reported previous self-harm⁶

Information on self-reported previous self-harm was available for 55% (2,849) of individuals. Sixty-four percent stated that they had self-harmed on at least one previous

occasion prior to the current episode, with or without medical treatment.

Table 9: Self-reported previous self-harm by gender, 2010 to 2011⁶

	Male N=1,233 (%)	Female N=1,616 (%)
Any previous self-harm	784 (64)	1,029 (64)
Self-harm within last 12 months	426 (35)	504 (31)
Previous self-harm more than 12 months ago	356 (29)	517 (32)

Published research

A clinical decision tool developed as part of the Multicentre Study of Self-Harm in England identified four factors associated with increased risk of repeat self-harm within six months of an initial A&E presentation (Steeg et al., 2012). The ReACT Self-Harm Rule classifies presentations as being at increased risk of repetition if at least one of the four following factors is present: recent self-harm (in the past year), living alone or homelessness, cutting as a method of harm and treatment for a current psychiatric disorder.

The risk of self-harm repetition was significantly lower in Black and South Asian individuals than in White individuals (Cooper et al., 2013b). However, different risk factors were associated with repetition in the different groups. In South Asian individuals, these factors were being single, alcohol misuse (both prior to and at the time of self-harm), recent self-harm, psychiatric treatment at the time of the index episode, and cutting or stabbing as a method of self-harm. In Black individuals, problems with mental health directly precipitating self-harm were associated with an increased risk of repetition.

Older adults (aged 55+) had a lower risk of self-harm repetition than middle-aged patients (aged 35-54) (Oude Voshaar et al., 2011). However, repetition was more often fatal in the older group. Physical health problems were the most important predictor of self-harm in the older age group, but had no effect in the middle-aged group. Similarly, psychiatric characteristics had little effect on risk of repetition in old age. This study highlights the need for age-specific self-harm interventions.

⁶ These figures are based on an individual's index episode, i.e. first episode within the relevant time period.

⁷ These figures are based on all episodes within the relevant time period, not just index episodes.

Published research

The risk of suicide was 67 times higher among older adults (aged 60+) presenting to hospital with self-harm relative to the general population, our Multicentre Study of Self-Harm research found (Murphy et al., 2012). Non-fatal repetition of self-harm was associated with those aged 60-74, previous self-harm and previous psychiatric treatment.

Our Multicentre Study of Self-Harm research examined the association between the treatment people receive in hospital following self-harm and the risk of repeat self-harm (Kapur et al., 2013). In two of the three centres, being assessed by a mental health specialist decreased the risk of self-harm by 40% in comparison with people who did not receive assessment. This suggests that psychosocial assessment is beneficial for some patients.

4.2 Alcohol and substance misuse⁸

Alcohol consumption & misuse

Details regarding whether or not alcohol was consumed at the time of self-harm were available for 48% (2,469) of all individuals. The following figures exclude all episodes where alcohol misuse was not recorded.

Sixty percent had consumed alcohol in conjunction with the self-harm episode (66% of males and 56% of females).

Details of alcohol misuse in general were recorded for 47% (2,433) of individuals. Alcohol misuse is here defined as harmful use as regarded by the mental health specialist. Overall, 32% of individuals were defined as currently misusing alcohol (38% of males and 27% of females).

Alcohol misuse was more common among males than females in all age groups, and was highest in both men and women aged 35-54, 52% of males and 35% of females.

Substance misuse

Details of substance misuse were recorded for 48% (2,490) of individuals. Substance misuse is defined here as use on a regular basis or classified as harmful use by the mental health specialist. The following figures exclude all episodes where substance misuse was not recorded.

Figure 6a: Alcohol misuse in individuals who self-harm by gender and age group, 2010 to 2011 (male N=1,068; female N=1,365)

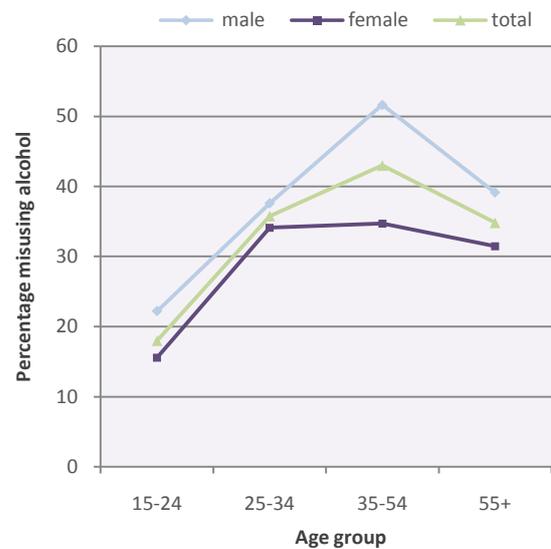
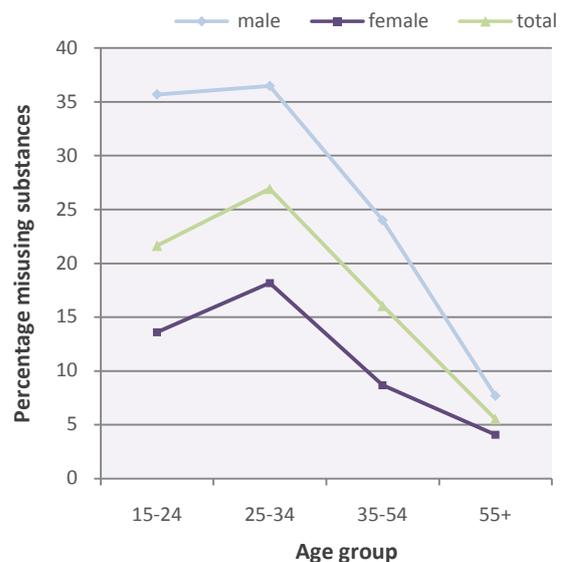


Figure 6b: Substance misuse in individuals who self-harm by gender and age group, 2010 to 2011 (male N=1,077; female N=1,413)



Substance misuse was less common than alcohol misuse. Twenty percent of individuals were identified as currently misusing substances, 30% of males and 12% of females.

In contrast to alcohol misuse, substance misuse was more common in those aged under 35. Thirty-six percent of males aged 15-24 and 25-34, and 14% of females aged 15-24 and 18% of females aged 25-34 were misusing substances.

⁸ These figures are based on an individual's index episode, i.e. first episode within the relevant time period.

5. Characteristics of Self-Harm Episodes and their Management

5.1 Method of harm

Method of harm was recorded for 7,323 (99.9%) episodes at the three Emergency Departments. Where a self-harm episode involved the use of more than one type of method, the primary method and the secondary method were coded. Methods were prioritized as follows: other self-injury (i.e. non-stabbing/cutting; usually the more violent method); then self-poisoning by medication; then other self-poisoning (e.g. using bleach or weed killer); then self injury using cutting or stabbing.

Table 11: Primary method of self-harm in all episodes by gender, 2010 to 2011

	Total N=7,323(%)	Males N=3,317(%)	Females N=4,006(%)
Self-poisoning (drugs)	5,081 (69)	2,210 (67)	2,871 (72)
Self-cutting or stabbing	1,323 (18)	597 (18)	726 (18)
Other self-injury	824 (11)	457 (14)	367 (9)
Self-poisoning (other substance)	95 (1)	53 (2)	42 (1)

The most common primary method of self-harm was self-poisoning with drugs (69%), and the second most common was self-cutting (18%).

Females were more likely than males to self-harm by self-poisoning (72% vs. 67%). These results are similar to those in our previous report (Dickson et al., 2011).

We previously reported that the proportion of episodes involving self-injury other than cutting or stabbing had increased from 5% to 9% (Dickson et al., 2011). Similar findings were reported in published research from the Multicentre Study of Self-Harm (Bergen et al., 2010a). This proportion has continued to increase and is 11% for 2010 to 2011.

Among episodes involving self-injury other than cutting or stabbing, the most common form of self-injury was hanging or strangulation (26%).

Table 12: Methods of self-harm in all episodes by gender, 2010 to 2011: Other self-injury

	Total N=797 (%)	Males N=443 (%)	Females N=354 (%)
Hanging / strangulation	207 (26)	127 (29)	80 (23)
Traffic related	102 (13)	65 (15)	37 (10)
Head banging	97 (12)	63 (14)	34 (10)
Jumping from height	84 (11)	51 (12)	33 (9)
Hit self or something	79 (10)	52 (12)	27 (8)
Swallowing foreign body	53 (7)	18 (4)	35 (10)
Burning self	38 (5)	11 (2)	27 (8)
Drowning	23 (3)	14 (3)	9 (3)
Interference with wound healing	22 (3)	5 (1)	17 (5)
Carbon monoxide poisoning	14 (2)	12 (3)	2 (1)
Other	78 (10)	25 (6)	53 (15)

Males were more likely than females to use an 'other' method of self-injury (14% vs. 9%). In particular, males were more likely to use hanging/strangulation, head banging, traffic related means and hitting an object/self. Females were more likely to swallow a foreign object, burn self and interfere with wound healing.

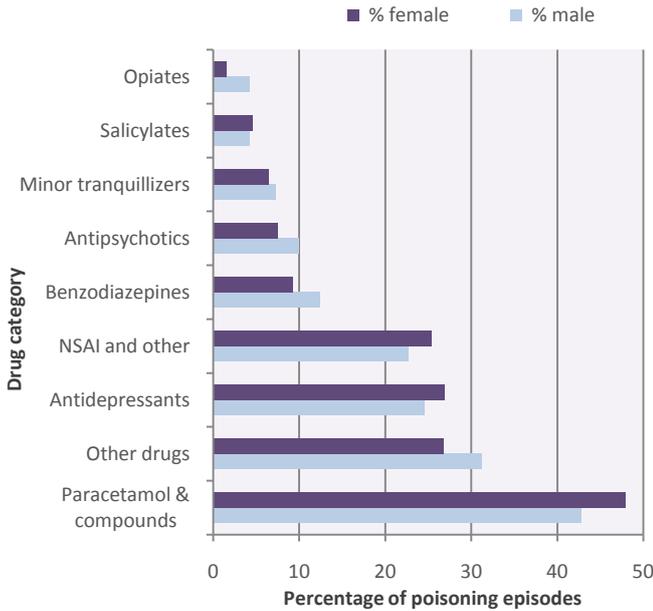
5.2 Drugs taken in self-poisoning

The following data include episodes where the primary method was self-poisoning.

Sixty-nine percent (5,080) of all episodes involved self-poisoning with drugs. Multiple drugs may have been used in a self-harm episode.

The type of drug used was known for 96% (4,900) of all self-poisoning episodes.

Figure 7: Substances used in self-poisoning episodes by gender, 2010 to 2011 (male N=2,130; female N=2,770)⁹



Sixty-one percent of self-poisoning episodes involved the use of analgesics (painkillers). Where analgesics were taken, three quarters (75%) involved the use of paracetamol (including paracetamol compounds). These account for 46% of self-poisoning episodes, and is the same percentage as in the previous report (Dickson et al., 2011).

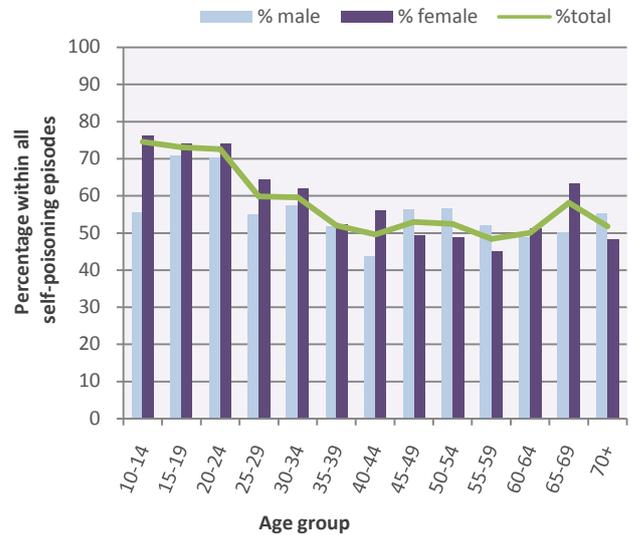
As a percentage of episodes involving analgesics, opioid analgesics were used in 17% compared with 16% in the previous report (Dickson et al., 2011).

Drugs other than analgesic and psychotropic medication were included in the 'other drugs' category, which also included street drugs. Following paracetamol, the three most commonly used types of drugs were 'other drugs' (29%), antidepressants (26%) and NSAID (non-steroidal anti-inflammatory) drugs (24%).

⁹ These figures are based on all episodes within the relevant time period, not just index episodes.

Figure 8 shows the proportion of self-poisoning episodes where analgesics were used, by gender and age groups. When younger people self-poisoned, they were more likely to use analgesics, particularly females aged 10 to 24.

Figure 8: Percentage of self-poisoning episodes involving analgesics, by gender and age group, 2010 to 2011 (male N=2,130; female N=2,770)



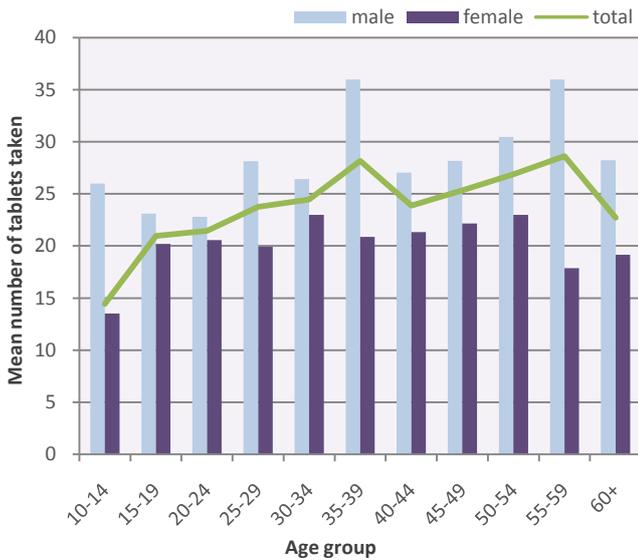
Recent published research

A marked variation in both prescribing and overdose of antidepressants was found across the three centres in our Multicentre Study of Self-Harm research (Bergen et al., 2010b). These results suggest that there may be a difference in prescribing practices, despite clear national guidelines.

Number of tablets taken in self-poisoning episodes involving paracetamol (and compounds)

For episodes involving paracetamol the mean number of tablets taken was 23 (median 17; range 1-150). The mean was higher for males than females (27 compared with 20), and greatest in those aged 55-59 (mean=29) and those aged 35-39 (mean = 28).

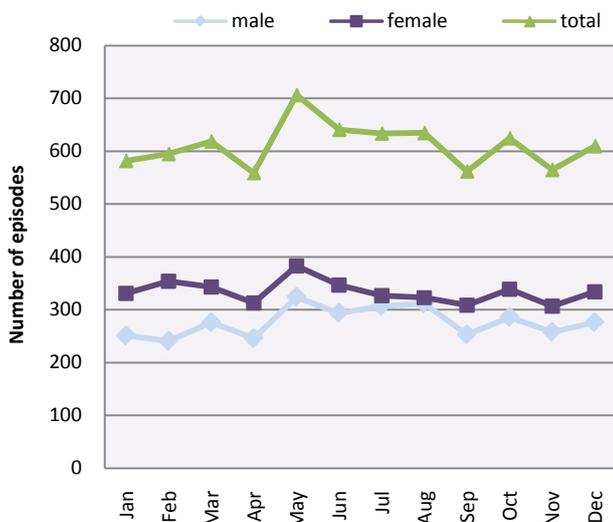
Figure 9: Mean number of tablets taken for self-poisoning episodes involving paracetamol compounds, by gender and age group, 2010 to 2011 (male N=794; female N=1,147)



5.3 Service Data¹⁰

Month of presentation

Figure 10: Month of self-harm presentation by gender, 2010 to 2011 (male N=3,324; female N=4,010)

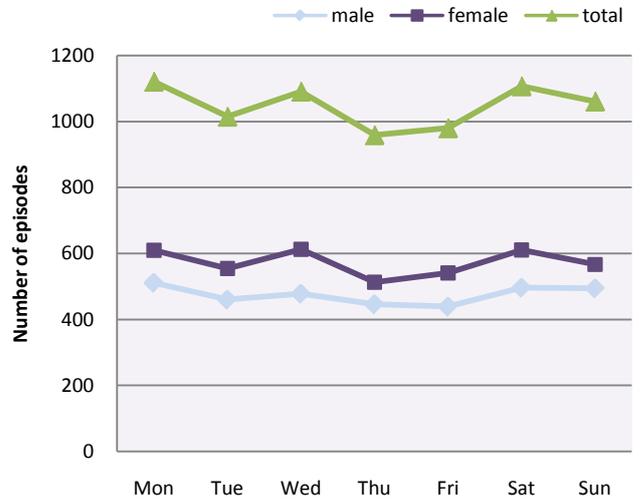


¹⁰ These figures are based on all episodes within the relevant time period, not just index episodes.

There was a peak in May in the number of presentations for both men and women.

Day of week of presentation

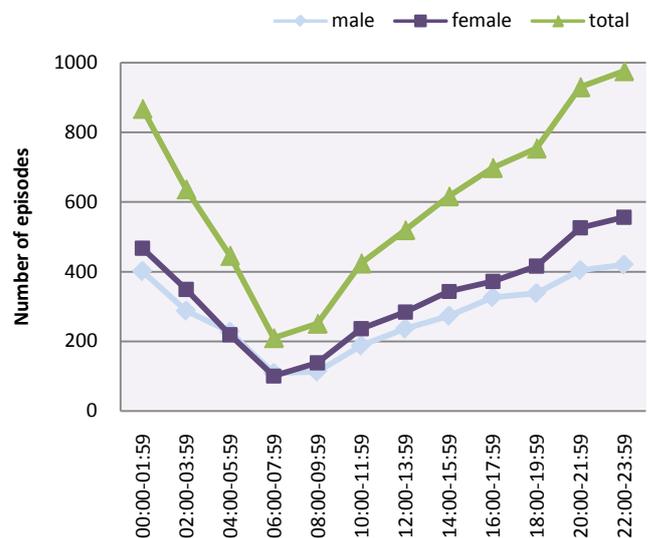
Figure 11: Day of self-harm presentation by gender, 2010 to 2011 (male N=3,324; female N=4,010)



Presentations were most frequent on Mondays and Saturdays. Presentations were fewest on Thursdays.

Time of presentation

Figure 12: Time of day of self-harm presentation by gender, 2010 to 2011 (male N=3,324; female N=4,010)



Fifty-seven percent of presentations were between 6pm and 4am, peaking between 10pm and 2am (25%) and declining from this time to a low of 6% between 6 and 10am.

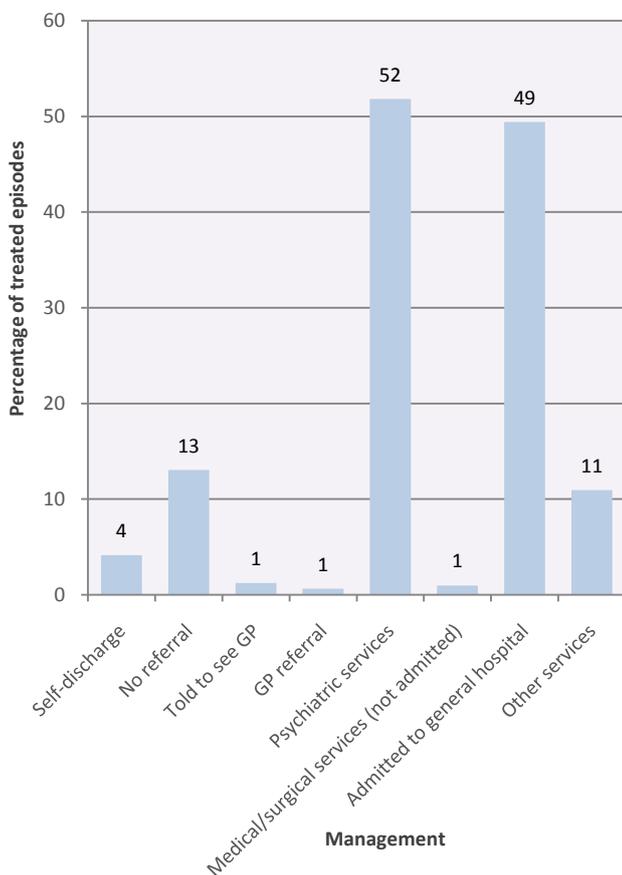
5.4 Management of episodes by emergency department and psychiatric staff

Management of self-harm episodes by emergency department staff

Management in the ED was known for 95% (6,932) of all episodes. This compares to 92% in 2008 to 2009 (Dickson et al., 2011).

Over the two year study period, patients did not wait for treatment in 306 (4%) episodes. The grade of ED staff was known for 5,946 (81%) episodes. Fifty-five percent were treated by SHOs (compared with 67% in 2008 to 2009), 31% by registrars (compared with 23% in 2008 to 2009) and 4% by consultants (compared with 7% in 2008 to 2009) (Dickson et al., 2011).

Figure 13: Referral of self-harm episodes by Emergency Department staff, 2010 to 2011 (N=6,932)¹¹



The majority of self-harm episodes resulted in admission to a hospital bed and/or referral to psychiatry:

- 49% of self-harm episodes resulted in being admitted to a hospital bed (including beds in Clinical Decision Units), compared with 53% in 2008 to 2009 (Dickson et al., 2011)

- 52% of episodes were referred to psychiatric services
- 18% of episodes were admitted to a medical bed but were not referred to psychiatric services first (although some of these may have been referred to psychiatric services later)
- 9% were referred to other services, e.g. social services, but were not admitted or referred to medical services, were not referred to psychiatry, and did not self-discharge
- 17% were either discharged or self-discharged without a referral

Among those episodes resulting in a medical admission, 52% received a psychosocial assessment completed by a mental health specialist. This compares to 44% in 2008 to 2009 (Dickson et al., 2011).

Management of episodes by mental health specialists

In 2010 to 2011, 3,116 episodes (42% of all presentations) were assessed by mental health specialists. This is an increase of 8% since the last report. Management by mental health specialists was known for 91% (2,828) of these episodes.

Forty-nine percent (1,873) of episodes received a psychiatric assessment in 2011, compared with 35% (1,243) in 2010, an increase of 14%.

- 34% (1,048) of episodes were referred to mental health services, including outpatients, duty psychiatrist, day hospital, community mental health teams, community drug and alcohol teams and psychiatric review
- 12% (366) of episodes resulted in admission to a psychiatry ward or unit; 41 of these admissions were under provision of the Mental Health Act (2007). In 2008 to 2009, these figures were 7% (148) of episodes and 8 admissions respectively (Dickson et al, 2011)
- 22% (613) of episodes had an urgent referral; almost all of which were to a Crisis Team (530, 86%)
- In 9% (261) of episodes other referrals were made, including to voluntary organisations (such as 42nd Street, a mental health charity for young people in Manchester), social services and counselling
- In 23% (727) of episodes, a referral to the patient's GP was the only formal referral, down from 29% in 2008 to 2009 (Dickson et al, 2011)
- In 17% (470) of episodes, no referral was made (excluding referrals to GPs and excluding episodes where the patient self-discharged)

The mental health specialist informed GPs of the self-harm in 67% of episodes.

¹¹ Each case may be referred to more than one service.

Figure 14: Referral of self-harm episodes by mental health specialists, 2010 to 2011 (N=2,828)^{12,13}

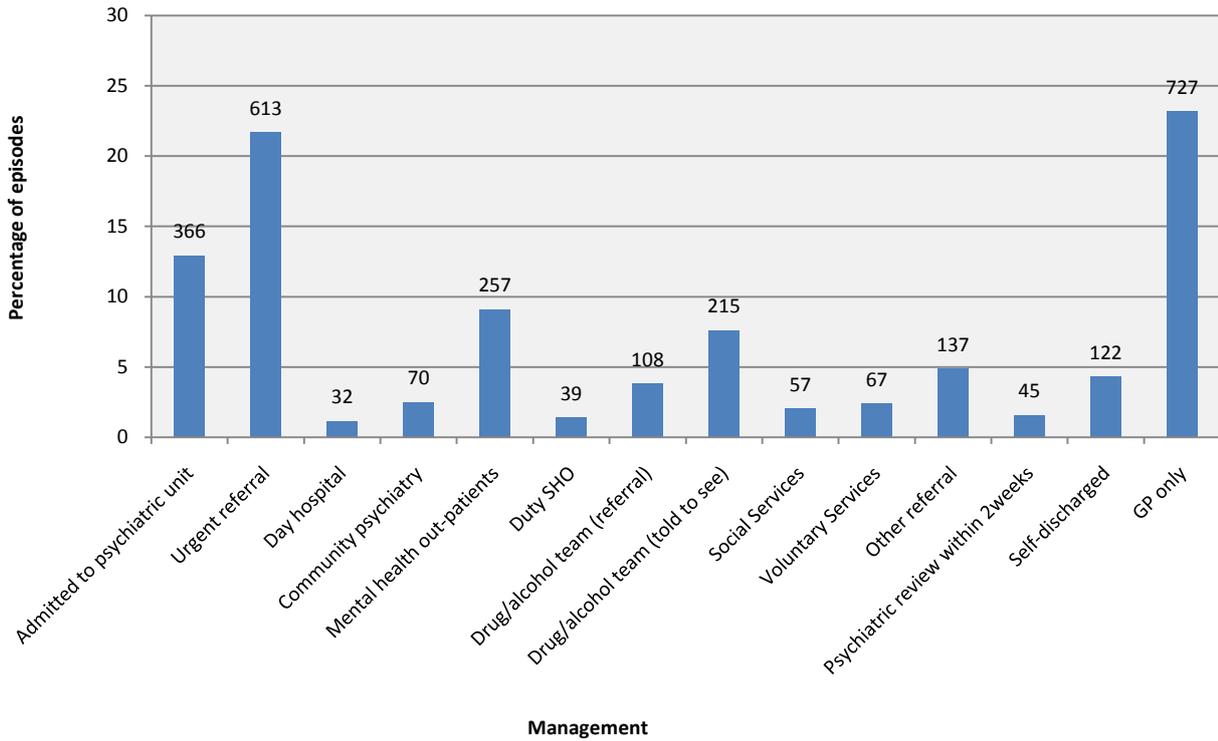
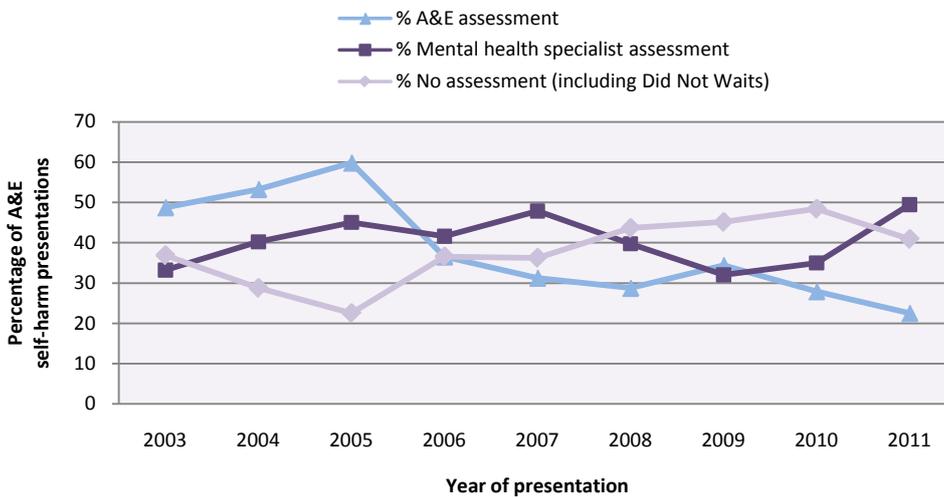


Figure 15: Percentage of self-harm episodes resulting in MaSH assessment form by A&E staff, psychiatric assessment by mental health specialists or no assessment, 2003 to 2011¹⁴



¹² Each case may have been referred to more than one service.

¹³ Number along axis shows percentage of episodes; number within figure shows number of episodes.

¹⁴ Some episodes may have had both an A&E assessment and a mental health specialist assessment.

Recent published research

Historically, the treatment and follow-up patients receive in hospital following a self-harm presentation has been found to vary markedly across England (Bennewith et al., 2004). We recently conducted an NIHR funded study in collaboration with researchers at the Universities of Oxford and Bristol, which involved 32 hospitals in England. We found that this wide variation of follow-up persists (Cooper et al., 2013a). We also found that the proportion of patients receiving assessment by a mental health specialist had not increased in the past decade. However, we found evidence that the services put in place for patients attending hospital with self-harm may have improved.

A paper on service user perspectives on psychosocial assessment following self-harm and its impact on further help-seeking was recently published from data extracted from a PhD thesis linked to the MaSH project (Hunter et al., 2013). Qualitative interviews with patients revealed that few patients understood the purpose of the psychosocial assessment. Assessments had the potential to promote or challenge hope. Poor experiences at the assessment could promote disengagement with services in the future. The authors concluded that follow-up needs to be timely and integrated with the assessment.

Further recent publications by the MaSH Project/ Multicentre Study of Self-Harm

Bergen, H., Hawton, K., Kapur, N., Cooper, J., Steeg, S., Ness, J., Waters, K. (2012b). Shared characteristics of suicides and other unnatural deaths following non-fatal self-harm? A multicentre study of risk factors. Psychological Medicine **42**(4): 727-741.

Cooper, J., Hunter, C., Owen-Smith, A., Gunnell, D., Donovan, J., Hawton, K., Kapur, N. (2011). "Well it's like someone at the other end cares about you". A qualitative study exploring the views of users and providers of care of contact-based interventions following self-harm. General Hospital Psychiatry **33**(2): 166-76.

Hawton, K., Bergen, H., Waters, K., Ness, J., Cooper, J., Steeg, S., Kapur, N. (2012a). Epidemiology and nature of self-harm in children and adolescents: findings from the multicentre study of self-harm in England. European Child and Adolescent Psychiatry **21**(7): 369-77.

Hawton, K., Bergen, H., Kapur, N., Cooper, J., Steeg, S., Ness, J., Waters, K. (2012b). Repetition of self-harm and suicide following self-harm in children and adolescents: findings from the Multicentre Study of Self-harm in England. Journal of Child Psychology and Psychiatry **53**(12): 1212-9.

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Manchester Self-Harm Assessment Form

A&E Number

1. Patient Details

NHS No

DISTRICT No

Postcode

Date of birth

Date of presentation (24hr)

If not assessed please give reason

2. Self-harm Details

Date of harm Time of harm (24hr)

Was alcohol taken within 6 hours prior to this attempt?

Yes No If yes, how many units?

Method of harm:

Self-poisoning drugs

Self-poisoning other

Self injury (cutting or piercing)

Other (drowning, asphyxiation, CO poisoning etc)

Further Details: For drug poisoning specify type and number of tablets; for all remaining methods give details of attempt.

Conscious level (GCS=)

Alert Voice Pain Unconscious

Nature of the act:

Premeditated? Yes No

Tried to avoid discovery? Yes No

Suicide note? Yes No

Wanted to die during incident? Yes No

Further details of circumstances:

MAIN precipitant(s) of self-harm: Yes No

Any known precipitants? Yes No

If the precipitants are known, what are they?

Relationship problems (partner or boy/girl friend) Yes No

Relationship problems (parents/siblings) Yes No

Relationship problems (with others) Yes No

Bullying/intimidation Yes No

Bereavement Yes No

Housing problem Yes No

Employment or study problem Yes No

Legal problem (eg. criminal charge) Yes No

Victim of crime Yes No

Physical health problem Yes No

Miscarriage, stillbirth Yes No

Financial problems Yes No

Direct response to mental symptoms Yes No

Drug abuse or misuse Yes No

Alcohol abuse or misuse Yes No

Other mental health issues Yes No

Abuse (physical/mental/sexual) Yes No

Other (specify) Yes No

Living circumstances: (tick first applicable box)

Q. *Whom do you normally live with*

Homeless

Alone

With spouse/partner

Parent/sibling

With friends/other relatives

Hostel resident/lodgings

Dependent children only

Other (including prison etc - please specify)

Employment:

Q. *Are you employed at the moment?*

Employed (including part time)

Registered unemployed

Registered sick

Retired

Student (Including schoolchildren)

Housewife/husband (including child care)

Other (including prison etc - please specify)

Duration of unemployment: (if reg ulc ask...)

Q. *About how long have you been unemployed?*

Up to 26 weeks Over 26 weeks

Not applicable Not known

Previous self-harm: (tick all appropriate boxes)

Q. *Have you harmed yourself deliberately in the past?*

No Yes, in the last 12 months Yes, more than 12 months ago

Current psychiatric treatment:

Q. *Are you currently having any help with mental problems?*

No Inpatient Outpatient GP

Other (specify)

3. Risk Factors for Suicide

Sex: Male Female

Marital status:

Q. *Are you married or living with a partner or do you regard yourself as separated, widowed or single?*

Single Separated/divorced

Widowed Married/partnered

Ethnic Origin: (Tick most likely classification)

White Black

Indian/Pakistani/Bangladeshi Chinese

Mixed Other

4. Current Mental State

Symptoms of depression:

Feels depressed Yes No

Looks depressed Yes No

Sleep disturbance Yes No

Appetite disturbance Yes No

Hopelessness Yes No

Suicidal thoughts Yes No

Suicidal plans Yes No

Hallucinations/delusions Yes No

5. Clinical Impression

How potentially lethal was this attempt?

Low Moderate High

What is the likelihood of further attempts?

Low Moderate High

What is the chance that further attempts will be lethal?

Low Moderate High

6. Management Plan

What was the outcome? (tick appropriate box(es))

Discharged, formally referred to GP Yes No

(eg by letter or phone)

Discharged, told to see GP Yes No

Discharged, no referral Yes No

Self-discharge Yes No

Referred to psychiatric services (including alcohol and drug team; specialist mental health team) Yes No

Referred to medical or surgical services Yes No

Referred to other services (specify)

Died Yes No

Further details of management follow up:

(include referrals to assessment and decision units)

General hospital admission requested? Yes No

General hospital admission achieved? Yes No

Psychiatric referral offered but patient refused? Yes No

Assessed by (BLOCK CAPITALS)

Name:

Signed:

Speciality:

Date of assessment

Time of assessment (24hr)

Grade of assessor: Consultant Registrar

SHO ENP

Other (specify)

The Centre for Suicide Prevention
The Institute of Brain, Behaviour and Mental Health
University of Manchester
Oxford Road
Manchester
M13 9PL
www.manchester.ac.uk/mash