BRITISH JOURNAL OF PSYCHIATRY (1999), 174, 9–14

Homicides by people with mental illness: myth and reality

PAMELA J. TAYLOR and JOHN GUNN

Background Tragic and high-profile killings by people with mental illness have been used to suggest that the community care model for mental health services has failed.

Aims To consider whether such homicides have become more frequent as psychiatric services have changed.

Method Data were extracted from Home Office-generated criminal statistics for England and Wales between 1957 and 1995 and subjected to trends analysis.

Results There was little fluctuation in numbers of people with a mental illness committing criminal homicide over the 38 years studied, and a 3% annual decline in their contribution to the official statistics.

Conclusions There are many reasons for improving the resources and quality of care for people with a mental disorder, but there is no evidence that it is anything but stigmatising to claim that their living in the community is a dangerous experiment that should be reversed. There appears to be some case for specially focused improvement of services for people with a personality disorder and/or substance misuse.

Declaration of interest None.

THE POWER OF POPULAR BELIEFS ABOUT DANGEROUSNESS AND MENTAL ILLNESS

> "What had I done? Assisted the victim of the most horrible of all false imprisonments to escape; or cast loose on the wide world of London an unfortunate creature whose actions it was my duty, and every man's duty, mercifully to control?" (Collins, 1860).

In the 1990s the question about whether a person with a mental health problem should be in hospital, even confined to hospital, or in the wider community seems to have shifted only to become more of a class dilemma – with politicians and the mass of the general public on one side and those with a major mental disorder or their representatives on the other – rather than principally a matter of personal conscience about an individual. The professional, social and legal intent in the 1950s was to accept that attitudes towards disorders of mental health should generally be comparable to those towards disorders of physical health. In Britain, the Mental Health Act 1959 for England and Wales and the parallel legislation for Scotland and Northern Ireland were important landmarks on the path to releasing most people with mental disorders, even when serious, from 'false imprisonment', or from entrapment by default away from ordinary society.

It is possible to invoke research to show that for some groups the moves brought few advantages, just shifting the circumstances of their institutionalisation (Wing, 1990). Other research has found no objective disadvantage to the changes in terms of mental state and correlated behaviour, but a substantial preference by the victims of mental disorder for more ordinary community living (Marks *et al*, 1994). Such moderate and scientific steps towards the proper evaluation and resolution both of the real needs of people with the more serious mental disorders and of any 'side-effects' for their community contacts tend, however, to be overshadowed by a popular delusion that people with a mental disorder are necessarily dangerous. Fed by highly selected information in the mass media about their very rare contribution to one type of tragedy – homicide – the public and politicians believe, or are being encouraged to believe through the mass media, that unless people with a mental disorder are once more segregated, the streets will not be safe.

In England and Wales, the Department of Health (1994, 1995) decreed that for "those who have been in contact with the specialist mental health services", "In cases of homicide, it will always be necessary to hold an inquiry which is independent of the providers involved". The inquiries are also commonly public. Peay (1996, 1997) has considered the nature and role of these inquiries in depth, arguing that case-by-case focus undermines any more general lessons that might be learned about risk management. In addition, by singling out individual cases, these inquiries serve specifically and generally to heap stigma on those with a mental disorder and, by association, their families. It is rare for any person without a mental disorder to be exposed in this way.

The Zito Trust was set up in July 1994, in the wake of the tragic killing of Jonathan Zito, as a lobby group to influence mental health policy. In spite of its best endeavours to be as sensitive to the needs of people with a mental illness as to those who have died at the hands of a very few of them, in practice it may have served most prominently to highlight the killings and a drive to more restrictive care. In January 1998, the *Daily Telegraph* carried the headline "Community care to be scrapped". While this is almost certainly a misreading of the Government's position, there seems little doubt that, based principally on public fears after homicides, there is a sense of needing some sort of action. There are many justifications for reviewing the principles and practice in the provision of most mental health care and treatment in the community, but presumed homicidal tendencies of people with a mental disorder need not be among them.

RISKS IN PERSPECTIVE

Individual tragedy requires a response, ideally determined by the individual

circumstances. There may be also some lessons to be learned from those cases which have wider application. The reformulation, however, of national policy towards the care and treatment of perhaps twelve or thirteen thousand[1] people in England and Wales on the basis of the actions of, say, 40 of them makes little sense in terms of widespread improvements in treatment. It makes almost no sense in terms of material influence on the survival of the general public, even when it is conceded that those 40 have killed others. The public is at risk from 600–700 offences per year recorded by the police as homicide, an additional 300 killings by dangerous, drunken or drugged driving or 'aggravated vehicle taking' (not included in the official homicide figures) and of the order of 3500–4000 deaths per year in incidents recorded as 'accidents' on the roads alone (Department of the Environment, 1997). Confining people with a mental illness to hospital to save 40 or so lives would be analogous to abolishing private motoring to prevent the 4000 or so road deaths.

There is, nevertheless, embedded in the homicide figures a small but important problem for which mental health and social services must find a better solution. Some groups of people with mental disorder are at statistically higher risk as a group of being violent to others than the general public, but it is vital to understand the size and nature of the risks involved.

HOMICIDE AND SERIOUS VIOLENCE BY PEOPLE WITH A MENTAL ILLNESS: NATIONAL POPULATION RATES

Interpretation of data

There are problems in interpreting figures for risk of violence by people with a mental disorder living in the community. One is that the proportional effect is likely to vary with overall community rates of violence. This has been fairly clearly documented over time for homicide (Schipkowensky, 1973; Coid, 1983; Reiss & Roth, 1993). For countries like the USA with high homicide rates, the proportion of homicide cases attributable to mental disorder is lower than in countries like the UK with low homicide rates.

The only true community survey of the relative prevalence of mental disorder and violence is from the Epidemiologic Catchment Area survey in the USA. Swanson *et al* (1990) showed that 8–10% of people with schizophrenia had reported to researchers that they had been violent (not necessarily seriously) in the 12-month period prior to interview, compared with about 2% of the general population. The proportion among people with anxiety states compared closely with that of the general population; for those with affective disorder the rate was slightly higher; those abusing alcohol or other drugs, whether also mentally ill or not, posed a more important risk. There was a statistically significantly increased rate of violence among people with schizophrenia, but Swanson's figures also indicated that had all of these identified in that study been kept out of the community for that period, just 3% of the community's violence would not have occurred there. There is no suggestion that even one homicide would have been prevented.

English research evidence of mental disorder among those who have killed

Returning to homicide, three pertinent questions arise. First, what is the prevalence of homicide committed by people with mental illness? Second, is there evidence that this has increased in parallel with changes in the mode of psychiatric care and delivery? And third, who is at risk of becoming a victim of such killings?

For England and Wales, extrapolation from figures for convictions for murder or manslaughter among men identified immediately after a murder or other homicide charge in Greater London and the Home Counties suggested that up to 11% of unlawful killings between 1 June 1979 and 31 March 1980 were by people with schizophrenia (Taylor & Gunn, 1984; Taylor, 1995). Other mental illnesses contributed almost nothing to the figures; personality disorder and other non-psychotic mental health problems rather more. Although homicide as a crime lends itself well to study, because of the relatively higher clear-up rate, there is none the less some evidence that people with a mental disorder are more likely to be identified without detection (Robertson, 1988) and, following a charge, more likely to sustain a conviction; Taylor & Gunn (1984) found that men with schizophrenia accounted for 8% of those charged with homicide, but 11% of the resulting convictions.

Comparable figures for comparable national populations

In countries or areas with comparable overall national homicide rates, the figures are almost all consistent, despite different approaches to sampling and identification of cases (criminal statistics or national cause of death register). In Iceland, a total national sample between 1900 and 1979 yielded a figure of 15% of homicide convictions by people with schizophrenia (Petursson & Gudjonsson, 1981); in Denmark all those convicted of homicide in Copenhagen over 25 years suggested figures of 20% for men and 44% for women (Gottlieb *et al*, 1987); in North Sweden and Stockholm, between 1970 and 1980, 8% of those convicted of homicide had schizophrenia and 4% schizophreniform psychosis (Lindqvist, 1989) and in Contra Costa County, California between 1978 and 1980, 10% had schizophrenia (Wilcox, 1985). Häfner & Böker (1973) argued that whether death follows a very serious assault or not may be a matter of chance, and so included near fatal attacks in their series covering 1955–1964 in West Germany; nearly 8% of the men and just over 6% of the women in the series suffered from schizophrenia. So, accepting as likely to be reliable that about 10% of those convicted of homicide in England and Wales suffer from schizophrenia, this would amount to 40–50 cases per year.

CHANGES OVER TIME?

There is little to suggest that trends in homicide figures over time bear any relationship to mental illness or changes in its treatment. When misuse of alcohol and other drugs are regarded as psychiatric problems, then the broader category of mental disorder is important, but for psychosis little has changed.

Longitudinal studies in Scandinavia

Wikström (1992) considered trends in criminal homicide in Stockholm between

1. The people most likely to be affected by the reforms of mental health care indicated so far are the 12–13 000 with schizophrenia, calculated as 0.4% of the population of people aged 16–64 living in households in Great Britain (Mason & Wilkinson, 1996). This is likely to be an underestimate as it excludes people resident in institutions or homeless, and (because many of them refuse to be interviewed) those with a positive indication for psychosis on the screening instrument.

1951 and 1987, a period in which overall, substance misuse figures doubled. He noted an increase in homicides associated with an alcohol problem, stabilising in the 1970s and 1980s, and a similar increase in association with the use of narcotic drugs.

Gabrielsen *et al* (1992) observed that the rate of homicides in Copenhagen had doubled between 1959 and 1983, but focused more specifically on mental disorder. A consecutive sample of persons suspected by the police of homicide between 1 January 1968 and 31 December 1983 was obtained from the Central Copenhagen Police: 40–50% did not receive a psychiatric examination because of 'obvious' motives such as mercy killing or killing in self-defence or membership of subcultural groups such as 'rockers'. The proportion considered appropriate for examination was consistent throughout the period, and also, they report, with that found in a previous series by Hansen (1979) between 1946 and 1970. An analysis of the 251 cases submitted for psychiatric examination between 1959 and 1983 in the context of homicide trends showed that the factor most strongly associated with the increase in homicide for both men and women was an increase in substance misuse; the next most important trend was an increase in non-domestic, non-psychotic homicides; the third significant trend was a modest increase in psychotic men killing within the family. While statistically significant, numbers in the last group were very small, rising to 1–2 cases per year from 1–2 per 5 years; none of the victims of killers suffering from schizophrenia or paranoia was a stranger. Although for people with a psychotic illness, freedom from an institution may be most importantly associated with freedom to behave like the general population in relation to drugs and alcohol, in this series it appeared to be proximity to family and neighbours that increased the risk for the psychotic group.

Official homicide statistics for England and Wales

Trends in the UK are difficult to discern. The Home Office publishes annual criminal statistics (Home Office, 1977–1997). The homicide figures (exclusive of deaths involving driving) are generally considered in some detail, and decrease steadily between those based on report, charge and conviction; persons suspected of committing suicide before coming to trial are presented explicitly and separately. Suicide is not necessarily an indicator of established mental disorder, but for this discussion it is important to note that numbers have fluctuated over the years between 1957 and 1995 (see Table 1), with a mean of 36 per year (range 19–58). As the overall number of *suspected* homicides has been rising (rather more than convictions), the proportion of presumed murder-suicides has therefore been falling. Even assuming that the suicide group consists mostly of people with a mental disorder, it thus provides no evidence for an increase in homicides by such people.

Section 2 of the Homicide Act 1957 introduced to England and Wales the concept of diminished responsibility in relation to a murder charge, allowing the 'reasonable man', represented collectively by the jury, to make a judgment that 'abnormality of mind' at the time of a killing had been sufficient for an accused to be convicted of manslaughter rather than murder. In cases which are not disputed by the prosecution, the judge may take this role without reference to the jury. Diminished responsibility rapidly replaced the use of the insanity defence almost completely in murder trials in England and Wales, although both are still used.

Taking together all people convicted of manslaughter on grounds of diminished responsibility, plus the small number of women found guilty of infanticide and people found not guilty by reason of insanity, or unfit to plead, Table 1 also shows that the actual numbers of people with a mental disorder which is defined in this way as being relevant to the homicide peaked in 1979 and have since been returning closer to 1960s levels. There is a 3% annual decline in the proportionate contribution to homicide of people in these mental disorder groups (interaction rate ratio=0.969; 95% CI 0.965–0.972; $P<0.001$) (Fig. 1).

Estimating the nature of mental disorder associated with homicide

Dell (1984) took a random two-thirds national sample of all verdicts of diminished responsibility from the (English) Office of the Director of Public Prosecutions between 1966 and 1969, and a one-third random sample from 1970 to 1973 and 1974 to 1977. There was no significant difference between the time periods in the diagnoses given across the groups. Prison medical officers attributed a diagnosis of schizophrenia to around 21% in each period, while all available evidence, including pre-trial reports by experts, suggested that just over 40% had been psychotic at the time of the homicide. It is possible for a case of psychosis to be missed, or for the defence to fail to convince a jury of diminished responsibility. There are a very small number of cases among life-sentenced prisoners (Taylor, 1986), but this is unusual, and there were no undetected cases among those accused of homicide in the pre-trial prisoner series (Taylor & Gunn, 1984).

Applying Dell's figure for diagnoses by medical experts to the diminished responsibility and infanticide cases in the table for homicides between 1957 and 1995, and assuming that all the cases of 'unfit to plead' and 'not guilty by reason of insanity' were of people with psychosis, it appears that the number and proportion of those with psychosis who killed have declined in a similar way to the number and proportion of such people with mental disorder more generally, over the years studied. In Dell's study periods of four years each, the proportions (and numbers) with psychosis were 16.5% (178), 14.8% (198) and 11.5% (171), respectively. For the years 1992–1995 the proportion thus calculated was 6.2% (127). The estimates are necessarily approximate, but the 1992–1995 estimate compares very closely with the figures for 1996 from the National Confidential Inquiry into Suicide and Homicide by people with mental illness (Appleby, 1997). Taking the complete national sample of people convicted of homicide over 12 months from April 1996, the Inquiry had at the time of this preliminary report retrieved psychiatric reports from the courts in 73% of cases; 5% of the sample were diagnosed as having had schizophrenia, and 5% as having active symptoms of psychosis at the time of the offence.

IS THE GENERAL PUBLIC MORE VULNERABLE?

So, the number of people with psychosis who kill others is small and probably not increasing, at least in England and Wales. Perhaps, though, there has been a shift towards such people targeting strangers. There is no evidence for this. In Dell's

Table 1 Homicide[1] committed by people with a mental disorder

Year[2,3]	No. of murder suspects who committed suicide[4]	No. of people under Section 2, diminished responsibility	No. of infanticides	No. found unfit to plead or NGRI	Total mentally disordered[5] (%)	Total no. of people convicted of homicide; or unfit/NGRI
1957	40	19	2	20	41 (35)	116
1958	38	28	2	19	49 (48)	102
1959	35	20	5	25	50 (42)	118
1960	39	30	7	20	57 (39)	145
1961	34	28	10	20	58 (41)	141
1962	46	38	9	15	62 (44)	140
1963	36	52	7	12	71 (48)	147
1964	31	35	6	10	51 (35)	145
1965	40	46	10	8	64 (39)	165
1966	25	60	9	5	74 (32.5)	227
1967	35	47	18	22	67 (24.5)	273
1968	39	50	26	14	73 (25.5)	286
1969	28	58	13	19	101 (35)	290
1970	19	65	15	12	93 (30)	311
1971	41	72	18	19	114 (33)	346
1972	27	85	17	19	130 (36.5)	356
1973	29	77	9	5	91 (28)	326
1974	29	96	15	5	116 (26)	440
1975	23	77	4	4	85 (22)	388
1976	49	92	6	5	113 (28)	399
1977	22	94	6	1	101 (28)	263
1978	30	90	8	2	100 (23)	426
1979	37	109	7	5	121 (25)	480
1980	20	88	9	4	101 (24)	427
1981	36	87	7	2	96 (21)	450
1982	49	102	6	1	109 (25)	442
1983	31	80	10	2	92 (22)	419
1984	40	77	2	4	83 (18)	455
1985	47	75	8	3	86 (19)	459
1986	46	84	3	3	90 (18)	509
1987	58	78	1	2	81 (16)	516
1988	43	74	8	0	82 (17)	492
1989	35	83	1	7	81 (18)	465
1990	35	70	4	1	75 (17)	444
1991	51	76	5	2	83 (16.5)	502
1992	39	78	6	5	89 (17.5)	507
1993	30	62	5	1	68 (14)	499
1994	42	68	3	6	77 (15.5)	494
1995	41	54	2	4	60 (11.5)	522

Figures drawn from the Criminal Statistics for England and Wales (Gibson & Klein, 1969; thereafter Home Office, annually to 1997). NGRI, not guilty by reason of insanity.

1. Home Office publications offer homicide statistics in a number of categories including reports to police, number of victims, number of confirmed incidents, number of suspects, and so on. We have chosen here to adopt a model which best captures the number of probable perpetrators. We have thus included all recorded persons convicted, *and*, because of the interest here in mental disorder, the numbers of suspects identified but where proceedings were not initiated or concluded because of suicide or a finding of unfitness to plead or a conviction not sustained on grounds of insanity.
2. Figures for any given year in Home Office published statistics may vary between publications; where this has occurred, we have used the figure from the latest available publication, on the assumption that this represents data improvement as occasional new information was still coming in.
3. 1996 figures are not included because there was incomplete resolution of court proceedings in about one-third of cases (n=232).
4. Numbers of suspects committing suicide are not always distinguished from numbers of homicides (i.e. counted by victim rather than perpetrator) after which the suspect committed suicide. The latter figure only has been traced between 1970 and 1995. It is likely to be an overestimate of perpetrators. For example, in 1957 there were 40 suspects who committed suicide or died, but presumed to account for 55 homicides; comparable figures in 1996 were 29 and 40. Probably not all the people who killed themselves had a mental disorder at the time, but it is more likely than not. Only raw figures are given. They are not included in the calculations of total mental disorder cases, since as they never came to court, and in some cases were never charged, it is possible that some may not actually have committed homicide.
5. From the criminal statistics publications it is not possible to be more precise about the nature of the mental disorder, but see Dell (1984) for an estimate of type.

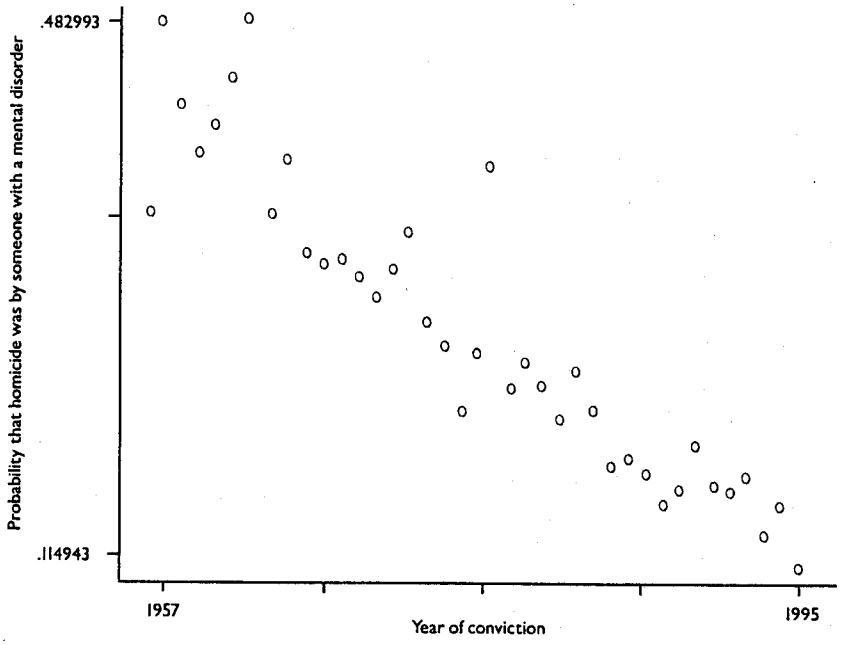

Fig. 1 The change over time in the proportionate contribution of people with mental disorder to homicide convictions. Estimate of mental disorder and homicide derived from Home Office statistics and calculated from Table I.

series of 'diminished responsibility' (not all with psychosis), strangers constituted a consistent minority of victims, with no significant difference between the three periods (7–14 people, 13%). A factor which increases the likelihood of admission to special hospital, rather than any hospital setting, is lack of relationship of perpetrator to victim. Among people admitted to special hospital after homicide, under the category of mental illness (about 75% schizophrenia, 10% other functional psychosis) between 1972 and 1975, those whose victims were strangers have remained unusual. Peak numbers came in 1991 (11; 9.5% of homicides admitted), 1992 (9; 7.8%) and 1995 (16; 13.8%) as the hospitals and the managing authority (then the Special Hospitals' Service Authority) sought to raise the threshold for admission. Otherwise the range was 0–8 (mean 4).

It thus seems likely that, in the UK as in Denmark, the slightly increased risk of any person being fatally assaulted by a stranger will involve a stranger who is not mentally ill.

IMPROVING MENTAL HEALTH SERVICES

On average, every week someone in the UK wins the jackpot on the National Lottery. About 54 999 999 people do not. On average, rather less than one person a week loses their life to a person with mental illness, generally his/her mother, father, sibling, spouse, child or other close contact; 54 999 999 remain safe from this threat. Nevertheless, there is an obligation on psychiatric and social services to seek to reduce this small risk even further. Although some of the factors which have been shown to be associated with a range of antisocial violence among people who are not suffering from mental disorder are also likely to be relevant to those suffering from schizophrenia and other serious and chronic disorders (Wessely *et al*, 1994), for schizophrenia and other psychoses, the illness appears particularly likely to be directly relevant to serious violence (Taylor *et al*, 1998).

This certainly has treatment implications, although with such small numbers, an improvement in the effect of treatment will be hard to demonstrate. There are other lessons too to be learned from a collective perspective on the homicide inquiry reports, and from research. Improvement in quality, quantity and direction of resources for care and treatment of such patients would achieve what tinkering round the edges of legislation cannot do. While most mental health services may offer adequate assessment and treatment to people suffering from schizophrenia and major affective illnesses, there is a reluctance and probably even inability on the part of most services to provide for people with problems of substance misuse or personality disorder. Such people are now the most important challenge for the development of mental health services. People with personality disorder and/or problems of substance misuse (there is considerable comorbidity between these disorders) form the majority of the broader category of people with mental disorder who kill others. They also kill themselves. Even among those in contact with mental health services in the year before death, 25% have a primary diagnosis of substance dependence or personality disorder and 50% a secondary diagnosis for these groups. Many more make no such contact.

Most people with a mental disorder offer no risk to others. While a wise person might take comfort from media coverage of mentally disordered homicides, since the mass media tend to a preference for the unusual, the effect for most of us is to raise our anxiety, and we begin to nurture beliefs of danger which are not supported by evidence. Perhaps psychiatrists should take as great an interest in "popular delusions and the madness of crowds" (Mackay, 1869) – hardly a new phenomenon – as they do in the pathological beliefs of individuals. Of even more importance, psychiatrists and other mental health professionals undoubtedly can and should improve their skills and service delivery. Even so, like infinity, the elimination of serious violence in any group of citizens may be approached, but it cannot be attained. It is important to acknowledge that in this respect, as in so many others in more positive mode, people suffering from schizophrenia and other mental disorders are citizens.

ACKNOWLEDGEMENTS

Our grateful thanks go to Robert Kendell for urging this piece of work upon us and for his preliminary comments; to Martin Butwell and Morven Leese for assistance with statistics; and to Christine Tonks for all her help with the manuscript. Figures for special hospital patients are drawn from the special hospitals' case register.

REFERENCES

Appleby, L. (1997) *National Confidential Inquiry into Suicide and Homicide by People with Mental Illness.* London: Department of Health.

CLINICAL IMPLICATIONS

- A homicide is an appalling tragedy for all directly concerned, but single cases, however shocking and publicised, do not constitute evidence for failure of a national system of care, nor for far-reaching changes in legislation and service delivery.
- Psychiatrists might help themselves, their services and their patients by taking an information-based but higher profile in public and political debate to counter popular and stigmatising mythologies about people with mental disorder. People with mental illness account for a minute amount of risk to the general public; their contribution has been falling over the years of major service change.
- This study could not be precise about clinical presentations among those convicted of homicides, but indicators were that the greatest unmet challenge to psychiatry lies in personality disorder and substance misuse.

LIMITATIONS

- Data were collected by non-clinicians, using legal classifications. Thus, cases of mental disorder are likely to have been missed, and the contribution of people with mental disorder to homicide may be underestimated. This is unlikely to have had much effect on the mental illness calculations. Personality disorder and substance misuse figures are likely to be higher than suggested.
- It is possible that, notwithstanding the high clear-up rate in homicide cases, people with a mental disorder are more likely to be identified as perpetrators than those without, and possibly more likely to confess to crime. This could exaggerate the contribution of people with a mental disorder to the figures.
- In demonstrating that there appears to be no case to change service philosophy on the basis of national homicide figures, we are not arguing against a need to review and improve national services, nor to divert attention from local services where there may have been specific remediable service problems in an individual case. We are arguing that nationally and internationally, findings such as these should be taken as evidence against the stigmatisation and isolation of people with a mental illness.

PAMELA J. TAYLOR, FRCPsych, JOHN GUNN, FRCPsych, Institute of Psychiatry, London

Correspondence: Professor P. J. Taylor, Department of Forensic Psychiatry, Institute of Psychiatry, London SE5 8AF

(First accepted 1 July 1998, final revision 4 September 1998, accepted 17 September 1998)

Coid, J. (1983) The epidemiology of abnormal homicide and murder followed by suicide. *Psychological Medicine*, **13**, 855–860.

Collins, W. (1860) *The Woman in White* (currently published Penguin, Harmondsworth, 1997).

Dell, S. (1984) *Murder into Manslaughter* (Maudsley Monograph No. 27). Oxford: Oxford University Press.

Department of the Environment, Transport and the Regions (1997) *Road Accidents Great Britain 1996. The Casualty Report*. London: TSO (HMSO).

Department of Health (1994) *Guidance on the Discharge of Mentally Disordered People and their Continuing Care in the Community*. NHS Executive HSG (94) 27 and LASSL (94)4. London: HMSO.

— **(1995)** *Building Bridges. A Guide to Arrangements for Inter-Agency Working for the Care and Protection of Severely Mentally Ill People*. London: HMSO.

Gabrielsen, G., Gottlieb, P. & Kramp, P. (1992) Criminal homicide trends in Copenhagen. *Studies on Crime and Crime Prevention*, **1**, 106–114.

Gibson, E. & Klein, S. (1969) *Murder 1957 to 1968*. Home Office Research Studies 3. London: HMSO.

Gottlieb, P., Gabrielsen, G. & Kramp, P. (1987) Psychotic homicides in Copenhagen from 1959 to 1983. *Acta Psychiatrica Scandinavica*, **76**, 285–292.

Gunn, J. & Taylor, P. J. (1993) *Forensic Psychiatry Clinical, Legal and Ethical Issues*. London: Butterworth Heinemann.

Häfner, H. & Böker, W. (1973) (translated by H. Marshall, 1982) *Crimes of Violence by Mentally Abnormal Offenders*. Cambridge: Cambridge University Press.

Hansen, J. P. H. (1977) *Drab; Danmark, 1946–1970* (in Danish with English Summary). Copenhagen: Munksgaard.

Home Office (1977, and annually until 1997) *Criminal Statistics England and Wales*. London: HMSO.

Lindqvist, P. (1989) *Violence Against a Person. The role of Mental Disorder and Abuse*. Umayer University Medical Dissertations New Series No. 254. Umeå, Sweden: Umayer University.

Marks, I. M., Connelly, J., Muijen, M., *et al* (1994) Home-based versus hospital-based care for people with serious mental illness. *British Journal of Psychiatry*, **165**, 179–194.

Mackay, C. (1869) *Memoirs of Extraordinary Popular Delusions and the Madness of Crowds*. London: Routledge.

Mason, P. & Wilkinson, G. (1996) The prevalence of psychiatric morbidity. OPCS survey of psychiatric morbidity in Great Britain. *British Journal of Psychiatry*, **168**, 1–3.

Peay, J. (ed.) (1996) *Inquiries after Homicide*. London: Duckworth.

— **(1997)** Clinicians and inquiries: Demons, drones or demigods? *International Review of Psychiatry*, **9**, 171–177.

Petursson, H. & Gudjonsson, G. H. (1981) Psychiatric aspects of homicide. *Acta Psychiatrica Scandinavica*, **64**, 363–372.

Reiss, A. J. & Roth, J. A. (eds) (1993) *Understanding and Preventing Violence*, p. 346. Washington, DC: National Academy Press.

Robertson, G. (1988) Arrest patterns among mentally disordered offenders. *British Journal of Psychiatry*, **153**, 313–316.

Schipkowensky, N. (1973) Epidemiological aspects of homicide. In *World Biennial of Psychiatry and Psychotherapy*, vol. 2 (ed. S. Arieti), pp. 192–215. New York: Basic Books.

Swanson, J. W., Holzer, C. E., Ganju, V. K., *et al* (1990) Violence and psychiatric disorder in the community: evidence from the Epidemiologic Catchment Area surveys. *Hospital and Community Psychiatry*, **41**, 761–770.

Taylor, P. J. (1986) Psychiatric disorder in London's life-sentenced prisoners. *British Journal of Criminology*, **26**, 63–78.

— **(1995)** Schizophrenia and the risk of violence. In *Schizophrenia* (eds S. R. Hirsch & D. R. Weinberger), pp. 163–183. Oxford: Blackwell Science.

— **& Gunn, J. C. (1984)** Violence and psychosis. *British Medical Journal*, **288**, 1945–1949; **289**, 9–12.

— **, Leese, M., Williams, D., *et al* (1998)** Mental disorder and violence. A special (high security) hospital study. *British Journal of Psychiatry*, **172**, 218–226.

Wessely, S., Castle, D., Douglas, A. J., *et al* (1994) The criminal careers of incident cases of schizophrenia. *Psychological Medicine*, **24**, 483–502.

Wikström, P. H. (1992) Context-specific trends in criminal homicide in Stockholm 1951–1987. In *Studies on Crime & Crime Prevention* (National Council for Crime Prevention), vol. 1, pp. 88–105. Oslo/Stockholm: Scandinavian University Press.

Wilcox, D. E. (1985) The relationship of mental illness to homicide. *American Journal of Forensic Psychiatry*, **6**, 3–15.

Wing, J. K. (1990) The functions of asylum. *British Journal of Psychiatry*, **157**, 822–827.