Regarding clozapine, our article states that all patients received classical neuroleptics (10-year follow-up concluded in 1993; by then, five patients were receiving sulpiride). Causes of death were not "lumped together" but, rather, aggregated by ICD-9 categories in accordance with general population statistics issued by the Department of Health; individual details on any of the above are available from us on request. Our data indicate that it is not increasing dose that is associated independently with reduced survival but, rather, increasing number of antipsychotics given concurrently; there were insufficient data to explore individual causes of death in relation to medication.

Altman, D. G. & Bland, J. M. (1998) Statistical notes: time to event (survival) data. *British Medical Journal*, 317, 468–469.

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Shotguns and blunderbusses: suicide in farmers

Sir: I read with interest the Oxford study on the methods used by farmers to commit suicide over a 13-year period (Hawton et al, 1998). The authors demonstrated that the method of choice used by farmers in England and Wales was that of firearms, followed by hanging and carbon monoxide poisoning. The authors stated that "the ownership of firearms by farmers should be questioned". The paper, originating from the city of dreaming spires, demonstrates a lack of understanding of rural issues, and is disingenuous in its conclusions. Farmers unquestionably require firearms to control vermin, including rabbit, mink, crow and other infestations.

Working in a remote area of rural Scotland, I do not have access to detailed population statistics; however, a rule of thumb will suffice for this purpose. Assume that the population of England and Wales is approximately 50 million; that 1 in 75 of us die each year; then over 13 years (the period of the study), there will have been 8.7 million deaths. The authors imply that banning the ownership of firearms to farmers might prevent up to 285 deaths. This would have reduced the number of deaths in England and Wales by a factor of

0.003%. This does not appear to be a very impressive public health measure, even if it worked and if farmers did not choose to use alternative and rather more conventional methods such as analgesic or antidepressant overdosage. The rate of death due to firearms in this group has in any case been declining throughout this period (and not just since 1989, the date of firearms legislation, as the authors suggested).

Of course, if the authors were to suggest that in addition to being prevented from owning firearms, that farmers were also prevented from owning ropes, balertwine and washing-lines (risk of hanging), and cars and agricultural vehicles and machinery (risk of carbon monoxide poisoning), then 613 deaths might be prevented, reducing the mortality in England and Wales by a whole factor of 0.007%! Perhaps Hawton et al would prefer to see analgesics and antidepressants banned for townsfolk. By a similar reckoning, this would have a much greater impact in reducing deaths.

Hawton, K., Fagg, J., Simkin, S., et al (1998) Methods used for suicide by farmers in England and Wales. The contribution of availability and its relevance to prevention. British Journal of Psychiatry, 173, 320–324.

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Author's reply: Dr Collacott's letter contains some surprising reasoning. First, to calculate the impact of suicide prevention in terms of the proportion of the overall number of deaths from all causes in the general population trivialises suicide prevention as a public health measure. Second, prevention of suicides in an individual group is surely worth pursuing, especially when that group has an elevated risk, as is the case with farmers (Charlton et al, 1993; Kelly & Bunting, 1998). Third, reducing the availability of means for selfinflicted death is recognised as being an important component of suicide prevention. We were not suggesting that all farmers should be prevented from owning firearms, but that access to lethal weapons should be restricted for farmers known to be at risk of suicide. It is surely important to restrict access to firearms when a farmer (or indeed any other individual) is known to be at risk, such as during a severe depressive episode. One well-established fact is that unavailability of one method does not mean that a suicidal individual will automatically turn to another method. Also, some survivors of firearm suicide attempts report similar impulsivity in their actions to that often found in patients presenting with overdoses (De Moore et al, 1994).

The recent publication describing the results of our research team's work on suicide in farmers indicates several potential strategies for suicide prevention (Hawton et al, 1998). However, restricting access to means will always be one important strategy.

Chariton, J., Kelly, S., Dunnell, K., et al (1993) Suicide deaths in England and Wales: trends in factors associated with suicide deaths. *Population Trends*, **71**, 34–42.

Hawton, K., Simkin, S., Malmberg, A., et al (1998) Suicide and Stress in Farmers. London: The Stationery Office.

Kelly, S. & Bunting, J. (1998) Trends in suicide in England and Wales, 1982–96. Population Trends, 92, 29–41.

De Moore, G. M., Plew, J. D., Bray, K. M., et al (1994) Survivors of self-inflicted firearm injury. A liaison psychiatry perspective. *Medical Journal of Australia*, 160 471–475.

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Satisfaction of carers at home

Sir: Szmukler et al (1998) wondered whether the greater satisfaction of the carers of patients treated at home compared with hospital in the study of Marks et al (1994) might reflect the fact that the patients were being considered for admission at the time and had "enthusiastic experimental teams engaging in an exciting new form of care".

Two facts make the above explanations unlikely. First, the relatives' satisfaction with home care did not become significantly superior to satisfaction with standard hospital care until fully 11 months after patients had entered the study, well after admission had ceased to be an issue. Second, the relatives' significantly superior satisfaction with home rather than standard care continued when the patients were stable in the fourth year of the study, despite the experimental team by then having long been demoralised and without enthusiasm.

The relatives' superior satisfaction with home over standard care may more likely have reflected a preference for treatment taking place at home and for the easy contact with the community team that it offered. (Satisfaction ratings did not relate to how much patients improved in symptoms or social adjustment.)

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

Szmukler, G. I., Wykes, T. & Parkman, S. (1998) Care-giving and the impact on carers of a community mental health service. PRiSM Psychosis Study 6. British Journal of Psychiatry, 173, 399-403.

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Hair analysis for substance use

Sir: McPhillips et al (1998) described the use of hair analysis as an outcome measure in research and for evaluating the effectiveness of treatments designed to modify substance

use. We wish to report its acceptability in the context of clinical research and development. We have collected hair samples from 36 patients engaged in a randomised controlled trial evaluating the effectiveness of individual and family cognitive-behavioural therapy for patients with schizophrenia and comorbid substance use problems. Mental health and substance use assessments of outcome were carried out at baseline, 3, 6, 9 and 12 months for the majority of patients following entry to the trial. Hair sample collection was carried out at roughly equivalent times resulting in, at the time of writing, a possible 148 samples being collected. Entry to the trial was not dependent on consent to supply a hair sample. Hair was collected mainly from the scalp (116/148 samples), legs (14/148 samples) or underarm area (5/158 samples). Leg or underarm hair was sampled only when the scalp hair was shaved or too short to provide an acceptable sample. The sample collected was taken from close to the

skin and was approximately 2 cm in length and 0.5 cm thick. Consent to provide hair samples was given by all except one subject who refused to consent at any time point (5/148 samples). Three other subjects refused on some occasions, but consented at other time-points (5/148 samples). Three other samples were not collected because of the death of a subject. As a result, 93% of the total available samples were collected. Even apart from issues of improved reliability, validity and usefulness, the acceptability of hair sampling to establish patterns of substance use is high, and probably higher than urine sampling. It is likely to be much more widely used as both a clinical and a research tool in the future.

McPhillips, M. A., Strang, J. & Barnes, T. R. E. (1998) Hair analysis. New laboratory ability to test for substance use. British Journal of Psychiatry, 173, 287-290.

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One hundred years ago

Lunatics at large and the public press

The daily Press, or at least a certain section of it, oscillates between two extremes in its views of the treatment of lunatics.

If some half-cured lunatic succeeds in attracting popular attention, the Press loudly advocates legislation that will prevent "incarceration" in an asylum, or, if a discharged patient commits a crime, it is equally forcible about "lunatics at large," and the wrongfulness of letting insane persons out of asylums.

The "lunatics at large" of which complaint is thus made, it should be remembered, are largely the outcome of the recent legislation, which was mainly based on these illogical outbursts of the Press.

The difficulties in placing a sick person with mental disorder under treatment resulting from the recent Lunacy Act, leads to many of these becoming "lunatics at large," until their lunacy is placed beyond all dispute. This is often arrived at by the uncertified lunatic committing some overt act, such as assault, homicide, suicide, or homicide followed by suicide, and thus proving that he needs or has needed treatment.

The number of "lunatics at large" thus created is probably considerably increased by the periodical recertification of lunatics under the recent Act, which may lead to the discharge of patients, who although manifesting no certifiable symptoms while under detention, develop their lunacy very shortly after discharge. Many of these "lunatics at large," therefore, are not under control, not from want of evidence of their insanity, but because this evidence is not within the personal observation of a medical man at the time when he is called on to certify.

The Medical Certificate evidently does not cover the ground, and it is obviously desirable that there should be some other procedure whereby a known lunatic could be placed or detained under care, when from any reason the written evidence of a medical man is not available.

The crimes which result from this defect of the law appeal by their striking character to the popular mind. They are, however, of little importance in comparison with the mass of mental suffering, prolonged even to lifelong lunacy, produced by the hindrances to treatment which the law entails in demanding written evidence (as an oath),

from a medical man, as the only means whereby a sick person can be appropriately

The "liberty of the subject" has been the popular cry on which this lunacy legislation has been based, with the object of preventing the most improbable possibility of a sane person being sent to an asylum. In this zeal for liberty many hundreds of sick persons are annually deprived of the liberty of obtaining the medical treatment they require, obtaining in exchange only the liberty to commit suicide or homicide.

The public should be clearly instructed that the annually recurring and possibly increasing horrors from the crimes of "lunatics at large" are the price it pays, under the existing lunacy law, for protection from an illusory danger to the "liberty of the subject." "Oh, liberty! liberty! how many crimes are committed in thy name."

REFERENCE

Journal of Mental Science, January 1898, 110. Researched by Henry Rollin, Emeritus Consultant