Manchester Self-Harm Project MaSH

6th Year Report
1st September 2002 to 31st August 2003

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**Publication date: May 2005**
The Monitoring of Self-Harm

Introduction
Self-harm greatly increases the risk of subsequent suicide and the monitoring of self-harm is part of the National Suicide Prevention Strategy. The monitoring of self-harm locally enables us to measure the effectiveness of changes within the service and other interventions that impact on this group of patients.

The Manchester Self-Harm (MaSH) Project is a city-wide collaboration between the University of Manchester and local hospitals. The project is funded by the Manchester Mental Health and Social Care NHS Trust. It began in April 1997 and data collection commenced in September 1997.

Aims
- To monitor patterns of self-harm following presentation at the A&E departments of Central Manchester (Manchester Royal Infirmary), North Manchester General Hospital and South Manchester University Hospital Trust (Wythenshawe Hospital)
- To evaluate self-harm services
- To provide evidence on which service development and training may be based
- To provide an infrastructure for further research on patterns of self-harm and their clinical management

Method
In each participating hospital, data collected includes:
- Patient data- e.g. demographic characteristics, psychiatric history, details of self-harm episode, precipitating events, method of self-harm, mental state and suicidal intent
- Service data- e.g. risk assessment, communication with GP, follow-up arrangements

Upon each patient presenting at an A&E Department with self-harm, a standard, brief assessment form containing the above items is completed. In addition, the mental health specialist who carries out the first full psychiatric assessment on this group of patients completes a more detailed assessment form.

The following is a report on the sixth year of data from the 1st September 2002 to 31st August 2003. We collected data on episode and individual level. The individual level data was collected at index episode. The report consists of a summary of findings across the three participating hospitals and detailed individual findings for each.

Acknowledgements
We wish to thank members of the A&E departments, mental health liaison teams and other psychiatric staff who have supported the project.
Summary of Findings across all Participating Hospitals

Source of Forms and Response Rates

<table>
<thead>
<tr>
<th>Source of Forms and Response Rates</th>
<th>TOTAL</th>
</tr>
</thead>
<tbody>
<tr>
<td>Number of episodes with forms</td>
<td>2140</td>
</tr>
<tr>
<td>Number of episodes without forms</td>
<td>698</td>
</tr>
<tr>
<td>Number of episodes did not wait (DNW)</td>
<td>445</td>
</tr>
<tr>
<td>Total number of episodes</td>
<td>3283</td>
</tr>
<tr>
<td>Total number of A&amp;E forms</td>
<td>1662</td>
</tr>
<tr>
<td>Total number of Psychiatric forms</td>
<td>1100</td>
</tr>
<tr>
<td>Total number of individuals</td>
<td>2667</td>
</tr>
</tbody>
</table>

The response rate (the number of forms received/number of presentations exc DNW) over the period covered by the report was 75% (2140/2838). Missing data were excluded from analyses.

Rate of people who self-harm in Manchester per 100,000 population (includes non-response + DNW)

<table>
<thead>
<tr>
<th>Present year (complete and actual data)</th>
<th>Previous year (estimated data)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Overall rate</td>
<td>552</td>
</tr>
<tr>
<td>Females</td>
<td>616</td>
</tr>
<tr>
<td>Males</td>
<td>487</td>
</tr>
</tbody>
</table>

Rates of self-harm in Manchester 2002/03 by age and sex

The above graph is based on individuals who have been treated at the participating hospitals.

Rates are based on individuals presenting to any of the three hospitals in Manchester following self-harm within the report period, who at index episode (first episode within the study period) resided within the Manchester postcode area. In the period covered by this report we collected basic information on all presentations (including those without a MaSH assessment form and patients who did not wait). More detailed data is presented on individuals and episodes with MaSH forms.
Rates of self-harm in Manchester 01/09/1997 - 31/08/2003

*The rate of treated individuals was established by assuming the rate of non-response for episodes was the same as for individuals. We were able to check this assumption for the Year 02/03 and it proved to be correct.

Episodes of self-harm presentations at A&E (Central Manchester, NMGH or SMUHT)
01/09/1997 - 31/08/2003
Social and Demographic Characteristics of Self-Harming Individuals (data on all individuals)

The total number of individuals presenting with self-harm during this study period was 2667, including 332 individuals (12%) who did not wait (DNW) and did not return to be treated within this period.

<table>
<thead>
<tr>
<th>Age and Gender</th>
<th>N (Valid cases)</th>
<th>Mean age 32 years, ranging from 7 to 98 years.</th>
<th>The group of patients with the highest frequency of self-harm were aged 15-19 years for females and 30-34 years for males although frequency was high in males aged 20-39 years</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gender</td>
<td>2620</td>
<td>57% female</td>
<td></td>
</tr>
</tbody>
</table>

Social and Demographic Characteristics of Self-Harming Individuals (data from completed forms only)

2335 individuals were treated and psycho-social assessments were completed on 1820 (78%). Additional socio-demographic information was available for those individuals who had completed forms.

<table>
<thead>
<tr>
<th>Ethnicity</th>
<th>N (Valid cases)</th>
<th>89% white Ethnically</th>
<th>The largest ethnic minority group was Indian/Pakistani or Bangladeshi (5%). 4% were black, 0.3% were Chinese, 0.1% were mixed race and 2% fell into the ‘other’ category.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Marital, Employment and Living</td>
<td>1691</td>
<td></td>
<td>Most patients were single (54%), 13% were separated or divorced, 2% were widowed and 30% were married or partnered. 41% were unemployed, 27% were employed and 12% were registered sick. 29% lived with a spouse/partner, 21% lived alone and 22% with a parent/sibling.</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Clinical Characteristics of Self-Harming Individuals (data from completed forms only)

Current and Previous Psychiatric Treatment:
The psychiatric history was known in 1660 people (91%). 38% of these were receiving current psychiatric treatment (including treatment by GP) and a further 15% had received psychiatric treatment in the past.

Alcohol and Substance Misuse:
1600 people (88%) were assessed for their use of alcohol and over one quarter of these (27%) were classified as abusing alcohol (i.e. current harmful alcohol use or drinking 7 or more units a day). 1607 people (92%) were assessed for their use of street drugs and 16% of these were classified as misusing drugs (use on a regular basis or classified as harmful use by a clinician). Previous research based on MaSH data has shown that high alcohol use is an independent predictor for further self-harm and subsequent suicide (Cooper et al, 2005).
Precipitants of Self-Harm:

Precipitants of self-harm by individuals at Central Manchester, NMGH and SMUHT

* n = 1604

In 1604 (88%) cases a precipitant to the act of self-harm was known. More than one precipitant was known in 44% of these cases. The most frequent reasons given as precipitating factors in both sexes were interpersonal problems. Relationship problems with family and others and abuse were significantly more common in females compared to males, whereas legal, housing and money problems were proportionately more commonly attributed to males. Data from both Manchester and Oxford (Hawton, Casey et al, 2002) suggest that a relationship problem with a partner is the most frequent precipitant of self-harm.

Evidence of mental disorder: clinical impression at time of assessment

375 individuals, (22% of all self-harm patients with any assessment, 41% of those assessed by mental health specialists) had evidence of a psychiatric disorder. Of those individuals assessed for psychiatric illness, 32% had probable depression, 16% had alcohol or drug misuse and 26% had probable anxiety/stress related disorders. Four percent of people were likely to have had a severe mental illness (schizophrenia, bi-polar disorder or psychotic depression) and a further 5% were diagnosed with personality disorders. 17% had no psychiatric disorder evident at time of assessment. In 534 people the diagnosis was recorded as ‘not known’. This will affect the robustness of the results. Nursing staff were more likely to record the diagnoses as ‘not known’ (65% of the cases they assessed) than doctors (31% of the cases they assessed).

In consultation with mental health nurse specialists at Central Manchester, and medical staff in charge of Liaison Psychiatry, it has now been agreed that broad categories of mental illness should
be recorded rather than operationalised diagnoses. It is hoped this will reduce the proportion of individuals who received a ‘not known’ diagnosis.

Repetition of Self-Harm:
Self-reported previous self-harm data was available for 1660 people who received a psycho-social assessment at the hospitals between 1st September 2002 and 31st August 2003. Of these people, 58% reported self-harm during their lifetime (with or without medical treatment) and 31% reported self-harm within the last year.

The repetition rate (forms only) within six months of the index episode was 11%. This figure is based on the 969 individuals for whom we could receive six month follow up data in the period covered by this report. It includes all individuals who re-presented following self-harm at any of the 3 trusts, whether or not they received psycho-social assessment. (The remaining 851 individuals could not be followed up for a full six months, because the follow up period fell outside the report period).

Please note that in the 5th Year Annual Report the repetition rate for the Year 01/02 within 6 months should have been given as 12% (and not 24%) based on 951 individuals and excluding 817 individuals who did not have sufficient follow up period.

Clinical Characteristics Self-Harm Episodes (data on all episodes)

Method of Self-Harm:
A method of self-harm was recorded for 3261/3283 episodes on the MaSH database. The most frequent method of self-harm was self-poisoning (83%), the second most frequent method was self-injury for example cutting or piercing (15%).

Of the 2689 episodes that involved drugs as a method of harm, type of drug was known in 73% of episodes (we do not have information on type of drug in many DNW episodes). Of these 47% of them used a paracetamol compound as a method of self-harm, the majority (70%) being pure paracetamol and the mean number of tablets taken was 24. 24% involved the ingestion of another form of analgesic and a further 24% used antidepressants, 12% used benzodiazepine and 4% used opiates (i.e. heroin, morphine, methadone) as a method of self-harm.

Time of Presentation:
Of the 2702 episodes (82%) where time of presentation at the A&E department was recorded, 47% presented to the A&E department between the hours of 8.00p.m and 4.00a.m.
Management of Self-Harm Episodes (data from forms only)

Management of Self-Harm Episodes by A&E staff

There were 445 episodes of self-harm where people did not wait for treatment. Of the 1662 episodes assessed by A&E staff, 89% were completed by SHOs, 9% by registrars and 2% by consultants and other staff. There were 1514 episodes where the management in the A&E department was known. Approximately half of all episodes of self-harm were referred to psychiatric services (48%), a further 22% were referred to medical/surgical services (within this group 50% had a completed psychiatric assessment form). 28% of A&E patients were either discharged with no referral or discharged and told to see their GP.

Management of Self-Harm Episodes by Mental Health Specialists:

For 1100 of the episodes that were assessed by mental health specialists (51% of the total number of episodes), 80% were completed by nurses, 20% by SHOs. There were 1058 episodes for which the management by mental health specialists was known. 6% resulted in an urgent referral, either to a 24-hour community service or to psychiatric outpatients. 5% resulted in an admission to a psychiatric unit, with 8 (1%) of these admissions under the Mental Health Act (1983). 18% were referred to other mental health services (these included community psychiatric teams, mental health teams, primary care teams and outpatients). 12% were referred to alcohol and/or drug teams and 23% were referred to other services (including voluntary and social services). Some episodes resulted in more than one referral 43% of episodes assessed by mental health specialists resulted in referral back to the patient’s general practitioner alone. Sixteen episodes resulted in self-discharge and twenty-three were discharged to be reviewed by the assessor within two weeks. With respect to the 16 child and adolescent episodes with psychiatric assessment at the Duchess of York hospital, 63% were given a non-urgent referral to other mental health services, and 31% were given an urgent referral to a psychiatric team. The general practitioner was contacted in 93% of episodes.

Summary of differences between participating hospitals

Key differences between the 3 hospitals are summarised below:

1. Central Manchester Hospital had the highest number of episodes and individuals presenting to the A&E department within the study period (1422 episodes and 1177 individuals compared to 956 and 805 at North Manchester General Hospital (NMGH), 913 and 762 at South Manchester University Hospital (SMUHT), respectively). The most frequent time of presentation in all hospitals was between midnight and 2 a.m. (15%).

2. The mean age at Central Manchester was lower than in the other hospitals (mean age at NMGH +4 years and at SMUHT +2 years compared to Central Manchester). NMGH had an older group of self-harming patients although in all 3 hospitals, the largest group were females aged 15-19 years.
3. Central Manchester Hospital had the highest proportion of ethnic minority groups (18%) – the largest being of Indian/Pakistani or Bangladeshi origin. SMUHT had the lowest proportion of ethnic minority groups (6%).

4. More individuals lived with their parents (28%) at SMUHT (NMGH -10% and Central Manchester -8% compared to SMUHT).

5. NMGH patients were more likely to have a life time history of self-harm (with or without treatment). However Central Manchester had the highest repetition rate within 6 months as determined from the MaSH database (12%) over the study period (NMGH -4 % and SMUHT -4%).

6. A&E staff at SMUHT were twice as likely as NMGH to complete psycho-social assessments (80% vs. 40%). More recent data has shown an increase in the number of initial psycho-social assessments completed at by A&E staff at NMGH (Donaldson 2005).

7. SMUHT had the highest proportion of specialist assessments (49%), (-7% at NMGH and -19% at Central Manchester). Most of these were completed by nursing staff.

8. SMUHT had the lowest proportion of patients not referred for formal follow up from the A&E department (16%), (+9% at NMGH and +12% at Central Manchester).

9. NMGH had the lowest number (and proportion, 2%) of admissions to a psychiatric in-patient unit (+4% at Central Manchester and +4% at SMUHT).

10. SMUHT had the highest proportion of GP only referrals following a specialist assessment (34%), (NMGH -4% and SMUHT -10%).

Further research

Multi-Centre Monitoring
Manchester is one of 3 sites that has been successful in their proposal to the Department of Health to set up a pilot study for a national multi-centre monitoring project of self-harm. The primary purpose is to set up an infrastructure for monitoring self-harm. The specific aims are:

1. To monitor trends and provide data relevant to national suicide prevention targets
2. To compare patterns of self-harm across centres
3. To provide a database that can be used to evaluate national initiatives
4. To establish a network that can take on specific research projects, including treatment and evaluation

It is hoped that new centres will be invited to join the multi-centre project. A mix of rural and urban data would increase generalisability of our results. The added value in having a multi-centre is a larger sample size – this would improve external validity of our results and enable us to consider sub-groups.

Recent findings
Self-harm and suicide
Women who self-harm out number men by 1.3:1. Recent data from the MaSH project shows that the suicide rate in a 0 to 4 year follow up of females is 241 per 100,000, half that of males (Cooper et al,
2005). However the degree of increased risk in this cohort compared to the general population is especially high in females (50 fold increased risk). This may be due to the low risk of suicide in females in the general population. However it does suggest that the view that attempts by women are not serious is mistaken.

Self-harm and legislation on analgesia

The MaSH data has also been used to look at the effects of legislation restricting pack sizes of paracetamol and salicylate on self-poisoning (Hawton et al, 2001). A longitudinal analysis investigated whether the benefits had persisted (Hawton et al, 2004). The 22% reduction in suicide deaths from poisoning with paracetamol and salicylate in the post legislation period year persisted in the second and third years. The average number of tablets taken in non-fatal overdoses of paracetamol and salicylate were reduced in the three years after the legislation. Overdose for ibuprofen increased and poisoning involving ibuprofen increased slightly following legislation, but numbers were small and in all cases other drugs were taken. Legislation appears to have had a beneficial effect, with only limited and less dangerous substitution with an alternative analgesic.

Assessing risk following self-harm

A recently published study investigated the predictive value of risk assessments following an episode of self-harm and compared assessments carried out by A&E and psychiatric staff (Kapur et al, 2005). The higher the assessed risk the greater the likelihood of repetition. However, for both staff groups the majority of repetitions occurred among those assessed as at low or moderate risk. A&E staff were more likely than psychiatric staff to assess the risk of repetition as high.
The response rate (the number of forms received/number of presentations excluding DNWs) over the period covered by the report was 69% (545/788). Missing data were excluded from analyses.

Social and Demographic Characteristics of Self-Harming Individuals (data on all individuals)

The total number of individuals presenting with self-harm during this study period at North Manchester General Hospital (NMGH) was 805, including 128 individuals (16%) who did not wait (DNW) and did not return to be treated within this period.

<table>
<thead>
<tr>
<th>Age and sex</th>
<th>N (valid cases)</th>
<th>54% female</th>
<th>Mean age 34 years, ranging from 14 to 97 years.</th>
<th>The group of patients with the highest frequency of self-harm were aged 15-19 years for females and 35-39 years for males.</th>
</tr>
</thead>
<tbody>
<tr>
<td>15-19</td>
<td>772</td>
<td></td>
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<td>20-24</td>
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<td>25-29</td>
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<td>30-34</td>
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<td>35-39</td>
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<td>40-44</td>
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<td>45-49</td>
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<td>50-54</td>
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<td>55-59</td>
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<td>60-64</td>
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<td>65+</td>
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</table>

The group of patients with the highest frequency of self-harm were aged 15-19 years for females and 35-39 years for males.
Social and Demographic Characteristics of Self-Harming Individuals (data from completed forms only)

677 individuals were treated and psycho-social assessments were completed on 489 (72%). Additional socio-demographic information was available for those individuals who had completed forms.

<table>
<thead>
<tr>
<th>Ethnicity</th>
<th>N (valid cases)</th>
<th>93% White</th>
<th>The largest ethnic minority group was Indian/Pakistani or Bangladeshi (3%). 2% were black, 1% were either Chinese, or fell into the ‘other’ category.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Marital,</td>
<td>474</td>
<td>Most patients were single (48%), 15% were separated or divorced, 2% were widowed and 35% were married or partnered. 51% were unemployed, 23% were employed and 11% were registered sick. 33% lived with a spouse/partner, 23% alone and 18% with parent/sibling.</td>
<td></td>
</tr>
<tr>
<td>Employment and Living</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Clinical Characteristics of Self-Harming Individuals (data from completed forms only)

Current and Previous Psychiatric Treatment:
The psychiatric history was known in 465 people (95%). 40% of these were receiving current psychiatric treatment (including treatment from GP) and a further 18% had received psychiatric treatment in the past.

Alcohol and Substance Misuse:
456 people (93%) were assessed for their use of alcohol and street drugs. 22% of these were classified as abusing alcohol (i.e. current harmful alcohol consumption or drinking 7 or more units a day) and 17% were classified as misusing drugs (use on a regular basis or classified as harmful use by a clinician).

Precipitants of Self-Harm:
In 432 (88%) cases a precipitant to the self-harm was known. The most frequent reason given as a precipitant to self-harm was relationship problems with partner/boyfriend/girlfriend (50%). A further 30% cited relationship problems with either family members or others as a precipitating factor. The next most frequently cited precipitating factors was bereavement and housing problems, with 12% citing this as instrumental in their self-harm.

Evidence of mental disorder - clinical impression at time of assessment:
157 individuals, (32% of all patients assessed at NMGH, 53% of those assessed by mental health specialists) had evidence of a psychiatric disorder. Of those individuals assessed for psychiatric illness, 31% had probable depression and 18% had probable alcohol and/or drug misuse. 13% were had probable stress related disorders. 6% were likely to have had a severe mental disorder (schizophrenia/schizo-affective disorder, bi polar disorder or psychotic depression). Only 2% were recorded as having a probable personality disorder. 29% had no psychiatric illness evident at time of assessment.
Repetition of Self-Harm:
Self-reported previous self-harm data was available for 469 individuals (96%) who received psycho-social assessments at NMGH between 1st September 2002 and 31st August 2003. Of these people, 62% reported self-harm during their lifetime (with or without medical treatment) and 34% reported self-harm within the last year.

The repetition rate within six months of the index episode was 8% according to the MaSH database. This figure is based on the 278 individuals for whom we could receive six month follow up data in the period covered by this report. (The remaining 211 individuals could not be followed up for a full six months, because the follow up period fell outside the report period).

Clinical Characteristics Self-Harm Episodes (data on all episodes)

Method of Self-Harm:
A method of self-harm was recorded on 946 episodes (99%) of self-harm at the NMGH (including DNW). The most frequent method of self-harm was by self-poisoning (84%), the second most frequent method was self-injury (cutting/piercing) (14%). We do not have information on type of drug in many DNW episodes.

Type of drug taken (n = 474)

NB: more than one drug may have been taken per episode
‘Opiates’ refers to heroin, morphine, and methadone only.

Of the 118 episodes using antidepressants, the majority used SSRIs or SNRIs (65%), with 41% using tricyclic antidepressants. Further analyses of the episodes involving paracetamol are given below.
Paracetamol products used in episodes of self harm (n=243)

NB: more than one type of paracetamol preparation may have been taken per episode

Time of Presentation:
Of the 725 episodes (76%) where time of presentation at the A&E department was recorded, 51% presented to A&E between 8.00p.m. and 4.00a.m.

Time of presentation at A&E following self-harm (n = 725)
Management of Self-Harm Episodes (data from completed forms only)

Management of Self-Harm Episodes by A&E Staff:
There were 168 episodes of self-harm where patients did not wait for treatment. Of the 319 episodes with assessment forms by A&E staff, 87% were completed by SHOs, 12% by registrars and 1% by consultants. There were 287 episodes where the management in the A&E department was known. The majority of cases were referred to psychiatric services (53%), a further 15% were referred to medical/surgical services (within this group 39% had a completed psychiatric assessment form). 25% of A&E patients (72 episodes) had no formal follow up (either discharged with no referral, discharged and told to see their GP or self discharged). However, of these 72 discharged episodes, 13 (18%) were subsequently detected by psychiatric services and assessed by a mental health specialist.

Management of episodes of self-harm in A & E Department (n = 287)

Management of DSH by Mental Health Specialists:
There were 331 episodes assessed by mental health specialists. 97% of the assessments were completed by nurses; 3% by SHOs. Of the 6 admissions (1.8%) made by mental health specialists, 2 were made under the Mental Health Act (1983). Of the 11 urgent referrals (3%), 8 were made to a 24-hour community service and 3 were made to outpatients. Referrals to ‘other mental health’ constituted 13.6% of episodes and included referrals to day hospitals, community psychiatric teams, mental health teams and outpatients. Other referrals include referrals to psychologists, debt counselling and marriage guidance. GP referral only constituted cases not formally referred elsewhere or not advised to contact another service.
Management of adult self-harm episodes by mental health specialists (n = 331)
Suggested service needs for deliberate self-harm patients presenting to the NMGH from 1st September ’02 to 31st August ’03

Glossary of inclusion criteria

<table>
<thead>
<tr>
<th>Service</th>
<th>Characteristics of deliberate self-harm patient who may require that service</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>People currently receiving psychiatric treatment, those assessed as a high suicide risk, people with hallucinations and delusions, people harming in a direct response to mental state.</td>
</tr>
<tr>
<td>B</td>
<td>People currently being treated for alcohol/substance misuse, current alcohol/substance abuse diagnosis, those drinking more than 7 units of alcohol per day.</td>
</tr>
<tr>
<td>C</td>
<td>People with interpersonal, bereavement, bullying, abuse, victim of crime, miscarriage problems. Interventions might include problem solving, brief psychodynamic interpersonal therapy, CBT etc.</td>
</tr>
<tr>
<td>D</td>
<td>People with financial, housing, unemployment and/or legal problems, or people who repeat DSH (self-report) where no specific service is appropriate. Informing patient’s GP is recommended in all cases.</td>
</tr>
<tr>
<td>N.B.</td>
<td>All categories are exclusive.</td>
</tr>
</tbody>
</table>

- **Mental Health Services** (A) 48% (233)
- **Alcohol & Drug Services** (B) 13% (61)
- **Specific Psychological Interventions** (C) 29% (140)
- **Other Social and Psychological Interventions** (D) 6% (29)

489 individuals presenting to A&E department at NMGH having self-harmed
Source of Forms and Response Rates

<table>
<thead>
<tr>
<th>Source of Forms and Response Rates</th>
<th>TOTAL</th>
</tr>
</thead>
<tbody>
<tr>
<td>Number of episodes with forms</td>
<td>854</td>
</tr>
<tr>
<td>Number of episodes without forms</td>
<td>373</td>
</tr>
<tr>
<td>Number of episodes did not wait (DNW)</td>
<td>195</td>
</tr>
<tr>
<td>Total number of episodes</td>
<td>1422</td>
</tr>
<tr>
<td>Total number of A&amp;E forms</td>
<td>687</td>
</tr>
<tr>
<td>Total number of psychiatric forms</td>
<td>368</td>
</tr>
<tr>
<td>Total number of individuals</td>
<td>1177</td>
</tr>
</tbody>
</table>

The response rate (the number of forms received/number of presentations excluding DNW) over the period covered by the report was 70% (854/1227). Missing data were excluded from analyses.

Social and Demographic Characteristics of Self-Harming Individuals (data on all individuals)

The total number of individuals presenting with self-harm during this study period at Central Manchester A&E department (Manchester Royal Infirmary, MRI) was 1177, including 148 individuals (13%) who did not wait (DNW) and did not return to be treated within this period.

| Age and Gender | N (valid cases) | 56% female | Mean age 30 years, ranging from 7 to 91 years. | The group of patients with the highest frequency of self-harm were aged 15-24 years for females and 20-39 years for males. |
Social and Demographic Characteristics of Self-Harming Individuals (data from completed forms only)

1029 individuals were treated and psycho-social assessments were completed on 745 (72%). Additional socio-demographic information was available for those individuals who had completed forms.

<table>
<thead>
<tr>
<th>Ethnicity</th>
<th>N (valid cases)</th>
<th>82% White</th>
<th>The largest ethnic minority group was Indian/Pakistani or Bangladesh (9%). 6% were black (African/Caribbean), 0.4% were Chinese, 0.3% were mixed race and 2% fell into the ‘other’ category.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Marital, Employment and Living Status</td>
<td>700</td>
<td>Most patients were single (59%), 13% were separated or divorced, 1% were widowed and 27% were married or partnered. 43% were unemployed, 24% were employed and 9% were registered sick. 25% lived with a spouse/partner, 21% alone and 20% with parent/sibling.</td>
<td></td>
</tr>
</tbody>
</table>

Clinical Characteristics of Self-Harming Individuals (data from completed forms only)

Current and Previous Psychiatric Treatment:
The psychiatric history was known in 702 people (94%). 37% of these were currently receiving psychiatric treatment (including treatment from their GP) and a further 14% had received psychiatric treatment in the past.

Alcohol and Substance Misuse:
683 people (92%) were assessed for their use of alcohol and 29% of these people were classified as abusing alcohol (i.e. current harmful use of alcohol or drinking 7 or more units a day). 687 people (92%) were assessed for their use of street drugs and 17% were classified as misusing drugs (use on a regular basis or classified as harmful use by a clinician).

Precipitants of Self-Harm:
In 659 (89%) cases a precipitant to the self-harm was known. The most frequent reason given as a precipitant to self-harm was relationship problems with partner/boyfriend/girlfriend (44%). 18% cited relationship difficulties with members of their family as instrumental in their self-harm. 16% said their self-harm was a direct response to their mental state and housing problems in 12% of individuals. Work problems were given by 11%, and bereavement was given by 9%, as a precipitant of self-harm.

Evidence of mental disorder - clinical impression at time of assessment
204 individuals, (27% of all patients assessed at Central Manchester, 63% of those assessed by mental health specialists) had evidence of psychiatric disorder. Of those individuals assessed for psychiatric illness, 36% had probable stress related disorder, 31% had probable depression and 15% had probable alcohol or drug misuse. 9% were assessed as likely to have personality problems and 2% had probable schizophrenia. 9% were likely to have had no psychiatric illness.
Repetition of Self-Harm:
Self-reported previous self-harm data was available for 711 individuals who received psycho-social assessments at Central Manchester between 1st September 2002 and 31st August 2003. Of these people, 59% reported self-harm during their lifetime (with or without medical treatment) and 36% reported self-harm within the last year.

The repetition rate within six months of the index episode was 12% according to the MaSH database. This figure is based on the 395 individuals for whom we could receive six month follow up data in the period covered by this report. (The remaining 350 individuals could not be followed up for a full six months, because the follow up period fell outside the report period).

Clinical Characteristics Self-Harming Episodes (data on all episodes)

Method of Self-Harm:
A method of self-harm was recorded on 1415 episodes (99.5%) of self-harm at the Central Manchester (including DNW). The most frequent primary method of self-harm was self-poisoning by drugs (80%), with the second most frequent method being self-injury (piercing/cutting) (17%). Details of the 1136 episodes involving self-poisoning by drugs were known on 844 episodes (74%). We do not have information on type of drug in many DNW episodes.

Type of drug taken (n = 844)

![Chart showing percentage of type of drug taken](chart)

NB: more than one drug may have been taken per episode
‘Opiates’ refers to heroin, morphine, and methadone only.

Of the 168 episodes involving antidepressants, the majority used SSRIs or SNRIs (67%), with 24% using tricyclic antidepressants. Further analyses of the episodes involving paracetamol are given below.
Paracetamol products used in episodes of self-harm (n = 432)

nb: more than one type of paracetamol preparation may have been taken per episode

**Time of Presentation:**
Of the 1238 episodes (87%) where time of presentation at the A&E department was recorded, 46% presented to A&E between 8.00p.m and 4.00a.m. The most frequent period of presentation was between midnight and 2am.
Management of Self-Harm Episodes (data from completed forms only)

Management of Self-Harm Episodes by A&E Staff:
There were 195 episodes of self-harm where patients did not wait for treatment. Of the 687 episodes assessed by A&E staff, 76% were completed by SHOs and 23% by registrars. There were 596 episodes where the management in the A&E department was known. The majority of cases were referred to psychiatric services (56%), a further 9% were referred to medical/surgical services (within this group 36% had a completed psychiatric assessment form). 28% of A&E patients (165 episodes) had no formal follow up (either discharged with no referral, discharged and told to see their GP or self discharged). However, of these 165 discharged episodes, 13 (8%) were subsequently detected by psychiatric services and assessed by a mental health specialist, which could indicate that a follow-up from the SAFE team at Central Manchester was prompted by the attendance at the A&E department.

Management of episodes of self-harm in A & E Department (n = 596)

Management of Self-Harm Episodes by Mental Health Specialists:
368 episodes received assessments by mental health specialists. 52% of the assessments were completed by nurses and 48% by SHOs. Of the 21 admissions (6%) made by mental health specialists, 4 were under the Mental Health Act (1983). Of the 24 urgent referrals (7%), 4 were made to a 24-hour community service and 20 were made to outpatients.). Referrals to ‘other mental health’ constituted 24% of episodes and included referrals to day hospitals, community psychiatric teams, mental health teams, and outpatients. Other referrals include referrals to psychologists, debt counselling and marriage guidance. GP referral only constituted cases not formally referred elsewhere or not advised to contact another service.
Management of adult self-harm by mental health specialist (n = 368)
Suggested service needs for self-harm patients presenting to MRI from 1st September '02 to 31st August '03

Glossary of inclusion criteria

<table>
<thead>
<tr>
<th>Service</th>
<th>Characteristics of deliberate self-harm patient who may require that service</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>People currently receiving psychiatric treatment, those assessed as a high suicide risk, people with hallucinations and delusions, people harming in a direct response to mental state.</td>
</tr>
<tr>
<td>B</td>
<td>People currently being treated for alcohol/substance misuse, current alcohol/substance abuse diagnosis, those drinking more than 7 units of alcohol per day.</td>
</tr>
<tr>
<td>C</td>
<td>People with interpersonal, bereavement, bullying, abuse, victim of crime, miscarriage problems. Interventions for this group might include problem solving, brief psychodynamic interpersonal therapy, CBT etc.</td>
</tr>
<tr>
<td>D</td>
<td>People with financial, housing, unemployment and/or legal problems, or people who repeat DSH (self-report) where no specific service is appropriate. Informing patient’s GP is recommended in all cases.</td>
</tr>
</tbody>
</table>

N.B. All categories are exclusive.
Source of Forms and Response Rates

<table>
<thead>
<tr>
<th></th>
<th>TOTAL</th>
</tr>
</thead>
<tbody>
<tr>
<td>Number of episodes with forms</td>
<td>749</td>
</tr>
<tr>
<td>Number of episodes without forms</td>
<td>82</td>
</tr>
<tr>
<td>Number of episodes did not wait (DNW)</td>
<td>82</td>
</tr>
<tr>
<td>Total number of episodes</td>
<td>913</td>
</tr>
<tr>
<td>Total number of A&amp;E forms</td>
<td>664</td>
</tr>
<tr>
<td>Total number of psychiatric forms</td>
<td>410</td>
</tr>
<tr>
<td>Total number of individuals</td>
<td>762</td>
</tr>
</tbody>
</table>

The response rate (the number of forms received/number of presentations excluding DNW) over the period covered by the report was 90% (749/831). Missing data were excluded from analyses.

Social and Demographic Characteristics of Self-Harming Individuals (data on all individuals)

The total number of individuals presenting with self-harm during this study period at South Manchester University Hospital Trust (SMUHT) (Wythenshawe Hospital) was 762, including 63 individuals (8%) who did not wait (DNW) and did not return to be treated within this period.

<table>
<thead>
<tr>
<th>Age and Gender</th>
<th>N (valid cases)</th>
<th>62% female</th>
<th>Mean age 32 years, ranging from 10 to 97 years.</th>
<th>The group of patients with the highest frequency of self-harm were aged 15-19 years for females and 20-34 years for males.</th>
</tr>
</thead>
</table>
Social and Demographic Characteristics of Self-Harming Individuals (data from completed forms only)

699 individuals were treated and psycho-social assessments were completed on 638 (84%). Additional socio-demographic information was available for those individuals who had completed forms.

<table>
<thead>
<tr>
<th>Ethnicity</th>
<th>N (valid cases)</th>
<th>94% White</th>
<th>The largest ethnic minority group was Indian /Pakistani /Bangladeshi (2%). 2% were black and 2% fell into the ‘other’ category.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Marital, Employment</td>
<td>609</td>
<td></td>
<td>Most patients were single (55%), 13% were separated or divorced, 3% were widowed and 30% were married or partnered. 31% were unemployed, 31% were employed and 14% were registered sick. 29% lived with a spouse/partner, 20% alone and 28% with parent/sibling.</td>
</tr>
<tr>
<td>Marital, Employment and Living Status</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Clinical Characteristics of Self-Harming Individuals (data from completed forms only)

Current and Previous Psychiatric Treatment:
The psychiatric history was known in 597 people (94%). 43% of these were receiving current psychiatric treatment (including treatment from their GP) and a further 14% had received psychiatric treatment in the past.

Alcohol and Substance Misuse:
580 people (91%) were assessed for their use of alcohol. 31% of these were classified as abusing alcohol (i.e. current harmful alcohol consumption or drinking 7 or more units a day). 533 people (84%) were assessed for their use of street drugs and 15% were classified as misusing drugs (use on a regular basis or classified as harmful use by a clinician).

Precipitants of Self-Harm:
In 563 (88%) cases a precipitant to the self-harm was known. The most frequent reason given as a precipitant to self-harm was relationship problems with partner/boyfriend/girlfriend (44%). Relationship problems with family was the second most frequent precipitant with 22% stating this was instrumental in their self-harm. The third most frequently given precipitant was mental state at time of self-harm, with 18% citing this as a precipitant.

Evidence of mental disorder - clinical impression at time of assessment:
52 individuals, (8% of all self-harm patients assessed at Wythenshawe Hospital, 14% of those assessed by mental health specialists) had a psychiatric impression of mental state at time of assessment recorded. Missing data seriously compromises the robustness of this data and therefore categories of probable diagnosis have not been presented.

Repetition of Self-Harm:
Self-reported previous self-harm data was available for 606 individuals who received psycho-social assessments at SMUHT between 1st September 2002 and 31st August 2003. Of these people, 58% reported self-harm during their lifetime (with or without medical treatment) and 31% reported self-harm within the last year.
The repetition rate within six months of the index episode was 8% according to the MaSH database. This figure is based on the 316 individuals for whom we could receive six month follow up data in the period covered by this report. (The remaining 322 individuals could not be followed up for a full six months, because the follow up period fell outside the report period).

Clinical Characteristics of Self-Harming Episodes (data on all episodes)

Method of Self-Harm:
A method of self-harm was recorded for 908 episodes (99.5%) of self-harm at SMUHT (including DNW). The most frequent method of self-harm was by self-poisoning (84%), the second most frequent method being self-injury (cutting/piercing) (13%). We do not have information on type of drug in many DNW episodes.

Of the 184 episodes involving antidepressants, the majority used SSRIs and SNRIs (67%), with 24% using tricyclic antidepressants. Further analyses of the episodes involving paracetamol are given below.
Paracetamol products used in episodes of self harm (n = 303)

NB: more than one type of paracetemol preparation may have been taken per episode

**Time of Presentation:**
Of the 826 episodes (91%) where time of presentation at the A&E department was recorded, 49% presented to A&E between the hours of 8.00p.m and 4.00a.m.
Management of Self-Harming Episodes (data on completed forms only)

Management of Self-Harm Episodes by A&E Staff
There were 82 episodes of self-harm where patients did not wait for treatment. Of the 664 episodes assessed by A&E staff, the vast majority were completed by SHOs (92%). There were 639 episodes where the management in the A&E department was known. The majority of the cases were referred to medical/surgical services (41%), a further 35% were referred to psychiatric services (within this group 77% had a completed psychiatric assessment form). 16% of A&E patients (103 episodes) had no formal follow up (either discharged with no referral, discharged and told to see their GP or self discharged). However, of these 103 discharged episodes, 21 (20%) were subsequently detected by psychiatric services and assessed by a mental health specialist.

Management of episodes of self-harm in A & E Department (n = 639)
Management of Self-Harm Episodes by Mental Health Specialists

410 episodes received assessments by mental health specialists, 16 of these were assessed by staff at the Carol Kendrick Unit (Child and Adolescent Psychiatry). 90% of the assessments were completed by nurses, 9% by SHOs and 1% by therapists. There were 377 episodes assessed by adult psychiatric services for which the management decision was known. Of the 21 admissions (6%) made by mental health specialists, 3 were made under the Mental Health Act (1983). Of the 25 urgent referrals (7%), 3 were made to a 24-hour community service and 22 were made to outpatients. Referrals to ‘other mental health’ constituted 17% of episodes and included referrals to day hospitals, community psychiatric teams, mental health teams and outpatients. Other referrals include referrals to psychologists, debt counselling and marriage guidance. GP referral only constituted cases not formally referred elsewhere or not advised to contact another service.

Management of adult self-harm episodes by mental health specialists (n = 377)
Suggested service needs for self-harm patients presenting to the South Manchester University Hospital Trust from 1st September '02 to 31st August '03

Glossary of inclusion criteria

<table>
<thead>
<tr>
<th>Service</th>
<th>Characteristics of deliberate self-harm patient who may require that service</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>People currently receiving psychiatric treatment, those assessed as a high suicide risk, people with hallucinations and delusions, people harming in a direct response to mental state.</td>
</tr>
<tr>
<td>B</td>
<td>People currently being treated for alcohol/substance misuse, current alcohol/substance abuse diagnosis, those drinking more than 7 units of alcohol per day.</td>
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<td>C</td>
<td>People with interpersonal, bereavement, bullying, abuse, victim of crime, miscarriage problems. Interventions for this group might include problem solving, brief psychodynamic interpersonal therapy, CBT etc.</td>
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<td>D</td>
<td>People with financial, housing, unemployment and/or legal problems, or people who repeat DSH (self-report) where no specific service is appropriate. Informing patient’s GP is recommended in all cases. N.B. All categories are exclusive.</td>
</tr>
</tbody>
</table>

638 individuals presenting to A&E department at SMUHT having self-harmed

Mental Health Services (A) 49% (314)

Alcohol & Drug Services (B) 16% (102)

Other Social and Psychological Interventions (D) 4.5% (29)

Specific Psychological Interventions (C) 25% (157)
References


Previous work from the project


Submitted for publication


Continuing work programme
Ecological study of self-harm.


Factors associated with repetition of self-harm.

Do males and females have different pathways to self-harm?