Commentary: Dangerous patients or dangerous diseases?

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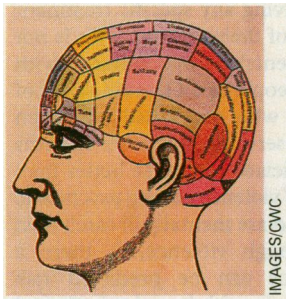

Victorians might have used phrenology to identify violent people

Given something of an international panic about people with a mental disorder, perhaps the most important contribution to rational practice is to emphasise that such disorders account for a minute proportion of society's violence. In countries with modest criminal homicide rates of, say, 2-6 per 100 000 population, people with schizophrenia are overrepresented in criminal homicide statistics compared with their representation in the general population.[1] In Denmark there is even some evidence of an increase, since 1959, in the number of men with schizophrenia who kill someone within their family.[2] Criminal homicide, however, is a highly selected type of unnatural death even in peacetime.

For non-fatal violence, in the only true community survey of violence and mental disorder,[3] people with schizophrenia, major affective disorder, substance misuse, or a combination of disorders were overrepresented in the violence groups. Even so, less than 10% of the people with pure schizophrenia reported having been violent in the 12 months before the interview. Furthermore, they accounted for less than 3% of the total violence reported in the sample. There are no data to support the media caricature of people with a mental disorder, the shunning of former patients by employers or neighbours, or the laws increasing constraints proposed by politicians pandering to public fears. If most of society can remain untroubled by schizophrenia, however, the 1% or so of the population that suffer from it, their families, and the victims of those few schizophrenic people who become violent deserve more than reassurances about probabilities.

Impact of psychotic illness

An association between two conditions suggests but does not establish a causal link. Studies of comparative illness and violence careers are an important next step. Two Scandinavian birth cohort studies compared the criminal careers of people who had been admitted to hospital for major mental disorders with those who had not.[4,5] Both found that men with these histories were more likely to be convicted for violence and that patterns in onset of offending differed from those of the general population. Women with mental disorder had generally higher offending rates. Findings of another Swedish study[6] comparing the criminal careers and arrests over 17 years of patients with schizophrenia discharged from hospital to the community with those of the general population were similar; so were those in an English study of patients with schizophrenia in contact with psychiatric services in one community (not necessarily inpatients) compared with other psychiatric patients.[7] Although since the 1970s other studies have hinted at an important temporal relation between onset of illness and onset of offending,[8-11] the cohort studies just described did not specifically explore this association. A problem with birth cohort studies is that the samples tend to be so large that data are collected only from records, which may not be reliable regarding onset of illness or any violence other than that appearing in official criminal records. Two studies—an English twin study in which subjects were selected for psychosis but not for offending in at least one twin[12] and an English pretrial prisoner study[13]—had full research interviews with the subjects to supplement data from records. In both studies violence clearly came after the onset of illness in most cases (88%).[14,15]

Driven by symptoms?

Previous studies have hinted at the nature of associations between illness and violence. Firstly, when violence occurs among people with a psychotic illness it occurs primarily as psychotic symptoms develop.[9,16] Secondly, among inpatients symptoms of psychosis are better predictors of violence than are the more traditionally cited indicators, including previous violence.[17,18] Delusions seem to be significantly associated with violence.[9,19] Unpublished material from Bulgaria on the psychiatric assessment of 1959 mentally disordered offenders found that just over half of the people with a functional psychosis had had delusions when they offended (P Dontschev, personal communication). A substantial study in New York of psychiatric patients and controls who had never received psychiatric treatment emphasised the importance of psychotic symptoms, established at interview, among people who had been arrested for or convicted of violent attacks.[20]

The English study of pretrial prisoners is the only study to date to have included interviews close in time to a specific act of violence, with specific questions about motivation for the violence.[13] The reasons given fell into three main categories. The men felt driven, they could not explain the offence at all, or the offence was explicitly reactive to an external stimulus or need such as provocation or financial gain. Psychotic men responded to external stimuli or need, albeit rather less often than non-psychotic men. Drive was almost invariably related to delusions, although the men by no means always recognised their beliefs as disordered. Motives and delusions are by definition subjective, but there was indirect evidence that the impact of delusions was likely to have been real. Contemporaneous victim and witness accounts were examined for evidence of real external provocation. A few of the men with a psychosis who were violent had been truly provoked, but most non-psychotic men had been. Similarly, affective involvement in the attack and its social circumstances differed between the groups.[14] Delusional drive was also more likely to be associated with the most serious violence.[13] A second, similar but independent series from the same prison showed a similar relation between delusions and violence.[21-23] Delusions most likely to be associated with delusional drive and violent offending were the related cluster of passivity delusions (beliefs about being under the control of something or someone else), religious delusions, delusions of paranormal influence, and delusions of physical influence. The relation between violence and other psychotic symptoms, including hallucinations, is not impressive.

The New York study has clarified further the nature of psychotic symptoms associated with violence.[20] The psychiatric epidemiological research interview was the principal measure of phenomenology.[24] From this, Link and Stueve extracted a particularly important cluster of symptoms to create the threat/control override scale.[25] These were, essentially, passivity delusions, thought insertion, and persecutory delusions. They then applied a series of models to test the relation of purportedly relevant risk factors to violence. In the simplest model, patients were significantly more likely to have been violent than controls in the community who had never received psychiatric treatment. When the model applying the threat/control override scale was added, however, this simple significant relation disappeared. Threat/control override was significantly

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associated with violence, regardless of patient status. In further tests sex, age, ethnic origin, and other psychotic symptoms all failed to improve the fit of the model.[29] It is particularly important to emphasise that among people with a mental disorder sex, age, and ethnic origin are not good indicators of risk of acting violently, as misleading guidance is often still given on the basis of traditional models drawn from criminology. Several studies have highlighted the extent of prediction errors.[26-28] A re-evaluation of the epidemiological catchment area study and of data from an entirely independent, large scale replication of the New York study in Israel have produced similar results (unpublished data cited by Link and Stueve[30]). The former reconfirmed that hallucinations alone have little effect but showed that they increased further the significant effect of delusions.

Misunderstandings about predicting violence

Clinicians from all professional disciplines have been criticised for overpredicting violence, even within psychiatric populations. Their greater than chance success generally depends heavily on the accuracy of their negative predictions. In a review of Western empirical studies from 1979 to 1989 of predictions of violence little else seemed clear.[31] Predictions, however, are not made in a vacuum of inaction. Responsible clinicians immediately try to draw up a plan to prevent their prediction of violence coming true. In a clinical setting it is arguable that overprediction of violence may be precisely what should be expected, but studies consistently fail to measure the context of any violence after predictions. Furthermore, the studies were disparate, were predominantly of men, were not all of people with a mental disorder, and mental disorder, when identified, was rarely measured systematically or using standardised scales. Any or all tend, however, to be cited to inform prediction in mental health services. There is also a serious problem of bias, with an offence or act of violence usually being a qualification for entry. In this context it is hardly surprising that past offending or violence was among the better predictors of further violence. The reviewers themselves acknowledged that prediction of violence from an established violence career is an easier task than first prediction of violence. Another, independent reviewer noted that the effect of a higher base rate of certain types of violence can be mistaken for greater accuracy in prediction.[32] In one empirical study an established history of criminality or violence was significantly associated with later criminality or violence, but it still accounted for only 5% of the subsequently observed variance.[33] A further caution relates particularly to reliance on criminal data. Within the remanded pretrial prisoner sample,[13] selected for criminality, previous violence among psychotic men was modestly related to the violence of an index offence only when all previous violence (not just previous criminal violence) was taken into account.[13] A history of violence must not be disregarded, but for clinicians wanting to assess and manage the risk of violence from their patients, the most important tasks are likely to be establishing systematic approaches to rating phenomenology and its impact, and informed treatment plans.

One aid in this is the Maudsley assessment of delusions schedule, which allows for systematic recording of the influence of delusions on action.[34] Barely rating a mention in standard texts, acting on delusions proves to be common; even destructive violent actions happened among 27% of one general psychiatric inpatient sample over one 28 day period.[35]

There is generally plenty of opportunity to assess and map the risk of violence among people with psychosis. Few who are seriously violent present for the first time early in their illness, and only a small minority have violence as a presenting complication.[9 36] Among the pretrial prisoners, however, over 90% of the psychotic men (50% of the non-psychotic men) were well known to the psychiatric services before their offence, but only a quarter of the psychotic men with active symptoms were receiving any specific treatment for their illness at the time of their offence. This is not necessarily because of patients' non-compliance with treatment. About 90% of people in a German series of people with schizophrenia who had killed had been discharged by psychiatric services about six months previously.[9] Given that clinicians can make better than chance predictions of risk of violence among psychiatric patients and that people who are mentally ill rarely first manifest their illness through violence, is there a danger that when violence can be predicted risk is in fact increased through withdrawal of clinical responsibility and services? In the management of head injury, for example, prediction of worst outcome leads to reduction in care.[37] What in psychiatry is worse as an outcome than serious violence or homicide?

Risk management and mental health law

There should be little doubt that for some people with psychotic illness the symptoms can and must be managed in some way if that person is to remain safe with respect to self or others. The ideal is symptom relief, but it may be acceptable to render the symptoms tolerable to the patient. For some people already acting violently admission to hospital may be unavoidable. If coercion is necessary, the legal mechanisms to do so are there in most countries. English law even avoids the last resort pitfall which Torrey and Jaffe are keen to challenge in the United States.[38 39] The Mental Health Act 1983 allows for a person's compulsory admission to hospital "in the interests of his own health" as well as according to dangerousness criteria. Ninety three per cent of all admissions to English psychiatric hospitals remain voluntary.[40] Greater concerns than whether the law is strong enough to bind reluctant patients into services are whether sufficient services of the right kind exist and reluctant clinicians will be truly committed to patients. On both sides of the Atlantic there have been calls for a moratorium on bed closures.[41] Some Western countries may yet have to find the right balance between inpatient and outpatient facilities and also review the balance of approaches for substance misusers and people with a personality disorder—those who are usually denied the label of being ill. Substance misuse seems now to be at least as important a risk factor for violence as schizophrenia but still receives less clinical attention. Only since 1994 has the British Department of Health required health service providers to include people with a personality disorder in their needs assessment exercises.

Calls for legal powers to constrain patients in the community offer further potential for deviation from the need to improve service provision. Compulsory treatment in the community has been debated at regular intervals in England and Wales, and on 1 April 1996 the Mental Health (Patient in the Community) Act 1995 was implemented, notwithstanding the underuse of pre-existing relevant powers, such as guardianship under the Mental Health Act 1983 or probation orders with a condition of treatment under the Powers of the Criminal Courts Act 1973. There is continuing dissatisfaction with the use of powers of commitment to outpatient treatment in the United States.[42] Some of the standards set for such commitment include[43]:

- Elements of dangerousness are not imminent while patients are complying with ordered treatments
- If patients discontinue treatment there would be

ample opportunity to take corrective action before they or anyone else is injured

- Patients have enough competency to understand the stipulations of their involuntary community treatment
- Patients have enough capacity to comply with an involuntary community treatment plan
- The prospective clinic is willing to be responsible for patients and is able to deliver ordered treatments.

Coerced community treatment within this sort of framework has long been possible under existing English legislation. Greater use of the probation order might even offer some hope for substance misusers. Experience in the United States suggests that this could be beneficial.[44] The value of additional or tougher legislation is dubious. Several commentators in the United States have pointed out that more research on its impact is needed,[45 46] with suggestions that the legislation may be counterproductive in enhancing clinician[45] or patient[47] cooperation. Furthermore, important lessons may be learned from experience in the criminal justice system. With the Criminal Justice Act 1991 the concept of alternatives to custody was replaced by punishment in the community. Alternatives included suspended sentences with or without supervision, community service orders, day training centres, and probation orders with conditions as part of a policy to reduce imprisonment. Consequently, the use of custody increased, not wholly because the crime rate increased.[48] The new sentencing options were being used as an "alternative to alternatives"[49] and simply adding restrictions to those who would have remained in the community anyway. The alternatives may also have directly increased the prison population as the sanction for breach was often imprisonment.[50] Could tougher compulsory treatment in the community have a similarly counterproductive effect on placement of people with a mental disorder, particularly if admission or readmission to hospital is a sanction for the breach of conditions?

In the United States yet another potential challenge to the civil liberties of patients exists in the form of the Kassebaum bill, now being considered by a Senate committee. The bill proposes incentive grants for states that expand their use of outpatient commitment to replace funds for alternative outpatient programmes. Is the potential of the Mental Health (Patients in the Community) Act 1995 similar for England and Wales? Section 1(4) specifies: "A supervision application may be made in respect of a patient only on the grounds that . . . (*c*) his being subject to after-care under supervision is likely to help to secure that he receives the after-care services to be so provided." Most clinicians would endorse the view that good practice would be better facilitated by the sufficient allocation of resources and the creation of an appropriate working climate than by ready recourse to law.[51] The Kassebaum proposal, and perhaps the new English act, could also serve as a warning to clinicians against a too easy recourse to law to coerce patients into treatment. If these moves succeed recourse to law explicitly to coerce clinicians into particular styles of treatment may not be far behind.

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