

# Screening, Detection and Management of Depression in Elderly Primary Care Attenders. II: Detection and Fitness for Treatment: a Case Record Study

ELEANOR MULLAN,\*\*\* PHILIPPA KATONA,<sup>†</sup> PENNY D'ATH\*\* AND CORNELIUS KATONA\*\*\*

Mullan E, Katona P, D'Ath P and Katona C. Screening, detection and management of depression in elderly primary care attenders. II: Detection and fitness for treatment: a case record study. *Family Practice* 1994; 11: 267-270.

Case note data were obtained for 186 elderly primary care attenders who also completed the 15 item Geriatric Depression Scale (GDS15). The presence or absence in the case notes of a current or past diagnosis of depression, of current treatment of depression, and of a number of clinical features of depression were noted. Case notes were also rated for the presence or absence of contraindications to the use of tricyclic antidepressants (TCAs) and to serotonin-specific reuptake inhibitors (SSRIs). Whereas 65 (35%) patients were rated as 'cases' of depression on the GDS15, only 28 (15%) had a current case note diagnosis of depression and 37 (20%) had one or more current symptoms of depression recorded in the case notes. Patients rated by their GP as having one or more current symptoms of depression scored higher on the GDS15 ( $P < 0.05$ ) and were more likely to be categorized as a GDS case ( $P = 0.05$ ). There was no significant relationship between GDS caseness and a current case note diagnosis of depression. Seventy-three patients (39%) had a past history of depression and 53 (28.5%) patients had previously been treated with antidepressants. The former was significantly associated with GDS caseness ( $P < 0.05$ ). Twenty-four patients (13%) were currently on antidepressants, 19 of them receiving adequate doses (equivalent to at least 75 mg of amitriptyline). Current antidepressant treatment was not associated with GDS 'caseness'. A significantly higher proportion of patients (both in the sample as a whole and in the subgroup of GDS15 depression 'cases') had a medical condition or were taking a drug that mitigated against the use of TCAs than was the case for SSRIs.

## INTRODUCTION

The detection and treatment of depression in elderly primary care populations have been the subject of much research.<sup>1-3</sup> Williamson *et al.*<sup>1</sup> and Iliffe *et al.*<sup>3</sup> both suggested that general practitioners (GPs) under-diagnose depression. In contrast, Macdonald<sup>2</sup> found that GPs had no difficulty in diagnosing depression in their elderly patients but seldom initiated treatment or made psychiatric referrals.

Under the new GP contract, the mandatory annual health checks for elderly people (at least those aged 75 and over) are expected to include a mental health component.<sup>4</sup> The short (15 item) version (GDS15)<sup>5</sup> of the Geriatric Depression Scale (GDS)<sup>6</sup> has been recommended by the Royal College of General Practitioners as the depression screening instrument of choice.<sup>7</sup> Evans and Katona<sup>8</sup> have shown that the GDS (in its 30 item version), when compared to diagnosis based on detailed psychiatric interview, has better sensitivity and specificity than GPs' own diagnoses on direct questioning. Iliffe *et al.*<sup>3</sup> have suggested that detection of depression by case note recording is probably a more accurate reflection of GPs' actual detection rates in practice. They have shown that with this measure, the

\* Department of Psychiatry, University College London Medical School, Wolfson Building, Middlesex Hospital, London W1N 8AA,

\*\* Department of Psychiatry, Princess Alexandra Hospital, Hamstel Road, Harlow, Essex and <sup>†</sup> Lower Clapton Health Centre, Lower Clapton Road, London E5, UK. Correspondence to C.K. at UCLMS.

GP rate of detection of depression in elderly patients is very low.

An abortive clinical trial<sup>9</sup> of nortriptyline against placebo in a physically ill elderly population (in which only three subjects out of nearly 1000 screened completed the trial) attests to the frequency with which contraindications to tricyclic antidepressants (TCAs) are encountered in a frail elderly population. Serotonin-specific reuptake inhibitors (SSRIs) have been claimed to have advantages in the elderly because of their better safety and tolerability. In a meta-analysis of controlled clinical trials of SSRIs involving elderly as well as younger patients, Song *et al.*<sup>10</sup> concluded that SSRIs offered no cost-benefits since there were no significant differences between SSRIs and comparative antidepressants in either efficacy or drop-out rate. The conclusions of this study have been criticized on several grounds.<sup>11</sup> In the context of depression in old age, it is particularly important to note that only subjects with no trial exclusion criteria (i.e. no reasons for not being given a TCA) could be included in the trials incorporated in the meta-analysis. A significant proportion of depressed elderly patients fit for treatment with SSRIs may have been excluded from these trials because of medical conditions contraindicating treatment with TCAs or because they were prescribed drugs that could potentially interact with TCAs. The practical difficulties in using SSRIs and TCAs have not previously been compared in a representative sample of elderly primary care attenders, with or without current depression.

The first aim of the present study was to examine the relationships between depression in elderly primary care subjects as detected by the GDS15 and as recorded in GP case notes. The second aim was to compare the frequency with which such patients had contraindications to the use of either drug group, were taking other drugs that might interact adversely with them, or in whom special precautions or close observations would be recommended.

## METHODS

### Procedure

As described in a companion paper,<sup>12</sup> the study was carried out at the Lower Clapton Health Centre, a seven partner inner city general practice with a list size of about 10 500. During an 8 week study period, consecutive attenders to the practice, aged 65 and over, completed the GDS15 by brief interview with a researcher (PD).

Patient case notes were traced on the patients thus identified and reviewed (blind to GDS15 data) by a psychiatrist (EM). Demographic and clinical data collected included current medication (including antidepressants and their dose); past psychiatric history including past record of treatment with antidepressants (at any time); and the recording of a diagnosis of depression or of depressive symptoms within the past 6 months. The latter information was collected using a

symptom checklist (available from the authors on request).

On the basis of a checklist (see Appendix 1) adapted from the relevant data sheets, patient case notes were rated for the presence or absence of specific contraindications to, precautions required with, close observations recommended with and drug interactions with TCAs (derived from the data sheet for Triptazol but similar in content to that for other proprietary preparations of amitriptyline and other TCAs) and the SSRIs (based on the data sheet for Prozac but similar in content to that for other SSRIs).

### Statistical Analysis

The chi-square test and Fisher's exact test were used to examine association. McNemar's test was used to compare proportions. All data was analysed using SPSS/PC + version 3.1.<sup>13</sup>

## RESULTS

The sample studied is described in detail in a companion paper.<sup>12</sup> One-hundred and ninety-eight subjects were identified for screening and 194 consented to complete the GDS15. Patient case notes were traced on 186 of those 194 patients.

### Relationship Between GDS and Case Note Identification of Depression

Table 1 summarizes the relationship between depression as detected by the GDS and as recorded in the GP case notes (in terms of current depressive illness or symptoms, current treatment with antidepressants or a recorded past history of depression). Depressed mood, sleep disturbance and fatigue were the most commonly recorded depressive symptoms (8, 8 and 3% respectively).

TABLE 1 Relationship between GDS-detected depression and clinical data

	GDS non-case		GDS case		P
	n	%	n	%	
No.	121		65		
GP-detected depression	15	12	13	20	NS
GP-recorded depressive symptom	19	16	18	28	0.05
Currently on antidepressants	15	12	9	14	NS
Past history of depression	40	33	33	51	<0.05
Past history of antidepressants	31	26	22	34	NS

Patients recorded by their GP as having current symptoms of depression scored significantly higher on the GDS (mean 8.4 versus 6.9;  $P < 0.05$ ) and were more likely to be considered a case by the GDS using the conventional cut-off of 4/5 ( $P = 0.05$ ). Forty-six subjects scored six or more on the GDS. Using this more conservative cut-off, the association between 'caseness' and case note-recorded depressive symptoms, though still modest, was more clearly evident (30% of cases versus 16% of non-cases;  $P < 0.05$ ). Patients with a past history of depression were also more likely to be identified as a case by the GDS ( $P < 0.05$ ). There was, however, no relationship between GP-recorded diagnosis of current depression and GDS caseness or score. There was also no significant relationship between current treatment with antidepressants and GDS score or caseness.

#### *Fitness for Treatment*

The fitness of the sample for treatment with TCAs and SSRIs (in terms of contraindications, precautions required, close observations required and drug interactions) is summarized in Table 2. Both overall and in the subgroup of GDS15 'cases', a higher proportion of patients were fit for treatment with SSRIs than with TCAs ( $P < 0.0001$ , and  $P < 0.01$  respectively). Higher proportions of patients were also fit for treatment with SSRIs than TCAs in terms of contraindications, precautions and drug interactions considered separately. However, similar proportions of patients had conditions that would require close observations if they were prescribed SSRIs or TCAs. These findings also held true for the subgroup of GDS15 'cases'.

TABLE 2 *Contraindications to antidepressants*

	TCA		SSRI		<i>P</i> <
	<i>n</i>	%	<i>n</i>	%	
Overall					
Total	120	65	70	37	0.0001
Depressed	46	71	32	49	0.01
Contraindications					
Total	14	8	1	1	0.001
Depressed	9	14	1	2	0.05
Precautions					
Total	27	15	0		0.0001
Depressed	9	14	0		0.05
Close observations					
Total	63	34	66	36	NS
Depressed	27	42	28	43	NS
Drug interactions					
Total	86	46	3	2	0.0001
Depressed	32	49	3	5	0.0001

#### DISCUSSION

In this study no relationship was found between GDS-detected cases of depression and a GP recorded current diagnosis of depression. This does not necessarily mean that the GPs were unaware of their patients' depression, even where it was mild. Macdonald<sup>2</sup> reported that not all the surgery attendances of his elderly sample were recorded in the notes. On this basis, GPs may be aware of an individual patient's depression, consider treatment and even provide supportive psychotherapy within the surgery without making any note in the case record.

It is encouraging that the majority (19/24) of those patients who were receiving antidepressants were prescribed these at therapeutic doses. This is contrary to the report by Thompson and Thompson<sup>14</sup> that, in younger adult patients, GPs usually prescribe antidepressants in doses too small to be effective. The lack of association between GDS-detected 'cases' and current treatment with antidepressants may be because the antidepressant-treated group had experienced a clinical improvement since the commencement of the antidepressant and were thus not depressed at the time of the study.

Our results do, however, reflect surprisingly low rates of either recording of depression or antidepressant use in proportion to the depressive symptomatology noted by screening. On this basis, screening with the GDS15 may identify a substantial group of elderly subjects meriting review of their depressive symptoms with a view to possible treatment. The fact that those patients in whose case notes the GP had recorded a symptom of depression had a higher GDS score suggests that GPs may record only more severe depression. There is little doubt about the benefit of treatment of severe depression in the elderly<sup>15</sup> but little is known about the efficacy of antidepressants or other forms of treatment for milder depression in old age. It is noteworthy that, in a general practice study of younger patients, Paykel *et al.*<sup>16</sup> found that active treatment was superior to placebo in all but the mildest cases.

The low rate of antidepressant use we found may also reflect reluctance to use drugs that are potentially toxic in the elderly. When deciding whether to use an antidepressant at all and if so which one, the prescriber will usually consider several factors including efficacy, toxicity, safety in overdose, side effect profile, contraindications and cost.<sup>17</sup> Such factors are particularly important in elderly patients because of their increased susceptibility to the adverse effects of drugs due to impairment of homeostatic mechanisms, alterations in pharmacokinetics and pharmacodynamics, drug interactions and poor drug compliance.<sup>18,19</sup> Our finding of significantly lower rates of factors mitigating against SSRI use than TCA use suggests that SSRIs may be particularly worth considering in the treatment of elderly primary care patients detected by screening who might otherwise not receive antidepressants at all.

## ACKNOWLEDGEMENTS

We are very grateful for the help we received from the doctors, ancillary staff and above all the patients at the Lower Clapton Health Centre. We also acknowledge receipt of an educational grant from Lilly Industries.

## REFERENCES

- <sup>1</sup> Williamson J, Stokoe IH, Gray S, *et al.* Old people at home: their unreported needs. *Lancet* 1964; **i**: 1117-1120.
- <sup>2</sup> MacDonald AJD. Do general practitioners "miss" depression in elderly patients? *Br Med J* 1986; **292**: 1365-1367.
- <sup>3</sup> Iliffe S, Haines A, Gallivan S, *et al.* Assessment of elderly patients in general practice. 1. Social circumstances and mental state. *Br J Gen Pract* 1991; **41**: 9-12.
- <sup>4</sup> Department of Health and the Welsh Office. *General practice in the National Health Service. A new contract*. London: Department of Health and the Welsh Office, 1989.
- <sup>5</sup> Sheikh JA, Yesavage JA. Geriatric Depression Scale (GDS): recent findings and development of a shorter version. In Brink TL (ed.) *Clinical gerontology: a guide to assessment and intervention*. New York: Howard Press, 1986.
- <sup>6</sup> Yesavage JA, Brink TL, Rose TL, Lum O. Development and validation of a geriatric depression screening scale: a preliminary report. *J Psychiatr Res* 1983; **17**: 37-49.
- <sup>7</sup> Williams EI, Wallace P. Health checks for people aged 75 and over. *Br J Gen Pract Occasional Paper* no. 59, 1993.
- <sup>8</sup> Evans S, Katona CLE. Prevalence of depressive symptoms in elderly primary attenders. *Dementia*, in press.
- <sup>9</sup> Koenig HG, Goli V, Shelp F, *et al.* Antidepressant use in elderly medical inpatients: lessons from an attempted clinical trial. *J Gen Intern Med* 1989; **4**: 498-505.
- <sup>10</sup> Song F, Freemantle N, Sheldon TA, *et al.* Selective serotonin reuptake inhibitors: a meta-analysis of efficacy and acceptability. *Br Med J* 1993; **306**: 683-687.
- <sup>11</sup> Robertson MM, Katona CLE. Effective and acceptable treatment for depression. *Br Med J* 1993; **306**: 1125.
- <sup>12</sup> D'Ath P, Katona P, Mullan E, Evans S, Katona C. Screening, detection and management of depression in elderly primary care attenders. 1. The acceptability and performance of the 15 item Geriatric Depression Scale and the development of short versions. *Fam Pract* 1994; **11**: 260-266.
- <sup>13</sup> *Statistical Package for the Social Sciences, PC Edition (SPSS/PC+ version 3.1)*. Chicago: SPSS Inc., 1992.
- <sup>14</sup> Thompson C, Thompson CM. Treatment resistant or inadequately treated? *Int Clin Psychopharmacol* 1989; **6** (Suppl. 1): 31-39.
- <sup>15</sup> Katona CLE. Optimising treatment for the elderly depressive: new antidepressants in the elderly. *J Psychopharmacol* 1993; **7** (Suppl): 131-134.
- <sup>16</sup> Paykel ES, Hollyman JA, Freeling P, Sedgwick P. Predictors of the therapeutic benefit from amitriptyline in mild depression: a general practice placebo-controlled trial. *J Affect Disord* 1988; **14**: 83-85.
- <sup>17</sup> Leonard BE. Cost benefit analysis of tricyclic antidepressant overdose. In Leonard BE, Parker SW (eds) *Current approaches—risk/benefits of antidepressants*. Southampton: Duphar Laboratories, 1988.
- <sup>18</sup> Ramsay LE, Tucker GT. Clinical pharmacology: drugs and the elderly. *Br Med J* 1981; **282**: 125-127.
- <sup>19</sup> Dawling S, Crome P. Clinical pharmacokinetic considerations in the elderly—an update. *Clin Pharmacokinet* 1989; **17**: 236-263.

## APPENDIX 1

**Checklist of cautions for TCAs**

Contraindications: prior sensitization to TCAD, recovery phase of a myocardial infarction, arrhythmias/heartblock, mania, severe liver disease.  
 Precautions: history of epilepsy, impaired liver function tests, a history of urinary retention, narrow angle glaucoma, increased intra-ocular pressure.  
 Close supervision: cardiovascular disease, hyperthyroidism, anticholinergics.  
 Drug interactions: antihypertensives, MAOIs, sympathomimetics, CNS depressants, methylphenidate, disulfiram, cimetidine.

**Checklist of cautions for SSRIs**

Contraindications: prior sensitization to fluoxetine, severe renal failure.  
 Precautions: unstable epilepsy.  
 Close observations required: cardiovascular disease, low weight, diabetes.  
 Drug interactions: MAOIs, CNS depressants, lithium.