cannot be maintained. For example, in the study quoted by the authors,⁴ neuroleptics were restarted or increased in 27-36% of cases because of a deterioration in the patient's mental state. In the same study, participating physicians were also encouraged to refer all patients taking neuroleptics for psychiatric review, which clearly has major resource implications. "Educational packages" have also been highly effective in reducing inappropriate neuroleptic use. They may be more effective than legislation.⁵

In the United Kingdom the provision of care for elderly mentally ill people is changing rapidly. Many NHS continuing care beds for them have closed, and the imposition of "eligibility criteria" from 1 April 1996 may further restrict access to long term hospital care. Consequently, increasingly dependent and behaviourally disturbed elderly patients are entering nursing homes, placing an added strain on general practitioners who may have little experience or training in their management.

Instead of considering legislation to restrict neuroleptic use, it would be better to increase levels of awareness and education in general practitioners and nursing home staff concerning the diagnosis and management of mental illness and behavioural disturbance in the elderly. Adequate staffing levels within nursing homes are vital in reducing inappropriate drug use, as is ready access to a multidisciplinary old age psychiatry service. Unfortunately, these can only be provided if sufficient resources are made available.

The media have leapt on McGrath and Jackson's study with great enthusiasm, reporting stories of elderly people being "drugged up" inappropriately. Although misuse of neuroleptics is associated with adverse effects, when used correctly neuroleptics can be highly effective in reducing distressing symptoms and behaviours. It would be unfortunate if the perceived message from this research were that "neuroleptics are bad," as this might adversely affect the rights of elderly severely mentally ill patients within nursing homes to receive adequate and appropriate treatment.

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Substantial study is imminent

EDITOR,—Alice McGrath and Graham Jackson's survey of neuroleptic prescribing in nursing homes is a timely addition to the scant British literature on this important subject.¹ They report a high prevalence of "inappropriate" neuroleptic prescribing according to American guidelines. However, judging appropriateness by guidelines fails to recognise the potential complexity of the decision to prescribe neuroleptics for patients with dementia.² For example, the term wandering subsumes a variety of behaviours, including leaving exits, trailing of carers, and persistent, purposeless pacing. The latter is often not

amenable to environmental manipulation and may be construed as organically driven and therefore more suitable for pharmacological intervention than other types of wandering.³ Similarly, the term agitation describes so many behaviours that it is almost meaningless. What is required is a thorough effort to understand the patient's predicament, from which flows proper management of needs and any behaviour problems, including the judicious use of psychotropic drugs, bearing in mind that, in dementia, psychotic features and depression may be short lived phenomena (C Ballard, Royal College of Psychiatrists winter meeting 1996).

Now, with most long stay care outside hospital settings, close liaison between primary care and specialist services is crucial. We are about to embark, over the next year, on a substantial study and audit of neuroleptic use at the interface of the primary care specialist and old age psychiatric team; we hope to report constructive results.

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Behaviour problems are underdocumented

EDITOR,—By applying American guidelines on neuroleptic use within nursing home facilities, Alice McGrath and Graham Jackson have deemed the prescription of these drugs for Glasgow nursing home residents to be potentially inappropriate in most cases.¹ Their interpretation of the findings may be incorrect.

No data are provided on the extent of behaviour problems among the patients studied. Previous research in similar settings suggests that a high prevalence of behaviour problems can be anticipated.^{2,3} Neuroleptic use may seem inappropriate in many cases because the behaviour had already been modified by treatment, but the nature of the study does not permit elucidation of this point.

The American legislation allows for deviation from the guidelines on antipsychotics if the prescriber can present a rationale for their use.⁴ This requires that the nature and severity of behaviour problems and response to drug treatment are carefully recorded. Although the management of disturbed behaviour is a routine part of the care process in most long term care settings, documentation of this important area is often poor.

Using a rating scale⁵ which is quick and simple to perform we assessed the prevalence and severity of behaviour disturbance in 104 patients aged 65-98 (mean 82) years in long term geriatric medical care and recorded the use of psychotropics in this group. In 52 of 76 patients tested the abbreviated mental test score was less than 6 out of 10, consistent with moderate to severe cognitive impairment. Twenty eight patients could not be scored because of severe deafness or dysphasia. Only 10 patients had no behaviour disturbance. The commonest problems identified were agitation (57 (55%) patients), nocturnal restlessness (51 (49%)), irritability (50 (48%)), and noisiness or verbal aggression (49 (47%)). Physical aggression occurred in 29 (28%) patients. In all, 46 patients (44%) were receiving one or more psychotropic medications

(31 neuroleptics, 9 temazepam, 4 diazepam, 2 chlormethiazole). Of 64 patients whose behaviour disturbance was considered severe enough to cause appreciable distress to themselves, other patients, or staff, only 31 (48%) were receiving psychotropics. The use of neuroleptics was therefore higher than that found by McGrath and Jackson, but given the extent of behaviour problems identified this was not felt to be inappropriate. Indeed, some clinicians suggested that given the high prevalence of untreated behaviour disturbance there may have been underuse of psychotropics.

Documentation of behaviour problems and response to treatment in long term care settings should be routine. Without this information it is impossible to assess whether the prescription of psychotropic drugs in the nursing homes documented by McGrath and Jackson is appropriate or inappropriate.

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Use may be justified if other factors have been considered

EDITOR,—The report by Alice McGrath and Graham Jackson¹ warrants further comment. They report that 88% of nursing home residents received neuroleptics inappropriately. They did not report psychiatric diagnoses nor reasons for the prescription. Mann *et al* found that nearly half the residents of local authority homes were receiving psychotropic medication, but also reported on the high levels of psychiatric morbidity among this group.²

Delusions and hallucinations are not limited to severe functional disorders but are common in dementia. They increase distress in the sufferer and the burden on carers and may be associated with aggression.³

Agitation, violence, wandering, restlessness, and sleep disturbance may occur in 30-50% of patients with Alzheimer's disease⁴ and often lead to admission to an institution. These behaviours are common reasons for referral to old age psychiatry services.

The management of troublesome behaviours in dementia includes a search for physical, environmental, and psychological precipitants. The management should include psychosocial interventions, attention to the environment, and the use of interpersonal skills by trained staff. Although there is evidence that non-pharmacological interventions may be effective, these approaches are labour intensive and may be underutilised in many nursing and residential homes. The extent of psychotropic medication use is likely to be influenced by the ability of staff to tolerate behaviour disturbance, which in turn may be influenced by staffing levels and training. Training for care staff is distinctly lacking and requires urgent attention. Even in the best staffed homes the use of psychotropic medication may still have an important role in management.

Although there is substantial clinical experience on the use of psychotropic medica-

tions for behaviour disturbances in dementia, methodological difficulties have meant that randomised, controlled trials are largely limited to the use of antipsychotic drugs—the most commonly used preparations. Schneider *et al* conducted a meta-analysis of double blind, placebo controlled trials of antipsychotic drugs in dementia.⁵ They concluded that there was reliable and significant evidence for the efficacy of these compounds. Agitation, hallucinations, delusions, suspiciousness, and aggression were the symptoms most likely to respond to treatment. Small doses of antipsychotic medication may be effective—for example, haloperidol 0.0125–1 mg daily or thioridazine 5–10 mg daily. Antipsychotic drugs seem to be more effective than benzodiazepines.² Hypnotics are widely used but should be reserved for specific disturbances in sleep. Other preparations, such as selective serotonin reuptake inhibitors and anticonvulsants, may be of benefit for behaviour disturbances, although this may have to be determined empirically as controlled trials are lacking.

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Authors' reply

EDITOR,—Like McAllister-Williams and Ferrier, and Tarbuck, we were also concerned about the media coverage of our recent article. We feel this matter was treated with an air of hysteria not justified by the content of our paper. We too would be concerned about the introduction of legislation to control neuroleptic prescribing, and at no point in our article do we advocate this.

Various authors (McAllister-Williams and Ferrier, and Thacker and Jones) have questioned our methodology and interpretation. Our selection of homes was geographical. It was simply a survey of prescribing levels using the only available (American) guidelines, which roughly mirror recommendations in the British National Formulary.

Cameron *et al* state that 90% of their patients have disturbed behaviour. This may reflect staff tolerance of behaviour rather than showing a need for medication. Their commonly reported problems (agitation and nocturnal restlessness) could be akathisia, a common side effect.

However, the most important issue is whether neuroleptics should be used. Studies have shown that neuroleptics have limited effects—18% benefit compared with placebo.¹ These studies were too short, at 6 weeks, to show ongoing benefit or to show side effects which develop later, such as tardive dyskinesia, Parkinsonism, and akathisia. Discontinuation studies, after the American legislation, suggest that there is often no need for ongoing medication.² Some commonly used neuroleptics have a high incidence of cholinergic effects, which may aggravate confusion and lead to many other side effects.

Documentation of behaviour problems should, indeed, be routine within long term care

settings. As Tobiansky and Blanchard point out, environmental factors, physical problems, and staff tolerance must be addressed before medication is considered. Should drugs with considerable morbidity and, indeed, mortality^{3,4} be used simply because a patient is noisy, as suggested by Cameron?

If neuroleptics must be used, then it should be for as short a period as possible. We must remain aware of the potential for side effects, often not attributed to the drugs, when patients are being managed in non-hospital settings.

We hope that our article will contribute to the debate regarding neuroleptic prescribing in elderly people and, by raising various issues, help lead to more appropriate use.

We believe, along with Tarbuck, and Tobiansky and Blanchard, that the way to improve on prescribing levels in nursing homes is through education and training of staff and the primary care team. Drug use should not be the first choice in the management of behavioural difficulties.

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Costs and getting ethical approval deter doctors from participating in multicentre trials

EDITOR,—Many questions in medicine can be answered only if large numbers of patients are studied, and multicentre trials are normally necessary for this. The research committee of the British Thoracic Society, which has conducted many multicentre trials,¹ designed two studies on the prevention and treatment of osteoporosis by hormone replacement therapy and/or etidronate and/or calcium in asthmatic patients taking corticosteroids. Height, weight, activity status, fractures, and (if available) results of bone densitometry were recorded annually for five years. Lateral radiographs of the thoracolumbar spine were obtained at entry and at five years, or sooner if symptoms of vertebral collapse developed. The costs of densitometry and copying the radiographs were reimbursed by the society, but funding was not provided for the radiography or drugs. Ninety six physicians agreed to enter patients into one (17) or both (79) studies.

After two years, recruitment was so slow and the number of physicians withdrawing their participation so high that we decided to investigate. We sent a questionnaire to the 60 physicians who had withdrawn or had not entered patients. Note was also taken of any difficulties reported by the 36 who had entered patients. Table 1 gives the reasons for withdrawal. Pressure of work and difficulty in finding patients are not new reasons for not participating in the society's trials, but difficulty in obtaining approval from the local research ethics committee and local objections to costs have not previously been so evident.¹ Objections on grounds of cost arose from the

Table 1—Reasons for physicians withdrawing from studies*

Reason	No
Pressure of work	26
Difficulty in obtaining local ethical approval	17
Local objections about costs	15
Difficulty finding patients	10
Scientific doubts	2

*Several physicians cited more than one reason.

radiology directorate (seven), pharmacy (seven), local research ethics committee (six), and general practice or family health services authority (three). Thirteen of the 36 active participants had had to overcome objections from their local research ethics committee of the sort that had caused others to withdraw, and seven had had to overcome problems with costs raised by their hospital or in general practice.

A national ethical body exists for community based multicentre research.² If a similar arrangement existed for hospital based multicentre trials then probably fewer physicians would have withdrawn because of the delays and frustrations occasioned by multiple submissions and exchanging correspondence with their local research ethics committees. The NHS reforms, particularly the purchaser-provider split, have increased concern about costs. Even local research ethics committees raised costs as objections, which is surely beyond their remit.^{3,4}

Difficulties with local research ethics committees and increased awareness of costs seem to have deterred participation in these studies. We agree with Smyth *et al* that a new approach to funding multicentre studies is required⁵ and recommend the establishment of a national ethical body for hospital based multicentre research.

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Diazepam is more useful than magnesium for immediate control of eclampsia

EDITOR,—Lelia Duley criticises our suggestion that diazepam should be used for the immediate control of active eclampsia.^{1,2} We did not argue that diazepam should be used because it is more readily available or that it should be used rather than magnesium to prevent further fits. Our point was that it controls active eclampsia more rapidly because it can be prepared and given more easily. We believe that in a patient who is