BJPsych | The British Journal of Psychiatry (2021) 218, 210–216. doi: 10.1192/bjp.2020.94

Mental disorder in people convicted of homicide: long-term national trends in rates and court outcome

Sandra Flynn, Saied Ibrahim, Nav Kapur, Louis Appleby and Jenny Shaw

Background

Homicide rates have fallen markedly in the UK over the past decade. There has been little research on whether homicides by people with mental disorder have contributed to this downward trend. Furthermore, there is limited information on trends in court outcomes for people with mental disorder who commit homicide.

Aims

To examine trends in general population homicide and homicide by people with mental disorder, and to explore court outcome.

Method

We conducted a national, consecutive case series of homicide in England and Wales (1997–2015). Data were received from the Home Office Statistics Unit of Home Office Science. Clinical information was obtained from psychiatric reports and mental health services.

Results

There has been a fall in the homicide rate in England and Wales since 2008. Despite this, the relative contribution of mental disorder as a proportion of all homicide has increased. Our findings also showed the inappropriate management of people with serious mental illness convicted of homicide. Of those who committed homicide and were diagnosed with schizophrenia, a third were imprisoned, and there was a marked fall in hospital order referrals. We found this to be linked to substance misuse comorbidity.

Conclusions

The proportional increase in homicide by people with schizophrenia suggests more complex factors may be driving rates, such as substance misuse. Addressing substance misuse comorbidity and maintaining engagement with services may help prevent patient homicide. Despite their complex needs, people with serious mental illness continue to be imprisoned. Improvements in assessment and the timely transfer of prisoners to health services are required.

Keywords

Homicide; schizophrenia; mental illness; prison; substance misuse.

Copyright and usage

© The Authors 2020. Published by Cambridge University Press on behalf of the Royal College of Psychiatrists.

Over the past decade, there has been a marked fall in the number and rate of recorded homicides in the UK,[1] consistent with international figures.[2] Globally, rates of homicide have been declining, with a fall from 7.4 per 100 000 population in 1993 to 6.1 per 100 000 population in 2017.[2] More recently, a marginal increase in homicide convictions has been recorded in England, Wales and Scotland.[1,3] Despite this upturn, it should be noted that the rate of homicide is still the lowest recorded for decades and it is too soon to discern whether this increase is because of a short-term fluctuation or if it is the beginning of a long-term trend. The reasons for the recent low rates of violence and homicide have been much debated. These include improved quality and availability of emergency trauma care,[4] strategically targeted violence prevention programmes,[5] a decline in the use of crack cocaine and heroin[6] and affirmative action on drug trafficking, organised crime and gang activity.[7] However, there has been no recent empirical evidence examining whether homicide by people with mental disorder has contributed to this fall. A study by Large et al[8] examined rates of homicide by people with mental disorder between 1957 and 2004.[8] The researchers found a decrease in homicides by people with mental disorder, which was negatively correlated with the general homicide rates in the latter two decades of the study ($r = -0.829$, $P < 0.01$). Although the contribution of mental disorder to violence in society is low,[9] there is a significant association between mental disorder and homicide, particularly in people diagnosed with schizophrenia and personality disorder.[10] Furthermore, the prevalence of mental disorder among people who are incarcerated is high. Recent studies have also shown that people with serious mental illness continue to be imprisoned. In a meta-analysis of 109 studies from 24 countries, Fazel and Seewald[11] found 3.6% of male prisoners and 3.9% of female prisoners had psychosis; these figures are seven times higher than the proportion in the general population in England (0.5%). Previous studies have also found that despite recommendations made by psychiatrists, people with mental disorder who committed homicide did not consistently receive a 'mental health' outcome from court.[12] To improve the care provided to mentally ill offenders, more research is required to develop a deeper understanding of their treatment throughout the criminal justice system. We aimed to explore a national, consecutive case series to determine the rate of homicide in the general population and by people with a mental health disorder. We also aimed to examine the outcome and disposal of homicide offenders with mental disorder to determine the proportion who were imprisoned.

Method

Study design

Data collection had three stages: the collection of a consecutive case series of convicted homicide offenders, the retrieval of psychiatric reports on those offenders (irrespective of mental health history) and the collection of clinical data on offenders known to have had contact with mental health services.

https://doi.org/10.1192/bjp.2020.94 Published online by Cambridge University Press

Total homicide sample

We examined data between 1 January 1997 and 31 December 2015 in England and Wales. The Home Office Statistics Unit of Home Office Science notified the National Confidential Inquiry into Suicide and Safety in Mental Health (NCISH) of people convicted of homicide (murder, manslaughter or infanticide) and offenders found unfit to plead and not guilty by reason of insanity. This data source provided demographic information on perpetrators and victims, details of the offence, sentencing and outcome in court.

Psychiatric reports

Psychiatric reports were obtained from Crown courts, the Prison Service, the Crown Prosecution Service and other sources. However, although psychiatric assessments may have been undertaken at the request of the defence or prosecution, if they had not been introduced at the trial then they were not accessible. The following information was extracted from the psychiatric reports: clinical history, mental state at time of offence and any lifetime diagnosis of mental disorder. A record of previous convictions was obtained from the Police National Computer in collaboration with Greater Manchester Police.

Collection of clinical data

Identifiable information on each offender was sent to the main hospital and community mental health service provider in the offender's district of residence. If the hospital records showed any previous contact with mental health services, the person became a 'case'. For each case, the patient's consultant psychiatrist was asked to complete a questionnaire covering demographic characteristics, clinical history, history of violence, aspects of care and treatment, details of final contact with services and respondents' views on prevention.

Definitions

In England and Wales, homicide is defined under the Homicide Act 1957 and is classified into three categories: murder, manslaughter and infanticide. Murder requires intent to kill or cause grievous bodily harm. Manslaughter can be voluntary or involuntary and requires the absence of intent. Section 2 of the Homicide Act (revised by the Coroners and Justice Act, 2009) provides a definition of diminished responsibility: 'A person ('D') who kills or is a party to the killing of another is not to be convicted of murder if D was suffering from an abnormality of mental functioning…'[13] An 'abnormal mental state' referred to in this paper is defined as an abnormality of mental functioning, arising from a recognised medical condition. A primary diagnosis of schizophrenia referred to in this paper includes schizoaffective disorder, other delusional disorders and psychosis not otherwise stated.

We explored the rate of homicide in the general population and by people with mental disorder by using five definitions: a diagnosis of schizophrenia, abnormal mental state at the time of the offence, patients in contact with mental health services, a verdict of manslaughter Section 2 diminished responsibility and hospital disposal.

Statistical analysis

General population and patient rates of homicide were estimated with mid-year population estimates from the Office for National Statistics as denominator data. The rates were age-standardised with the 2013 European Standard Population.[14] We examined the number, proportion with 95% confidence intervals and rate of homicides in the general population, the patient population and those patients with a mental disorder

To examine trends, Poisson models were fitted with the number (and rate) of homicides per year as the outcome and year as a linear predictor. We were unable to obtain denominator data for each definition of mental disorder examined in this study, so we used general population estimates as those at risk of exposure in the Poisson models. Overall, we found similar trends when using year of conviction and year of offence as linear predictors in our analysis, and have presented data by year of conviction. In addition, Poisson models were also fitted to examine trends in the proportion of homicides by people with a mental health disorder, with total homicide as the denominator in the model. We also used Poisson models to examine trends in the proportion of homicides, in particular by offenders with schizophrenia, who were imprisoned at the final outcome. Incidence rate ratios (IRRs) with 95% confidence intervals were obtained from the models, with an IRR >1 indicating an upward trend and an IRR <1 indicating a downward trend. Denominator data in all estimates were the number of valid cases. Linear trends can vary by the unit of measurement (i.e. number or proportion) and an anomaly in a single year can have a disproportionate influence on trends. Adjustments were made for yearly fluctuation by calculating trends using 3-year moving averages. All statistical analysis was carried out using Stata version 15.1 for Windows.

Ethical approval

The authors assert that all procedures contributing to this work comply with the ethical standards of the relevant national and institutional committees on human experimentation and with the Helsinki Declaration of 1975, as revised in 2008. All procedures involving human subjects/patients were approved by the North West Research Ethical Committee (approval number ERP/96/136). We obtained exemption under section 251 of the NHS Act 2006 (formerly section 60 of the Health and Social Care Act 2001), enabling access to confidential and identifiable information without informed consent in the interest of improving patient care. The study was registered under the Data Protection Act (1998).

Results

Homicide offenders in the general population

Between 1 January 1997 and 31 December 2015, NCISH were notified of 10 918 offenders convicted of homicide in England and Wales, which included 44 people found unfit to plead and 38 who received an insanity verdict. Most of the offenders were male ($n = 9932$, 91%), the median age of offenders was 28 (range 12–99, interquartile range 16) years. We obtained psychiatric reports on 4064 offenders (38%). The mean age-standardised rate of homicide convictions over the study period was 1.11 per 100 000 population (95% CI 1.09–1.13). Rates have fluctuated with an upward trend, until a peak of 1.38 per 100 000 population in 2008. Convictions have since fallen year on year, to the lowest rate of 0.78 in 2015, with a decrease of 43% since 2008 (IRR = 0.928, 95% CI 0.916–0.940, $P = 0.000$) (Fig. 1). However, it should be noted the data presented does not cover convictions between 2016 and 2018, where a recent increase has been observed.

Homicide offenders with mental disorder

We measured mental disorder by using five definitions, referred to collectively in this paper as mental health homicides. Table 1 shows the number, proportion and rate per 100 000 population and the trends over the 19-year study period by each definition. Overall, across the study period, no significant fall in the number or proportion of homicides were found by people with schizophrenia, an abnormal mental state at the time of offence and patients. There was an overall fall in

https://doi.org/10.1192/bjp.2020.94 Published online by Cambridge University Press

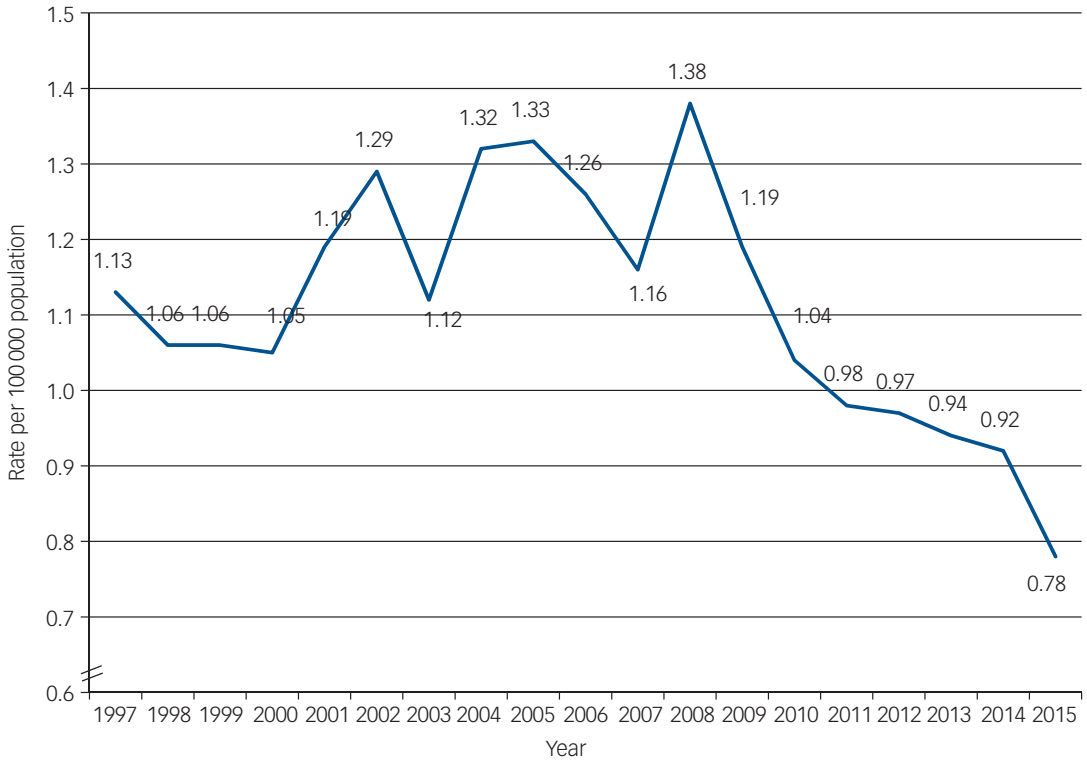

Fig. 1 Age-standardised rate of general population homicide convictions per 100 000 population in England and Wales, 1997–2015 (standardised to the 2013 European Standard Population).

the number of homicides in those receiving a verdict of manslaughter on the grounds of diminished responsibility or receiving a hospital disposal.

The pattern of mental health homicides has fluctuated over the past two decades, clearer patterns emerged when data were examined over two distinct time periods (Fig. 2). A rise in the number of convictions by most definitions was observed between 1997 and 2005, there was a significant increase in the number with schizophrenia, an abnormal mental state at the time of offence and mental health patients (Table 2). However, over the same period there was a fall in the number and proportion of offenders who received a verdict of manslaughter on the grounds of diminished responsibility – an inverse trend. During the second time period, 2006–2015, there was a fall in the number (but not in the proportion) of mental health patients committing homicide. In contrast, the proportion of people with diminished responsibility verdicts and those with schizophrenia increased (Table 2).

A total of 274 (42%) offenders with schizophrenia had a secondary diagnosis of alcohol and/or drug misuse/dependence. The proportion of people with schizophrenia and comorbid alcohol (IRR = 1.05, 95% CI 1.01–1.08), drug (IRR = 1.04, 95% CI 1.02–1.07) and alcohol and drug dependence/misuse (IRR = 1.04, 95% CI 1.02–1.06) significantly increased between 1997 and 2015. Forty three per cent of patients with mental disorder had a secondary diagnosis of alcohol and/or drug misuse/dependence.

Mental disorder, court outcome and disposal

Of the offenders with schizophrenia, 508 out of 566 (90%) experienced psychotic symptoms at the time of the offence. Where psychiatrists' recommendations were known, in 434 out of 480 offenders with schizophrenia (90%), psychiatrists recommended a diminished responsibility verdict, and in 419 out of 492 offenders with schizophrenia (85%), psychiatrists recommended a hospital disposal. Table 3 shows homicide verdicts and court disposals by three definitions of mental disorder: schizophrenia, abnormal mental state at the time of offence and patients in recent contact with mental health services. A quarter of people with schizophrenia were found guilty of murder, a third received a verdict of manslaughter (self-defence or provocation) and a third received a verdict of manslaughter on the grounds of diminished responsibility. Regarding sentencing, a third received a prison disposal and two thirds received a hospital order with/without restrictions.

Table 1 Number, proportion, age-standardised rate and trends of homicides by people with mental disorder, by five definitions (1997–2015)

					Trend by number			Trend by proportion		
Definition of mental disorder	*N*	%	95% CI	Age-standardised rate per 100 000 population	IRR	95% CI	*P*-value	IRR	95% CI	*P*-value
Schizophrenia (and other delusional disorders)	656	6%	5.5–6.5	0.07	0.99	(0.98–1.01)	0.45	1.01	1.00–1.03	0.10
Abnormal mental state at the time of offence	1104	10%	9.5–10.7	0.12	0.99	(0.97–1.00)	0.07	1.00	0.99–1.01	0.93
Patients	1143	10%	9.9–11.1	0.12	0.99	(0.98–1.00)	0.14	1.01	1.00–1.02	0.21
Manslaughter Section 2 diminished responsibility	573	5%	4.8–5.7	0.06	0.98	(0.96–0.99)	<0.01	0.99	0.98–1.01	0.31
Hospital disposal	658	6%	5.6–6.5	0.07	0.98	(0.97–1.00)	0.01	1.00	0.98–1.01	0.58

IRR, incidence rate ratio.

https://doi.org/10.1192/bjp.2020.94 Published online by Cambridge University Press

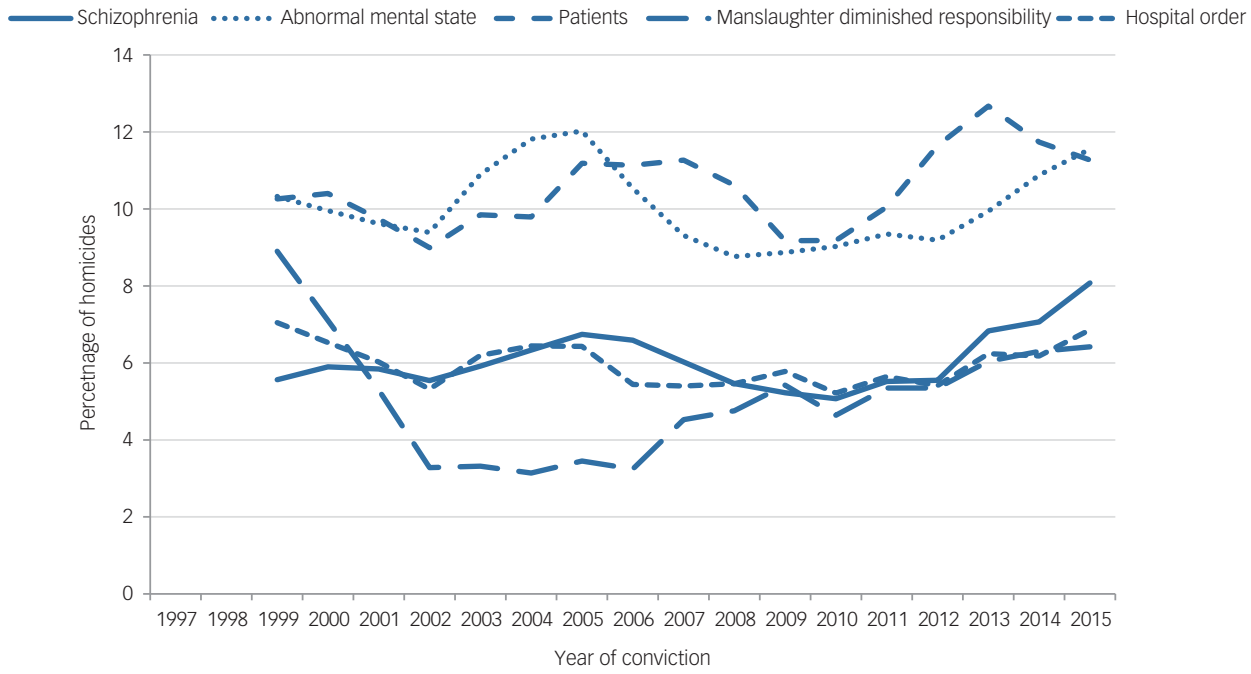

Fig. 2 Three-year moving average proportion of mental health homicides by five definitions and year of conviction.

Table 2 Trends in homicide numbers and proportions by definition of mental disorder and by years 1997–2005 and 2006–2015

	1997–2005		1997–2005		2006–2015		2006–2015	
	Trend by number		Trend by proportion		Trend by number		Trend by proportion	
Definition of mental disorder	IRR (95% CI)	*P*-value	IRR (95% CI)	*P*-value	IRR (95% CI)	*P*-value	IRR (95% CI)	*P*-value
Schizophrenia (and other delusional disorders)	1.05 (1.01–1.10)	0.02	1.03 (0.99–1.07)	0.19	0.98 (0.95–1.02)	0.33	1.05 (1.01–1.09)	0.02
Abnormal mental state at the time of offence	1.05 (1.02–1.08)	<0.01	1.02 (0.99–1.05)	0.19	0.98 (0.95–1.01)	0.12	1.03 (1.00–1.07)	0.03
Patients	1.03 (1.00–1.07)	0.05	1.01 (0.98–1.04)	0.6	0.96 (0.93–0.98)	<0.01	1.01 (0.98–1.04)	0.47
Manslaughter Section 2 diminished responsibility	0.86 (0.82–0.90)	<0.01	0.84 (0.80–0.88)	<0.01	0.98 (0.94–1.02)	0.36	1.04 (1.00–1.08)	0.06
Hospital disposal	1.00 (0.96–1.05)	0.91	0.98 (0.94–1.02)	0.32	0.97 (0.94–1.01)	0.15	1.03 (0.99–1.07)	0.13

IRR, incidence rate ratio.

Over the study period, there was an upward trend in the rate of people with schizophrenia receiving a prison disposal (IRR = 1.02, 95% CI 1.00–1.05, $P = 0.06$); however, this was non-significant. There was a significant fall in those receiving a hospital order disposal (IRR = 0.98, 95% CI 0.96–0.99, $P = 0.01$) (Fig. 3). People with schizophrenia who had a secondary diagnosis of substance misuse were more likely to receive a prison disposal than those with no substance comorbidity ($n = 124$, 45% *v.* $n = 106$, 28%; $P < 0.01$); the numbers also increased over the study period (IRR = 1.05, 95% CI, 1.02–1.09, $P = 0.003$). It was more likely for offenders with schizophrenia to receive a hospital disposal if they did not have a secondary diagnosis of substance misuse ($n = 265$, 70% *v.* $n = 146$, 53%; $P < 0.01$).

Table 3 Court outcome and disposal by three definitions of mental disorder

	Schizophrenia			Abnormal mental state at the time of the offence			Mental health patients		
Verdict	*N* = 656	%	95% CI	*N* = 1104	%	95% CI	*N* = 1143	%	95% CI
Verdict									
Murder	183	28%	24–32	359	33%	29–36	535	47%	43–51
Manslaughter	203	31%	27–36	350	32%	28–35	382	33%	30–37
Manslaughter Section 2 (diminished responsibility)	232	35%	31–40	343	31%	28–35	193	17%	15–19
Infanticide	3	0.5%	0.1–1.3	18	2%	1–3	7	1%	0·2–1.3
Unit to plead	17	3%	2–4	17	2%	1–2	14	1%	0.7–2.1
Insanity verdict	18	3%	2–4	17	2%	1–2	12	1%	0.5–1.8
Disposal									
Prison sentence	230	35%	31–40	561	51%	47–55	819	72%	67–77
Hospital disposal	411	63%	57–69	467	42%	39–46	291	26%	23–29
Non-custodial sentence	14	2%	1–4	74	7%	5–8	30	3%	2–4

Some proportions do not tally to a total of 100% because of rounding.

https://doi.org/10.1192/bjp.2020.94 Published online by Cambridge University Press

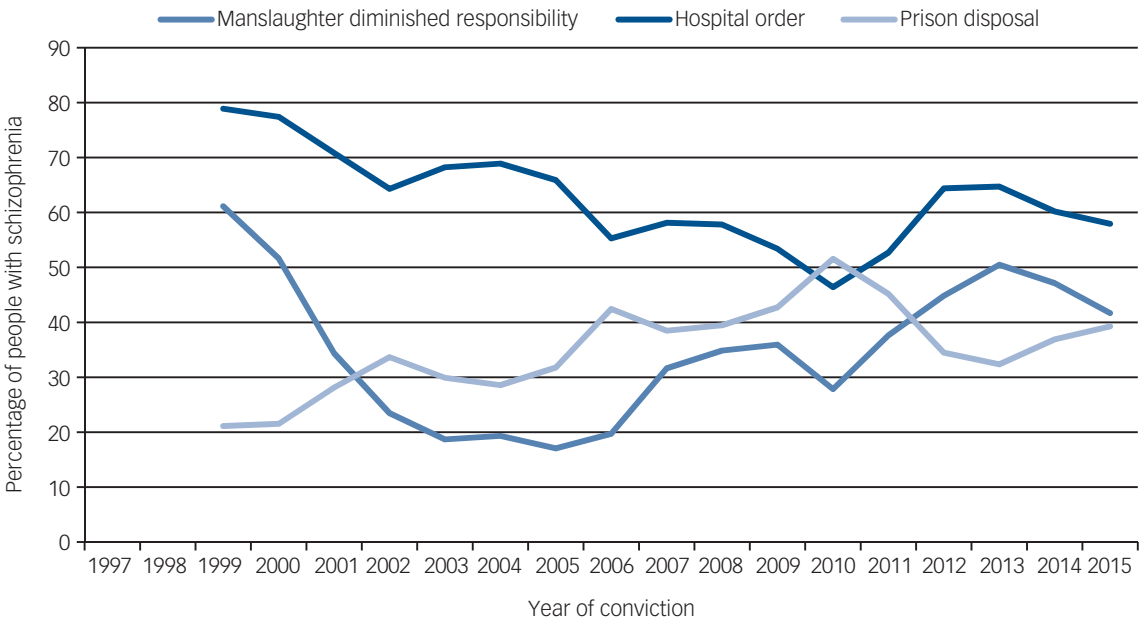

Fig. 3 Three-year moving average percentages of homicide offenders with schizophrenia who received a verdict of manslaughter on the grounds of diminished responsibility, and a prison disposal or hospital order, by year of conviction.

There were 114 (17%) people with schizophrenia who had a secondary diagnosis of personality disorder. They were also more likely to receive a prison disposal than those with no personality disorder comorbidity ($n = 64$, 56% *v.* $n = 166$, 31%; $P < 0.01$). There was no trend found over the study period (IRR = 1.01, 95% CI 0.96–1.06; $P = 0.78$). People with schizophrenia who had a comorbidity personality disorder were less likely to receive a hospital disposal than those with no comorbidity personality disorder ($n = 50$, 44% *v.* $n = 361$, 67%; $P < 0.01$), but no change in trends were found over the report period (IRR = 0.98, 95% CI 0.93–1.03, $P = 0.43$).

Of those with an abnormal mental state at the time of offence, 514 (48%) had a diagnosis of schizophrenia, 371 (35%) had an affective disorder, 59 (6%) had a personality disorder, 39 (4%) had alcohol dependence/misuse and 17 (2%) had drug dependence/misuse. Almost a third received a verdict of manslaughter on the grounds of diminished responsibility. Regarding sentencing, 50% received a prison sentence, 42% received a hospital disposal and 8% received a non-custodial sentence (Table 3).

Of the patients in contact with mental health services within 12 months of the offence, less than 20% received a diminished responsibility verdict and the majority were imprisoned (Table 3). There was no trend over time in the number or proportion of patients receiving a diminished responsibility verdict or hospital order outcome. Of the patients who received a diminished responsibility verdict, 147 (77%) received a hospital disposal.

Discussion

Key findings

Over the 19-year period, there was a significant fall in the rate of homicide convictions in England and Wales since a peak in the mid-2000s, with a 43% fall between 2008 and 2015. Homicide by people with mental disorder has followed a similar pattern, but the fall has been less striking than in the general population. As a result, mental disorder is now becoming proportionately more important to homicide reduction. We found that the way mental disorder is dealt with in courts has also changed, with hospital orders and verdicts of manslaughter Section 2 diminished responsibility following exactly opposite patterns up until 2010. Our data shows a high number of prison disposals for those with mental disorder, a possible explanation for which is comorbid substance misuse.

Findings in context

The fall in the number of homicide convictions in the UK is consistent with international trends.[2] Recent data from the Office for National Statistics show a 5% decrease in homicide over a 12-month period, year ending June 2019, and no overall increase in violent offences; however, all offences involving knives or sharp instruments increased by 7%.[15] The recent upsurge in knife crime in England is a major public health concern. Lessons can be learned from Police Scotland, who have implemented a pioneering approach establishing the Violence Reduction Unit. Communities have worked together to promote behaviour change through a combination of methods, including education, offering opportunities to disenfranchised youths and introducing more punitive sentences for carrying knives. Policing approaches to knife crime have also changed, focusing on 'prevention, diversion and support'. Although there is no direct causal link, since the initiative was introduced there has been a reduction in a cycle of violence that once saw Scotland having one of the highest rates of homicide in high-income countries worldwide.[16]

Large et al.[8] previously suggested the decrease in homicide associated with mental disorder may be attributed to improved mental health treatment and services. We agree that the fall in patient homicide could be associated with improved service provision and mental health patients being managed more effectively in the community. Improving Access to Psychological Therapies services were introduced in 2008 to provide evidence-based therapy for people with anxiety and depression. An estimated 900 000 people annually access these services.[17] Likewise, since the introduction of Community Treatment Orders also in 2008, there has been a steady increase in their use from a rate of 6.4 to 10.0 per 100 000 population between 2009–2010 and 2013–2014.[18] However, one form of Community Treatment Orders for offenders with mental disorder that remains underused is the Mental Health Treatment

https://doi.org/10.1192/bjp.2020.94 Published online by Cambridge University Press

Requirement, with fewer than 400 orders made in 2016 (0.3% of all community orders).[19] Nonetheless, there has been an increase in comorbid substance misuse, with 43% of patients having a secondary diagnosis of substance dependence/misuse. Prevention of patient homicide therefore is strongly linked to clinical measures in reducing substance misuse and maintaining treatment and engagement with services.[20]

In contrast to most other definitions, the proportion of homicide offenders with schizophrenia has risen. This could be explained by the number remaining stable whereas homicides in the general population (denominator) have fallen. This indicates that there may be different factors driving homicide in people with schizophrenia. There are common covarying risk factors, which may elevate risk. NCISH reported 39% of people with schizophrenia who committed homicide were not in recent contact with mental health services, therefore suggesting the offence may have been associated with long-term untreated psychopathology or first-episode psychosis before the offence.[20] In addition, complex comorbidities are known to elevate risk, including substance misuse.[21] Psychotic symptoms, social disadvantage (e.g. homelessness) and marginalisation, trauma and victimisation are all factors that mediate violence and aggression in people with serious mental disorder.[22]

The presence of mental disorder in itself is not a factor in determining a mental health court outcome if the diagnosis had no connection to the offence. However, we found the majority of those with schizophrenia were experiencing symptoms of psychosis at the time of the offence. Consistent with previous research, our findings have shown that a small but significant proportion of offenders with serious mental disorders continue to be imprisoned.[11] In addition, the number of people with schizophrenia and psychotic symptoms receiving a prison sentence increased over the study period, although this was not significant. However, the use of hospital order disposals fell markedly.

These sentencing outcomes were strongly associated with comorbid substance misuse/dependence. Prison is not generally considered to be an appropriate environment to treat people with mental disorder, particularly when presenting with complex needs such as comorbid substance misuse. Previous research has shown the risk of suicide to be elevated sevenfold (relative risk 7.3) for prisoners with schizophrenia and fivefold (relative risk 5.1) for those with major depression.[23]

Clinical implications

There are two key clinical measures required to reduce the risk of homicide by patients in contact with mental health services: first, ensuring patients maintain engagement with services and adhere to treatment and medication plans and second, tackling alcohol and drugs use, which is known to exacerbate symptoms. Post-offence, it is important that all homicide offenders held on remand should have a detailed mental health assessment and those with serious mental disorder should be identified to court. The Prison and Probation Ombudsman Annual Report 2017–18[24] highlighted the lack of suitable skilled healthcare staff in prisons, with continual difficulties in transferring prisoners who are mentally unwell into clinical care. Department of Health guidance recommends that prisoner transfer direction should be actioned within 14 days; however, the Prison and Probation Ombudsman suggest many prisons continue to find this target problematic.[24]

Strengths and limitations of study

The NCISH is an internationally unique project whose recommendations have informed national policies and clinical guidance in the UK for over 20 years. The study's key strength is the large, generalisable and representative data set, which allows for the examination of the antecedents of homicide, leading to recommendations to improve safety in mental healthcare. However, this research is not without limitations. This was a descriptive study examining aggregated data over the 19-year period and we were unable to test for causal association. Data are based on the offender's outcome and disposal at the time of the trial, and does not capture any transfers from prison after conviction. Offenders with schizophrenia were identified from the diagnoses in psychiatric reports and questionnaires completed by services and information on abnormal mental state at the time of the offence was obtained from psychiatric reports only. The results are therefore based on homicide perpetrators either known to mental health services or diagnosed pre-trial. However, there may be a small unknown proportion of offenders with schizophrenia who had not been under the care of mental health services or received a psychiatric assessment, and who are consequently not represented in this analysis. Despite the fall in the number of psychiatric reports since 2001, we do not believe this has biased our results. Analysis of the NCISH data has shown the proportion of people with serious mental disorder (particularly schizophrenia) receiving a pre-trial/sentencing psychiatric assessment has remained stable.[25]

Policy implications

The evidence from this research illustrates that homicide is a clinically important area of study. The findings show mental health plays a small but significant role in contributing to homicide rates, and there are key clinical measures that can be implemented to reduce the numbers of lives lost each year. Although influential reports such as Justice's 'Mental Health and Fair Trial' increase both media attention and public awareness of these issues,[26] further work is required to inform the courts (judge and juries) of the detrimental effects of imprisoning people with a serious mental disorder. A shift toward consistent, appropriate, therapeutically focused sentencing is required.

Sandra Flynn, Division of Psychology and Mental Health, School of Health Sciences, University of Manchester, UK; **Saied Ibrahim**, Division of Psychology and Mental Health, School of Health Sciences, University of Manchester, UK; **Nav Kapur**, Division of Psychology and Mental Health, School of Health Sciences, University of Manchester, UK; **Louis Appleby**, Division of Psychology and Mental Health, School of Health Sciences, University of Manchester, UK; **Jenny Shaw**, Division of Psychology and Mental Health, School of Health Sciences, University of Manchester, UK

Correspondence: Dr Sandra Flynn. Email: sandra.m.flynn@manchester.ac.uk

First received 23 Oct 2019, final revision 28 Apr 2020, accepted 1 May 2020

Data availability

All authors had access to the study data and continue to have access to data managed and collated by the National Confidential Inquiry into Suicide and Safety in Mental Health.

Acknowledgements

The study was carried out as part of the National Confidential Inquiry into Suicide and Safety in Mental Health (NCISH). We acknowledge the help of the administrative staff in NHS Trusts, HM Crown Courts and Greater Manchester Police who helped with the NCISH processes, and the clinicians who completed the questionnaires. We are grateful for the work of current staff at NCISH: Alison Baird, Lana Bojanic, James Burns, Huma Daud, Jane Graney, Julie Hall, Isabelle M. Hunt, Rebecca Lowe, Nicola Richards, Cathryn Rodway, Philip Stones, Su-Gwan Tham and Pauline Turnbull. The NCISH is currently commissioned by the Healthcare Quality Improvement Partnership on behalf of the four UK governments and the States of Jersey and Guernsey.

Author contributions

All authors are experienced researchers and provided expertise regarding the topic area (S.F., J.S., L.A.), data acquisition (S.F., S.I.), study design (S.F., J.S., L.A., N.K.) and analysis (S.I., S.F., N.K., L.A., J.S.). S.F., N.K., L.A. and J.S. were responsible for study conception, design and interpretation of the data. S.F. and S.I. were responsible for data analysis and for drafting of the article, under the supervision of N.K., L.A. and J.S. All authors critically revised and approved the final

https://doi.org/10.1192/bjp.2020.94 Published online by Cambridge University Press

manuscript for submission. All authors agree to be accountable for all aspects of the work in ensuring that questions related to the accuracy or integrity of any part of the work are appropriately investigated and resolved.

Funding

This work was supported by the Healthcare Quality Improvement Partnership (HQIP). All researchers are independent from the funders. The funding body (HQIP) had no involvement in the study design, data collection, analysis, data interpretation, report writing or decision to submit the manuscript. All authors had full access to all of the data (including statistical reports and tables) in the study and can take responsibility for the integrity of the data and the accuracy of the data analysis.

Declaration of interest

L.A. is a non-executive board member of the Care Quality Commission.

An ICMJE form is in the supplementary material, available online at https://doi.org/10.1192/bjp.2020.73.

References

1 Office for National Statistics (ONS). Homicide in England and Wales: Year Ending March 2017. ONS, 2018 (https://www.ons.gov.uk/peoplepopulationandcommunity/crimeandjustice/articles/homicideinenglandandwales/yearendingmarch2017).

2 United Nations Office on Drugs and Crime (UNODC). Global Study on Homicide: Homicide Trends, Patterns and Criminal Justice Response. UNODC, 2019 (https://www.unodc.org/documents/data-and-analysis/gsh/Booklet2.pdf).

3 Scottish Government. Homicide in Scotland 2016–2017: Statistical Bulletin on Crimes of Homicide Recorded by the Police in Scotland in 2016 to 2017. Scottish Government, 2017 (https://www.gov.scot/publications/homicide-scotland-2016-17-9781788512367/pages/5/).

4 Giacopassi DJ, Sparger JR. The effects of emergency medical care on the homicide rate: some additional evidence. *J Crim Justice* 1992; **20**: 249–59.

5 Sumner SA, Mercy JA, Dahlberg LL, Hillis SD, Klevens J, Houry D. Violence in the United States: status, challenges, and opportunities. *JAMA* 2015; **314**: 478–88.

6 Cook PJ, Philip J, Machin S, Marie O, Mastrobunoni G. *Lessons from the Economics of Crime*. MIT Press, 2013.

7 Malby S. Homicide. In *International Statistics on Crime and Justice* (eds S Harrendorf, M Heiskanen, S Malby S): 7–20. European Institute for Crime Prevention and Control, 2010.

8 Large M, Smith G, Swinson N, Shaw J, Nielssen O. Homicide due to mental disorder in England and Wales over 50 years. *Br J Psychiatry* 2008; **193**: 130–3.

9 Walsh E, Fahy T. Violence in society. *BMJ* 2002: 325–507.

10 Brennan PA, Mednick SA, Hodgins S. Major mental disorders and criminal violence in a Danish birth cohort. *Arch Gen Psychiatry* 2000; **57**: 494–500.

11 Fazel S, Seewald K. Severe mental illness in 33,588 prisoners worldwide: systematic review and meta-regression analysis. *Br J Psychiatry* 2012: 364–73.

12 Roscoe A, Rodway C, Mehta H, et al. Psychiatric recommendations to the court as regards homicide perpetrators. *J Forens Psychiatry Psychol* 2009; **20**: 366–77.

13 *R v Golds* [2016] UKSC 61.

14 Office for National Statistics (ONS). Revised European Standard Population 2013 (2013 ESP). ONS, 2013 (https://webarchive.nationalarchives.gov.uk/20160106020035/http://www.ons.gov.uk/ons/guide-method/user-guidance/health-and-life-events/revised-european-standard-population-2013–2013-esp-/index.html).

15 Office for National Statistics (ONS). Crime in England and Wales: Year Ending June 2019. ONS, 2019 (https://www.ons.gov.uk/releases/crimeinenglandandwalesyearendingjune2019).

16 Police Scotland. Scottish Violence Reduction Unit. Police Scotland, 2018 (http://actiononviolence.org/).

17 NHS England. Adult Improving Access to Psychological Therapies Programme. NHS England, 2019 (https://www.england.nhs.uk/mental-health/adults/iapt/).

18 Trevithick L, Carlile J, Nodiyal S, Keown P. Community treatments orders: an analysis of the first five years of use in England. *Br J Psychiatry* 2018; **212**: 175–9.

19 Manjunath A, Gillham R, Samele C, Taylor PJ. Serving a community sentence with a mental health treatment requirement: offenders' perspectives. *Crim Behav Ment Health* 2018; **28**: 492–502.

20 National Confidential Inquiry into Suicide and Safety in Mental Health. Annual Report 2018: England, Northern Ireland, Scotland, Wales. University of Manchester, 2018 (https://sites.manchester.ac.uk/ncish/reports/annual-report-2018-england-northern-ireland-scotland-and-wales/).

21 Fazel S, Gulati G, Linsell L, Geddes JR, Grann M. Schizophrenia and violence: systematic review and meta-analysis. *PloS Med* 2009; **6**: e1000120.

22 Swanson JW, McGinty EE, Fazel S, Mays VM. Mental illness and reduction of gun violence and suicide: bringing epidemiological research to policy. *Ann Epidemiol* 2015; **25**: 366–76.

23 Baillargeon J, Penn JV, Thomas CR, Temple JR, Baillargeon G, Murray OJ. Psychiatric disorders and suicide in the nation's largest state prison system. *J Am Acad Psychiatry Law* 2009; **37**: 188–93.

24 Prisons & Probation Ombudsman. Prisons & Probation Ombudsman Annual Report 2017–18. The Stationery Office, 2018 (https://s3-eu-west-2.amazonaws.com/ppo-prod-storage-1g9rkhjhkjmgw/uploads/2018/10/PPO_Annual-Report-2017-18_WEB_final.pdf).

25 National Confidential Inquiry into Suicide and Homicide by People with Mental Illness. Annual Report: England, Northern Ireland, Scotland and Wales. University of Manchester, 2014 (http://documents.manchester.ac.uk/display.aspx?DocID=37594).

26 JUSTICE. Mental Health and Fair Trial. JUSTICE, 2017 (https://justice.org.uk/wp-content/uploads/2017/11/JUSTICE-Mental-Health-and-Fair-Trial-Report-2.pdf).

psychiatry in pictures

'Lone travelers'

Brent R. Carr

Lone travelers (September 2019). ISO 250 1/1000 s f/5 200 mm.

© The Author 2021. Published by Cambridge University Press on behalf of the Royal College of Psychiatrists

The British Journal of Psychiatry (2021) 218, 216. doi: 10.1192/bjp.2020.235

https://doi.org/10.1192/bjp.2020.94 Published online by Cambridge University Press