Antidepressant prescribing prior to suicide: role of doctors

Harm Boer, Nick Booth, David Russell, Roy Powell and Martin Briscoe

The pharmacological treatment of depression and the time elapsed since last seen by a doctor were investigated among 507 adults who subsequently killed themselves. The proportion of people consulting a general practitioner or psychiatrist prior to suicide was lower than reported by the British government in the *Health of the Nation* document. General practitioners prescribed relatively low doses of antidepressants. Nineteen out of the 115 people receiving antidepressants used the drugs to kill themselves. Our findings emphasise the importance of prescribing adequate doses of antidepressants and underline the need for safer prescribing.

The Department of Health has identified the reduction of mortality by suicide as a health gain objective, which can be used as a tool in assessing the effectiveness of mental health services in England. In the *Health of the Nation* White Paper (Secretary of State for Health, 1992) the target was set of a 15% fall in suicide rates overall and a reduction of suicide rates in people suffering from severe mental illness of at least 33% by the year 2000. There appears to be an assumption that this will be achieved at least in part by improved detection and more effective intervention in depressive illness (Matthews *et al*, 1994). Recently there has been some concern that antidepressants are sometimes prescribed in low doses (Kragh-Sørensen, 1993) and that medical contact near to the time of the suicidal act may be rare (Vassilas & Morgan, 1993; Matthews *et al*, 1994). We therefore looked at the pharmacological treatment of depression before suicide and the time elapsed since the subjects were last seen by their general practitioners (GPs) and psychiatrists. The study involved a retrospective case note analysis of all deaths in the Exeter Health District between 1979 and 1991 for which an open or suicide verdict was returned.

The study

Subjects were identified from the coroner's register. Information was gathered from the inquest notes and where available the GP notes and psychiatric and community mental health team records were examined. Only a proportion of the GP notes could be examined as many had been destroyed.

The coroner's inquest notes and, where available, the GP and psychiatric notes were used to identify subjects taking antidepressants prior to death. Those on antidepressants were, where possible, divided into three groups equivalent to amitriptyline doses; low (25–74 mg), medium (75–124 mg) and high (125 mg or more). The Defeat Depression campaign, a joint venture of the Royal College of Psychiatrists and the Royal College of General Practitioners, suggested that dose equivalents of 125 mg or more may be needed to maximise response to treatment (Paykel & Priest, 1992).

Findings

Of the total of 507 subjects, 457 (91%) were given a suicide verdict and 9% an open verdict. Three hundred and forty-six (68%) were male and 161 (32%) female.

It was possible to determine the number of days since the subjects had last seen their GP in 295 (58%) cases. Of these, 73 (24%) had been seen in the week prior to death and 143 (49%) in the month before death. One hundred and sixty-four (32%) of the 507 subjects had been referred to a psychiatrist in the Exeter health district in their lifetime. Of the 507, 33 (6.5%) had seen a psychiatrist in the week before death (seven were psychiatric in-patients) and 60 (12%) in the last month. A small number may have seen a psychiatrist outside the Exeter area.

At the time of death 115 subjects were taking antidepressants or lithium. Forty-one of the 115 were excluded because a) the dose of antidepressants was not known (18); b) the drug was not known (11); c) there was doubt about the subjects' compliance with medication at time of death (5), or d) they were prescribed lithium but not an antidepressant (7). Of the remaining 74, 49 were on tricyclics and lofepramine and 25 on other antidepressants. Amitriptyline (15), dothiepin (17) and mianserin (17) were the most frequently prescribed drugs.

Figure 1 shows the three treatment groups and the numbers of people treated by GPs and

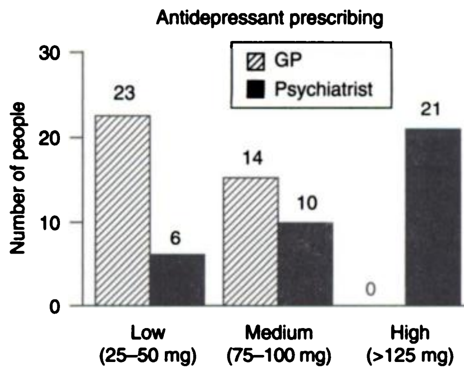

Fig. 1. Antidepressant prescribing by general practitioners and psychiatrists

psychiatrists. Most psychiatrists prescribed high doses of antidepressants whereas all GPs prescribed low or medium doses. This difference is highly significant (χ^2=31.6, P<0.001). Of the 115 people taking antidepressants at the time of death 19 (17%) used antidepressant drugs to kill themselves.

Comment

Our finding that lower numbers than those previously quoted had consulted their doctors in the week or month before death is consistent with other recent studies. Matthews *et al* (1994) reported that 16% had seen a GP in the last week and 38% in the month before death. Vassilas & Morgan (1993) found that fewer people had seen their GP before death, especially those aged under 35. In our sample just under a quarter had seen their GP in the last week and nearly half in the month before death, whereas in 1974, Barraclough *et al* reported that 40% had seen a GP in the last week and 69% in the last month.

Less than a quarter of the total sample in our study was treated with antidepressants and fewer than half of those were taking doses as currently recommended (Paykel & Priest, 1992). Most psychiatrists prescribed adequate doses of antidepressants but no GPs prescribed dose equivalents of 125 mg or more. There is no evidence that daily doses of tricyclic antidepressants of 75 mg or lower are effective in depression, although individual patients may respond to and remain well on such doses (Paykel & Priest, 1992). It has generally been thought that about half the patients who commit suicide are depressed (Barraclough *et al*, 1974), but the changing in pattern of suicide, with an increase in suicide in young men (Hawton, 1992; Vassilas & Morgan, 1993), may mean that fewer people now suffer from depression requiring drug treatment. Kragh-Sørensen (1993) has argued that there is a tendency in general practice to prescribe tricyclic antidepressants in subtherapeutic doses and for inappropriate indications. In their review article Gunnell & Frankel (1994) noted that "paradoxically, people who are prescribed tricyclic antidepressants are given a powerful potential agent to commit suicide".

Because of the missing data (we were able to obtain only 81 (16%) GP notes and a letter from the GP to the coroner was present in 273 (54%) of the 507 cases) our findings need to be interpreted with caution. Exact information about medication was obtained in only two-thirds of cases and the date of the last consultation with the GP was known in only 58% of the subjects. It is also possible that a few people who were taking antidepressants were not identified in the study. This number is likely to be small as previous research has shown that coroner's notes are reasonably accurate (King & Barraclough, 1990). Despite these limitations our results give additional support to the current guidelines in the treatment of depression, such as giving out small quantities of tablets, the need to prescribe adequate doses and possibly to consider the use of safer drugs.

If, as our results suggest, fewer people now consult their doctors immediately before death, GPs and psychiatrists may be less effective in achieving a further reduction of suicide rates than previously thought. However, our finding that GPs prescribed antidepressants in low doses means that professional education and guidelines in the treatment of depression may help to reduce suicide rates.

Acknowledgement

We are grateful to Mr Richard van Oppen, HM Coroner for East Devon for his help and support.

References

BARRACLOUGH, B., BUNCH, J., NELSON, B., *et al* (1974) A hundred cases of suicide: clinical aspects. *British Journal of Psychiatry*, **125**, 355–373.

GUNNELL, D. & FRANKEL, S. (1994) Prevention of suicide: aspirations and evidence. *British Medical Journal*, **308**, 1227–1233.

HAWTON, K. (1992) By their own young hand. Suicide is increasing rapidly in young men. *British Medical Journal*, **304**, 1000.

KING, K. & BARRACLOUGH, B. (1990) Violent death and mental illness: a study of a single catchment area over eight years. *British Journal of Psychiatry*, **156**, 714–720.

KRAGH-SØRENSEN, P. (1993) Pharmacotherapy of the suicidal patient. *Acta Psychiatrica Scandinavica*, **371** (Suppl), 57–59.

ISACSSON, G., HOLMGREN, P., WASSERMAN, D., *et al* (1994) Use of antidepressants among people committing suicide in Sweden. *British Medical Journal*, **308**, 506–509.

MATTHEWS, K., MILNE, S. & ASHCROFT, G. W. (1994) Role of doctors in the prevention of suicide: the final consultation. *British Journal of General Practice*, **44**, 345–348.

PAYKEL, E. S. & PRIEST, R. G. (1992) Recognition and management of depression in general practice: consensus statement. *British Medical Journal*, **305**, 1198–1202.

SECRETARY OF STATE FOR HEALTH (1992) *The Health of the Nation: a Strategy for Health in England*. London: HMSO.

VASSILAS, C. A. & MORGAN, H. G. (1993) General practitioners' contact with victims of suicide. *British Medical Journal*, **307**, 300–301.

Harm Boer, *Senior Registrar in Developmental Psychiatry, Reaside Clinic, Birmingham B45 9BE;* David Russell, *General Practitioner, Mount Pleasant Health Centre, Exeter EX4 7BW;* Roy Powell, *Clinical Audit Facilitator, Royal Devon & Exeter Hospital, Exeter EX2 5DW; and* *Martin Briscoe, *Consultant Psychiatrist, Wonford House Hospital, Exeter EX2 5AF*

*Correspondence

Prevention of Anxiety and Depression in Vulnerable Groups

Joanna Murray

The scope of this review, commissioned by the Department of Health, is the common mental disorders of anxiety and depression occurring in adults in the community. It considers the possibilities for prevention in primary care. This combination of basic conceptual and research information provides a practical framework of preventive strategies for the primary care team. Social factors in aetiology are examined in detail, and epidemiological data is used to consider vulnerability factors and to identify high risk groups. There is also a thorough review of risk for common mental disorders.

• £7.50 • 112pp. • 1995 • ISBN 0 902241 87 7

Available from bookshops and from the Publications Department, Royal College of Psychiatrists, 17 Belgrave Square, London SW1X 8PG (Tel. 0171-235 2351 extension 146)