High rate of antidepressant treatment in elderly people who commit suicide

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The strong role of affective illness in suicides late in life has been shown repeatedly.¹ The prevailing view is that suicide in the elderly is primarily a question of undiagnosed, untreated depression.^{2,3} During recent years antidepressants which are better tolerated by elderly people have been introduced. We therefore examined cases of suicide among elderly people to see whether they had been taking antidepressants.

Subjects, methods, and results

Seventy five Scandinavian born people aged 65 or over (40 men, 35 women) committed suicide and were examined by the Göteborg Institute of Forensic Medicine from January 1994 to July 1995. The median age was 73 years (range 65-97). Sixty suicides were classified as certain—that is, there was no doubt of suicidal intention according to the forensic examiner (ICD9, E950-959)—and 15 as uncertain (E980-989); this group consisted mainly of lethal overdoses without a suicide note. The catchment area included Göteborg, Sweden's second largest city, and two surrounding counties, with an elderly (≥ 65) population of 210 703. Data from Statistics Sweden, available only for 1994, revealed that 90% of all reported cases of suicide among elderly people in the catchment area underwent necropsy at the institute that year.

Psychiatric, geriatric, internal medicine, and primary care records were reviewed for all 75 people. Fifty one (24 men, 27 women) had a documented history of treatment for affective illness, and 36 (15 men, 21 women) had had such treatment in the six months before their suicide. Antidepressants were prescribed in 34 cases, lithium in four, and electroconvulsive therapy in four. Four additional people (2 men, 2 women) gave positive test results for antidepressants at necropsy, but prescription information was unavailable. Three further men had consulted the psychiatric services within three weeks of their suicide but antidepressants were not prescribed.

Postmortem analysis of legal drugs was carried out in 73 of the cases. Twelve men and 17 women had detectable levels of antidepressants or lithium at necropsy (table 1).

Comment

The treatment rate for depression⁴ among these elderly suicide victims and the proportion taking antidepressants detected at necropsy⁵ were substantially higher than in previous reports. As is usually the case, women had a higher treatment rate than men, but 60% of the men had been treated for affective illness at some time, indicating that most were not suffering from undiagnosed first time depression. The 1994 suicide rates in the catchment area were 38/100 000 for men and 19/100 000 for women, compared with national rates of 46/100 000 for men and 19/100 000 for women. On an international scale these Swedish rates are at an intermediate level.

Antidepressant sales have more than doubled in the catchment area during the past 10 years, and our results may reflect changing patterns of prescription. Regional differences in prescription rates and national differences in the availability of psychiatric services may also account for some of the disparity. Although our results must be interpreted with caution owing to the relatively small size of our sample, they indicate that suicide late in life is not primarily a question of undiagnosed, untreated depression. The efficacy of the newer antidepressants in treating suicidal elderly people warrants attention. While somatic illness is often a background factor in suicides in elderly people, clinical trials often exclude somatically ill individuals. As the elderly tend to respond more slowly to antidepressants than younger people they may require psychological or social support for a longer period. Furthermore, lower doses are generally recommended in elderly people, but in this age group individual differences are large, and some patients may be undertreated. Our findings emphasise that, once diagnosed, depression in the elderly must be managed with persistence.

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Table 1—Subjects with positive screening for antidepressants and lithium at necropsy

Drug	No of subjects	Sex (M:F)	Blood concentration of drug (normal range) (mg/g)	Comments
Citalopram*†	15	7:8	0.1-2.1 (0.1-1.1)	2 also had mianserin prescribed (1 with positive and 1 with negative screening); 1 overdose with paracetamol and dextropropofol
Amitriptyline	4	3:1	0.2-23 (0.1-0.6)	2 lethal overdoses; 1 combined overdose with propiomazine
Moclobemide	3	0:3	0.1-5 (0.2-2.1)	1 overdose and hanging
Maprotiline	2	1:1	2.1-2.3 (0.03-0.2)	1 lethal overdose (lithium also prescribed); 1 overdose and drowning
Mianserin	1	0:1	0.2 (0.03-0.2)	Citalopram also prescribed (positive screening)
Paroxetine	1	1:0	0.4 (<7)	
Sertraline	1	0:1	0.2 (0.2)	
Trimipramine	1	0:1	0.4 (<0.7)	
Lithium*	3	0:3	0.17-0.72 mmol/l (0.6-1.2)	

* One subject was taking both citalopram and lithium.

† Citalopram is a selective serotonin reuptake inhibitor, the predominant antidepressant prescribed in Sweden at the time of the study.