# **SAFER SERVICES**

National Confidential Inquiry into Suicide and Homicide by People with Mental Illness

Report 1999

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## **SUMMARY: KEY FINDINGS AND RECOMMENDATIONS**

#### **Key findings: Suicide**

#### Suicides under mental health services

- 1. 24% of suicides had been in contact with mental health services in the year before death; this represents over 1,000 cases per year (findings below refer to these cases).
- 2. The commonest methods of suicide were hanging (men) and self poisoning by overdose (women).
- 3. The commonest drugs used in overdose were those prescribed to treat mental disorder (psychotropic drugs); suicides who had previously harmed themselves were more likely to commit suicide with psychotropic drugs.
- 4. The commonest diagnoses were depression, schizophrenia, personality disorder and alcohol or drug dependence.
- 5. Around half also had a second (co-morbid) diagnosis, indicating more complex treatment needs.
- 6. Suicides clustered in the first year after the onset of illness, when 22% occurred.
- 7. There were high rates of alcohol and drug misuse; 17% were misusing both alcohol and drugs.
- 8. 63% had a history of self-harm; 19% had a history of violence.
- 9. Around half the suicides occurred in patients with a history of self-harm and either substance misuse or previous admission to hospital; combinations of risk factors such as these indicate priority groups for mental health services.
- 10. Following suicide, the mental health team had contact with the family of the deceased person in just over half the cases.

#### Last contact with services

- 11. Half the suicides had been in contact with mental health services in the week before death.
- 12. At final contact, immediate risk of suicide was estimated to be low or absent in 85% of cases.

- 13. When suicide risk was estimated to be moderate or high, this information was usually passed on to other members of the mental health team, but in a minority (14%) it was either recorded in the case notes only, or not communicated.
- 14. In 10% of suicides, the care plan was not altered at final contact because the patient's current problem was thought to be the result of alcohol, drugs or personality rather than illness.
- 15. When patients were seen by two services prior to suicide, key points of information known to one service were frequently not known by the other.

#### **Preventability**

- 16. Mental health teams regarded 22% of the suicides as preventable but in around two-thirds they believed that more could have been done to reduce risk.
- 17. Mental health teams identified improved patient compliance and closer supervision as the factors that would have reduced risk in the largest number of cases.
- If a new Mental Health Act prevented non-compliance or non-attendance by severely mentally ill patients whose last admission was under the Act, up to 30 suicides per year could be prevented.

#### **In-patient suicides**

- 19. 16% of cases (4% of all suicides) were psychiatric in-patients.
- 20. Around one third of in-patient suicides occurred on the ward itself.
- 21. In-patient suicides, particularly those occurring on the ward, were most likely to be by hanging.
- 22. Suicide on and off the ward followed different patterns, suicide on the ward being more common in the evening and night.
- 23. Around one quarter of in-patient suicides were under special observation (constant or intermittent).
- 24. In almost a quarter of in-patient suicides, there were difficulties in observing patients because of ward design.

25. In a quarter of in-patient suicides, there were nursing shortages on the ward.

#### Suicides in the community

- 26. 28% of patients in the community who committed suicide were currently out of contact with services, usually following discharge at the patient's request or against medical advice.
- 27. In around a third of community suicides who had lost contact with services, no further action was taken; when action was taken this was usually to offer an appointment by letter rather than a home visit.
- 28. Less than half of community suicides were regarded as receiving any form of psychological intervention, including psychological support.
- 29. 14% were taking benzodiazipines for anxiety; almost half of these had a diagnosis of major psychiatric disorder.

#### **Post-discharge suicides**

- 30. 24% of suicides occurred within three months of discharge from inpatient care.
- 31. These post-discharge suicides were at a peak in the first week after leaving hospital; within the first week, the highest number occurred on the day after discharge.
- 32. 41% of post-discharge suicides occurred before the first follow-up appointment.
- 33. Post-discharge suicides were associated with final admissions lasting less than 7 days, re-admissions within 3 months of previous admission and "patient-initiated" discharge.

#### Suicides and the Care Programme Approach

- 34. Forty-two per cent of suicides were subject to the Care Programme Approach (CPA) at a level requiring multi-disciplinary review.
- 35. In most of these, the main provisions of the CPA were in place, i.e. key worker, follow-up appointment, date for next case review.
- 36. These CPA suicides had a higher rate of non-compliance but a lower rate of being out of contact with services.

#### Non-compliance with treatment

- 37. 26% of suicides were known to be non-compliant with drug treatments in the month before death; 30% of these had also missed their final appointment with services.
- 38. Non-compliant suicides had higher rates of schizophrenia, hospital admission and drug misuse.
- 39. Non-compliant suicides had a higher rate of distressing medication sideeffects, most often related to oral anti-psychotic drugs.

#### **Disengagement from services**

- 40. 24% of suicides did not attend their final appointment with services in the community.
- 41. This disengaged group showed a general pattern of weak ties to society as a whole (i.e. high rates of unemployment and living alone) as well as to mental health services.
- 42. When this disengaged group committed suicide as in-patients, this was more likely to occur following absconding, indicating continuing disengagement from services.

#### Suicides in ethnic minorities

- 43. 5% of suicides were from an ethnic minority. Suicides among ethnic minorities usually had severe mental illness.
- 44. Suicides in ethnic minorities had a high rate of non-compliance with drug treatments in the three months before suicide.

#### **Homeless patients**

- 45. 3% of suicides were homeless.
- 46. Homeless suicides tended to be young unemployed males with alcohol dependence or schizophrenia.
- 47. 46% of homeless suicides were under the CPA at a level requiring multidisciplinary review.
- 48. Homeless suicides had high rates of non-compliance with treatment and loss of contact with services.
- 49. A high proportion of homeless suicides died as in-patients.

#### Diagnosis

- 50. Suicides in people with schizophrenia showed high rates of noncompliance and distressing drug side-effects although the main reason for non-compliance was thought to be lack of insight into illness.
- 51. Suicides with alcohol or drug dependence or personality disorder had the most disrupted pattern of care, including high rates of loss of contact with services.

#### **Key findings: Homicide**

#### Homicides in the general population

- 52. The majority of homicides in the general population were committed by young men who were unmarried and/or unemployed. Alcohol and drug misuse were common.
- 53. Six per cent of people convicted of homicide were committed to psychiatric hospital; this outcome was more common in women.
- 54. Of perpetrators whose psychiatric court reports were obtained, 44% had a diagnosis of mental disorder based on life history; the majority of diagnoses were alcohol or drug dependence, personality disorder or affective disorder. Most did not have severe mental illness.
- 55. 6% of people convicted of homicide (for whom psychiatric reports were available) had a history of schizophrenia.

#### Mental illness at the time of homicide

- 56. 14% of people convicted of homicide (for whom reports were available) had symptoms of mental illness at the time of the offence ("mentally ill homicides")
- 57. In these mentally ill homicides, previous convictions for violence were less common.
- 58. In these mentally ill homicides, alcohol and drugs were less likely to have played a part in the offence.
- 59. Mentally ill homicides were most likely to kill a family member or spouse; the proportion of victims who were strangers was lower than in those without current symptoms of mental illness.
- 60. Only 20% of mentally ill homicides had been in contact with mental health services in the previous year.

#### Homicides and mental health services

- 61. 8% of all homicides had been in contact with mental health services in the year before the offence: this represents around 40 cases per year. At least 14% had been in contact with services at some time (findings below refer to these 14%).
- 62. The most common diagnoses were personality disorder and schizophrenia; the majority did not have severe mental illness.
- 63. More than half also had a second (co-morbid) diagnosis, indicating more complex treatment needs.
- 64. There were high rates of alcohol and drug misuse.
- 65. In a third of cases in which contact had occurred with two hospitals, no written details had been passed between hospitals.

#### Previous violence (those with mental health service contact)

- 66. The majority of patients who committed homicide had a recorded history of previous violence.
- 67. Previous convictions for violence were frequently not documented in the mental health case notes.
- 68. In 14% there was a history of previous violence occurring during episodes of psychosis; the majority of these patients were either non-compliant with treatment or out of contact with services at the time of the homicide; just over half were subject to the higher levels of the CPA.
- 69. Most cases in whom service contact had been recent had committed an aggressive act (including threatening) in the year before homicide.

#### **Contact with services**

- 70. Only 17% of patients convicted of homicide were subject to multidisciplinary review under the CPA.
- 71. 71% of patients convicted of homicide were out of contact with services at the time of the offence, usually following "patient-initiated" discharge.
- 72. 23% of patients were not compliant with their treatment prior to homicide.

- 73. Homicides tended to have lower rates of recent contact with services than suicides, 14% having been in contact with services in the week before the offence.
- 74. At final service contact risk was estimated to be low or absent in 88% of cases.
- 75. Most of the homicides were not regarded as preventable by the mental health teams involved; however in around half, mental health teams were able to identify factors which could have made homicide less likely, most often improved patient compliance.
- 76. If a new Mental Health Act prevented non-compliance or non-attendance by severely mentally ill patients whose last admission was under the Act, around 2 homicides per year could be prevented.
- 77. There were 15 patients with schizophrenia among the Inquiry cases; most had a history of previous violence; only 9 were subject to the higher levels of the CPA.

#### **Training and policies**

- 78. Most trusts in England and Wales provide training for staff in the use of the Mental Health Act, but only half provide training on the assessment of suicide risk and risk of harm to others.
- 79. Only a minority of trusts have written policies on responding to noncompliance or non-attendance, or the communication of risk estimations.

#### Aims of recommendations

- to improve the skills of "front-line" staff in the recognition, assessment and management of suicide risk
- to simplify the administrative component of clinical care
- to strengthen the CPA by increasing its focus on people at risk
- to specify high-risk groups who should be the priority for safer services
- to ensure that information related to risk is passed between components of services
- to reduce non-compliance with treatment in people at risk by improving both the acceptability and the acceptance of effective treatments

- to improve the ways in which services maintain contact with disengaged patients at risk, including homeless people
- to promote the development of services for people with mental illness who also misuse alcohol and drugs
- to make it easier for families to gain access to health professionals as partners in care
- to prompt an extensive review of the physical structure of in-patient facilities, and of observation procedures on in-patient wards
- to improve integration of in-patient and community services at the time of in-patient discharge
- to specify the legal powers that will be required to achieve greater engagement and compliance with treatment
- to reduce access to means of suicide
- to establish good practice on dealing with the aftermath of suicide and homicide
- to highlight the need for new policies on personality disorder
- to reduce the stigma of mental illness arising from the high public profile of homicides by psychiatric patients
- to reduce the "culture of blame" in mental health services

#### **Recommendations**

#### Training

- 1. All staff in contact with patients at risk of suicide should receive training in the recognition, assessment and management of risk, of both suicide and violence, at intervals of no more than three years.
- 2. The content of training should reflect many of the points highlighted by this report: indicators of risk, high-risk periods, managing non-compliance and loss of contact, communication, the Mental Health Act.

#### Documentation/information

- 3. A new, simplified, universal system of documentation (patient passports) should be developed, to be used for three purposes:
  - Clinical risk assessment, by the recording of key indicators of risk.
  - Allocation to care under the CPA according to evidence of risk, and subsequent monitoring.
  - Transfer of information between services.
- 4. Unified systems of case notes for all professional disciplines should be developed.
- 5. All patients with a history of violence in the context of mental illness should receive the highest level of care under the CPA.
- 6. Information on previous convictions for violent offences should be readily available to mental health services on request.
- 7. Risk-related information, e.g. rates of co-morbidity and staff training, should be collected and used in determining resources and monitoring performance.

#### Treatments and non-compliance

- 8. Modern drug treatments such as "atypical" anti-psychotic drugs and newer antidepressants should be offered to all patients with severe mental illness who are non-compliant with treatment because of side-effects.
- 9. Family and psychological interventions should be available to all high-risk patients with severe mental illness.
- 10. Trusts should have a written policy on non-compliance, based on these recommendations, which is made known to staff, patients and families.

#### **Disengaged patients**

11. In all patients with severe mental illness who have a history of disengagement from services, a comprehensive social and clinical care plan should be devised which includes satisfactory housing and occupational activities.

- 12. Services should have the capacity for assertive outreach in response to loss of contact with patients with severe mental illness, including those who are homeless.
- 13. These recommendations should be part of a written policy on disengagement which should be made known to staff, patients and families.

#### **Co-morbidity**

- 14. Services should make provision for patients with severe mental illness and alcohol or drug misuse as part of mainstream mental health services.
- 15. Training of staff in general psychiatry services should include the management of alcohol and drug misuse.

#### **Families**

16. "Points of access" to mental health teams should be provided for families who are concerned about a patient's risk.

#### **In-patient suicides**

- 17. All services should review the physical structure of wards to identify(1) any obstructions to the observation of high-risk patients and(2) structures which could be used in suicide by hanging. Wards in which these cannot be removed should not be used for the admission of acutely ill patients.
- 18. Alternatives to intermediate level observations should be developed for patients at risk.
- 19. Services should increase and monitor the observation of patients in the evening and at night.
- 20. Risk assessment should always be carried out prior to granting leave in patients who are recovering from illness.

#### Post-discharge suicides

21. There should be follow-up within 48 hours for all patients who have been at high risk and who are discharged from in-patient care, and follow-up within one week for all discharges, including those who discharge themselves.

- 22. Health authorities and trusts should make provision to accommodate all acutely ill patients in local catchment area services, ending transfers to inpatient care in other districts.
- 23. Prior to discharge from in-patient care, in-patient and community teams should conduct a joint case review, including assessment of risk.
- 24. CPA documentation should include more intensive provisions for the first three months after discharge from in-patient care, and specific reference to the first post-discharge week.

#### Mental Health Act

25. Mental health legislation should allow the enforced treatment of high-risk patients with severe mental illness who become non-compliant with treatment or who show indications of increasing risk, even in the absence of clear signs of relapse.

#### Access to means of suicide

26. Patients at risk of suicide, including all patients with a recent history of self harm, who are treated with psychotropic drugs should receive modern, less toxic drugs and/or supplies lasting no more than 2 weeks.

#### Aftermath of suicide or homicide

- 27. Following a suicide or a homicide, mental health teams should hold a multi-disciplinary review of the case.
- 28. Following a suicide or homicide, information on what happened should be provided promptly and openly to families.

#### Personality disorder

29. Clear policies on the clinical management of personality disorder should be disseminated by the Department of Health.

#### Stigma

30. Information in this report should be used by the Royal College of Psychiatrists to inform the public on the risks posed by people with severe mental illness, both to themselves and others.

#### Culture of blame

31. The Department of Health should assess the purpose and value of local inquiries into serious untoward incidents, and consider changes to the current requirement for full-scale inquiries in all cases.

#### **Background and aims**

The National Confidential Inquiry into Suicide and Homicide by People with Mental Illness was established at the University of Manchester in 1996, having previously been based in London. It is funded by the Department of Health, the Scottish Office, the Welsh Office and the Department of Health and Social Services, Northern Ireland.<sup>†</sup> The Inquiry is conducted in association with the Royal College of Psychiatrists. Its main aims are:

- to collect detailed clinical data on people who die by suicide or commit homicide and who have been in contact with mental health services
- to make recommendations on clinical practice and policy that will reduce the risk of suicide and homicide by people under mental health care

The Inquiry is particularly interested in the circumstances of suicide and homicide in specific "priority groups" for whom recommendations are most needed. These are people who are known to be at higher risk or to have greater treatment needs, or who are likely to experience difficulty in maintaining contact with services. The priority groups are patients who:

- were in-patients at the time of the incident
- were discharged from in-patient care less than three months earlier
- were subject to the Care Programme Approach at a level requiring regular multidisciplinary review
- were not compliant with treatment
- had missed their final appointment with services
- were from an ethnic minority
- were homeless

#### **Overview of Inquiry method**

There are three stages to both the suicide and homicide components of the Inquiry. The first stage is the collection of a comprehensive national sample, irrespective of mental health history. The second stage is the identification of

<sup>&</sup>lt;sup>†</sup>Findings from Scotland and Northern Ireland will be presented in a future report.

individuals within the sample who have been in contact with mental health services. The third stage is the collection of clinical data about these individuals.

The Inquiry does not collect equivalent information on "controls", individuals who have been in contact with mental health services but who have not committed suicide or homicide. This means it cannot identify the causes of suicide or homicide by psychiatric patients or say with certainty how people who commit suicide or homicide differ from other patients. However, it does collect detailed information on the activities of clinical services prior to suicide and homicide and on patterns of events leading to these incidents. As a result it can say how often certain kinds of problems occur prior to suicide and link these to service responses. For example, the Inquiry can tell us how often patients lose contact with services before suicide or homicide, and what actions services take. It can also carry out comparisons within the sample of patients committing suicide (their number being much larger than the number committing homicide), highlighting the features of suicides in different settings, e.g. in-patient suicides versus suicides in the community. Some of these findings will reflect differences between patients in these settings in general, whether or not they commit suicide; others will show particular problems of providing safe care.

#### **Data collection processes**

#### Suicide

Information on people who die by suicide or who receive an open verdict at coroner's inquest is forwarded regularly to the Inquiry by the Directors of Public Health in the 105 health authority districts in England and Wales. This information is supplemented with data obtained from the Office for National Statistics (ONS). The majority of open verdicts are suicides and it is conventional to include some or all open verdicts in studies of suicide. In the Inquiry all open verdicts are included unless it is clear that suicide was not considered at inquest, e.g. in deaths in which a clear medical cause cannot be found but which were not self-inflicted. As a result the Inquiry suicide sample consists of suicides and probable suicides but all cases are referred to as suicides in this report.

The Inquiry next determines which suicides were in contact with mental health services in the year before death with the help of hospital and community trusts in each person's area of residence. This includes the trust in the person's health district and any other trusts to which patients in that district are frequently referred. When trust records show that contact occurred in the twelve months before suicide the person becomes an "Inquiry case" and the responsible consultant psychiatrist is contacted. An assessment of the accuracy of checks undertaken by trusts, carried out in sixteen trusts in the north west, showed

that 95% of eligible cases were identified. Most omissions arose because of minor inaccuracies in trust records or in personal information notified to the Inquiry, e.g. mis-spellings of names. As a result a checking protocol was developed and recommended to trusts.

The consultant is then sent a questionnaire and asked to complete it in consultation with other members of the mental health team. The questionnaire consists of sections covering the following:

- identification of priority groups (see above)
- demographic details
- clinical history
- details of suicide
- details of care in in-patient suicides
- details of care in community suicides
- details of final contact with services
- events leading to suicide
- respondents' views on prevention
- additional information

Individual reporting arrangements have been made for patients under the care of most regional and national units, including Regional Secure Units.

#### Homicide

People convicted of homicide - murder, manslaughter or infanticide - are notified to the Inquiry by the Home Office who routinely collect this information in the Homicide Index. Data collection then proceeds in two ways. Firstly, psychiatric reports and records of previous offences are sought on all homicides, whether or not they have ever had contact with mental health services. Psychiatric reports are usually prepared prior to a trial for homicide and may subsequently be retained in court files. We have sought reports from the following sources: courts, the Crown Prosecution Service, solicitors, prisons, secure units, Special Hospitals, individual psychiatrists and the Home Office itself. Lists of previous offences have been obtained from the Police National Computer and court files.

Secondly, the Inquiry proceeds as in the Suicide Inquiry, in that individuals who have been in contact with mental health services are identified with the help of trusts in the local district and in many cases several surrounding districts, and questionnaires are sent to the consultants whose teams provided care. However, there is no one year limit for contact with services, as there is in the Suicide Inquiry, and people who are known to have had contact with services at any time become Inquiry cases. Those with contact in the last year are an identifiable sub-group and information on them rather than on the whole sample is more suitable for some analyses.

The psychiatric reports provide information on psychiatric and social history, and mental state at the time of the offence. The questionnaires are similar to those used in cases of suicide but there are additional items on previous violence.

#### Survey of training and policies

The Inquiry has also carried out a survey of training and policies in trusts throughout England. The survey was conducted by postal questionnaire, information being provided by clinical directors of mental health services. The information on training concerned the availability of training for staff in the assessment and management of suicide risk and risk of violence, and in the use of the Mental Health Act. The information about policies was simply whether or not written policies existed for the following aspects of clinical practice: inpatient observation, responding to non-compliance, responding to nonattendance, responding to absconding from in-patient care, informal leave from in-patient care, communication of estimates of risk, and multi-disciplinary case review following suicide. When the existence of written policies was reported, these were requested by the Inquiry.

#### Findings in this report

The suicide findings in this report are based on notifications to the Inquiry during its first two years from April 1996. The sample is defined by date of notification to District Directors of Public Health rather than date of death and is a 24-month consecutive case series. The homicide findings are based on notifications from the Homicide Index during a period of approximately 18 months from April 1996, the shorter period reflecting the longer data collection process in the Homicide Inquiry. The sample is therefore defined by date of

conviction rather than date of homicide and is an 18-month consecutive case series. The findings are based on suicides and homicides by residents of England and Wales. Data collection in Scotland and Northern Ireland began in 1997 and findings will be presented in a future report.

The homicide sample, being based on convictions for murder, manslaughter or infanticide, excludes three groups that are important to understanding the relationship between mental disorder and homicide. These are people who commit suicide after the homicide (but before conviction), people who are unfit to plead and people who are found not guilty by reason of insanity. The Inquiry collects data on these groups and will present detailed findings in a future report.

The Inquiry is a research project and its findings will also be reported in a peerreviewed scientific journal. In this report, which is intended for a broad readership, the style of presentation is intended to balance the requirements of a scientific publication with those of a public document. Many of the main figures are presented in tables of "key variables" the composition of which is equivalent in all sections, and in a series of graphs. The text then comments on these main findings and presents additional specific figures. Indicators of statistical significance (p values) are quoted sparingly but tests of significance have been carried out on all suitable findings. Wherever differences between groups are referred to in the text, these are statistically significant. More detailed information, including p values, is included in the tables of key variables. In most analyses statistical significance has been set at 1%, i.e. there is a 1% probability that a reported difference between groups has arisen by chance. In the Homicide Inquiry and when comparisons in the Suicide Inquiry involve small groups, e.g. ethnic minorities or homeless people, the conventional figure of 5% has been adopted. When percentages are quoted, these refer to "valid cases", i.e. those for whom the relevant information was available. In other words, if an item of information was not known about a person, he/she was excluded from the analysis of that item in the sample. As a result, the denominator varies a little in any group of calculations.

The following list defines key terms as used in this report:

Alcohol/drug/substance misuse/dependence The term "drugs" includes heroin and other opiates, amphetamines, ecstasy, cocaine, crack cocaine, hallucinogens, cannabis, and (when used without prescription) benzodiazepines. When alcohol is included, the term "substance" is used. Misuse is an imprecise term referring to excessive consumption which could cause social, physical or legal problems. Dependence equals addiction, suggesting severe misuse.

**Cognitive therapy** A form of psychological treatment used mostly in depression but increasingly shown to be a useful component of treatment in schizophrenia.

**Co-morbidity** The simultaneous presence of two or more disorders (often refers to severe mental illness and substance misuse).

**Disengagement** Loss of contact with services.

#### **Drugs:**

**Psychotropic drugs** Any drugs used in the treatment of individuals with mental disorder.

**Anti-psychotic drugs** Drugs used to treat psychosis, particularly schizophrenia. **Atypical anti-psychotic drugs** Newer (and therefore more expensive) antipsychotic drugs which do not have some of the side-effects of older drugs, especially abnormal movements.

**Antidepressants** Drugs used to treat depression (and other disorders). Two main subgroups: (1) Tricyclic antidepressants, used for many years, cheap but can be more dangerous in overdose. (2) Selective serotonin reuptake inhibitors (SSRIs), newer and more expensive but generally have fewer side-effects and are safer in overdose.

#### **Homicide offences:**

**Homicides** Convictions for murder, manslaughter or infanticide. **Murder** Unlawful killing where the offender is of sound mind and discretion and had malice aforethought (i.e. intent to cause death or grievous bodily harm).

**Manslaughter** Homicide where there is an absence of intent to kill or there are mitigating factors such as immediate severe provocation, or there is an abnormality of mind of such severity that his/her responsibility was substantially impaired ("diminished responsibility").

**Infanticide** Killing by a mother of her own child under the age of 12 months.

**Inquiry case** A person on whom the Inquiry obtained questionnaire data. The Inquiry requested information on all persons in contact with mental health services in the year before suicide or at any time before homicide.

#### Mental health policies:

**Care Programme Approach (CPA)** Department of Health guidelines for the care of the most needy patients with mental illness - main elements are a key worker, a written care plan, and at the "higher level(s)", regular reviews by the multidisciplinary health team. Similar guidelines exist for Wales. In this report, CPA refers to both.

**Supervision Register** A list of individuals held by hospital trusts, consisting of patients who are known to be at risk of committing violence against themselves or other people as the result of mental illness.

**Supervised Discharge** Under the 1995 Mental Health (Patients in the Community) Act consultant psychiatrists may apply for powers of supervision of patients following discharge from hospital. A supervisor, typically a CPN acting as key worker, has the power to "take and convey" the patient to a place of treatment, but not to treat.

#### Mental illness/disorder:

**Mental illness** Clinically significant mental disorder other than "behavioural" disorders such as alcohol or drug misuse and personality disorder. Mainly refers to schizophrenia and affective disorders. When "severe" is added, this signifies that the illness is of a severity that would usually lead to contact with mental health services rather than primary care alone.

**Mental disorder** Any clinically significant mental or behavioural disorder, including alcohol or drug dependence (but not misuse) and personality disorder.

**(Non-)compliance** Refers to (non-)receipt of proposed treatment. Unsatisfactory terms because they carry the implication that the patient should always follow medical instruction. Being superseded by (non-)concordance as both a concept and an expression, but retained here because they are still in general use.

**ONS** Office for National Statistics.

**Patient-initiated discharge** Self-discharge or discharge as a result of patient's actions i.e. breach of patient contract or ward rules e.g. drinking, violence.

#### **Secure Units:**

**RSU** Regional Secure Units – medium secure units for individuals who are thought to pose special risks, particularly of violence to others.**Special Hospital** 3 units in England and Wales (Ashworth, Broadmoor, Rampton) which care for those who require high security.

**Suicides** Deaths which at coroner's inquest received a verdict of suicide or an open verdict, excluding open verdicts in which suicide was clearly not considered. Therefore includes suicides and probable suicides but excludes suicides receiving any other verdict such as misadventure.

#### General population suicides

The Inquiry was notified of 10,040 suicides and probable suicides during the two years from April 1996. This included 6,682 cases in which the coroner's verdict was suicide and 3,358 open verdicts or deaths from undetermined cause. The corresponding suicide rate is 9.7 per 100,000 people per year. This is equivalent to recent ONS suicide rates for England and Wales and suggests that notifications to the Inquiry omit few (if any) cases. For the remainder of this report these cases are referred to as suicides regardless of verdict at inquest.

Seventy-five per cent were male, giving a male to female ratio of 3:1 (fig. 1). The ratio of males to females was highest in the age groups 20-34 in which 82% were male. Three methods of suicide together accounted for 69% of suicides (fig. 2): self-poisoning (mainly overdoses), hanging and carbon monoxide poisoning (using car exhaust fumes). Methods differed between the sexes: in males the commonest methods were hanging, self-poisoning by overdose and self-poisoning with car exhaust fumes; in females, overdose was by far the commonest method, followed by hanging. Violent or "active" methods, i.e. those involving physical injury such as hanging, jumping from a height or in front of a moving vehicle, were used in 54% of deaths overall, including 58% of male deaths and 42% of female deaths.

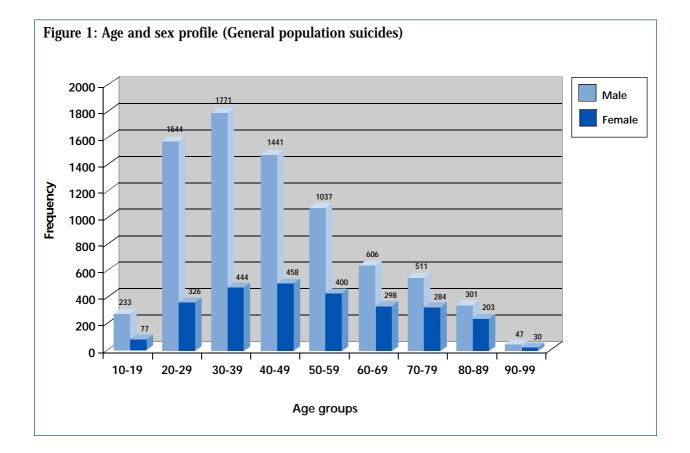
#### **Inquiry cases**

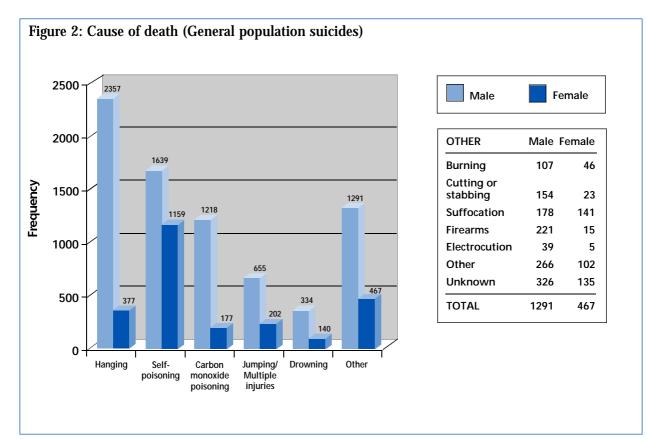
Of the total sample, 2,370 suicides, i.e. 24%, were known to be in contact with mental health services in the year before death. This figure varied widely between districts, from 14% to 36%. The variation between English health regions was small, 22-26%; in Wales the figure was 20%. When the English districts were classified according to a system of ONS categories based on social characteristics - the categories are urban, rural, prospering, maturer, mining/industrial and Inner London - the figures for each category again fell within a narrow range (23-25%) with the exception of the rate in Inner London, which was 20%. There was no relation between the district suicide rates for the general population and the proportion who had been under mental health services.

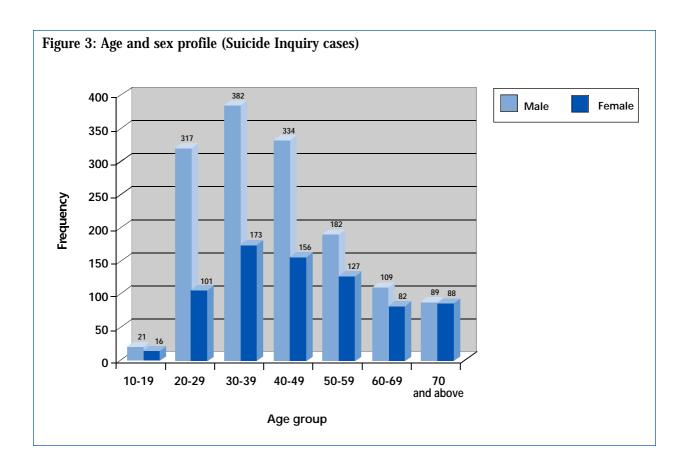
Questionnaires were returned on 2,177 cases, a response rate of 92%. These are referred to in this report as Inquiry cases.

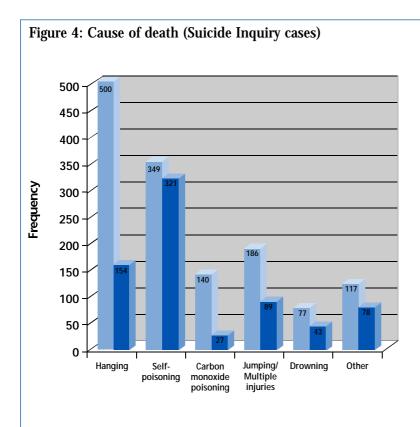
The Inquiry cases were predominantly male but there was a smaller male to female ratio, 2:1 (fig. 3), than in the general population suicides. The male to female ratio was generally higher in the younger age groups. Fifty per cent were aged forty-one or under. Thirteen per cent were over sixty-five. Self-poisoning by overdose and hanging accounted for 64% of deaths (fig. 4). Violent or "active" methods were more commonly used by both sexes than in general

24% of suicides had been in contact with mental health services in the year before death: this represents over 1,000 cases per year.









Male	F	emale
SELF POISONING	Male	Female
Psychotropic dru	ıg 123	119
Paracetamol	33	39
Opiate	25	13
Other analgesic	14	34
Other/Unknowr	n 154	116
TOTAL	349	321
DTHER	Male	Female
irearms	11	3
Cutting or stabbing	26	7
Suffocation	25	31
Burning	20	16
Electrocution	7	0
Other specified	28	21
TOTAL	117	78

population suicides, accounting for 62% of deaths in men and 48% in women, 58% overall.

Key social and clinical characteristics of Inquiry cases are presented in table 1.

#### **Social characteristics**

The social characteristics of the Inquiry suicides were similar to reported figures for people with mental illness in general. Social adversity and isolation were prominent. Most were not currently married (fig. 5). The majority were either unemployed or long-term sick (fig. 6). Forty-one per cent lived alone (fig. 7). Four per cent were the lone carers of children. Five per cent were from an ethnic minority (fig. 8).

Three per cent were homeless or of no fixed abode. Less than 1% were current prisoners.

Homeless people and ethnic minorities are considered in detail in later sections.

#### **Clinical characteristics**

Diagnosis A breakdown of primary diagnoses is given in fig. 9. Major affective disorders counted for nearly half the cases, the other principal diagnoses being schizophrenia, alcohol dependence and personality disorder. Fifty-one per cent also had at least one secondary diagnosis (fig. 10). The most common secondary diagnoses were depressive illness, personality disorder and alcohol or drug dependence. Individual diagnoses are considered further in a later section.

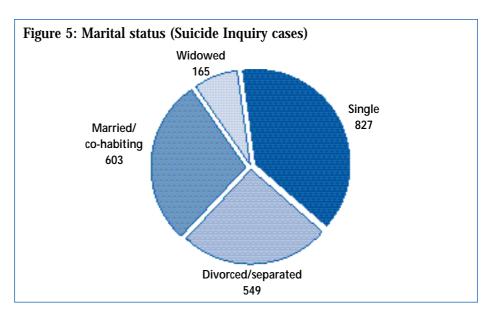
Behaviour There were substantial rates of alcohol and drug misuse. Seventeen per cent of the sample were misusing both alcohol and drugs. The majority had a history of self-harm but less than one fifth had a history of violence.

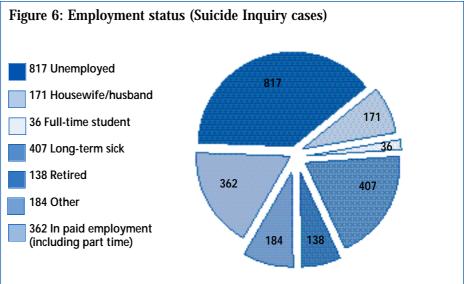
History of illness Duration of illness (fig. 11) and number of admissions (fig. 12) varied widely but two groups are worth highlighting because they show the contrasting features of different kinds of people at risk. These are suicides in the first year of illness and suicides following multiple hospital admissions.

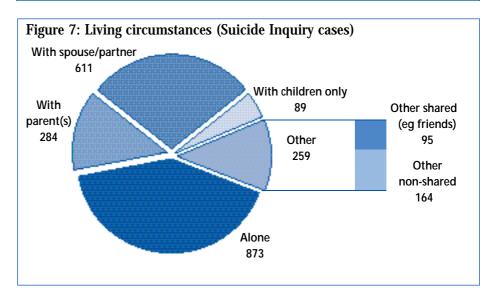
There was evidence of clustering of suicides in the year after onset of illness when 22% occurred. These early suicides were not associated with age, ethnicity or gender. They were strongly associated with depression, this being the primary diagnosis in 57%, while only 6% were suffering from schizophrenia. They also had lower rates of some indicators of risk, namely alcohol and drug misuse, violence and past self-harm, compared to other Inquiry cases. However, recent self-harm was more likely to be detected at final service contact. Final contact with services was also more likely to be recent, i.e. within seven days of death.

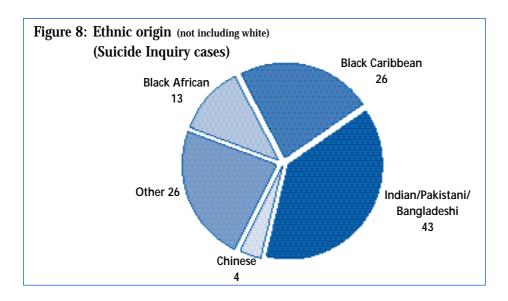
There were high rates of alcohol and drug misuse; 17% were misusing both alcohol and drugs.

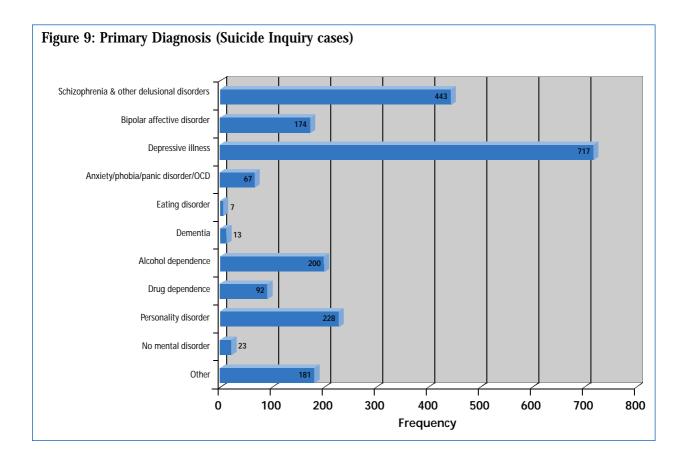
	Total sample (n			
	number	% (valid)		
Social and demographic variables				
Age: Median (Range)	41 (15-95)			
Male	1434	66%		
Ethnic minority	112	5%		
Not currently married	1541	72%		
Unemployed	817	39%		
Living alone	873	41%		
Clinical variables				
Primary diagnosis Schizophrenia & other delusional disorders Affective disorder (bipolar & depression) Alcohol & drug dependence Personality disorder	443 891 292 228	21% 42% 14% 11%		
Any secondary diagnosis	1095	51%		
Duration of history less than 12 months	466	22%		
More than 5 previous admissions	322	15%		
History of self harm	1347	63%		
History of violence	397	19%		
History of alcohol misuse	818	38%		
History of drug misuse	566	26%		
Non-compliance in month before suicide	488	26%		
Service contact				
Symptoms at last contact with services	1342	62%		
Last contact within 7 days of death	1069	50%		
Estimate of risk at final contact was low (or none)	1759	85%		
Regular multidisciplinary review under CPA	914	42%		
Out of contact (community patients only)	486	28%		
Suicide thought to be preventable	423	22%		

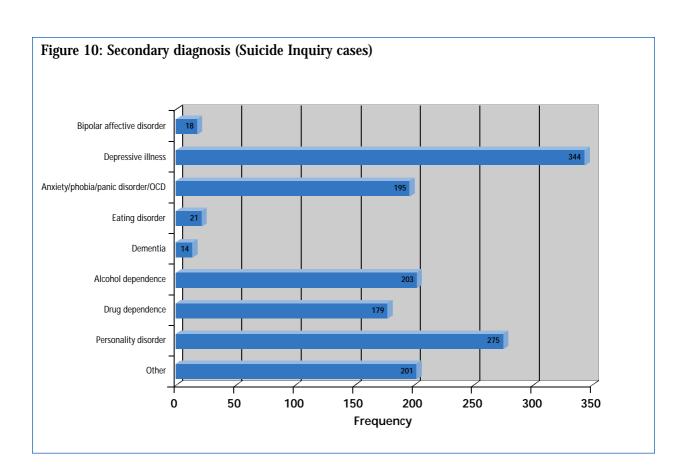


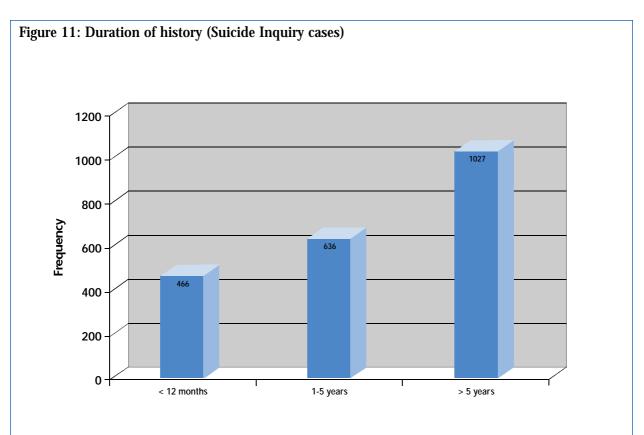


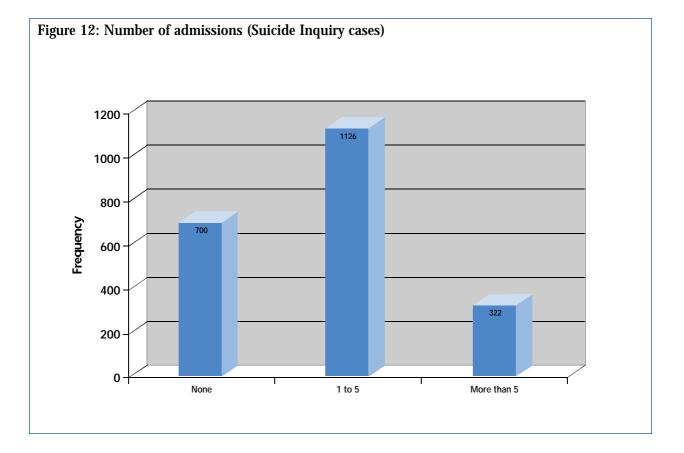












One third of cases had never had an in-patient admission, while 15% had had more than five previous admissions. This "multiple admission" group showed features of more severe illness and more frequent indicators of risk. Compared to other Inquiry cases, they had higher rates of schizophrenia and bipolar affective disorder, but also of personality disorder. They were more likely to have a history of non-compliance, self-harm, violence, and alcohol and drug misuse. They were more often single and living alone. They were more likely to be in-patients when the suicide occurred.

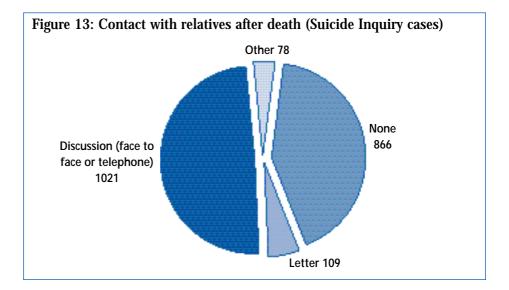
Duration of history and number of admissions were strongly associated. Only 8% of cases had been ill for more than five years without being admitted.

Combinations of risk indicators Combining key variables from different "domains" of risk such as previous suicidal behaviour, consumption of alcohol or drugs, and course of illness can delineate a group of patients in whom a substantial proportion of suicides occurs. For example, according to our data 45% of the suicides in a service will be in people who have a history of selfharm and either a previous admission or a history of substance misuse. Although clearly these factors encompass many non-suicides, they do indicate a group of patients who should be a priority for suicide prevention.

# **Circumstances of death**

The most common methods of suicide were hanging and self-poisoning (fig. 4). Those who died by self-poisoning were likely to use psychotropic drugs or analgesics other than opiates. Paracetamol overdose, a current cause for concern arising from studies of general population suicides and non-fatal self-harm, was the cause of death in only 4% of cases. Psychotropic drug overdose was more likely to be the cause of death in patients who had already carried out an episode of self-harm.

In 58% of cases, the mental health team had had contact with the family of the deceased person following the death, usually face-to-face or by telephone (fig. 13). Fifty-seven per cent held a multidisciplinary review of the case.

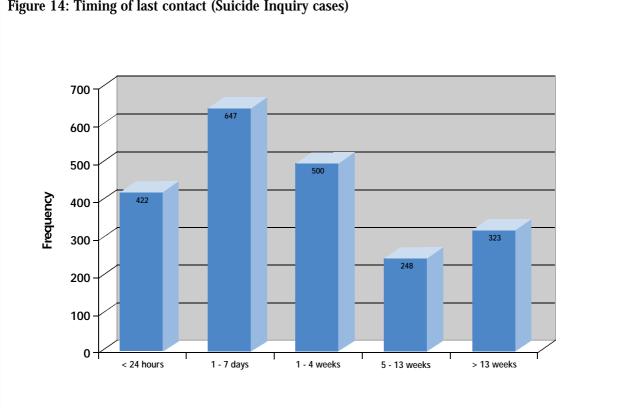


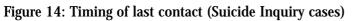
Half the suicides had been in contact with mental health services in the week before death.

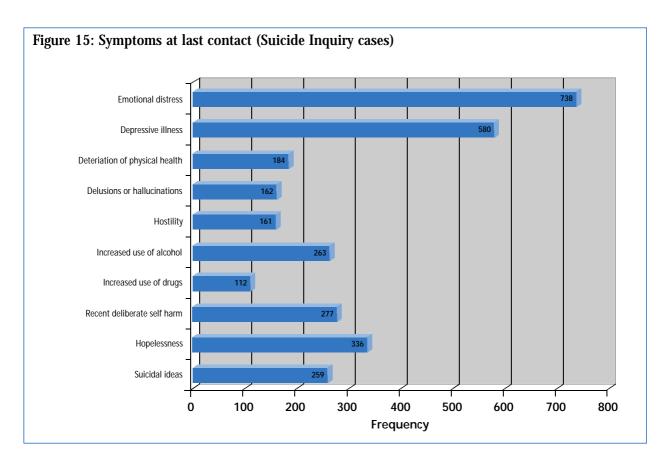
## Last contact

The figures in this section refer to all Inquiry cases. Figures for in-patients and community patients are given separately in later sections.

Nature of contact Contact with services frequently occurred in the period leading up to suicide (fig. 14). In almost half, last contact took place within a week of death, in 20% within 24 hours. In most cases (69%) the contact was routine rather than urgent. In nearly all (93%), this was a face-to-face contact, usually with a consultant or junior psychiatrist or mental health nurse. The key worker was present at the meeting in around half the cases (53%). Most (84%) staff present at final contact had received training in risk assessment. Around half these contacts took place at a hospital and almost a quarter in the patient's home.

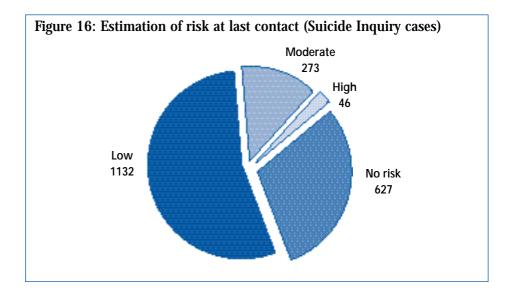






Mental state Assessment at the final contact revealed abnormalities of mental state or recent behaviour in 62% of cases (fig. 15). Most commonly this was emotional distress or depressive illness. Hopelessness and suicidal ideas, important predictors of suicide, were reported in only a minority. A deterioration in physical health was associated with older age and was noted in 20% of suicides over 65.

Estimates of risk Immediate risk of suicide was estimated to be low or absent in 85%; high risk was identified in only 2% (fig. 16). There was a strong association between timing of last contact before suicide and estimated risk: the more recent the contact, the higher the perceived risk. Respondents generally reported using a range of risk factors to assess risk, i.e. demographic and clinical risk factors, history of self-harm, current mental state and suicidal ideas or actions. The most important factor was likely to be current mental state (44%). However, this was found to be normal in over a third of cases. When risk at final contact was judged to be moderate or high, this was usually discussed with other members of the mental health team, though in 14% of cases no direct communication took place, staff usually relying on entries in casenotes to pass on information.



Clinical management In 81% of final contacts the care plan was unchanged, generally because the patient was judged to be well. Similarly, the Mental Health Act was used in few cases (3%, excluding those already detained under the Act), usually because it was not thought to be indicated clinically. In 6% of final contacts the patient made a treatment request that could not be complied with, the most common being for hospital admission.

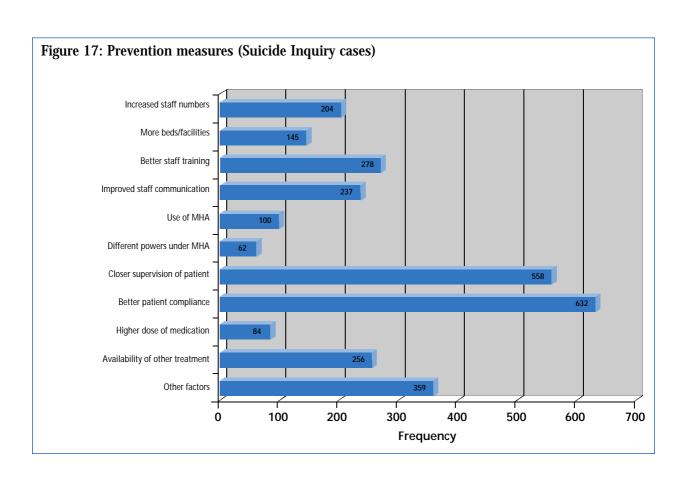
In 10% the care plan was not altered because the patient's problem, i.e. the complaint for which they were currently seeking help, was thought to be the result of alcohol, drugs or personality rather than illness. Even so, this group was more likely to be found to have symptoms of illness at the final contact and immediate risk was estimated to be higher, compared to other Inquiry cases. These patients were also characterised by higher rates of risk indicators such as non-compliance, previous self-harm and violence and they were more likely to be out of contact with services at the time of suicide. One reason for examining this group specifically was to find out if the assumption that a patient's problem was caused by substance misuse or personality disorder was more common with ethnic minority patients; however, there was no association with ethnicity.

### **Preventability**

Mental health teams regarded 22% of the suicides as preventable but in around twothirds they believed that more could have been done to reduce risk. In 423 cases (22%), the respondent believed that the suicide could have been prevented. Because of the common view in clinical practice that many suicides are not preventable, the features of those perceived as preventable were studied. The most striking finding was how few differences were found in the main social and clinical variables. However, suicides perceived as preventable were more likely to be suffering from affective disorder and less likely to be alcohol dependent or personality disordered. They were more likely to have been inpatients at the time of death but, whether they were in hospital or in the community, they were more likely to have detectable symptoms at final contact and more often thought to be at moderate or high risk at final contact.

Fig. 17 shows what, according to respondents, could have made the suicide less likely. The most frequent answers were closer supervision and better compliance with treatment. In 32% the mental health teams could not suggest anything that would have made suicide less likely. Putting these figures together, the views of staff were that one fifth of suicides were clearly preventable but in two-thirds risk could have been reduced.

One notable finding shown by fig. 17 is how few suicides, in the opinion of mental health teams, would have been made less likely by different powers under the Mental Health Act. The total figure was 62, around 3% of the suicide sample. A review of the Mental Health Act is currently taking place, and is likely to assess the need for compulsory treatment in the community for some patients. One way of estimating the benefit of this is to calculate the number of people with schizophrenia or major affective disorder who were last admitted under section 2 or 3 of the current Act (as an example of a high-risk group to whom a community treatment order could apply) and who were either non-compliant with drug treatment in the month before suicide or did not attend their final appointment before suicide. The overall figure for this



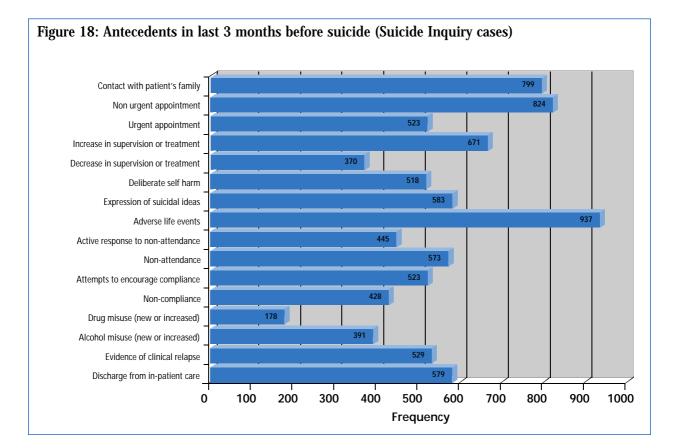
combination of questionnaire items in the Inquiry database is 65. This is similar to the figure of 62 based on respondents' opinions but the overlap between these groups is small, only 12 cases. These 65 cases provide an indication of the suicide prevention that a community treatment order could achieve, i.e. 32 cases per year, around 3% of Inquiry cases. Clearly this figure would increase if a broader high-risk group were targeted by the new Act.

# Antecedents of suicide

Respondents were asked to detail events in the three months leading up to suicide (fig. 18). Adverse life events, particularly problems in relationships, were common, occurring in almost half. Four per cent of suicides were preceded by a bereavement. Non-fatal self-harm or suicidal ideas occurred in 40%. Non-compliance with drug treatment, non-attendance, and increased alcohol or drug misuse were each reported in around a quarter of cases. Forty per cent had routine appointments in this three month period while a quarter were seen urgently. In 39% there was contact between services and the patient's family. In a third of cases, treatment or supervision were increased, but in 18% they were decreased.

Only around one quarter of patients were thought to have shown clear evidence of relapse of their illnesses in the three months before death. In these cases, our questionnaire was designed to detect "proxy indicators" of relapse such as increased alcohol or drug misuse or self-harm, i.e. ways in which patients may show themselves to be at increasing risk in the absence of obvious recurrence of illness. Almost half of those who did not have symptoms of relapse did show increased alcohol or drug misuse, self-harm, or non-compliance.

The first event in the sequence leading to suicide was most often a life event, which was then followed by self-harm or suicidal ideas. Non-compliance and alcohol or drug misuse tended to occur early in the sequence. Contact between clinical staff and relatives tended to occur late.



16% of cases (4% of all suicides) were psychiatric inpatients.

### **In-patient suicides**

Three hundred and fifty-eight in-patient suicides were reported in the two years of data collection, 16% of Inquiry cases and 4% of all suicides in the population. Their key characteristics are given in table 2.

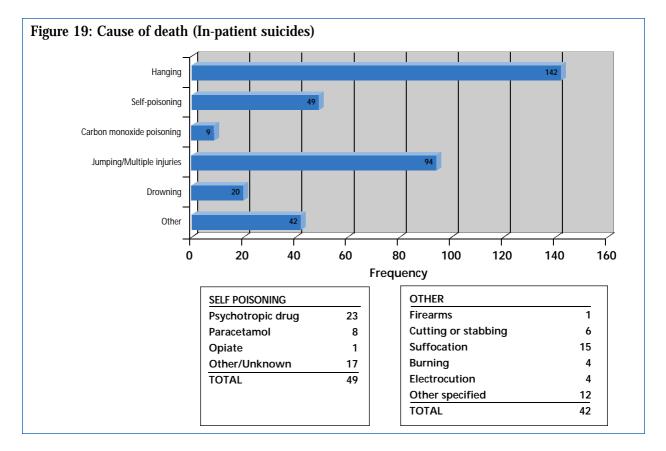
Clinical features As an in-patient sample, these cases showed evidence of more severe illness. For example, 34% had schizophrenia and they had higher rates of previous self-harm and violence. They also had a higher rate of previous

Table 2: In-patient suicides				
	Group sam	ple (n=358)	Total sampl	e (n=2177)
	number	% (valid)	number	% (valid)
Social and demographic variables				
Age: Median (Range)	39 (1	8-80)**	41 (1	5-95)
Male	234	65%	1434	66%
Ethnic minority	19	5%	112	5%
Not currently married	255	72%	1541	72%
Jnemployed	154	43%	817	39%
Living alone	130	38%	873	41%
Clinical variables				
Primary diagnosis				
Schizophrenia & other delusional disorders Affective disorder (bipolar & depression) Alcohol & drug dependence Personality disorder	121 162 9 30	34% ** 46% ** 3% ** 9% **	443 891 292 228	21% 42% 14% 11%
Any secondary diagnosis	194	55%	1095	51%
Duration of history less than 12 months	82	23%	466	22%
More than 5 previous admissions	106	30% **	322	15%
History of self harm	266	75% **	1347	63%
History of violence	94	27% **	397	19%
History of alcohol misuse	117	33%	818	38%
History of drug misuse	106	30%	566	26%
Non-compliance in month before suicide	93	27%	488	26%
Service contact				
Symptoms at last contact with services	209	58%	1342	62%
ast contact within 7 days of death	349	98% **	1069	50%
Estimate of risk at final contact was low (or none)	276	79% **	1759	85%
Regular multidisciplinary review under CPA	254	72% **	914	42%
Out of contact (community patients only)	-	-	486	28%
Suicide thought to be preventable	101	30% **	423	22%
** Compared to all other Inquiry cases: significance p<0.	01			

admission. In particular they had a high rate of multiple (> 5) previous admissions, and of those with multiple previous admissions who committed suicide, around one third did so while in-patients.

Method The rates of suicide methods were different from those of the Inquiry sample as a whole (fig. 19). By far the most common method was hanging, followed by jumping from a height or in front of a moving vehicle. Overdose was most commonly with psychotropic drugs. Of those suicides that occurred on the ward itself, 68% were by hanging, while 9% were by suffocation and 12% by self-poisoning. Jumping from a height or in front of a vehicle generally took place outside hospital grounds, usually distant from the hospital site - 44% of distant suicides among in-patients were by jumping.

Timing Twenty-three per cent of in-patient suicides occurred in the first week after admission; 40% during the period when discharge was being planned. There was no characteristic time of the day or week when in-patient suicides occurred and overall there was no evidence of clustering "out of hours". However, suicides that occurred on the ward itself followed a different pattern from those that occurred elsewhere, being more common in the evening and night. Although depressive symptoms are often worse in early morning, in-patient suicides did not cluster at this time, either in all in-patients or in those with affective disorder.



Location Around a third occurred on the ward itself, just over half took place at a distance from the hospital, while 13% occurred in or around the hospital premises. In suicides that occurred off the ward, the majority of patients had left with staff agreement.

Care The majority of subjects were under routine care at the time of the suicide, being voluntary patients (72%) and on an open ward (80%). Most were under routine observation (66%) but a substantial minority (18%) were under close or intermediate level observation and 3% were under high level (one-to-one) observation.

Almost all wards (92%) had a written observation policy at the time. However, 24% reported problems observing patients because of ward design. Seven per cent reported problems observing the patients because of the needs of other disturbed patients. Twenty-five per cent reported nursing shortages at the time.

Most patients (78%) had been in contact with a staff member, usually a ward nurse, in the 24 hours before death. This was generally a routine contact and it was unusual for suicidal ideas to be detected (16%). As in the sample as a whole, the majority of patients (79%) were thought to be at low or no risk.

Preventability In-patient suicides were more likely to be seen as preventable (30%). Respondents most often (44%) suggested closer supervision as the factor that would have made suicide less likely. However, staff-related factors were also mentioned frequently, i.e. increased staff numbers (22%), better staff training (23%) and better staff communication (19%). Better patient compliance was mentioned by 21%.

Special observations The 76 suicides under non-routine levels of observation were generally similar to all in-patient suicides in their social and clinical characteristics although they were more likely to have a history of substance misuse. These suicides were more likely to occur in the first week of admission. Despite their observation status 46% had left the ward at the time of suicide, including 14% who had left with staff agreement. In 30% there were problems observing patients on the ward because of ward design or other disturbed patients. Suicides under special observation were more often seen as preventable (55%) than in-patient suicides in general and 57% of respondents thought risk would have been reduced by closer supervision. When these suicides occurred on the ward, they were usually by hanging (66%) while 5% were by self-poisoning and 7% by suffocation.

## Suicides in the community

In total, 1815 suicides (84%) occurred in patients living in the community. Their key characteristics are given in table 3.

In almost a quarter of inpatient suicides, there were difficulties in observing patients because of ward design.

Table 3: Suicides in community				
	Group sam	ple (n=1815)	Total sample	e (n=2177)
	number	% (valid)	number	% (valid)
Social and demographic variables				
Age: Median (Range)	42 (1	5-95)**	41 (1	5-95)
Male	1198	66%	1434	66%
Ethnic minority	93	5%	112	5%
Not currently married	1284	72%	1541	72%
Unemployed	663	38%	817	39%
Living alone	742	42%	873	41%
Clinical variables				
Primary diagnosis Schizophrenia & other delusional disorders Affective disorder (bipolar & depression) Alcohol & drug dependence Personality disorder	322 727 283 198	18% ** 41% ** 16% ** 11% **	443 891 292 228	21% 42% 14% 11%
Any secondary diagnosis	900	51%	1095	51%
Duration of history less than 12 months	384	22%	466	22%
More than 5 previous admissions	216	12% **	322	15%
History of self harm	1077	60% **	1347	63%
History of violence	303	17% **	397	19%
History of alcohol misuse	699	39%	818	38%
History of drug misuse	459	26%	566	26%
Non-compliance in month before suicide	395	26%	488	26%
Service contact				
Symptoms at last contact with services	1130	62%	1342	62%
Last contact within 7 days of death	720	40% **	1069	50%
Estimate of risk at final contact was low (or none)	1482	86% **	1759	85%
Regular multidisciplinary review under CPA	660	37% **	914	42%
Out of contact (community patients only)	486	28%	486	28%
Suicide thought to be preventable	322	20% **	423	22%
** Compared to all other Inquiry cases: significance p<0.	01			

Last admission Of these, 1275 (71%) had been admitted at some time and the figures in the next two paragraphs refer to suicides in the community by previously admitted patients. In 15% the last admission had been under the Mental Health Act. In 17% this had been a re-admission within three months of a previous discharge from in-patient care. In 23% the final admission had lasted less than seven days. In the majority (76%) discharge was planned but in the remainder discharge was initiated by the patient, usually by simple request (10%) or as self-discharge against medical advice (10%). In an additional 3% the patient was discharged because of a breach of ward rules e.g. self-harm on the ward.

Most (89%) were regarded as being at least moderately recovered at the time of discharge. In 91% a follow-up appointment had been arranged but in 24% suicide occurred before the appointment took place. Suicides who discharged themselves were over three times more likely to be clinically unchanged or worse at the time of discharge and twice as likely to have no follow-up arrangements.

28% of patients in the community who committed suicide were currently out of contact with services, usually following discharge at the patient's request or against medical advice.

Care arrangements Just over a third of suicides in the community were subject to multidisciplinary review under the CPA, although in 63% a key worker had been allocated. In 44% a date had been set for the next case review. Eighteen patients were under supervised discharge; thirty-two were on the Supervision Register (5 patients were on both).

Out of contact Twenty-eight per cent were currently out of contact with services, usually following "patient-initiated" discharge i.e. unplanned discharge following a patient's request or actions. In the majority of self-discharges, the consultant had been informed but this was not the case in 23%. In just over one third, no further action had been taken; when further action was taken, this was usually to offer an appointment by letter rather than a home visit. In 6% there had been a request (from the patient, his/her family or his/her GP) for further contact which had not taken place. The community patients who were out of contact included 8 on the Supervision Register or under supervised discharge.

Treatments Most patients were receiving some form of pharmacotherapy but less than half (42%) were regarded as receiving any form of psychological intervention, including psychological support. Fourteen per cent were taking benzodiazepines as anxiolytics despite a diagnosis of major psychiatric disorder in almost half. Eight per cent had complained of distressing drug side-effects, usually related to oral or injectable antipsychotic drugs. Twenty-six per cent were not compliant with their treatment plan in the previous month, the main reason - in the view of the mental health team - being lack of insight into illness. Non-compliance is discussed further in a later section. In the three months before suicide, decreases in drug dosage were reported in 6%, decreases in supervision in 7%. Post-discharge suicides were at a peak in the first week after leaving hospital; within the first week, the highest number occurred on the day after discharge.

41% of postdischarge suicides occurred before the first followup appointment.

## Suicides within three months of hospital discharge

There were 519 suicides within three months of discharge from in-patient care, 24% of the Inquiry sample. Their key characteristics are given in table 4.

Post-discharge suicides were at a peak in the first week after leaving hospital; the more recent the discharge, the higher the number of deaths (fig. 20). Within the first week, the highest number of suicides was on the day after discharge (fig. 21).

Clinical and social features Overall post-discharge suicides were similar to the Inquiry sample as a whole, both clinically and demographically. For example the distribution of diagnoses, rates of secondary diagnoses, previous self-harm and violence, and living circumstances were not different. This included the fact that 2% were homeless, though they had only recently left hospital. Similarly, their suicide methods followed the pattern of the whole sample. However, compared to other community suicides they had shorter histories of illness, being more likely to have been ill for less than a year (28%).

Care arrangements The main differences from all community suicides lay in the nature of their care. Their last admissions were more than twice as likely to have lasted less than seven days, to have followed a previous admission within three months and to have ended in patient-initiated discharge. The timing of suicides followed the same pattern (see fig. 20, 21) when self-discharges were excluded from the analysis. Most (92%) had a follow-up appointment arranged on discharge but in 41% suicide took place before this first follow-up. Non-compliance with drug treatment was common (29%) but not more than in all community suicides.

Contact with services The post-discharge suicides were more likely than other community suicides to have been in contact with services in the week before death. At final contact they were less likely to report symptoms of illness. Estimates of risk at final contact followed the pattern of the sample as a whole. These suicides were not seen as more or less preventable.

The 67 suicides that occurred within the first week after discharge from hospital were generally similar to post-discharge suicides as a whole. Compared to all community suicides, they had high rates of short final admissions and patient-initiated discharge. Most (88%) died before their first follow-up appointment.

## **Care Programme Approach**

Nine hundred and fourteen suicides (42% of Inquiry sample) were subject to the Care Programme Approach at a level requiring multidisciplinary review. The key characteristics of these CPA suicides are shown in table 5.

	Group sample (n=519)		Total sample (n=21	
	number	% (valid)	number	% (valid)
Social and demographic variables				
Age: Median (Range)	40 (1	6-95)	41 (	15-95)
Male	345	67%	1434	66%
Ethnic minority	30	6%	112	5%
Not currently married	380	74%	1541	72%
Unemployed	206	40%	817	39%
Living alone	207	40%	873	41%
Clinical variables				
Primary diagnosis Schizophrenia & other delusional disorders Affective disorder (bipolar & depression) Alcohol & drug dependence Personality disorder	98 219 73 60	19% 42% 14% 12%	443 891 292 228	21% 42% 14% 11%
Any secondary diagnosis	264	52%	1095	51%
Duration of history less than 12 months	142	28% **	466	22%
More than 5 previous admissions	80	16%	322	15%
History of self harm	345	67%	1347	63%
History of violence	95	19%	397	19%
History of alcohol misuse	206	40%	818	38%
History of drug misuse	138	27%	566	26%
Non-compliance in month before suicide	135	29%	488	26%
Service contact				
Symptoms at last contact with services	299	58%	1342	62%
Last contact within 7 days of death	296	58% **	1069	50%
Estimate of risk at final contact was low (or none)	418	84%	1759	85%
Regular multidisciplinary review under CPA	281	55% **	914	42%
Out of contact (community patients only)	96	19% **	486	28%
Suicide thought to be preventable	105	22%	423	22%
** Compared to all other Inquiry cases: significance p<0.	01			

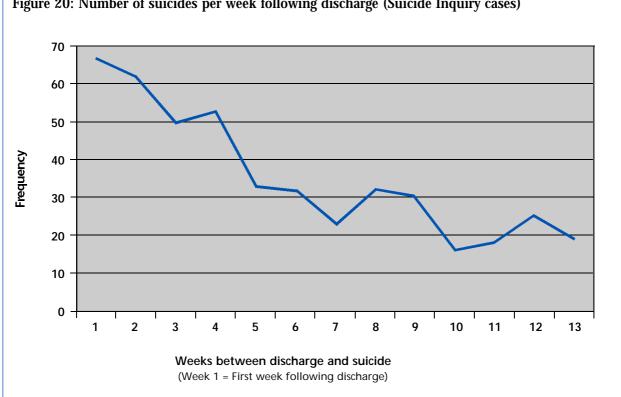


Figure 20: Number of suicides per week following discharge (Suicide Inquiry cases)

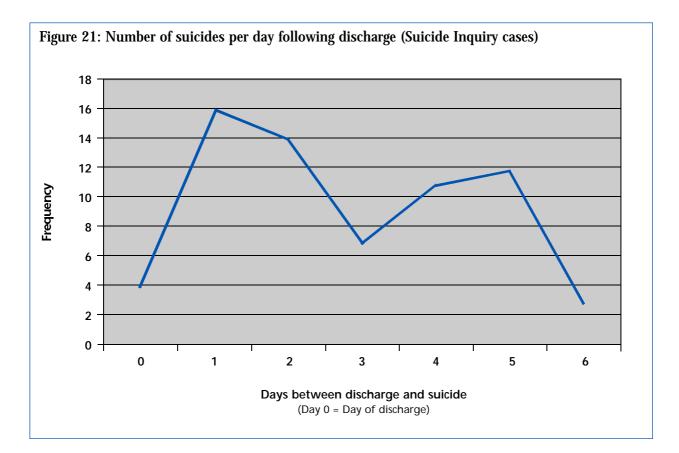


Table 5: Suicides in patients subject to regular multi-disciplinary review under CPA								
	Group sam	ple (n=914)	Total sampl	e (n=2177)				
	number	% (valid)	number	% (valid)				
Social and demographic variables								
Age: Median (Range)	41 (1	5-94)	41 (	15-95)				
Male	593	65%	1434	66%				
Ethnic minority	68	7% **	112	5%				
Not currently married	672	74%	1541	72%				
Unemployed	343	38%	817	39%				
Living alone	359	40%	873	41%				
Clinical variables								
Primary diagnosis Schizophrenia & other delusional disorders Affective disorder (bipolar & depression) Alcohol & drug dependence Personality disorder	318 382 50 84	35% ** 42% ** 5% ** 9% **	443 891 292 228	21% 42% 14% 11%				
Any secondary diagnosis	494	55% **	1095	51%				
Duration of history less than 12 months	158	17% **	466	22%				
More than 5 previous admissions	222	25% **	322	15%				
History of self harm	612	68% **	1347	63%				
History of violence	193	21% **	397	19%				
History of alcohol misuse	293	32% **	818	38%				
History of drug misuse	260	29%	566	26%				
Non-compliance in month before suicide	274	32% **	488	26%				
Service contact								
Symptoms at last contact with services	521	57% **	1342	62%				
Last contact within 7 days of death	626	70% **	1069	50%				
Estimate of risk at final contact was low (or none)	723	81% **	1759	85%				
Regular multidisciplinary review under CPA	914	100%	914	42%				
Out of contact (community patients only)	73	11% **	486	28%				
Suicide thought to be preventable	185	22%	423	22%				
** Compared to all other Inquiry cases: significance p<0.	.01							

Social and clinical features The social characteristics of these cases were similar to those of the Inquiry sample as a whole. Their clinical characteristics indicated more severe mental illness and in general reflected the kind of patients who are more likely to require the closer supervision of the CPA. CPA suicides were more likely to be suffering from schizophrenia (35%) and less likely to have a primary diagnosis of alcohol or drug misuse (5%). The majority had a secondary diagnosis. In general they had been ill for longer and had experienced more admissions. They had a higher rate of self-harm.

Method Suicide methods in the CPA suicides also indicated more severe illness. Compared to the whole sample, they were more likely to commit suicide by jumping from a height (10%) or in front of a vehicle (8%), and less likely to die by self-poisoning (26%) or car exhaust asphyxiation (6%). The most common method of suicide was again hanging (32%).

Care arrangements Twenty-eight per cent of CPA suicides were in-patients at the time of suicide. Thirty-one per cent had been discharged from in-patient care in the previous three months.

Of those CPA suicides who died in the community, 88% had been admitted at some time. Eighteen per cent had last been admitted under the Mental Health Act. The provisions of the CPA had been implemented in most, though not all, cases. At the time of discharge 94% had been allocated a key worker and in 77% a date had been set for next review. Two per cent were under supervised discharge, 5% were on the Supervision Register. A follow-up appointment had been arranged in 90%. By the time of suicide 11% were out of contact with services, less than in the whole sample.

However, despite the CPA, they had a higher rate of non-compliance with drug treatment in the month before death in comparison to the whole sample. The main reason for non-compliance was thought to be lack of insight into illness. Twelve per cent complained of distressing side-effects.

Final contact The CPA suicides were more likely to have been seen by services in the week before death. Thirty-one per cent were seen within 24 hours of death. The key worker was present at final contact in 63%. Estimates of risk at final contact were similar to those in the total sample. CPA suicides were not seen as more or less preventable.

#### Non-compliance

Patients who were known to be non-compliant with drug treatment in the month before suicide were examined separately. This was the main Inquiry definition of non-compliance, although this report also includes reference to non-compliance over three months, e.g. in considering the antecedents of

In most suicides by patients under the Care Programme Approach, the main provisions of the CPA were in place. 26% of suicides were known to be noncompliant with drug treatments in the month before death; 30% of these had also missed their final appointment with services.

The disengaged suicides showed a general pattern of weak ties to society as a whole (i.e. high rates of unemployment and living alone) as well as to mental health services. suicide. There were 488 cases of non-compliance by this main definition, 26% of the total sample. Their key characteristics are shown in table 6. By the broader definition the figure was 34%.

There was clear overlap between this group, those subject to the CPA, and those who were not engaged with services at the time of suicide. Among the non-compliant suicides, 56% were subject to the CPA and 30% had missed their final appointment with services.

The non-compliant cases were broadly similar to the total sample on social variables, although they were more likely to be single. They were also similar on many clinical variables, though they had a higher rate of schizophrenia, more previous admissions despite similar illness duration and higher rates of drug misuse but not alcohol misuse. They were more likely to commit suicide by jumping from a height or before a vehicle.

Non-compliant suicides had high rates (15%) of distressing side-effects of medication, most often related to oral anti-psychotic drugs, although the most common reason for non-compliance was thought by staff to be lack of insight.

The timing of final contact with services was similar to that in the total sample, but there was more evidence of mental state and behavioural abnormalities at that time. More patients were thought to be at moderate or high suicide risk, though the majority of patients were again thought to be at low or no immediate risk. Similarly, the care plan was more likely to be altered at this contact when patients were non-compliant but in most cases was not changed.

Better compliance was thought to be the main way in which suicide risk could have been reduced. Nine per cent thought that new legal powers would have made suicide less likely.

## Lack of engagement

In the Inquiry the indicator of lack of engagement was failed final contact before suicide. This was a feature of 505 cases, 24% of the sample. Their key characteristics are given in table 7.

Although there was overlap with the non-compliant suicides, the disengaged group had distinct characteristics indicating a general pattern of weak ties to society as a whole. They had high rates of being unmarried, unemployed and living alone. Their clinical histories were similar but they were more likely to have a primary diagnosis of alcohol or drug dependence, though the most common diagnoses remained affective disorder and schizophrenia. They had substantially higher rates of both alcohol and drug misuse.

Social and demographic variables       40 (16-89)       41 (15-95)         Male       324       66%       1434       66%         Ethnic minority       28       6%       112       5%         Not currently married       374       77%       **       1541       72%         Unemployed       222       46%       **       817       39%         Living alone       217       45%       873       41%         Clinical variables       202       42%       891       42%         Primary diagnosis       50       10%       222       14%         Alcohol & drug dependence       50       10%       228       11%         Alcohol & drug dependence       50       10%       228       11%         Alcohol & drug dependence       50       10%       228       11%         Algo of history less than 12 months       100       21%       466       22%         More than 5 previous admissions       97       20%       322       15%         History of self harm       303       63%       1347       63%         More contact       15		Group sam	ple (n=488)	Total sample (n=217)		
Age: Median (Range)     40 (16-89)     41 (15-95)       Male     324     66%     1434     66%       Ethnic minority     28     6%     112     5%       Not currently married     374     77%     **     1541     72%       Unemployed     222     46%     **     817     39%       Living alone     217     45%     873     41%       Clinical variables     217     45%     873     41%       Primary diagnosis Schizophrenia & other delusional disorders Affective disorder (bipolar & depression)     202     42% 891     443     21% 42%       Affective disorder (bipolar & depression)     202     42% 891     891     42% 891       Any secondary diagnosis     269     56%     **     1095     51%       Duration of history less than 12 months     100     21%     466     22%       More than 5 previous admissions     97     20%     **     322     15%       History of self harm     303     63%     1347     63%       History of drug misuse     150     31%     **     566     26%		number	% (valid)	number	% (valid)	
Male       324       66%       1434       66%         Ethnic minority       28       6%       112       5%         Not currently married       374       77% **       1541       72%         Unemployed       222       46% **       817       39%         Living alone       217       45%       873       41%         Clinical variables       Primary diagnosis       28       443       21%         Schizophrenia & other delusional disorders       135       28%       443       21%         Affective disorder (bipolar & depression)       202       10%       292       14%         Personality disorder       50       10%       228       11%         Any secondary diagnosis       269       56% **       1095       51%         Duration of history less than 12 months       100       21%       466       22%         Mistory of self harm       303       63%       1347       63%         History of alcohol misuse       189       39%       818       38%         History of drug misuse       150       31% **       566       26%	Social and demographic variables					
Ethnic minority286%1125%Not currently married37477% **154172%Unemployed22246% **81739%Living alone21745%87341%Clinical variablesPrimary diagnosisSchizophrenia & other delusional disorders20242%89142%Affective disorder (bipolar & depression)20224%89142%Alcohol & drug dependence5010%22214%Personality disorder5010%22811%Any secondary diagnosis26956% **109551%Duration of history less than 12 months10021%46622%More than 5 previous admissions9720%39719%History of self harm30363%134763%History of drug misuse15031% **56626%Non-compliance in month before suicide488100%48826%Service contact29060%106950%Last contact within 7 days of death29060%105955%Regular multidisciplinary review under CPA27456% **91442%Out of contact (community patients only)8622%48628%	Age: Median (Range)	40 (1	6-89)	41 (	(15-95)	
Not currently married       374       77% **       1541       72%         Unemployed       222       46% **       817       39%         Living alone       217       45%       873       41%         Clinical variables       217       45%       873       41%         Primary diagnosis       135       28%       443       21%         Affective disorder (bipolar & depression)       202       42%       891       42%         Alcohol & drug dependence       50       10%       292       14%         Personality disorder       50       10%       228       11%         Any secondary diagnosis       269       56% **       1095       51%         Duration of history less than 12 months       100       21%       466       22%         More than 5 previous admissions       97       20% **       322       15%         History of self harm       303       63%       1347       63%         History of drug misuse       189       39%       818       38%         History of drug misuse       150       31% **       566       26%	Male	324	66%	1434	66%	
Unemployed       222       46% **       817       39%         Living alone       217       45%       873       41%         Clinical variables       217       45%       873       41%         Primary diagnosis Schizophrenia & other delusional disorders Affective disorder (bipolar & depression) Alcohol & drug dependence       202       42%       891       42%         Personality disorder       50       10%       228       11%         Any secondary diagnosis       269       56% **       1095       51%         Duration of history less than 12 months       100       21%       466       22%         More than 5 previous admissions       97       20% **       322       15%         History of self harm       303       63%       1347       63%         History of alcohol misuse       189       39%       818       38%         History of drug misuse       150       31% **       566       26%         Service contact       2       50%       20%       20%       20%         Symptoms at last contact with services       328       67% **       1342       62%         List contact w	Ethnic minority	28	6%	112	5%	
Living alone21745%87341%Clinical variablesPrimary diagnosisSchizophrenia & other delusional disorders13528%44321%Affective disorder (bipolar & depression)20242%89142%Alcohol & drug dependence5010%29214%Personality disorder5010%22811%Any secondary diagnosis26956% **109551%Duration of history less than 12 months10021%46622%More than 5 previous admissions9720% **32215%History of self harm30363%134763%History of self harm30363%134763%History of drug misuse15031% **56626%Non-compliance in month before suicide488100%48826%Service contact29060%106950%Estimate of risk at final contact was low (or none)37880%175985%Regular multidisciplinary review under CPA27456% **91442%Out of contact (community patients only)8622%48628%	Not currently married	374	77% **	1541	72%	
Clinical variablesPrimary diagnosisSchizophrenia & other delusional disorders13528%44321%Affective disorder (bipolar & depression)20242%89142%Alcohol & drug dependence5010%22811%Personality disorder5010%22811%Alcohol & drug dependence5010%22811%Personality disorder5010%22811%Any secondary diagnosis26956%**109551%Duration of history less than 12 months10021%46622%More than 5 previous admissions9720%**32215%History of self harm30363%134763%History of violence9720%39719%History of alcohol misuse18939%81838%History of drug misuse15031%**56626%Non-compliance in month before suicide488100%48826%Symptoms at last contact with services32867%**134262%Last contact within 7 days of death29060%106950%Estimate of risk at final contact was low37880%175985%(or none)8622%48628%Regular multidisciplinary review under CPA27456%	Unemployed	222	46% **	817	39%	
Primary diagnosis Schizophrenia & other delusional disorders135 13528% 202443 42% 89121% 42% 	Living alone	217	45%	873	41%	
Schizophrenia & other delusional disorders13528%44321%Affective disorder (bipolar & depression)20242%89142%Alcohol & drug dependence5010%29214%Personality disorder5010%22811%Any secondary diagnosis26956% **109551%Duration of history less than 12 months10021%46622%More than 5 previous admissions9720% **32215%History of self har m30363%134763%History of violence9720%39719%History of drug misuse18939%81838%History of drug misuse15031% **56626%Non-compliance in month before suicide488100%48826%Service contact29060%106950%Estimate of risk at final contact was low (or none)37880%175985%Regular multidisciplinary review under CPA27456% **91442%Out of contact (community patients only)8622%48628%	Clinical variables					
Duration of history less than 12 months10021%46622%More than 5 previous admissions9720% **32215%History of self harm30363%134763%History of violence9720%39719%History of alcohol misuse18939%81838%History of drug misuse15031% **56626%Non-compliance in month before suicide488100%48826%Service contact29060%106950%Last contact within 7 days of death29060%106950%Estimate of risk at final contact was low (or none)37880%175985%Regular multidisciplinary review under CPA27456% **91442%Out of contact (community patients only)8622%48628%	Schizophrenia & other delusional disorders Affective disorder (bipolar & depression) Alcohol & drug dependence	202 50	42% 10%	891 292	42% 14%	
More than 5 previous admissions9720% **32215%History of self har m30363%134763%History of violence9720%39719%History of alcohol misuse18939%81838%History of drug misuse15031% **56626%Non-compliance in month before suicide488100%48826%Service contact32867% **134262%Last contact within 7 days of death29060%106950%Estimate of risk at final contact was low (or none)37880%175985%Regular multidisciplinary review under CPA27456% **91442%Out of contact (community patients only)8622%48628%	Any secondary diagnosis	269	56% **	1095	51%	
History of self harm30363%134763%History of violence9720%39719%History of alcohol misuse18939%81838%History of drug misuse15031% **56626%Non-compliance in month before suicide488100%48826%Service contact32867% **134262%Last contact within 7 days of death29060%106950%Estimate of risk at final contact was low (or none)37880%175985%Regular multidisciplinary review under CPA27456% **91442%Out of contact (community patients only)8622%48628%	Duration of history less than 12 months	100	21%	466	22%	
History of violence9720%39719%History of alcohol misuse18939%81838%History of drug misuse15031% **56626%Non-compliance in month before suicide488100%48826%Service contact5526%26%Symptoms at last contact with services32867% **134262%Last contact within 7 days of death29060%106950%Estimate of risk at final contact was low (or none)37880%175985%Regular multidisciplinary review under CPA27456% **91442%Out of contact (community patients only)8622%48628%	More than 5 previous admissions	97	20% **	322	15%	
History of alcohol misuse18939%81838%History of drug misuse15031% **56626%Non-compliance in month before suicide488100%48826%Service contact55526%Symptoms at last contact with services32867% **134262%Last contact within 7 days of death29060%106950%Estimate of risk at final contact was low (or none)37880%175985%Regular multidisciplinary review under CPA27456% **91442%Out of contact (community patients only)8622%48628%	History of self harm	303	63%	1347	63%	
History of drug misuse15031% **56626%Non-compliance in month before suicide488100%48826%Service contactSymptoms at last contact with services32867% **134262%Last contact within 7 days of death29060%106950%Estimate of risk at final contact was low (or none)37880%175985%Regular multidisciplinary review under CPA27456% **91442%Out of contact (community patients only)8622%48628%	History of violence	97	20%	397	19%	
Non-compliance in month before suicide488100%48826%Service contactSymptoms at last contact with services32867% **134262%Last contact within 7 days of death29060%106950%Estimate of risk at final contact was low (or none)37880%175985%Regular multidisciplinary review under CPA27456% **91442%Out of contact (community patients only)8622%48628%	History of alcohol misuse	189	39%	818	38%	
Service contactSymptoms at last contact with services32867% **134262%Last contact within 7 days of death29060%106950%Estimate of risk at final contact was low (or none)37880%175985%Regular multidisciplinary review under CPA27456% **91442%Out of contact (community patients only)8622%48628%	History of drug misuse	150	31% **	566	26%	
Symptoms at last contact with services32867% **134262%Last contact within 7 days of death29060%106950%Estimate of risk at final contact was low (or none)37880%175985%Regular multidisciplinary review under CPA27456% **91442%Out of contact (community patients only)8622%48628%	Non-compliance in month before suicide	488	100%	488	26%	
Last contact within 7 days of death29060%106950%Estimate of risk at final contact was low (or none)37880%175985%Regular multidisciplinary review under CPA27456% **91442%Out of contact (community patients only)8622%48628%	Service contact					
Estimate of risk at final contact was low 378 80% 1759 85% (or none) Regular multidisciplinary review under CPA 274 56% ** 914 42% Out of contact (community patients only) 86 22% 486 28%	Symptoms at last contact with services	328	67% **	1342	62%	
(or none) Regular multidisciplinary review under CPA 274 56% ** 914 42% Out of contact (community patients only) 86 22% 486 28%	Last contact within 7 days of death	290	60%	1069	50%	
Out of contact (community patients only) 86 22% 486 28%		378	80%	1759	85%	
	Regular multidisciplinary review under CPA	274	56% **	914	42%	
Suicide thought to be preventable 114 25% 423 22%	Out of contact (community patients only)	86	22%	486	28%	
	Suicide thought to be preventable	114	25%	423	22%	

	Group sample (n=505)		Total sample (n=217)		
	number	% (valid)	number	% (valid)	
Social and demographic variables					
Age: Median (Range)	39 (1	5-83)**	41 (	15-95)	
Male	350	69%	1434	66%	
Ethnic minority	27	5%	112	5%	
Not currently married	379	76% **	1541	72%	
Unemployed	241	49% **	817	39%	
Living alone	227	47% **	873	41%	
Clinical variables					
Primary diagnosis Schizophrenia & other delusional disorders Affective disorder (bipolar & depression) Alcohol & drug dependence Personality disorder	103 178 98 59	21% ** 36% ** 20% ** 12% **	443 891 292 228	21% 42% 14% 11%	
Any secondary diagnosis	294	<b>59%</b> **	1095	51%	
Duration of history less than 12 months	106	21%	466	22%	
More than 5 previous admissions	64	13%	322	15%	
History of self harm	301	60%	1347	63%	
History of violence	106	22%	397	19%	
History of alcohol misuse	237	48% **	818	38%	
History of drug misuse	173	35% **	566	26%	
Non-compliance in month before suicide	144	38% **	488	26%	
Service contact					
Symptoms at last contact with services	330	65%	1342	62%	
Last contact within 7 days of death	132	27% **	1069	50%	
Estimate of risk at final contact was low (or none)	416	87%	1759	85%	
Regular multidisciplinary review under CPA	174	35% **	914	42%	
Out of contact (community patients only)	214	45% **	486	28%	
Suicide thought to be preventable	107	25%	423	22%	
** Compared to all other Inquiry cases: significance p<0.	01				

When suicides in this group occurred in in-patients, (i.e. patients admitted after missing their most recent appointment), they were more likely to occur following absconding (46%), indicating a continuing pattern of non-engagement. Community suicides in this group were less likely to be subject to the CPA and less likely to be receiving non-drug treatments. At the time of suicide they were substantially more likely to be out of contact with services and similarly less likely to have been seen in the week before death. However, at the final contact with services they showed more evidence of increased alcohol and drug misuse.

### **Ethnic minorities**

The sample included 112 individuals from an ethnic minority, i.e. 5% of Inquiry cases. Their key characteristics are shown in table 8. The numbers in the most numerous ethnic categories were: Indian subcontinental 41, black Caribbean 26, black African 13.

Our main purpose in examining this group separately was to find out if suicides in ethnic minorities would have higher rates of disengagement from services and non-compliance with treatment. This would be important in developing more responsive and culturally appropriate services. However, there was no evidence of greater disengagement. For example, 16% were out of contact with services at the time of suicide compared to 28% of the total sample; 26% had missed their last appointment, a similar figure to that in the total sample. Twenty-six percent were in contact with services within 24 hours of suicide, compared to 20% of the total sample.

There was a higher rate of non-compliance in the three months before suicide when no fewer than 42% were non-compliant, though this was not recorded for the narrow definition of non-compliance, i.e. within the last month, for which the figure was 26%. Distressing side-effects were not more common and the reason for non-compliance was usually thought to be lack of insight. Seven per cent had made a request to services that had not been met, compared to 6% of the total sample.

The most striking difference in the ethnic minority suicides was the high rate of schizophrenia, 46% compared to 21% in the total sample, and some other findings reflect this high rate of severe illness. For example, they were subject to the CPA more often and more likely to commit suicide by violent methods. Their last admission was more likely to have been under the Mental Health Act.

However, suicides in ethnic minorities were not more likely to occur as inpatients or within three months of hospital discharge. Their rate of co-morbidity was similar and their rate of alcohol misuse was lower. Their rate of violence was higher while their rate of previous self-harm was lower.

	Group sam	ple (n=112)	Total samp	le (n=2177)
	number	% (valid)	number	% (valid)
Social and demographic variables				
Age: Median (Range)	37 (1	6-81)**	41 (	(15-95)
Male	75	67%	1434	66%
Ethnic minority	112	100%	112	5%
Not currently married	80	72%	1541	72%
Unemployed	48	43%	817	39%
Living alone	35	32% *	873	41%
Clinical variables				
Primary diagnosis Schizophrenia & other delusional disorders Affective disorder (bipolar & depression) Alcohol & drug dependence Personality disorder	50 37 10 4	46% ** 34% ** 9% ** 4% **	443 891 292 228	21% 42% 14% 11%
Any secondary diagnosis	56	50%	1095	51%
Duration of history less than 12 months	17	16%	466	22%
More than 5 previous admissions	22	20%	322	15%
History of self harm	58	52% *	1347	63%
History of violence	29	27% *	397	19%
History of alcohol misuse	22	20% **	818	38%
History of drug misuse	35	32%	566	26%
Non-compliance in month before suicide	28	26%	488	26%
Service contact				
Symptoms at last contact with services	56	50% *	1342	62%
Last contact within 7 days of death	66	60% *	1069	50%
Estimate of risk at final contact was low (or none)	98	91%	1759	85%
Regular multidisciplinary review under CPA	68	61% **	914	42%
Out of contact (community patients only)	15	16% *	486	28%
Suicide thought to be preventable	21	21%	423	22%
* Compared to all other Inquiry cases: significance p<0. ** Compared to all other Inquiry cases: significance p<0.	05 01			

3% of suicides were homeless.

### **Homeless people**

There were 53 suicides among homeless people, 3% of the Inquiry sample. Their key characteristics are shown in table 9.

The homeless suicides were mainly young, single, unemployed males. They had a different diagnostic profile from Inquiry cases as a whole, the most common primary diagnoses being schizophrenia (27%) and alcohol dependence (21%). In 41% the duration of history was more than five years and 20% had had more than five admissions. Compared to all Inquiry cases, they had high rates of alcohol and drug misuse and violence and at final contact with services increased alcohol use was more often noted.

The most common method of suicide was hanging (42%), followed by self-poisoning (19%).

A large proportion (45%) were in-patients at the time of suicide and 23% died within three months of hospital discharge. Consequently many (60%) of the suicides occurred within a week of contact with services but among the homeless community suicides the rate of loss of contact with services was high. Forty-six per cent were under the higher levels of the CPA.

# Diagnosis

Characteristics of the largest diagnostic groups, i.e. schizophrenia, affective disorders, alcohol dependence, drug dependence and personality disorder, were examined.

Schizophrenia There were 443 suicides in people with schizophrenia. Schizophrenic suicides were more likely to have been in-patients at the time of death. Most schizophrenic suicides (79%) had both been ill for over a year and admitted more than once. Schizophrenic suicides were more likely to have been seen by services in the 24 hours before death. In schizophrenic suicides in the community, the final admission was more likely to be a re-admission within three months of previous discharge and to have been under the Mental Health Act. Thirty-three per cent of schizophrenic suicides were non-compliant with drug treatment in the month before death. Seventeen per cent reported distressing drug side-effects but the main reason for non-compliance was thought to be lack of insight.

Affective disorders Depressive suicides were more likely to have a short illness history. Non-compliance with drug treatment occurred in 26% in the month before death; over a third (37%) of the non-compliant cases were receiving tricyclic antidepressants. Respondents viewed suicides in depression as the most preventable cases.

	Group sar	nple (n=53)	Total sample (n=2177		
	number	% (valid)	number	% (valid)	
Social and demographic variables					
Age: Median (Range)	33 (1	8-75)**	41 (	(15-95)	
Male	43	81% *	1434	66%	
Ethnic minority	2	4%	112	5%	
Not currently married	46	92% **	1541	72%	
Unemployed	35	66% **	817	39%	
Living alone	30	59% **	873	41%	
Clinical variables					
Primary diagnosis Schizophrenia & other delusional disorders Affective disorder (bipolar & depression) Alcohol & drug dependence Personality disorder	14 9 15 8	27% * 17% * 29% * 15% *	443 891 292 228	21% 42% 14% 11%	
Any secondary diagnosis	29	58%	1095	51%	
Duration of history less than 12 months	11	22%	466	22%	
More than 5 previous admissions	10	20%	322	15%	
History of self harm	38	75%	1347	63%	
History of violence	25	50% **	397	1 <b>9</b> %	
History of alcohol misuse	26	52% *	818	38%	
History of drug misuse	25	49% **	566	26%	
Non-compliance in month before suicide	15	32%	488	26%	
Service contact					
Symptoms at last contact with services	32	60%	1342	62%	
Last contact within 7 days of death	32	60%	1069	50%	
Estimate of risk at final contact was low (or none)	39	80%	1759	85%	
Regular multidisciplinary review under CPA	24	46%	914	42%	
Out of contact (community patients only)	19	68% **	486	28%	
Suicide thought to be preventable	13	28%	423	22%	
* Compared to all other Inquiry cases: significance p<0.0 ** Compared to all other Inquiry cases: significance p<0.0					

Substance dependence and personality disorder Suicides with alcohol or drug dependence or personality disorder had the most disrupted pattern of care. These three diagnoses were more likely to be out of contact with services at the time of death. Their final admissions before suicide in the community were more likely to be short; in personality disorder they were also more likely to be re-admissions within three months of previous discharge. Suicides with personality disorder had the highest rates of previous self-harm, violence and substance misuse (excluding those with substance dependence). Respondents viewed suicides in personality disorder as the least preventable. Contact with relatives after suicide occurred less often in alcohol or drug dependence and personality disorder.

### **Transfer of information**

In 45 cases we received two completed questionnaires when two independent services had been in recent contact with a patient. Usually these were services in different districts or different kinds of service, one general and one specialist e.g. for substance misuse, in the same district. This allowed us to compare what each service knew about risk factors for suicide, namely previous self-harm, alcohol misuse, drug misuse, non-compliance, and living alone. In this comparison we had to assume that clinicians use similar definitions for these risk factors.

Overall, when one service stated that one of these risk factors was present, it was recorded by the other in less than half the cases (44%).

# **HOMICIDE FINDINGS**

#### All homicides

Over an approximately 18 month period, the Inquiry was notified of 718 convictions for homicide from the Homicide Index (table 10).

Ninety per cent were male giving a male to female ratio of 9:1 (fig. 22); in the age group 10-19 the male to female ratio was highest at 25:1. Most were young, half being twenty-seven or younger.

Most victims were also young men (table 10; fig. 23). Twenty-five victims (4%) were aged under one. This was the only group in which there were similar numbers of male (14 cases) and female (11 cases) perpetrators. Around a third of perpetrators killed a family member or a current or former spouse/partner, just over a third killed an acquaintance and about a quarter killed a stranger (fig. 24). When women were the perpetrators, the victim was proportionately more likely to be their spouse/partner or their own child. When men were the perpetrators, the victim was more likely to be a stranger or acquaintance.

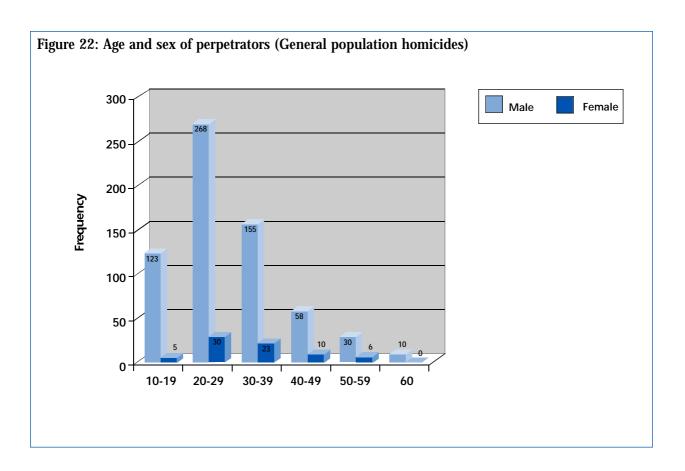
The commonest method of killing by both men and women was stabbing; homicides by men were more likely to be by blunt instrument, shooting, or hitting and kicking (fig. 25).

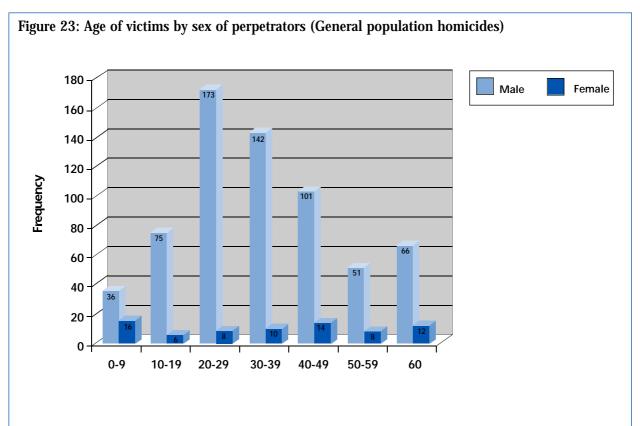
Ten per cent of perpetrators were found guilty of manslaughter on grounds of diminished responsibility, or infanticide. Six per cent were committed to psychiatric hospital; this outcome was more common in women.

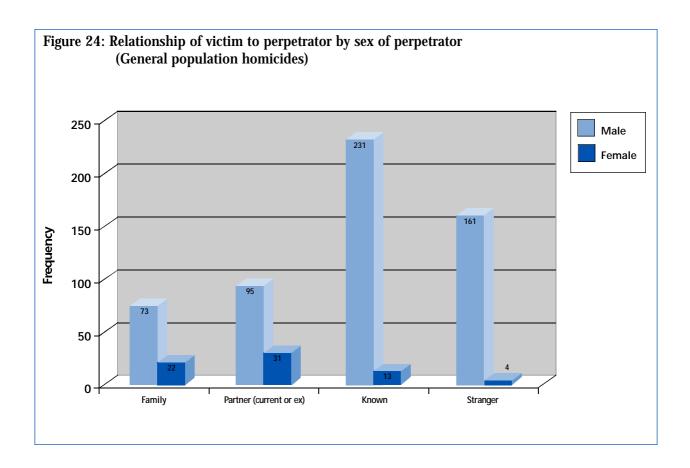
We obtained details of previous convictions (antecedents) in 696 cases (97%). Of these, 258 (37%) had a history of violence against the person and a further 69 (10%) had a history of threats of violence, possession of offensive weapon or sexual offences. An additional 38 (5%) had a history of previous criminal damage. A history of previous convictions was more common in men, 40% of men and 15% of women having a history of violence against the person.

We obtained 500 psychiatric reports prepared for the court, i.e. on 70% of the total sample. Table 11 shows that reports were more likely to be obtained when the perpetrator was found guilty of manslaughter on grounds of diminished responsibility and committed to hospital. This suggests that severe mental disorder is over-represented in the sample, presumably because psychiatric reports are more likely to be prepared and held in court files in those cases in which there is a psychiatric disorder. The figures in the rest of this section, which are based on cases with reports rather than all cases, need to be considered with this bias in mind.

	Ma	ale (n=644)	Fem	Female (n=74)		(n=718)
nu	mber	% (valid)	number	% (valid)	number	% (valid)
Age of perpetrator: Median (Range)	26 (	10-77)	31	(12-59)	27 (	10-77)
Age of victim: Median (Range)	33 (	0-90)	38 (	0-98)	33 (	0-98)
Male victim	476	74%	58	78%	534	74%
Victim was stranger	161	29%	4	6%	165	26% **
Sharp instrument used	243	38%	34	47%	277	39%
Final outcome Murder Manslaughter (diminished responsibility) Manslaughter (other including provocation, self defence) Infanticide	345 53 242 -	54% 8% 38% -	16 16 36 6	22% 22% 49% 8%	361 69 278 6	50% ** 10% ** 39% ** 0.8% **
Disposal Prison Hospital Order with or without Restriction Other	604 30 10	94% 5% 2%	48 16 10	65% 22% 14%	652 46 20	91% ** 6% ** 3% **







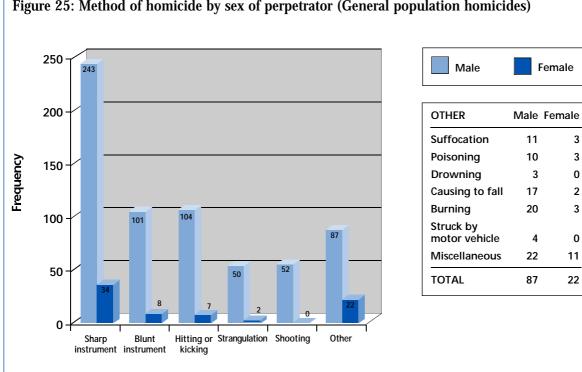


Figure 25: Method of homicide by sex of perpetrator (General population homicides)

	With Report (n=500)		Withou	Without Report (n=218)		Total (n=718)
nur	nber	% (valid)	number %	o (valid)	number	%(valid)
Age of perpetrator: Median (Range)	28	(13-77)	25 (1	0-61)	27	(10-77)**
Male perpetrator	437	87%	207	<b>9</b> 5%	644	90% **
Age of victim: Median (Range)	35	(0-89)	28 (0-	·98)	33 (	0-98)**
Male victim	358	72%	176	81%	534	74% **
Victim was stranger	99	22%	66	36%	165	26% **
Sharp instrument used	207	42%	70	33%	277	39%
Final outcome Murder Manslaughter (diminished responsibility) Manslaughter (other including provocation, self defence) Infanticide	255 69 170 5	51% 14% 34% 1%	106 0 108 1	49% 0% 50% 0.5%	361 69 278 6	50% ** 10% ** 39% ** 1% **
Disposal Prison Hospital Order with or without Restriction Other	442 45 13	88% 9% 3%	210 1 7	96% 0.5% 3%	652 46 20	91% ** 6% ** 3% **

The main social and clinical characteristics, taken from the psychiatric reports, are shown in table 12. Most were unmarried, over half were unemployed and a further 5% were long-term sick.

Just over a third had a history of alcohol misuse but in a larger proportion alcohol was thought to play some role in the offence. A similar number had a history of drug misuse but drugs were less likely to play a part in the offence. Cannabis (22%), benzodiazepines (6%), amphetamines (6%) and heroin (and other opiates) (6%) were the commonest drugs taken regularly in the year prior to the homicide.

In 44% of reports a diagnosis of mental disorder was specified, based on life histories. A breakdown of primary diagnoses is shown in table 12. The majority were alcohol or drug dependence or personality disorder, rather than schizophrenia or affective disorder. Twelve per cent also gave a secondary diagnosis, the commonest being alcohol or drug dependence and personality disorder. Although this is a large number of people with a history of mental disorder, most did not have conditions usually regarded as severe mental illness, and relatively few (22%) were under the care of mental health services at the time of the offence.

#### Homicides by people with mental illness at the time of the offence

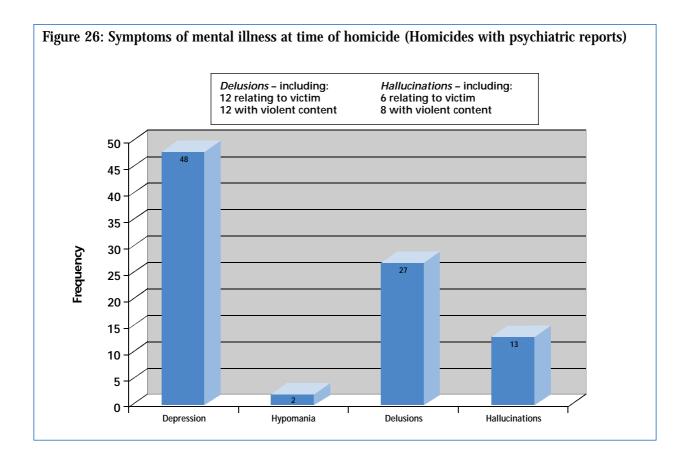
Seventy-one perpetrators (14%) were noted in the psychiatric reports to have had symptoms of mental illness at the time of the homicide. In this section these cases are referred to as the mentally ill group. Twenty-seven cases had delusions, hallucinations or both at the time of the offence, indicating psychotic illness (fig. 26); symptoms of depressive illness were present in 48 cases. In 52 cases, the mental state abnormalities were thought to play a major part in the offence and in 13 they were thought to play a minor part.

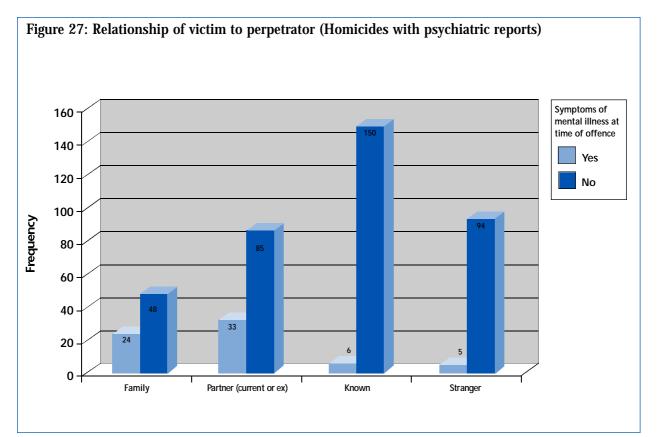
We wanted to ensure that all cases of depression were unequivocally of clinically significant illness and we therefore set a high threshold for accepting this diagnosis. In all cases we had the reports prepared for the court/Crown Prosecution Service and in a minority we also had reports prepared for the defence. We concluded that depression had been present at the time of the offence if the report writer made a definite diagnosis of depression based on the presence of a sustained mood disorder with biological features of depression. Where there was more than one report we reached this conclusion only if all reports reached this diagnosis.

The social characteristics of the mentally ill group were similar to those without symptoms (table 13). Their methods of homicide were similar. However, their victims were more likely to be a family member or spouse/partner (fig. 27).

14% of people convicted of homicide (for whom reports were available) had symptoms of mental illness at the time of the offence ("mentally ill homicides").

Table 12:       Social and clinical characteristics of homicides with psychiatric reports									
	Male	(n=437)	Female	(n=63)	Total	(n=500)			
	number	% (valid)	number	% (valid)	number%	o (valid)			
Social and demographic varia	ables								
Age: Median (Range)	28	(13-77)	31	(18-59)	28 (1	13-77)			
Ethnic minority	64	15%	7	11%	71	14%			
Not currently married	267	65%	28	46%	295	63%	* *		
Unemployed	224	55%	34	60%	258	56%			
Living alone	59	17%	3	5%	62	15%	*		
Homeless/no fixed abode	12	3%	3	5%	15	4%			
Clinical variables									
History of alcohol misuse	158	40%	22	37%	180	39%			
Alcohol thought to have contributed to the offence	184	52%	26	46%	210	51%			
History of drug misuse	144	36%	15	25%	159	35%			
Drugs thought to have contributed to offence	70	19%	4	7%	74	18%	*		
Primary diagnosis (lifetime) Schizophrenia Affective disorders Alcohol dependence Drug dependence Personality disorder Other	22 42 34 26 42 17	5% 10% 8% 6% 10% 4%	8 11 4 5 5 4	13% 18% 7% 8% 8% 7%	30 53 38 31 47 21	6% 11% 8% 6% 9% 4%	* * * * *		
Mental disorders in total (lifetime)	183	42%	37	60%	220	44%			
Symptoms of mental illness at time of homicide	54	12%	17	27%	71	14%	**		
Service contact									
Contact with psychiatric services Any contact (lifetime) Contact in last year * Comparison of males and females: sig	64 36	15% 8%	19 11	30% 18%	83 47	17% 9%	**		
** Comparison of males and females: si									





	Mental illness (n=71)		No mental illness (n=429)		Total (n=500)	
	number	% (valid)	number	% (valid)	number	% (valid)
Social and demographic variabl	es					
Age: Median (Range)	34 (19	-77)	27 (1	3-67)	28 (1	3-77)**
Ethnic minority	11	16%	60	14%	71	14%
Not currently married	40	57%	255	64%	295	63%
Unemployed	36	51%	222	57%	258	56%
Living alone	10	15%	52	16%	62	15%
Homeless/no fixed abode	0	0%	15	4%	15	4%
Clinical variables						
History of alcohol misuse	25	37%	155	40%	180	39%
Alcohol thought to have contributed the offence	21	30%	189	55%	210	51% **
History of drug misuse	15	22%	144	37%	159	35% *
Drugs thought to have contributed to the offence	5	7%	69	20%	74	18% *
Service contact						
Contact with psychiatric services Any contact (lifetime) Contact in last year	21 14	30% 20%	62 33	15% 8%	83 47	17% ** 9%
Offence variables						
Age of victim: Median (Range)	39 (0-	39 (0-87)		89)	35 (0	-89)
Male victim	30	42%	328	77%	358	72% **
Victim was stranger	5	7%	94	25%	99	22% **
Sharp instrument used	33	47%	174	41%	207	42%
Final outcome Murder Manslaughter	6 44	9% 62%	249 25	58% 6%	255 69	51% ** 14% **
(diminished responsibility) Manslaughter (other including	18	25%	152	35%	170	34% **
provocation, self defence) Infanticide	3	4%	2	1%	5	1% **
Disposal Prison Hospital Order with or	32 34	45% 48%	410 11	95% 3%	442 45	88% ** 9% **
without Restriction Other	5	7%	8	2%	13	3% **

 $^{\ast}$  Comparison of cases with and without mental illness: significance p<0.05  $^{\ast*}$  Comparison of cases with and without mental illness: significance p<0.01

They had a lower rate of previous convictions for violence against the person (17% versus 42%). They had a lower rate of drug misuse but the same rate of alcohol misuse. Alcohol and drugs were less likely to have played a part in the offence in the mentally ill group. As with those who had a lifetime history of mental disorder, few - only 14 (20%) - of the mentally ill group had been in contact with mental health services in the previous year.

#### Rates of mental disorder

There is no single definition of mental disorder and there are therefore several ways of estimating the rate of mental disorder in people convicted of homicide. The main estimates in this report are listed in table 14.

Table 14: Rates of mental disorder in people convicted of homicide		
	Frequency	% of homicides
Convicted of Section 2 manslaughter (diminished responsibility)	69	10% ª
Hospital Order	46	<b>6%</b> <sup>a</sup>
Mental disorder - (lifetime)	220	44% (31%) <sup>b</sup>
Schizophrenia - (lifetime)	30	6% (4%) <sup>b</sup>
Abnormal mental state at time of offence	71	14% (10%) <sup>b</sup>
Contact with mental health services - lifetime	102	14% <sup>a</sup>
Contact with mental health services within 12 months of the offence	58	8% <sup>a</sup>
<sup>a</sup> Percentage of all homicides (n=718)		
<sup>b</sup> Percentage of homicides with a psychiatric re Figure in bracket is the percentage of all hom		

One important statistic is the rate of perpetrators with symptoms of mental illness at the time of the offence (14%). Although there are no directly comparable estimates for a general population sample of predominantly young and unemployed men, this figure suggests that mental disorder is substantially more common in those convicted of homicide. However, the figure of 14% is likely to be an over-estimate because of the bias towards mental illness referred to above. If none of the cases on whom reports were unavailable had symptoms of mental disorder, a more accurate estimate would be in the region of 10%, a less striking figure though still high.

On the other hand, this definition of mental disorder is a restricted one which may exclude some forms of treatable illness. It also excludes those who committed homicide but who were not convicted because they were found unfit to plead, or not guilty by reason of insanity, or because they committed suicide. In the same period of approximately 18 months during which the homicide convictions in this report were notified to the Inquiry, the following were also notified from the Homicide Index: 5 cases found unfit to plead, 2 cases found not guilty by reason of insanity, and 49 homicides followed by suicide.

The relationship between definitions of mental disorder is also important. For example, in our total sample, there were 69 verdicts of manslaughter on grounds of diminished responsibility and 71 cases of mental illness at the time of the offence according to psychiatric reports. However the overlap of these two groups was only 44 cases, i.e. around 60%. Similarly, only a minority of those with mental illness at the time of the offence were under mental health services, just as in the community as a whole most mental disorder is not under – and does not need – mental health services.

Those with a history of contact with mental health services are described in the next section.

#### Inquiry cases

Of the total homicide sample, 102 perpetrators (14%) were known to have been in contact with mental health services at some time, 58 (8%) in the last year. In addition there were 47 cases in which mental health service contact was referred to in the psychiatric reports but not confirmed by extensive enquiry; in many of these cases contact was said to have occurred years before the homicide, and was often with alcohol or drug services rather than general psychiatry services. In only one such case did the unconfirmed contact take place in the year before the homicide.

The figure of 102 represents a minimum figure and it is likely that some service contacts were not identified, particularly in those individuals who had been under services in one locality and who then made long-distance moves without making contact with services in their new place of residence. Some trust records may have been unable to identify contacts from many years ago.

We received completed questionnaires on 95 cases, a response rate of 93%, and the findings presented below and in table 15 are based on these cases. These are referred to below as Inquiry cases. However, we also examined separately the 54 questionnaires returned on the 58 cases in whom contact with mental

8% of all homicides had been in contact with mental health services in the year before the offence: this represents around 40 cases per year. At least 14% had been in contact with services at some time.

health services occurred less than 12 months before the homicide (fig. 28). Findings for this group alone are also presented in table 15. In general the findings were similar whether we analysed all Inquiry cases or the 54 with recent contact. Where differences occurred, these will be described below. On some variables, e.g. those which refer to details of final service contact, it is more relevant to focus on the 54 with recent contact than all Inquiry cases.

In most of the Inquiry cases (72%), the responsible service was a general psychiatry service rather than a specialist service. Twelve cases had most recently been under forensic psychiatry services.

# Social and clinical characteristics

The social and clinical characteristics of the Inquiry cases, including those with recent (within 12 months of offence) contact, are shown in table 15.

Social features As with homicides in the general population, most perpetrators were male, single and unemployed. Four were homeless or living in bed and breakfast accommodation. Two were in supervised hostels.

Clinical features A breakdown of primary diagnoses is given in fig. 29. The commonest diagnosis was personality disorder, and only a minority had severe mental illness by most definitions. More than half (56%) also had at least one secondary diagnosis (fig. 30): the most common were personality disorder, alcohol dependence and drug dependence.

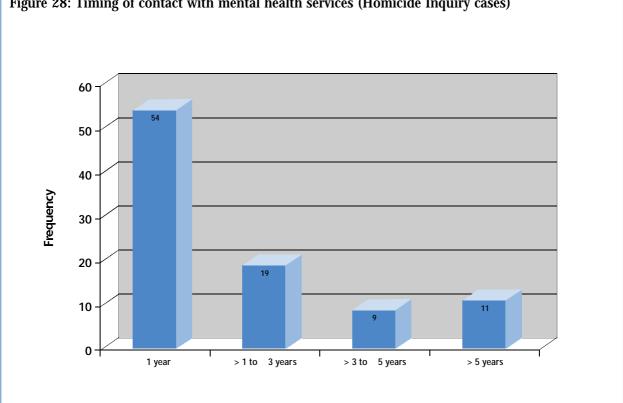
In 10% the onset of mental disorder had been in the previous year (fig. 31). In 64% it had been more than five years earlier, reflecting the long-term nature of the main primary diagnoses. Despite this, 50% had never been admitted to hospital (fig. 32), a further indication that most did not have severe mental illness in the conventional sense. There were 10 cases in which there had been more than five admissions. Ten patients had previously been admitted to a type of secure facility: 3 to a Special Hospital, 2 to a Regional Secure Unit and 5 to a general psychiatry intensive care ward. Eighteen per cent (16 people) had previously been admitted under the Mental Health Act.

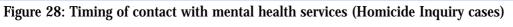
There were high rates of alcohol and drug misuse, and 42% of the sample were known to be misusing both alcohol and drugs. Fifty-three per cent had a history of self-harm.

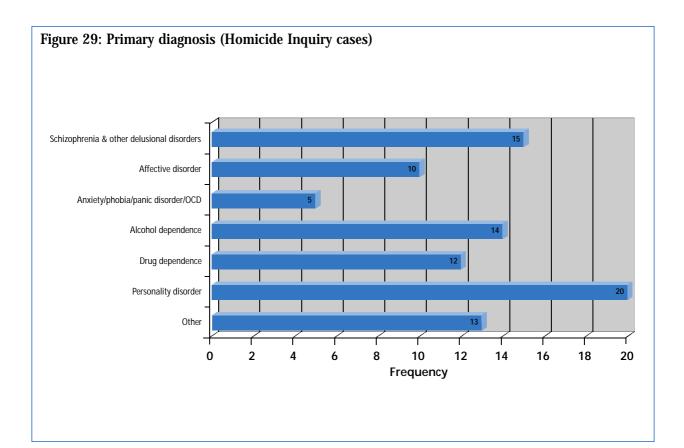
Twenty-two cases (26%), mainly in the group with recent contact, had previously been in contact with another hospital. In 9 of these no written details about the patient were passed between hospitals.

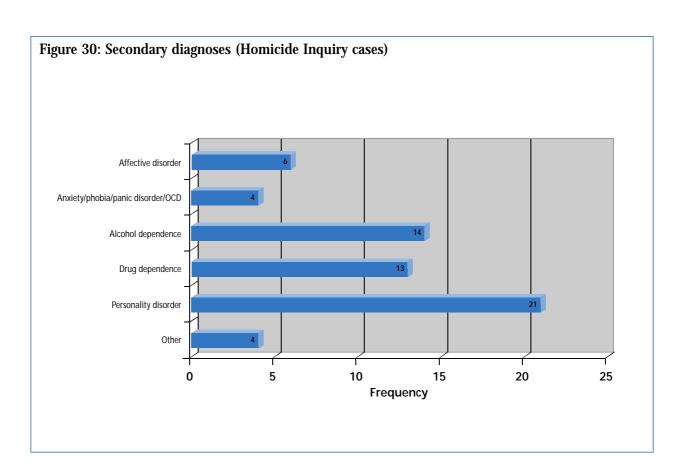
The most common diagnoses were personality disorder and schizophrenia; the majority did not have severe mental illness.

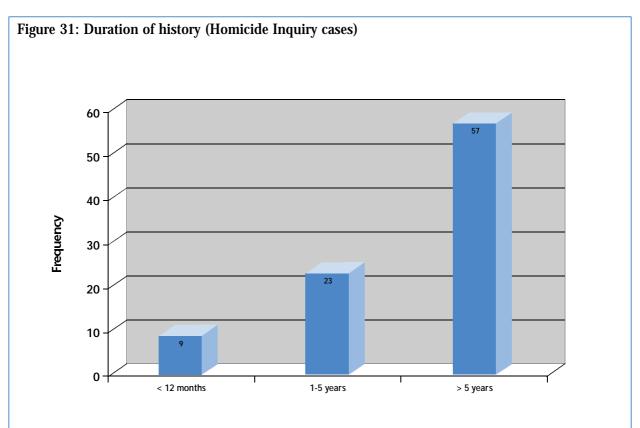
Table 15:       People convicted of homicide who had been in contact with mental health services at any time and in the 12 months before the homicide				
	Contact at any time (n= 95) <b>number % (valid)</b>		Contact within 12 months (n=54) <b>number % (valid)</b>	
Social and demographic variables				
Age: Median (Range)	30 (14-58)		30 (14-53)	
Male	76	80%	43	80%
Ethnic minority	6	6%	3	6%
Not currently married	62	76%	41	79%
Unemployed	53	68%	35	66%
Living alone	32	44%	20	41%
Clinical variables				
Primary diagnosis Schizophrenia & other delusional disorders Affective disorder (bipolar & depression) Alcohol & drug dependence Personality disorder	15 10 26 20	16% 11% 29% 22%	12 4 16 10	23% 8% 31% 19%
Any secondary diagnosis	50	55%	29	56%
Duration of history less than 12 months	9	10%	9	18%
More than 5 previous admissions	10	11%	7	14%
History of self harm	47	53%	31	61%
History of alcohol misuse	62	70%	38	75%
History of drug misuse	55	65%	33	67%
Non-compliance in month before homicide	16	23%	13	30%
Service contact				
Symptoms at last contact with services	43	46%	21	40%
Estimate of risk at final contact was low (or none)	68	88%	45	94%
Regular multidisciplinary review under CPA	16	17%	13	25%
Out of contact (community patients only)	60	71%	26	53%
Homicide thought to be preventable	8	12%	5	11%











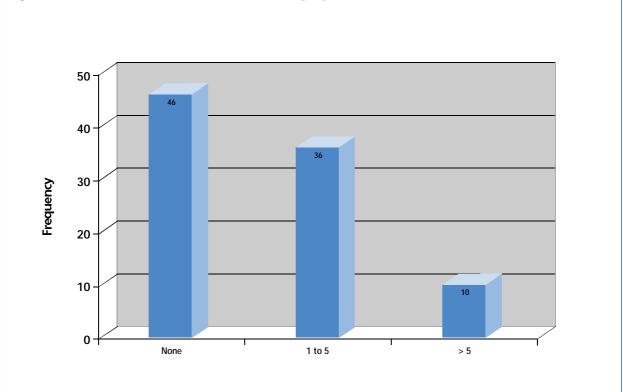


Figure 32: Number of admissions (Homicide Inquiry cases)

Recent contact cases The group with recent contact appeared to have more severe illness. More patients in this group had schizophrenia but there was a similar proportion with personality disorder. The recent contact group had more previous admissions. Most of those admitted under the Mental Health Act (14 of 16) were in this group.

#### **History of violence**

Thirty Inquiry cases (32%) had a history of violence towards another person documented in the case notes. Twenty-two of these 30 were known to have previous convictions for violence against the person, as were a further 20 cases in which there was no documentation in the notes. In total therefore, 50 (53%) had a history of violence against the person that had led to conviction or had been documented in the case notes.

In 13 cases (14%) there had been a known previous violent incident (actual or threatened) during an episode of psychosis. Ten of these were either non-compliant with treatment or out of contact with services at the time of the homicide. Only 8 of these 13 were subject to the CPA, of whom 6 were either non-compliant or out of contact at the time of the homicide. Five of the 13 were psychotic at the time of the homicide.

Previous convictions for violence were frequently not documented in the mental health case notes. Recent contact group In the group with recent contact, the pattern was the same, thirty-two patients (60%) having either a history of violence towards another person documented in their case notes or a previous conviction. They also had a high rate of documented recent violence: 13 (24%) had committed at least one physical assault against another person in the year before the homicide and a further 10 patients (19%) had been verbally aggressive. In total, therefore, 23 patients in this group (43%) had committed an aggressive act against the person, including threatening, in the year before the homicide. Eleven of these had threatened homicide, 2 were known to carry weapons and 2 had caused damage to property.

Ten of the 13 incidents of assault were documented in the case notes. Staff action after previous physical assaults included altering medication in 3 cases, changing the supervision level in 4 and calling the police in 5 cases. No action was taken in 3 cases. The victims in these 13 assaults were family members in 6 cases, strangers in 4 cases and acquaintances in 3 cases.

## **Care arrangements**

Location of care One Inquiry case was an in-patient at the time of the homicide. Among the remainder, there was no marked clustering following hospital discharge (as was found in the suicides), only 7 cases occurring within three months of discharge. Eight patients were attending day hospital.

Care Programme Approach Only 15 patients (16%) were subject to multidisciplinary review under the CPA although a key worker had been allocated in 31 cases and a date had been set for the next case review in 20 cases. Two patients were on the Supervision Register and there were no cases of supervised discharge. In the group with recent contact, 12 (23%) were under the CPA, and 1 was on the Supervision Register.

Last admission Forty-six cases (50%) had been admitted to hospital at some time. In 8 the last admission had been under the Mental Health Act; also in 8 the final admission had been a re-admission within three months of a previous discharge from in-patient care. In 23 the last discharge was planned but in 22 the discharge was patient-initiated, i.e. against medical advice or the result of the patient's behaviour on the ward. Around three quarters of patients discharged were regarded as being at least moderately improved at the time of discharge. In 21 cases the final admission lasted less than 7 days. The pattern of care around the final admission in the group with recent contact was similar to that of all Inquiry cases.

71% of patients convicted of homicide were out of contact with services at the time.

Loss of contact with services Sixty patients (71%) were out of contact with services at the time of the homicide. Forty of these were out of contact following self-

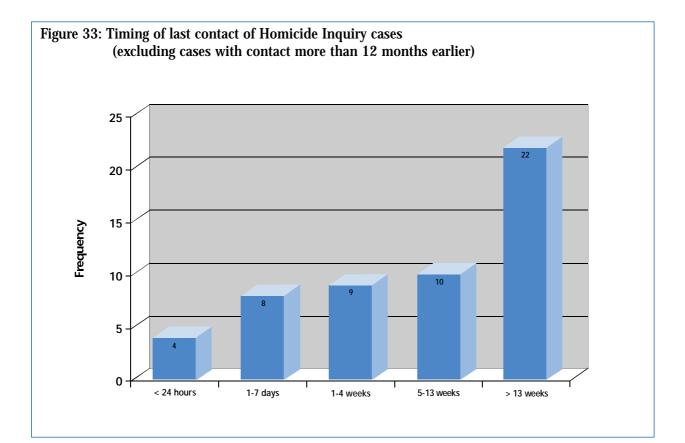
discharge or discharge as a result of patient's actions. In 28 cases further action was taken after loss of contact but in only three cases was this action a home visit.

Although the recent contact group were more likely to be still in contact at the time of the homicide, around half - 26 (53%) - were out of contact, usually following patient-initiated discharge. Most of these had a diagnosis of personality disorder or alcohol or drug dependence. Thirteen of these 26 had a history of aggression in the twelve months before homicide, including 6 who had made threats to kill.

Treatments and compliance Most patients were receiving some form of pharmacotherapy, but only 14 were regarded as receiving any form of psychological intervention, including psychological support. Sixteen patients (23%) were not fully compliant with their drug treatment plan in the month prior to homicide. In the three months before homicide, 6 patients had their drug dosages or supervision decreased.

# Last contact

The timing of last contact with mental health services before the homicide is shown in fig. 33. (This figure, and the other data in this section, include only those patients who had last been seen less than a year before the offence). In



31 cases (58%) last contact occurred less than thirteen weeks before the homicide and in 12 (23%) this was within one week. In 31% this was a non-routine contact. In all cases it took place face-to-face, most often with a junior psychiatrist or consultant.

Assessment at final contact revealed abnormalities of mental state or recent behaviour in 21 cases (40%). These are shown in figure 34. The most common were emotional distress, hostility, or increased use of alcohol or drugs.

Immediate risk of violence was thought to be low or absent in 94% (fig. 35). Respondents reported using a range of risk factors to assess risk including demographic and clinical factors, history of violence, current mental state and threats of violence. The most important group of factors was thought to be demographic and clinical factors. At final service contact only 3 patients were estimated to be at moderate risk of committing a violent act. Thirty-three (61%) of the professionals involved in the last contact had received training in risk assessment.

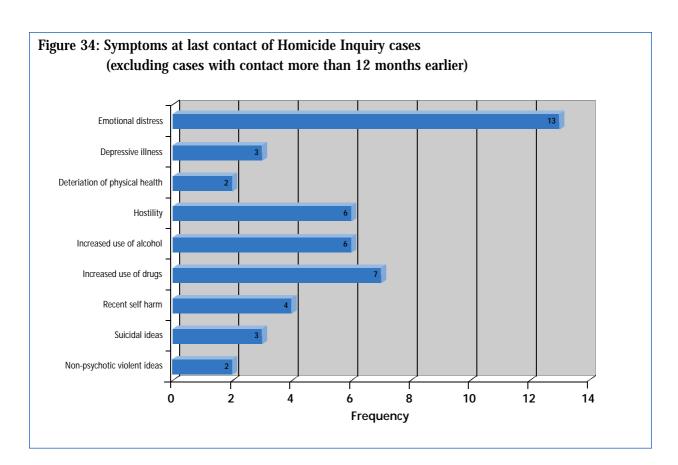
## **Preventability**

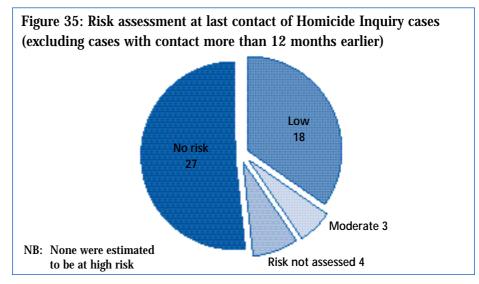
In only 8 cases did the respondent believe that the homicide could have been prevented. However, most were able to identify factors that would have made the homicide less likely (fig. 36). The factor most frequently mentioned was better patient compliance.

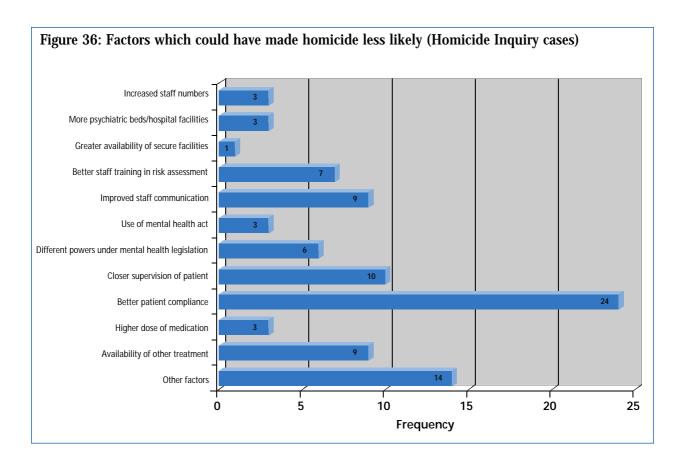
In 6 cases the respondent believed that different powers under the Mental Health Act would have made the homicide less likely. As in the Suicide Inquiry, it is possible to calculate the number of patients with schizophrenia or affective disorder, who were detained under section 2 or 3 of the Mental Health Act in their last admission and who were non-compliant in the month before committing homicide, or who did not attend their final appointment. This group could be seen as those who would be prevented from committing homicide by a "community treatment order," the number in this 18-month sample being three (i.e. two per year).

# **Schizophrenia**

Fifteen patients (17%) had a diagnosis of schizophrenia according to the mental health teams providing care. Nine had a secondary diagnosis, usually alcohol or drug dependence or personality disorder. Eleven had a history of drug misuse, 9 of alcohol misuse and 7 of self-harm. Ten cases had a history of violence against the person documented in the case notes. Six of the 10 were known to have previous convictions for violence against the person and these were all documented in the case notes. A further 2 cases had convictions for threatening behaviour, and these were not documented in the case notes.







There were 15 patients with schizophrenia among the Inquiry cases; most had a history of previous violence; only 9 were subject to the higher levels of the CPA. Twelve patients (80%) with schizophrenia had been in contact with services in the year before the homicide. Twelve had previously been admitted to hospital, eight under the Mental Health Act. Nine were under the higher levels of supervision of the CPA, including 5 of those with previous convictions for violence. Two were living in supervised hostels. Six were not compliant with treatment in the month before the homicide. Eight had lost contact by the time of the homicide.

At last contact with services, a third had symptoms of illness. In all 12 there was thought to be no or low risk of violence. In 7 this final contact was less than a week before the homicide.

Of the 12 homicides in which the relationship was known, the victim was a family member in 5 and a stranger in 4. Seven perpetrators with schizophrenia were thought to have been psychotic at the time of the offence.

# **Personality disorder**

Thirty-four patients had a primary or secondary diagnosis of personality disorder in the absence of major mental illness, i.e. schizophrenia or affective disorder. Of these, 29 (85%) had a secondary diagnosis. Thirty had a history of alcohol misuse and/or drug misuse. Nineteen had a history of self-harm. Fifteen cases had a history of violence against the person documented in the case notes. Fourteen of these were known to have previous convictions for violence against the person as were a further 5 cases in which there was no documentation in the notes. A further case had a conviction for threatening behaviour which was not documented in the case notes.

Twenty-two (65%) had been in contact with services in the 12 months before the homicide. Only four were under higher levels of the CPA. Fourteen of these 22 were out of contact at the time of the offence, including all but one of those with a previous history of violence. At last contact there was thought to be no or low risk of violence in 24 cases (80%).

In 7 cases the victim was a stranger.

# **Training and policies**

Trusts in England which deliver mental health services were surveyed to discover the number providing training and possessing written policies on key aspects of risk management. Information was received from 154 trusts, a response rate of 82%.

Around half of trusts provide training to front-line nursing staff on assessing suicide risk and risk of harm to others (fig. 37). A majority offer such training to junior psychiatrists. Most provide training in the use of the Mental Health Act.

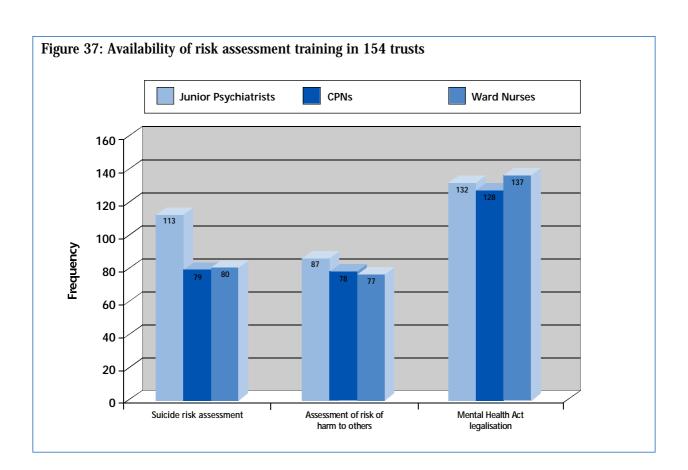
The possession of written policies varies (fig. 38). On certain subjects, namely communication of risk and responding to non-compliance or non-attendance, only a minority reported policies, while on others, notably in-patient observation, most have policies. However, these figures are self-reports and taking all subjects together, only 36% of trusts were able to provide copies of their policies.

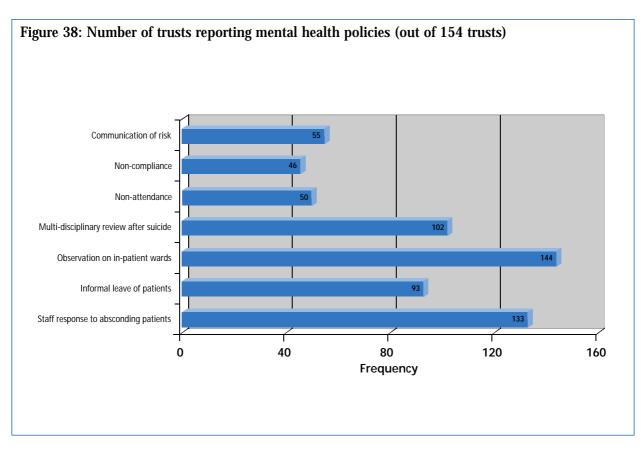
# **Qualitative comments**

Many of the professionals who completed Inquiry questionnaires also took the opportunity to comment on the main problems they faced in clinical practice. Similar comments were frequently made by psychiatrists attending the numerous meetings at which the work of the Inquiry was presented. Although it was not the main purpose of the Inquiry to collect opinions in this way, these were so consistent and so frequently and powerfully expressed that it is important to record their content in general terms.

There were two themes. Firstly, we were repeatedly told that administrative duties relating to service provision were interfering with clinical work, reducing time for patient contact. In general these administrative tasks were seen as a burden on busy clinicians; they included the completion of documentation relating to the Care Programme Approach, even though it appeared that there was acceptance of the principle of care planning which the CPA formalises.

Secondly, staff complained of excessive expectations of them in preventing suicide and homicide, and of excessive scrutiny by outside agencies. Mental health professionals believe that they are held responsible for deaths which they cannot prevent and which are the consequences of social factors, or reflections of the risk inherent in mental illness. They resent the current requirement for local inquiries into individual "untoward incidents", and fear they will be blamed for tragedies outside of their control.





# **CONCLUSIONS: NEEDS FOR SERVICES**

# **Preventability of suicide**

The Inquiry has found that 24% of suicides in England and Wales occurred in people who were in contact with mental health services in the year before death. This figure is an indication of the potential reduction in the population suicide rates which could be achieved by mental health services alone. For example, for mental health services to bring about a 15% reduction in the suicide rate, in line with The Health of the Nation,<sup>1</sup> they would have to prevent over 60% of the suicides with whom they have been in recent contact, an unrealistic expectation in the short term. Suicide prevention requires a broadly-based strategy, incorporating population initiatives to reduce key risk factors such as alcohol and drug misuse, and measures to reduce the availability or the lethality of common means of suicide such as the detoxification of car exhaust emissions.

However, the figure of 24% corresponds to over 1,000 suicides per year in close proximity to mental health care, and it is clear from our detailed findings that services could be made safer in a number of ways. It is a commonly held view in mental health services that suicides by people with mental disorder are often impossible to prevent because of the unpredictability of suicide and the high risk that is inherent in most disorders. Our data do not support this pessimistic view. Even the staff who provided us with information on their patients, who could be excused for underestimating, felt that the suicides were preventable in 22% of cases, i.e. over 200 deaths per year. In two-thirds of cases the staff were able to identify elements of service provision which would have made the suicide less likely.

The Inquiry's findings suggest the need for substantial changes to the way that mental health services currently operate. Some of these concern broad topics such as service priorities, training policy and information transfer; others concern specific aspects of clinical care. The Inquiry did not find, nor did it primarily set out to find, evidence of individual errors that contributed to particular suicides. Most mental health professionals work according to the structure and demands of their service, in ways that reflect their service requirements and their own training. Our approach was therefore to relate suicides to the way in which services routinely work, to look for problems in the system rather than in the individual practitioner. We believe that as a result our conclusions, and the recommendations based on them, are generally applicable.

The finding that 24% of suicides were in contact with mental health services in the year before death raises important questions about the accessibility of services for the remainder, especially as several studies have shown that most people who commit suicide have a clinically significant mental disorder at the

The Inquiry's findings suggest the need for substantial changes to the way that mental health services currently operate. time.<sup>2,3,4</sup> The Inquiry has not at this stage studied the factors that limit access but this is clearly an important subject for research. Limiting factors are likely to include the stigma of mental illness, public knowledge about mental illness, the recognition of risk in primary care and the availability of crisis services.

The purpose of this report is to improve mental health services, and inevitably it must highlight areas in which services are deficient in some way. It is therefore important to emphasise that the Inquiry also found considerable evidence of good practice in several areas of activity. Some of our recommendations are intended to bring all services in line with the best services. Others, however, are aimed at major change in the system as a whole.

#### **Preventability of homicide**

The Inquiry has found that 8% of people convicted of homicide had been in contact with mental health services in the year before the offence, and that 14% had been in contact at some time in the past. These figures, particularly the latter, may underestimate the true rate of contact because it has not been possible for us to detect all service contacts that occurred many years ago or in a part of the country far away from where a perpetrator was living at the time of the offence.

Nevertheless the figures allow comparison with suicide. The rate of 8% in contact with services within a year corresponds to a little under 40 cases per year, whereas the equivalent figure for suicide is over 1,000 cases, more than twenty-five times higher.

The Inquiry findings lead to additional conclusions about rates of mental disorder that are relevant to the prevention of homicide by health services. Firstly, there was surprisingly little overlap between those who had been in recent contact with services and those who were found to have been mentally ill at the time of the offence, only 20% of the latter having had contact in the twelve months before the offence. While this further emphasises the need to improve access to mental health services in some cases, it cannot be assumed that all cases should have been under mental health services. A large proportion of mental illness in the community is looked after in primary care, particularly less severe disorders including many cases of depression.

Secondly, in homicides as a whole, as well as in the Inquiry sample, there was a striking prominence of alcohol and drug misuse. Any public health strategy for preventing homicide would have to focus on alcohol and drugs at least as much as on mental illness.

Any public health strategy for preventing homicide would have to focus on alcohol and drugs at least as much as on mental illness. Thirdly, those who were under mental health care were likely to have a diagnosis of personality disorder, or alcohol or drug dependence, rather than severe mental illness. The term "community care patients" is often used in discussing homicide and mental disorder to denote those patients who were, or should have been, under the care of a community mental health service before committing homicide. It therefore implies severe mental illness and/or considerable needs. Among Inquiry cases whose contact with services was within a year of the offence, around three-quarters had schizophrenia or depression, or had previously required hospital admission (whatever the nature of their disorder). If these are regarded as homicides by community care patients, the number of such cases is around 25 per year.

This is a small figure as a proportion of all homicides, and represents a tiny fraction of all those who are treated by community mental health services, but it is not insignificant. The critical question for services is the extent to which these tragic incidents are preventable.

The Inquiry findings show both the limits of and the potential for prevention. Compared to suicides, homicides did not occur in such close proximity to services - relatively few convicted patients had been in contact with staff in the week before the offence. More of the homicide perpetrators were suffering from disorders that are regarded as difficult to treat, e.g. personality disorder. The mental health teams who gave us information rarely believed that the homicide had been preventable. However, they did in half the cases indicate measures that would have made the homicide less likely. Moreover our detailed findings on contact with services make clear several ways in which services need to be strengthened. As these are generally comparable to the needs for suicide prevention, discussions of suicide and homicide are combined in the rest of this chapter.

# **Priority groups of patients**

We believe that there should be no higher priority in planning care than preventing suicide and serious violence. Risk should therefore rank beside the other main priorities such as social needs and the breadth and intensity of services that patients receive should be proportionate to the risk that they present to themselves and others.

Our findings show that a large number of patients, including many with severe mental illness, who commit suicide or homicide are not subject to the higher levels of the Care Programme Approach. Many patients who commit suicide have been thought to need less intensive service support soon after their acute illnesses have subsided, even though many of their risk factors are unchanged. The Inquiry has highlighted the main characteristics of patients who commit suicide and has calculated how often certain risk factors for suicide, identified in previous studies, are found. We are not yet at the stage of drawing up a questionnaire that can be used to estimate the degree of risk in an individual patient based on the presence of combinations of key risk factors, though this is a future aim. However it is possible from our data to describe groups of patients in whom a large proportion of all suicides under mental health care will occur. The main indicators of risk that we have presented are deliberate self-harm, alcohol or drug misuse, and a history of hospital admission; other risk indicators include detention under the Mental Health Act, co-morbidity and social isolation.

Our findings also show that a majority of patients who kill have previously been violent, particularly in the year before the homicide. They have high rates of alcohol and drug misuse and deliberate self-harm. They have frequently been admitted to hospital at some time, often under the Mental Health Act. Those with severe mental illness often have secondary diagnoses. Many of these risk indicators are common to both suicide and homicide.

Using such factors, particularly when they occur in combination, a service can identify a group of patients who should be the priority for its preventive activities, not only at times of acute illness but long-term. To do this effectively a service needs to record key indicators of risk when a patient first makes contact with a service and to review these at regular intervals. Its documentation needs to be designed to reflect these priorities.

In concentrating its activities on priority groups based on estimates of risk, a service will have to accept that it will be providing more intensive care to many patients who would not in any case commit suicide or serious violence. This is sometimes seen as wasteful of resources but we believe it can be justified because, in the relative absence of specific suicide and homicide prevention measures, the activities that are required - closer supervision, maintenance of treatments, etc. - are in fact aspects of high quality care. The primary aim of a properly focused service may then be to reduce risk but the secondary benefit is that many of the most needy patients will receive a better service.

It is also important to recognise that greater service activity for one group of patients must mean doing less of something else. At present it is apparent that mental health staff spend too much time on administrative aspects of care, as well as on routine reviews of patient care which do not differ from one occasion to the next, and often do not include the patient or his/her family. Mental health services should ensure that contacts between patients and services always serve a specific agreed purpose, that in most cases this includes assessment of risk, that health professionals do not duplicate each other's work, and that patients without severe mental illness who have no major indicators of risk are considered for referral to a less specialised service such as primary care if they have no specific acute treatment needs that justify remaining in the secondary service. Routine appointments, serving no definite purpose, should become a thing of the past in a specialised service.

If the risk of individual patients is a major determinant of how resources are allocated within a service, then the risk-related characteristics of a patient population should be a major determinant of how resources are allocated to a service. Where there are high rates of co-morbidity or substance misuse, these should clearly be reflected in funding. Services should therefore collect risk-related information; some, such as the percentage of staff receiving training, should be used to assess service performance in relation to risk (**Recommendation 7**).

## Training

We believe that to operate more safely, services need to improve skills rather than increase paperwork. There has been a large expansion of the latter in recent years; what is now required is a programme of training in the recognition, assessment and management of risk (**Recommendations 1 and 2**).

Our findings show that most suicides occur in patients who are regarded as being at low immediate risk at the final contact with services, even though this frequently takes place within a week before death and in many cases within 24 hours. This does not mean that services assess risk poorly, because studies of this kind do not include people whose risk is recognised and who are then successfully treated. Nor does it mean that high risk was missed in these cases because risk may vary as circumstances change. However, it suggests that, at least in some suicides, there are opportunities for prevention, particularly when contact has been recent, and it implies that in some cases this could be achieved by more accurate risk assessment.

Even so, the finding that many suicides and homicides are thought at low immediate risk at final service contact is not in itself evidence of the need for widespread training. Several other findings in this report point to that conclusion. For example, our data show that suicide risk assessment in clinical practice relies most heavily on abnormalities of current mental state and suicidal ideas. This is understandable when these are present but misleading when they are absent, as they frequently are. Many of the Inquiry suicides who were thought to be at low immediate risk carried a number of risk factors at all times and could have been regarded as at constant high risk. In the three months before suicide, many who showed no direct evidence of clinical relapse indicated their risk in less direct ways, e.g. through increased alcohol or drug misuse, or

We believe that to operate more safely, services need to improve skills rather than increase paperwork. Most of the Inquiry homicides were committed by people under general psychiatry services. non-compliance with treatment. However, these "proxy indicators" of relapse did not lead to an awareness of increasing risk.

In our homicide data the pattern of contact was similar. Although the homicides were less likely to have been in contact with services in the recent past, almost a quarter of those who were under mental health care in the year before the homicide were assessed in the week before the offence. Around a third of final contacts were non-routine. At final contact, few expressed violent ideas - increased alcohol or drug misuse were more common. In most cases, risk was estimated to be low.

Training in risk management should aim to make full risk assessment, using all relevant evidence, a routine part of clinical practice for all "front-line" staff - those in contact with high-risk patients at high-risk times, including both community and ward staff. Although most people assessing the Inquiry suicides at final contact had had some form of previous training in suicide risk assessment, only around half of the staff at the final contact with the homicide cases had had training in the assessment of risk of violence. Assessing risk of violence is sometimes seen as the role of forensic mental health services but most of the Inquiry homicides were committed by people under general psychiatry services.

Only around half the trusts in our national survey offered their nursing staff training in the assessment of either suicide or violence risk. This is an unacceptable situation in which staff do not appear to have the opportunity for regular improvement in skills that are central to the safety of patients, families and the public. All health regions have a training budget, now devolved to Regional Educational Training Consortia, who should develop training programmes in risk assessment and management.

The need for regular training and routine assessment of risk applies to all services that care for high-risk patients, including those that are not now part of mainstream mental health care. We were concerned to hear regularly that alcohol and drug teams do not assess risk because they do not regard it as their responsibility, an untenable and unsafe argument.

## **Documentation/information**

The need to record all relevant risk factors for suicide and serious violence at entry to a service, and to review these at regular intervals, has already been emphasised. Accurate assessment also requires proper documentation, and multidisciplinary management of risk requires the transfer of relevant information between individual professionals and between agencies. One of the most frequent recommendations in previous reports on mental health services is for better communication between staff. In the Inquiry cases, once moderate or high risk had been identified, this information was usually though not always passed on to other staff, but in some cases by writing in the casenotes. Yet it is common practice in mental health for each professional discipline to keep its own set of notes in a way that is never available to the others (see Recommendation 4).

Our findings show that when patients attend new services, key information relevant to their risk of suicide often does not accompany them. The solution to this dangerous practice will lie in developments in information technology, leading to shared electronic casenotes. In the interim, services need to develop their paper casenotes to ensure structured recording of information and sharing of relevant information between disciplines within a service, and to adopt protocols for the transfer of information to other agencies and to services in other districts.

Our aim is not to join the list of reports that have made a general call for better communication but to prompt specific developments in the recording and use of information concerning risk of suicide and serious violence. We are therefore proposing a single, simplified but universal system of documentation, "patient passports", which will serve three related purposes (**Recommendation 3**):

- clinical risk assessment, by the recording of key indicators of risk
- allocation to care under the CPA according to evidence of risk, and subsequent monitoring
- transfer of information between services

As a first step, the Department of Health should identify examples of good practice in local CPA documentation.

In the homicide cases, one of the most notable findings was that previous convictions for violence were frequently not recorded in case notes. Such information is vital to risk assessment. Our data provide a strong argument for making information on convictions, currently held by the police, available to mental health services on request (**Recommendation 6**). Although this could give rise to concerns over confidentiality and privacy, we believe these are outweighed by the need to improve safety.

It is common practice in mental health for each professional discipline to keep its own set of notes in a way that is never available to others.

# **Care Programme Approach**

The CPA, the centrepiece of mental health service provision in the community,<sup>5,6</sup> is in need of overhaul. This is not to say that it does not work well in many cases. It is clear from our data that it is applied to more severely ill patients and that for most of those whom it covers, it does what it is supposed to, providing a key worker and ensuring regular review.

However, there are four serious problems with the CPA. Firstly, it is not applied sufficiently to patients at risk. At its higher levels, intended to provide structured multidisciplinary care for the most needy patients, it encompasses a minority of suicides and few patients who commit homicide. Even in patients with schizophrenia who commit suicide or homicide, perhaps the most obvious groups to be under the highest level of the CPA, it covers only two-thirds of cases. Priority for allocation to high level CPA should be given to all patients with severe mental illness who fall into the high-risk groups outlined earlier in this chapter and in particular to those with a history of violence against the person (**Recommendation 5**).

Secondly, it does not prevent non-compliance with treatment or loss of contact with services, as findings from both the homicide and suicide cases make clear. It needs to be backed by stronger clinical and legal measures, as outlined below. It could be argued that the Supervision Register and supervised discharge provide the necessary backing already, but the register is an administrative rather than clinical measure and is not popular with health staff, while supervised discharge does not in itself allow treatment. Our sample includes patients who lost contact with services despite being on the Supervision Register or under supervised discharge.

Thirdly, it generally does not take account of changes in suicide risk over time. At the point of hospital discharge, therefore, long-term after-care is planned and formalised in the CPA, as if needs were uniform over the following months or longer. In fact suicide risk is much greater in the first few months after discharge and service provision must reflect this period of maximum need (**Recommendation 24**).

Fourthly, the documentation that the CPA requires is poorly regarded by clinical staff, and this is likely to explain those cases in which the CPA is implemented but review dates are unrecorded. Its clinical value is in danger of being undermined by its administrative demands. Assessment for the CPA is often separate from clinical assessment and the two must be combined in an integrated information system. At its simplest level, and while developments in information technology are awaited, CPA documentation should be universally redesigned to be compatible with clinical assessment in general and risk

The clinical value of the CPA is in danger of being undermined by its administrative demands. assessment in particular, and should become part of casenotes, not a separate system (**Recommendation 3**).

## **Treatments and compliance**

Non-compliance with treatment runs throughout mental health services and is a feature of many suicides and homicides. Addressing this problem is a matter of urgency.

It is important to stress that non-compliance is a short-hand but slightly loaded term, implying reluctance on the part of the patient to do what staff believe to be needed. In clinical practice - and in this report - non-compliance covers non-receipt of treatment for any one of a number of reasons. It is a reflection of the broader relationship between patient and service, and solving the widespread problem of non-compliance requires an understanding of the reasons behind it. Our focus, however, has been narrower than this, and concerns the non-receipt of potentially effective treatment by people who are at risk.

There is an absence of policy on non-compliance in most district services and in many Inquiry suicides and homicides, possible interventions - including the use of modern anti-psychotic and antidepressant drugs, motivational interviewing, and the involvement of families in ensuring treatment - do not appear to have been pursued. In high-risk cases with severe mental illness, intervention is essential. In a safe service it should not be possible for high-risk people to be non-compliant or incompletely recovered while alternative treatments are untried, including family and cognitive interventions.

However, at present the more modern drug treatments can only be taken orally, which makes compliance more difficult to monitor. It is also unrealistic to expect services to make family and cognitive interventions available to large numbers of patients in the short-term because they require trained staff to deliver them. Nevertheless, these non-pharmacological treatments should be available at least for those at high risk (**Recommendation 9**). Newer drug treatments are more readily available to services and, despite their cost, should be used in severe mental illness when older anti-psychotic drugs cause side-effects that prevent compliance (**Recommendation 8**). Ultimately in some cases appropriate mental health legislation is needed (see below).

One surprising feature of drug treatments in our sample is the use of benzodiazepines to treat anxiety in patients with severe mental illness, including schizophrenia. Our concern is that in at least some of these patients anxiety is an indicator of relapse of major illness, requiring a review of clinical management as a whole rather than symptomatic treatment.

# **Disengaged patients**

Non-attendance and loss of contact with services are frequent findings in Inquiry suicides and homicides. Reducing the problem of disengagement is, as with non-compliance to which it is closely related, a service priority.

Disengaged patients are a mixed group but include:

- patients with severe mental illness who are disengaged from society as a whole as well as from clinical services
- patients at risk who lose contact with services
- homeless patients

The first of these, more than any group, require broad packages of care, incorporating social support, daily care facilities, assertive outreach and occupational activities, and therefore multi-professional coordination (**Recommendation 11**). They require close observation after hospital admission when they appear to commit suicide following absconding. At present only a minority of services have policies for this needy group. Suicides in homeless people have similar characteristics and needs. Although there is good evidence for the benefits of assertive community treatment,<sup>7</sup> including in the care of homeless mentally ill people, <sup>8</sup> their development has been patchy (**see Recommendation 12**).

Our data show that in many cases of suicide and homicide, including cases of severe mental illness, assertive actions to re-engage patients, such as home visits, are not taken. In a safe service it should not be possible for people with severe mental illness who are at high risk of suicide or serious violence to drop out of care without strenuous efforts to maintain contact, ultimately including the use of mental health legislation (see below).

# **Co-morbidity**

Throughout our findings there is repeated evidence that alcohol and drug misuse are among the main problems facing the development of safer services. Both suicides and homicides have high rates of both alcohol and drug dependence and misuse. Increased alcohol and drug misuse frequently occur in the period leading to suicide or homicide, often in the absence of more direct indications of clinical relapse. Yet, for a variety of reasons, specialist services for alcohol and drugs are now often separate from mainstream mental health services, many patients fall between the two services, and the capacity of general psychiatry services to address these problems falls well short of the clinical need. The problem of substance misuse is now in a central position in mental health services and cannot continue to be the domain of a distant speciality. Despite the absence (so far) of clear evidence for the effectiveness of any intervention for patients with both severe mental illness and substance misuse,<sup>9</sup> two measures can be regarded as essential to equip services to provide treatment of alcohol and drug misuse as an integral part of mental health services (**Recommendation 14**) - the problem of substance misuse is now in a central position in mental health services and cannot continue to be the domain of a distant speciality. Firstly, staff numbers need to be sufficient - the number of cases of co-morbidity in a service should be a determinant of health authority spending on mental health (**Recommendation 7**). Secondly, staff need to be trained to provide clinical management (**Recommendation 15**).

# **Ethnic minorities**

Our findings do not suggest the need for specific measures to reduce suicide in ethnic minority patients but some of the measures required for all patients at risk are particularly needed by those from ethnic minority groups. This is especially true of initiatives to reduce non-compliance with drug treatment.

The higher rate of severe mental illness in ethnic minority suicides is a noteworthy finding but cannot be explained by Inquiry data at this stage. Suicide in ethnic minority patients will continue to be a priority for data collection by the Inquiry.

# **Contacts with families**

The care of people with mental illness is shared with their families but when crises arise families who want to alert services can encounter difficulties in gaining access. In charting the sequence of events prior to suicide, we found that clinical contact with relatives tended to occur late, if at all. In two homicide cases the final contact with services was arranged at the request of families. It is vital that families are treated as partners in the care of people at risk so that the information they have can quickly be passed on directly to the professionals. They need a direct and easy route to the mental health team providing care for their relative, one that does not involve negotiating their way through switchboards or leaving messages with unknown staff (**Recommendation 16**).

Information provided to families should include routes of access in times of crisis. Similarly, families are often aware of non-compliance and concerned by loss of contact, and should also be given information on policies in these areas (**Recommendations 10 and 13**).

When a suicide or a homicide has occurred, families need information, provided openly and promptly (**Recommendation 28**). Many services appear already to

hold discussions with families after suicide but this is unusual after homicide. The offer of information in these circumstances should become routine practice for all services.

# **In-patient suicides**

Suicides by current in-patients are seen as the most preventable group in our case series. The numbers are substantial. In-patient suicides are more than twice as frequent as prison suicides over which there is (correctly) great public concern.

Five problems need to be addressed. Firstly, two-thirds of suicides occurring on wards are by hanging. All wards need to remove the structures which allow this to happen, including non-collapsible curtain rails, door handles and coat-hooks (**Recommendation 17**). Secondly, a substantial number of suicides occur on wards in which there are structural difficulties in observing patients. These wards are unsuitable for the admission of acutely ill patients (**Recommendation 17**). Thirdly, many in-patients who commit suicide are allowed off the ward by staff believing them to be well. Training in risk assessment for all ward staff and greater caution in granting leave during recovery is needed (**Recommendation 20**). Fourthly, suicides on the ward itself cluster in the evening and at night - more intensive observation at this time is needed (**Recommendation 19**).

Fifthly, our findings raise serious doubts about the value of current observation protocols. To our knowledge there has never been a clinical trial of the kind of observation practices that are in widespread use. It also seems that there is great variation nationally in the observation of patients at risk. Suicides by patients on an intermediate level of observation (e.g. patient to be observed every 10-15 minutes) are not uncommon. Whether observation at intervals of this kind are of any value in preventing suicide, self-harm or absconding must be in doubt. Trusts should consider the criteria by which patients are moved from intensive to intermediate observation levels, and work to develop alternative models of observation: for example, constant observation of defined areas of a ward (**Recommendation 18**).

#### **Post-discharge suicides**

The immediate post-discharge clustering of suicides is one of the greatest priorities for prevention. Our findings make clear that patients fall between in-patient and community care at this critical transition.

We strongly support better integration of in-patient and community teams and their activities (**Recommendation 23**). This requires immediate follow-up for all high-risk patients, including many whose admission has been brief, and rapid follow-up for all discharges (**Recommendation 21**). In particular we are

In-patient suicides are more than twice as frequent as prison suicides over which there is (correctly) great public concern. extremely concerned about the practice of admitting acutely ill patients to hospitals in other districts, which usually happens because of shortage of suitable acute facilities locally (**Recommendation 22**). The consequence is that these patients are discharged to community services which may be far distant from where they have received in-patient care, and fully coordinated transfer of care to the community becomes almost impossible. This is obviously an inhumane practice because it can take patients far from their homes and families. Our finding that post-discharge suicides begin - in fact, are most likely - immediately after leaving hospital suggests that it is also dangerous.

# **Mental Health Act**

The Mental Health Act is currently under review. Our findings support the need for treatment to be maintained in patients who would be at substantial risk of suicide or violence if they were to relapse. It is clearly unacceptable that patients who have a history of violence, or serious aggressive behaviour, in the context of mental illness should be allowed to be non-compliant with any effective treatment or to lose contact with services, as occurred in several cases prior to homicide. The same is also true of patients at high risk of suicide.

In these patients it is not safe to wait until risk has clearly manifested itself before turning to the use of the Act. It should be possible to treat high-risk patients as soon as there are clear signs that a familiar sequence of events has begun which will lead to suicide or serious violence.

The Mental Health Act Commission has clarified that the Act can be used before relapse has become severe.<sup>10</sup> Our data show that clinical relapse in the sense of mental state symptoms frequently does not occur prior to suicide and homicide, but that many patients show "proxy indicators", including simple non-compliance with treatment. The new Act must allow treatment in the community at the earliest point in cases of high risk (**Recommendation 25**).

However, this extension of its powers increases the need for more skilled assessments and suitable training. These too should become a requirement of the Act, placed on the professionals who will use it. It also needs to be emphasised that the proportion of suicides and homicides that will be prevented by enforced community treatment is small. If, for example, the target of such treatment were people with schizophrenia or affective disorder who in their last admission had to be detained under the Mental Health Act, and if all suicides and homicides were prevented in which non-compliance or non-attendance had recently occurred, then according to our data, 30 suicides and 2 homicides would be prevented per year.

## Access to means of suicide

Most suicides under mental health care take place by hanging or overdose with psychotropic drugs. These are the methods that must be addressed by measures designed to reduce access to the means of suicide.

There is a clear need to restrict access to the more toxic psychotropic drugs, through the use of alternative treatments, e.g. modern antidepressants, or short-term supplies (**Recommendation 26**). When patients are at risk, services should first ensure that they do not provide the means of suicide themselves. Our data show that at present patients known to have a history of self-harm are more likely to commit suicide by overdose of the drugs used in their treatment.

Hanging is a much more difficult method to restrict but its frequent use in inpatient suicides emphasises the need for the physical structure of wards to be reviewed (**see above and Recommendation 17**).

# Aftermath of suicide and homicide

Many services already review suicides, and some review homicides, in a multidisciplinary forum. This is an example of good practice which should be universal (**Recommendation 27**).

Making information available to families is discussed above (**and see Recommendations 10 and 13**).

# **Personality disorder**

It is not the purpose of this report to make detailed recommendations on the treatment of patients with personality disorder. However, there are numerous references to personality disorder in our findings and it is important to summarise what they show.

Patients with personality disorder are the largest diagnostic group in the homicide cases and one of the larger groups in the suicides. In both parts of the Inquiry, patients with personality disorder had high rates of risk factors, including previous violence, but had highly disrupted patterns of care with frequent non-compliance and loss of contact. In the suicide cases, those with personality disorder were seen as the least preventable.

It is clear that mental health services are not currently able to provide satisfactory care to this group. They do not fall within any definition of severe mental illness on which priority in service provision, such as the CPA, is based. There is no good evidence on which to base treatment; as a result they cannot be detained under the "treatment section" of the present Mental Health Act. Nevertheless services can and should provide support and supervision for people with personality disorder at times when they are at risk of suicide, as they do with other groups.

The greater problem is in preventing violent behaviour. Likelihood of violence is in itself not a reason to receive treatment from mental health services but in many cases the diagnosis of personality disorder indicates little else. As a result of the diagnosis, some violent patients fall between the two stools of mental health services and the criminal justice system, and part of the solution to the problems posed by violent personality disorder patients is to locate them more firmly within one or the other (**Recommendation 29**).

One alternative is therefore to bring violent personality disorder patients more clearly under mental health services, which would have to become more custodial - a solution that would be unacceptable to many staff, patients and families. The other is to bring them more clearly into the criminal justice system, which would have to become more therapeutic - a solution with the potential for broader benefits to criminal recidivism.

## **Stigma**

One of the concerns of patient groups and others is the preoccupation in the press and elsewhere with violence committed by people with mental illness and the risk that the mentally ill pose to the general public. Critics of such publicity argue that most serious violence is not committed by the mentally ill, that the great majority of mentally ill people are not violent and that to focus on rare incidents of serious violence adds to the stigma that limits the rights and freedoms of the mentally ill.

Our findings offer support to these views. Homicides by people with severe mental illness are few; when they do occur, it is patients' families rather than the public at large who are usually the victims; many mentally ill perpetrators are not - and have never been - under mental health services.

However, this chapter also makes clear that there are numerous ways in which services could and should be made safer. The data collected by the Inquiry should be used by the Royal College of Psychiatrists, which has been conducting an anti-stigma campaign, <sup>11</sup> to present a balanced view of this issue to the press and public, for example whenever violence by someone with mental disorder receives publicity (**Recommendation 30**).

# "Culture of blame"

There appears to be a strong and widely-held view in mental health services that when a homicide or other serious untoward incident occurs, staff will be unfairly blamed. This is particularly how the mandatory local inquiries into individual homicides are viewed.<sup>12</sup> As a result, local inquiries cannot provide the best setting for lessons to be learned.

We believe that the National Confidential Inquiry now serves this purpose. Cooperation from mental health staff is excellent. Information is provided without fear of blame. Data from a substantial number of cases are aggregated for analysis; as a result conclusions are likely to be generalisable to services nationwide - inquiries into individual cases may have narrow relevance.

Where then does this leave local inquiries? In theory they are capable of serving several purposes: information for relatives of patients and/or victims; public reassurance about the accountability of public services; highlighting of the need for improvements in services; identification of negligence. In practice their benefits are not so clear, but their cost is high. We believe that with the publication of this report it is time to re-assess the purpose and value of local inquiries and that the Department of Health should consider alternatives to the present system (**Recommendation 31**).

We believe that with the publication of this report it is time to reassess the purpose and value of local inquiries. On the basis of the Inquiry findings, as discussed in the previous chapter, a number of changes to mental health services are proposed. We are aware that major intervention studies are needed to show conclusively that these measures will prevent suicide and homicide. However, in the absence of such evidence, we believe that the Inquiry findings provide a satisfactory basis for recommendations on good clinical practice. Most require agreed action by health authorities and hospital trusts, and the support of NHS Executive Regional Offices. Some require specific action by the Department of Health or the Royal College of Psychiatrists.

#### Training

- 1. All staff in contact with patients at risk of suicide should receive training in the recognition, assessment and management of risk, of both suicide and violence, at intervals of no more than three years.
- 2. The content of training should reflect many of the points highlighted by this report: indicators of risk, high-risk periods, managing non-compliance and loss of contact, communication, the Mental Health Act.

#### Documentation/information

- 3. A new, simplified, universal system of documentation (patient passports) should be developed, to be used for three purposes:
  - Clinical risk assessment, by the recording of key indicators of risk.
  - Allocation to care under the CPA according to evidence of risk, and subsequent monitoring.
  - Transfer of information between services.
- 4. Unified systems of case notes for all professional disciplines should be developed.
- 5. All patients with a history of violence in the context of mental illness should receive the highest level of care under the CPA.
- 6. Information on previous convictions for violent offences should be readily available to mental health services on request.
- 7. Risk-related information, e.g. rates of co-morbidity and staff training, should be collected and used in determining resources and monitoring performance.

#### Treatments and non-compliance

- 8. Modern drug treatments such as "atypical" anti-psychotic drugs and newer antidepressants should be offered to all patients with severe mental illness who are non-compliant with treatment because of side-effects.
- 9. Family and psychological interventions should be available to all high-risk patients with severe mental illness.
- 10. Trusts should have a written policy on non-compliance, based on these recommendations, which is made known to staff, patients and families.

#### **Disengaged patients**

- 11. In all patients with severe mental illness who have a history of disengagement from services, a comprehensive social and clinical care plan should be devised which includes satisfactory housing and occupational activities.
- 12. Services should have the capacity for assertive outreach in response to loss of contact with patients with severe mental illness, including those who are homeless.
- 13. These recommendations should be part of a written policy on disengagement which should be made known to staff, patients and families.

#### **Co-morbidity**

- 14. Services should make provision for patients with severe mental illness and alcohol or drug misuse as part of mainstream mental health services.
- 15. Training of staff in general psychiatry services should include the management of alcohol and drug misuse.

#### **Families**

16. "Points of access" to mental health teams should be provided for families who are concerned about a patient's risk.

#### **In-patient suicides**

17. All services should review the physical structure of wards to identify(1) any obstructions to the observation of high-risk patients and(2) structures which could be used in suicide by hanging. Wards inwhich these cannot be removed should not be used for the admission of acutely ill patients.

- 18. Alternatives to intermediate level observations should be developed for patients at risk.
- 19. Services should increase and monitor the observation of patients in the evening and at night.
- 20. Risk assessment should always be carried out prior to granting leave in patients who are recovering from illness.

## Post-discharge suicides

- 21. There should be follow-up within 48 hours for all patients who have been at high risk and who are discharged from in-patient care, and follow-up within one week for all discharges, including those who discharge themselves.
- 22. Health authorities and trusts should make provision to accommodate all acutely ill patients in local catchment area services, ending transfers to inpatient care in other districts.
- 23. Prior to discharge from in-patient care, in-patient and community teams should conduct a joint case review, including assessment of risk.
- 24. CPA documentation should include more intensive provisions for the first three months after discharge from in-patient care, and specific reference to the first post-discharge week.

#### Mental Health Act

25. Mental health legislation should allow the enforced treatment of high-risk patients with severe mental illness who become non-compliant with treatment or who show indications of increasing risk, even in the absence of clear signs of relapse.

#### Access to means of suicide

26. Patients at risk of suicide, including all patients with a recent history of self harm, who are treated with psychotropic drugs should receive modern, less toxic drugs and/or supplies lasting no more than 2 weeks.

# Aftermath of suicide or homicide

- 27. Following a suicide or a homicide, mental health teams should hold a multi-disciplinary review of the case.
- 28. Following a suicide or homicide, information on what happened should be provided promptly and openly to families.

## Personality disorder

29. Clear policies on the clinical management of personality disorder should be disseminated by the Department of Health.

#### **Stigma**

30. Information in this report should be used by the Royal College of Psychiatrists to inform the public on the risks posed by people with severe mental illness, both to themselves and others.

#### Culture of blame

31. The Department of Health should assess the purpose and value of local inquiries into serious untoward incidents, and consider changes to the current requirement for full-scale inquiries in all cases.

# REFERENCES

- 1. Department of Health. The Health of the Nation. London, HMSO: 1992
- 2. Barraclough BM, Bunch J, Nelson B et al. A hundred cases of suicide. British Journal of Psychiatry 1974; 125:355-373.
- 3. Foster T, Gillespie K, McClelland R. Mental Disorders and Suicide in Northern Ireland. British Journal of Psychiatry 1997; 170:447-452.
- 4. Appleby L, Cooper J, Amos T, Faragher B. A Psychological autopsy of suicides by people under thirty-five years. British Journal of Psychiatry, in press.
- 5. Department of Health. Caring for People. Care Programme Approach for People with a Mental Illness referred to the Special Psychiatric Services. London HMSO:1990.
- 6. Welsh Office. Guidance on the Care of People in the Community with a Mental Illness. Cardiff, 1996.
- Marshall M, Gray A, Green R. Case management for people with severe mental disorders In: Cochrane Collaboration. Cochrane Library. Issue 3. Oxford: Update Software, 1996.
- 8. Dixon L, Weiden P, Torres M, Lehman A. Assertive community treatment and medication compliance in the homeless mentally ill. American Journal of Psychiatry 1997; 154:1302-1304.
- 9. Weaver T, Renton A, Stimson G, Tyrer P. Severe mental illness and substance misuse. British Medical Journal 1999; 318:137-138.
- 10. Mental Health Act Commission. The Threshold for Admission and the Relapsing Patient, 1998.
- 11. Royal College of Psychiatrists. Changing Minds: every family in the land. Psychiatric Bulletin 1998; 22:328-329.
- 12. Department of Health. Guidance on the discharge of mentally disordered people and their continuing care in the community. London, NHS Executive HSG (94)27 1994.

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