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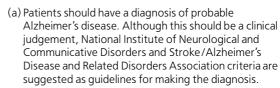
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Appendix

The Leicestershire Mental Health Service NHS Trust Protocol for the prescribing of cholinesterase inhibitor drugs: 1997 Version[1]

(a) Patients should have a diagnosis of probable Alzheimer's disease. Although this should be a clinical judgement, National Institute of Neurological and Communicative Disorders and Stroke/Alzheimer's Disease and Related Disorders Association criteria are suggested as guidelines for making the diagnosis.

(b) Disease should not have progressed to the severe stage. The Cambridge Examination for Mental Disorders of the Elderly severity classification is suggested as a model for assessing the disease stage.

(c) There should be assurance of supervision when administering medication in the domestic setting.

(d) Treatment is to be initiated by the specialist but the responsibility of ongoing prescribing to be that of the patient's general practitioner.

(e) Treatment should be discontinued if disease progresses to the severe stage or if there is no benefit from the treatment after an adequate trial.

(f) The treatment response should be regularly monitored − initially at 2–4 weeks, then at 12 weeks and then at 12-weekly intervals.

1. The protocol currently followed in Leicestershire is a modified version of the 1997 protocol but the principal components are essentially the same.

original papers

RAHUL RAO

'Sadly confused': the detection of depression and dementia on medical wards

AIMS AND METHOD
Dementia and depression are common psychiatric diagnoses in older people, and are common reasons for referral to liaison psychiatry services. The present study examined the accuracy of physicians' diagnoses for both disorders in consecutive referrals to a liaison old age psychiatry service.

RESULTS
Positive predictive values for depression and dementia were high, but levels of treatment of depression and documentation of past psychiatric history were both poor. Alcohol misuse and stroke accounted for the commonest accompanying disorders.

CLINICAL IMPLICATIONS
The findings have implications for the encouragement of physicians to treat depression when this is suspected. Educational programmes for this purpose may be useful, incorporating an exploration of attitudes and knowledge of physicians towards depression in older people.

The prevalence of psychiatric disorders in older people with acute physical illness is high, with depression known to be present in over 30% (Sadavoy *et al*, 1990; Evans, 1993) and dementia in over 14% (Feldman *et al*, 1987; Turrina *et al*, 1992) of elderly in-patients.

Recognition of both depression and cognitive impairment is vital, having implications for treatment, social/carer support and prognosis. Most studies examining the recognition of depression have been confined to primary care settings, with some evidence that the detection of depression by general practitioners may be more adequate than both treatment and referral to specialist services (MacDonald, 1987).

The possibility of either low mood or cognitive impairment may influence referrals to liaison psychiatry services, but the appropriateness of such referrals and accuracy of suspected diagnoses deserves further exploration.

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The study

A prospective study was undertaken to determine the appropriateness and accuracy of referrals to an old age psychiatry liaison service. The study had two main aims: (1) to determine the positive predictive value of a diagnosis of depression or dementia made by referring doctors for people aged 60 and over on medical wards; and (2) to assess the degree to which the correct identification of depression influences treatment of this disorder in the same setting as (1).

Consecutive referrals to an old age psychiatry liaison service based at Guy's Hospital were assessed over an 18-month period (March 1998 to September 1999). All referrals made were for people aged 60 and over on medical wards and were seen by the same assessor (R.R.). Before each assessment age, sex and reason for referral were documented. Any record of antidepressant treatment initiated by the referring team, as well as coexisting physical/mental health problems, were recorded from medical notes. After each assessment the assessor made a primary psychiatric diagnosis according to DSM–IV (American Psychiatric Association, 1999). Primary diagnoses were made for disorders presenting greater subjective/objective clinical problem(s).

Findings

Forty patients were assessed (17 men; 23 women), with ages ranging from 62 to 96 (mean: 80, s.d. 8.4). A breakdown of broad categories for reason referred, coexisting physical/psychiatric disorders and DSM–IV diagnosis is detailed in Table 1. Memory problems, low mood and/or aggression accounted for 75% of referrals made. Other reasons for referral were other behavioural problems (n=4); poor motivation (n=1); assessment for long-term placement (n=2); hallucinatory experiences (n=1); failed discharge (n=1); and poor appetite (n=1). Twelve referrals were given a provisional diagnosis of dementia by the referrer, comprising those referred for confusion (n=8) or poor memory (n=4). Sixteen referrals were given a provisional diagnosis of depression by the referrer. Fourteen of these were referrals for low mood, one for poor appetite and one for poor motivation.

The commonest accompanying physical disorders were stroke (24%), other vascular risk factors (15%) and alcohol misuse (15%). Past psychiatric history was poorly documented, with a record of this in only two people (both referred with low mood and with a history of schizoaffective disorder).

For 47% of referrals, a primary diagnosis of dementia was made by the assessor; a primary diagnosis of depression was made in a further 28%. Six referrals were found to have no psychiatric diagnosis, but only two of these referrals were made as a result of particular concerns over mood state and/or cognitive impairment. The other four referrals were made on the basis of non-specific symptoms (e.g. inability to cope). The percentage of people suspected of having a disorder in which this was confirmed by the assessor (positive predictive value)

Table 1.   Characteristics of consecutive liaison psychiatry referrals (n=40)

Characteristic	n
Reason for referral	
Confusion	8
Poor memory	4
Aggression	4
Low mood	14
Other	10
Physical disorders	
Stroke	9
Other vascular risk factors	6
Alcohol misuse	6
Other psychiatric disorders	
Schizoaffective disorder	2
Primary DSM–IV diagnosis	
Alzheimer's disease	13
Vascular dementia	6
Alcohol dependence	2
Depressive disorder	11
Other	2
No psychiatric diagnosis	6

was 83% (10/12) for dementia and 81% (13/16) for depression. All three people referred with low mood but not given a primary diagnosis of depression were diagnosed as having dementia; none of these had comorbid depression.

Of the 11 people with depressive disorder, only one had been started on an antidepressant by the referring team; none had been recommended to receive other treatment(s) for depression prior to referral.

Discussion

Given that the two most common psychiatric disorders in older people are depression and dementia, the high proportion of people referred for problems related to either mood disturbance or cognitive impairment may not be surprising. The high positive predictive values in identifying depression and dementia is encouraging, however, the low rate of treatment in patients correctly identified as having depression is less so. The present study confirms the findings from other studies of a high concordance in the detection of depression (Clarke *et al*, 1995) and dementia (Harwood *et al*, 1997) in hospital settings.

The undertreatment of depression is a recognised phenomenon in both hospital (Lustman & Harper, 1988) and primary care settings (MacDonald, 1987; Crawford *et al*, 1998). However, it would appear that the high positive predictive value of depression for people given this provisional diagnosis by referrers in this study indicates a sizeable rate of detection. It is to be commended that physicians are able to detect both depression and dementia with a high degree of accuracy and refer on appropriately. It is not possible to assess the negative predictive value for depression and dementia in the

current study, as a suspected mental health problem was the reason for referral.

The study also emphasises the importance of both stroke and alcohol misuse accompanying psychiatric disorders in older people, which may be clinically relevant in some people. In this study one-quarter of people with a history of stroke had depressive disorder or dementia and one-fifth of people with alcohol misuse were depressed.

Implications for clinical practice and research

In view of the high rates of detection for depression in this study, one of the roles of liaison psychiatry services may be to encourage physicians to act upon their clinical judgement, particularly in the initiation of antidepressant treatment. This could be incorporated within a broader educational programme examining knowledge of, and attitudes towards, depression in older people.

Research may best be directed at interventional trials to assess the impact of such educational programmes on the detection and treatment of depression in secondary care settings. Given the finding that all those wrongly classified as depressed by the referrer in this study were found to have dementia, further studies examining this finding would be valuable.

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ALCUIN WILKIE, NEIL PRESTON AND ROGER WESBY

High dose neuroleptics – who gives them and why?

AIMS AND METHOD

Neuroleptic medication is often used in excess of the *BNF* maximum. The purpose of this study was to examine the relationship of neuroleptic dose to patient, prescriber and environmental factors, by using a cross sectional 'snapshot' study of psychiatric in-patient prescriptions combined with a retrospective case note survey.

RESULTS

It was found that certain consultants prescribe higher doses of neuroleptics than others. Patients with a history of aggression had a nine and a half times higher chance of being prescribed higher doses of neuroleptics. Patients with a greater than 5-year history of neuroleptic prescription received higher doses.

CLINICAL IMPLICATIONS

High neuroleptic prescription is related more to patients' past reputation and prescriber differences than to patients' current behaviour.

There is evidence that following the introduction of neuroleptics in the 1950s there was a steady increase in the average dose of neuroleptic prescribed – 'if it's good – give more of it' (Cole, 1982). Baldessarini *et al*'s review in 1988 gave strong evidence that very high doses are overall countertherapeutic and produce excessive sedation, neurological extrapyramidal symptoms and iatrogenic negative symptoms. More recently a meta analysis has concluded that 'moderate' doses of neuroleptics (165–375 mg chlorpromazine equivalents) are preferable in long-term treatment of chronic patients with schizophrenia (Bollini *et al*, 1994).

There are significant differences in the pharmacokinetics and pharmacodynamics of neuroleptics between individuals (Ko *et al*, 1985; Van Tol *et al*, 1992) and across ethnic groups (Lin *et al*, 1995) – such that different people given the same oral dose will have widely differing blood levels of the drug and will respond differently. Response to neuroleptics is invariably measured according to subjective symptoms and signs, and there are no objective patient indicators to guide dose ranges for neuroleptic prescribing. For these reasons there is no clear relationship between neuroleptic dose and clinical response (Baldessarini *et al*, 1988), and more scope for variation in dose to relate to prescriber habits. The few studies that have examined the relationship of neuroleptic dose to prescriber, environmental and patient history variables demonstrate an association of higher neuroleptic dose with a history of violence; recent disruptive or violent behaviour; treatment non-