AVOIDABLE DEATHS

five year report of the national confidential inquiry into suicide and homicide by people with mental illness

December 2006
SUDDEN UNEXPLAINED DEATH (SUD) STUDY COLLABORATORS

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<table>
<thead>
<tr>
<th>Department of Health</th>
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<tbody>
<tr>
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</tr>
<tr>
<td>National Patient Safety Agency</td>
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<td>Psychiatrists and other mental health professionals who have completed questionnaires</td>
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<td>Office for National Statistics</td>
<td>Royal College of Psychiatrists</td>
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<td>Lord Chancellor’s Department</td>
<td>Independent hospitals</td>
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<td>Crown Prosecution Service</td>
<td>Secure units</td>
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<td>Inquest</td>
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<td>HM Prison Service - Suicide Awareness Support Unit</td>
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<td>National Crime Operations Faculty</td>
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**PROGRESS ON SUICIDE**

The Inquiry investigated 6,367 cases of suicide by current or recent mental health patients, occurring between April 2000 and December 2004, 27% of all suicides in England and Wales during this period. This figure translates into over 1,300 patient suicides per year.

The main methods of suicide were hanging/strangulation and self-poisoning, which together accounted for 65% of deaths. Suicides by these methods are not falling but there have been small falls in the number of deaths by car exhaust asphyxiation and paracetamol poisoning.

Forty-nine percent of the patients who died had been in contact with services in the previous week, 19% in the previous 24 hours. At final contact, immediate suicide risk was estimated to be low or absent in 86% of cases.

We identified 856 suicides by in-patients. As a proportion of all patient suicides, in-patient suicides have fallen from 17% in 1997 to 11% in 2004 – this translates to 67 fewer deaths in 2004. Deaths by hanging/strangulation on the ward itself fell from 53 in 1997 to 26 in 2004. The proportion of in-patient deaths occurring within seven days of admission has fallen from 24% to 15%.

We identified 1,271 patient suicides occurring within three months of discharge from in-patient care. There has been no clear change in risk associated with the post-discharge period.

There has been a fall in the number of suicides that are preceded by non-compliance with drug treatment. As a proportion of all patient suicides, non-compliant cases have fallen from 22% to 14%, a fall of 71 deaths per year, between 1997 and 2004. There has been a fall in the number of deaths from self-poisoning with tricyclic antidepressants but the number of deaths in patients with depression has not fallen.

We identified a group of “most preventable” suicides, consisting of 1,108 cases, 18% of the total, or 233 per year. These are the cases most clearly related to service failure.

Previous Inquiry recommendations have been adopted well by services overall. Previous data collection has highlighted a number of patient groups at risk – the number of suicides by patients falling into more than one of these “priority groups” has fallen most. There has been a rise in suicides by patients outside the priority groups.

**AVOIDABLE DEATHS:**

**SUMMARY OF FINDINGS AND RECOMMENDATIONS**

**PROGRESS ON HOMICIDE**

The Inquiry investigated 249 cases of homicide by current or recent patients, occurring between April 1999 and December 2003, 9% of all homicides occurring in England Wales during this period. This figure translates into 52 patient homicides per year.

Our data show no clear evidence for either a rise or a fall in the number of homicides by people with mental illness. There has been a rise in the number of perpetrators subsequently judged to have been mentally ill at the time of the offence, but a fall in the number of people found guilty of manslaughter on grounds on diminished responsibility (i.e. mental illness contributed to the offence). The number of patient homicides has not changed; nor has the number of homicides by people with schizophrenia, whether patients or not.

The number of homicides by people with schizophrenia is around 30 per year. This is 5% of all homicides, the prevalence of schizophrenia in the population being 1% or less. Our findings show that half the perpetrators with schizophrenia were current or recent patients while one third had no previous contact with services. Of perpetrators with personality disorder, 42 were current or recent patients, around 10 cases per year.

The number of “stranger homicides” (perpetrator and victim not known to each other) in which the perpetrator was mentally ill has not risen – by these figures, the risk to the general public is not increasing.
Twenty-nine percent of patients who committed homicide were seen by mental health services in the previous week. At final service contact, immediate risk was judged to be low or absent in 88% of cases.

We have calculated the number of “most preventable” cases to be 34 cases, 14% of all patient homicides, or 7 per year. These are the cases most clearly related to service failure.

**FUTURE PREVENTION**

In this section we highlight key areas relevant to prevention, as well as potential solutions that can be adopted by services.

1. **Absconding from in-patient wards**

Two hundred and twenty-seven (27%) in-patient suicides occurred after the patient left the ward without permission. These deaths clustered in the first 7 days after admission. In mental health services we have to balance patient autonomy and patient safety and at times this can be difficult. But the current situation, in which patients admitted for their own protection can leave a ward within a few hours or days, cannot continue. The solution does not have to be coercive. Wards can reduce absconding by:

- understanding the factors that trigger it, such as a disturbed ward environment or an incident affecting the patient
- making greater use of technology, such as CCTV or swipe cards, to observe and control ward entry and exit.

2. **Transition from in-patient ward to the community**

Of the 1,271 post-discharge suicides in this report, 192 (15%) occurred in the first week after discharge. Two hundred and fifty-five (22%) occurred before the first follow-up appointment in the community. In addition, 292 in-patient suicides occurred during the period of discharge planning towards the end of an admission. In total therefore, 1,563 suicides occurred during the transition from ward to community, making this the period of maximum suicide risk. Four hundred and eighty-four patient deaths occurred just before or just after discharge. Several measures are needed to manage this transition safely:

- regular assessment of risk during the period of discharge planning and trial leave
- agreed plans to address stressors that will be encountered on leave and on discharge
- the patient to have ways of contacting services if a crisis occurs during leave or after discharge
- early follow-up on discharge, including telephone calls immediately after discharge for high risk patients and face-to-face contact within a week of discharge for anyone receiving “enhanced” care under the Care Programme Approach (CPA)
- support arrangements for people who discharge themselves from wards.
3. Use of CPA and management of risk

Four hundred and thirty-six patients who died by suicide were not subject to enhanced CPA despite a combination of severe mental illness and previous self-harm or previous admission under the Mental Health Act. Similarly, 18 patients who were convicted of homicide were not subject to enhanced CPA despite a combination of severe mental illness and previous violence or previous admission under the Mental Health Act. These groups make up 39% of the “most preventable” suicides and 53% of the “most preventable” homicides. These are the most striking illustrations of the under use of CPA in people at high risk but they are not the only examples. Services can improve risk management by:

- aligning CPA and risk management more closely, ensuring comprehensive assessment of risk at CPA review
- ensuring that enhanced CPA is used for high risk groups, including people with severe mental illness who are in the early stages of their illness
- jointly reviewing the management of the most high-risk patients with other clinical teams, through local clinical governance.

4. Responding when a care plan breaks down

Sixty-eight patients who died by suicide and six who committed a homicide while under enhanced CPA did not receive the kind of intensive care that CPA is meant to ensure. In other words, when they stopped their medication or missed an appointment, the attempt to re-establish care and treatment was insufficient. There was no face-to-face attempt to encourage compliance with medication, or no direct contact with the patient or their family to re-establish the plan of care. These groups make up 6% of the “most preventable” suicides and 18% of the “most preventable” homicides. One of the positive findings in the report is that the number of patient suicides that are preceded by non-compliance with treatment has fallen. However, over 100 suicides still occur per year in patients who are non-compliant while taking older antipsychotic or antidepressant drugs. Overall, 14% of patient suicides and 25% of patient homicides were preceded by non-compliance with drug treatment. Clinicians thought risk could have been reduced by better compliance in 24% of suicides and 24% of homicides. Services can strengthen their response to the breakdown of a care plan in a number of ways, including:

- robust use of CPA provision e.g. close supervision, home visits, working with families
- use of assertive outreach teams for patients with a history of disengagement from services
- use of modern drug treatments as first line therapy.

5. Attitudes to prevention

A feature of the cases we have investigated is the low proportion that clinicians regarded as preventable – only 19% of suicides and 21% of homicides. To an extent this reflects the recognition that mental health patients overall are a high risk group – it is therefore unrealistic to expect services to prevent all suicides or homicides. However, there is a danger in going from recognising risk in patients as a whole to accepting the inevitability of individual deaths.

Clinicians’ views of in-patient suicides illustrate the problem best. In most cases the patient would have been admitted because of suicide risk, to a ward environment offering close observation, therapeutic support and, as a last resort, the use of legal powers. Yet in only 28% of in-patient suicides, did clinicians retrospectively view these deaths as preventable. Our own calculation of the “most preventable” in-patient suicides – based on, for example, the number absconding or dying while under observation or Mental Health Act powers, gives a figure of 41%, and this is likely to be an under-estimate. In fact, unlike suicide by patients in the community where supervision is less immediate, all in-patient suicides could be seen as preventable.

It is time to change the widespread view that individual deaths are inevitable – such a view is bound to discourage staff from taking steps to improve safety. It may be a reaction to the criticism of services and individuals that can happen when serious incidents occur. Therefore, if mental health staff are to give up the culture of inevitability, it is up to commentators outside clinical practice to give up the culture of blame.
6. Observation on in-patient wards
One hundred and eighty five (22%) in-patient deaths occurred in people who were (or were supposed to be) under observation. Eighteen (3%) were said to be under one-to-one observation. Two conclusions are clear. Firstly, intermittent observation regimes provide long gaps in observation and they are unsuitable for the care of high risk patients unless additional measures are taken, such as the observation of ward exits. Secondly, close observation must be strictly carried out. There should be no gaps in one-to-one observation; and if a patient is to be observed every ten minutes, this time gap must be carefully adhered to.

7. Ward environment
In-patient deaths have fallen substantially, as have ward deaths by hanging, but many suicides still occur through self-strangulation. Clinical and estate staff now need to extend their success in removing non-collapsible curtain rails and eliminate other ligature points, or at least make them inaccessible. This applies in particular to hooks and handles on windows and doors.

8. Dual diagnosis
Dual diagnosis – the occurrence together of mental illness and substance misuse – is one of the central problems facing mental health services. One thousand six hundred and fifty-nine (27%) suicides and 72 (36%) homicides in this report were dual diagnosis cases and, as we use a restrictive definition, the contribution of dual diagnosis to patient suicides and homicides may be substantially more. Previously we have recommended the development of dual diagnosis services in all mental health trusts. However, this is the Inquiry recommendation with the lowest take-up rate of those we have examined. Provision for dual diagnosis should be central to modern mental health care and should include:

- staff training in substance misuse management
- joint working with drug and alcohol teams
- local clinical leadership
- use of enhanced CPA for all those with severe mental illness and a destabilising substance misuse problem.
9. Suicide in older people
Our report includes 740 suicides by people over 65 years of age, 12% of the total. However, as most patients who die by suicide are young, our findings are dominated by the features of these younger cases. In this report we have highlighted the different antecedents of suicide in older patients. They are less likely to benefit from assertive outreach or dual diagnosis teams, but more likely to benefit from good clinical care for physical illness or following recent bereavement.

SUDDEN UNEXPLAINED DEATH
We have identified 235 sudden unexplained deaths (SUD) on mental health in-patient units in England and Wales between March 1999 and December 2004. This translates into 41 cases per year.

These deaths were more common in men and in older patients.

Seventeen of these deaths, 7%, occurred in patients from ethnic minorities.

The following findings are important to future prevention:

1. Safer prescribing
There appeared to be relatively few cases of poor prescribing practice prior to sudden death. For example, only 17 patients (7%) were taking the type of drugs that may have increased the risk of fatal cardiac arrhythmia. However, 8 of these patients had a history of heart disease or respiratory disease. These drugs should always be used cautiously, and they should not be used in such patients.

2. Physical health care
Almost half the patients in the SUD study had a history of cardiovascular disease, and 31% had a history of respiratory disease. Psychiatric wards are naturally most concerned with the treatment of mental illness but these findings show the importance of good physical health care also. Mental health units can improve the safety of in-patients by a number of measures including:

• satisfactory assessment of physical health on admission
• appropriate follow-up of high blood pressure and other evidence of physical ill-health, and in particular cardiovascular disease
• routine inclusion of physical health care in the patient’s care plan
• training opportunities for mental health nurses in appropriate physical health care.

3. Restraint
There were few cases of recent restraint. Six patients had been restrained in the 24 hours before death, of whom four had been restrained in the hour before death—this is too few to allow us to draw any overall conclusions. We can say that in at least some of these cases, restraint was an important antecedent of sudden death but we cannot say that the relationship was causal. Even so, this is a highly sensitive area of clinical practice and it is essential that safety standards are high:

• physical restraint should be used as a last resort and to published clinical standards
• staff should follow agreed local protocols on restraint, rapid tranquillisation, and monitoring of the restrained or tranquillised patient
• every incident should be subject to review and local audit
• the use of restraint should be a standing priority for local clinical governance.

4. Resuscitation
We did not find evidence that poor resuscitation procedures contributed to the SUD cases that we investigated. However, it was clear that cardiopulmonary resuscitation (CPR) equipment and resuscitation staff should have been more readily available in a minority of cases. Mental health care is now provided in a large number of dispersed settings in many trusts, and it is important that in each setting there are suitably trained staff and accessible resuscitation equipment.
SUMMARY

The findings in this report suggest that mental health services should take steps to:

(for suicides and homicides)
• reduce absconding from in-patient units
• strengthen the transition from ward to community
• ensure that high risk patients receive enhanced CPA, backed up by peer review in the highest risk cases
• respond robustly when care plans break down
• accept that prevention is possible in many cases, particularly in in-patient suicides
• strengthen observation procedures on wards
• further improve the physical environment on wards
• develop services for dual diagnosis patients
• give greater emphasis to risk management in older people’s services.

(for sudden unexplained death)
• further improve the safety of prescribing, in particular by avoiding potentially cardiotoxic drugs in patients with a history of cardiovascular or respiratory disease
• give greater priority to physical health care, particularly on in-patient units
• adopt strict standards for physical restraint and review each incident
• follow protocols for rapid tranquilisation
• ensure that CPR training and equipment are available in all locations where care is provided.
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The report is also available on our website at
http://www.medicine.manchester.ac.uk/suicideprevention/nci/Useful/avoidable_deaths.pdf

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