

A survey of psychotropic drug prescribing

W.G. IRWIN, MD, FRCGP
Professor of General Practice, Queen's University of Belfast

M.E. CUPPLES, MD, MRCP
Research Fellow, Department of General Practice, Queen's University of Belfast

SUMMARY. Psychotropic drug prescribing in a group practice was studied retrospectively. Approximately two-thirds of patients considered to have psychosocial problems were being treated with psychotropic drugs. Compared with the remaining patients with psychosocial problems not prescribed psychotropic medication these patients were more likely to be older, to have no children in the household and to have a past history of physical illness but were less likely to have an acute physical problem or to have a social factor contributing to their mental problem. Sedative and antidepressant drugs were prescribed with similar frequency for all age groups but 75% of hypnotic drugs were prescribed for the elderly.

The study provides evidence that while a high proportion of patients with psychosocial problems receive a prescription for a psychotropic drug, general practitioners are discriminating in their prescribing.

Introduction

RECENTLY concern has been expressed, both in medical journals and in the popular press, regarding the high rate of psychotropic drug prescribing. In 1983 a MORI poll reported that 23% of the adult population had at some time taken tranquillizers, almost all of which had been prescribed by general practitioners. Previous studies had reported the percentage of adults taking tranquillizers at 10%,¹ 11%² and 12.5%.³

However, the number of psychotropic prescriptions per 1000 population per year has been relatively static since 1976 in Great Britain and Northern Ireland and when psychotropic prescribing is expressed as defined daily dose per 1000 population per day, the figures for Northern Ireland show a progressive fall from a peak in 1975 to 1980.² Further, it has been suggested that the use of psychotropic drugs may not be inappropriate⁴ since benzodiazepines are often more acceptable than alcohol, smoking or overeating as a method of coping with anxiety.

This study was designed to investigate the current state of psychotropic drug prescribing in one of several National Health Service practices in the Queen's University of Belfast's base of general practice at Dunluce Health Centre. The aims of the study were to determine the incidence of psychotropic drug prescribing in terms of the number of prescriptions for psychotropic drugs per 1000 patients per year and to identify patients with psychosocial problems and compare the demographic, socioeconomic and health characteristics of those who received psychotropic medication with those who did not.

Method

The study design was retrospective. Using a computerized record system the total number of prescriptions issued for specific psychotropic drugs during the year 1984 was determined. These

specific drugs were those which are included in the Central Services Agency (equivalent to the family practitioner committee in England and Wales) list of drugs in the following therapeutic groups: (1) hypnotics, (2) sedatives and tranquillizers, (3) antidepressants, and (4) antidepressant and tranquillizer combinations. The total number of prescriptions issued for all classes of drugs during 1984 was also determined. From the total number of patients whose records were held by the group practice, the total number of prescriptions and the number of psychotropic prescriptions per 1000 patients per year were calculated. These figures were compared with those of neighbouring practices in Belfast city and in Northern Ireland as a whole, using Central Services Agency figures.

The study practice's computer recorded patients' past significant problems and problems observed during recent consultations. This system had been in operation for several months before the onset of the study. The term 'psychosocial' was used to include psychiatric, psychological and social problems. By identifying all the computer record codes pertaining to these diagnoses, all the patients who had presented to the general practitioner during the first four months of 1984 with perceived significant psychosocial problems were identified. Included were patients with varying grades of anxiety, depression, insomnia, bereavement reactions, marital disharmony, relationship problems and alcohol abuse.

The written records of these patients were examined manually. Data collected included the patient's age, sex, social class, marital status, and type, location and occupants of home, present mental and physical problems, past mental and physical history, all current medication and the involvement of various medical and paramedical services in the patient's management. Where data was incomplete or unclear from the records, details were clarified by personal interview with the relevant general practitioner.

Patients were grouped according to whether or not they were prescribed psychotropic medication.

Results

The group practice in this study is part of the Dunluce Health Centre which is situated in an urban area. The list size was 3140 patients at the time of the study. In comparison with both the local area and Northern Ireland as a whole the study practice was found to have a lower frequency of prescribing for all classes of drugs and for psychotropic drugs in particular in 1984 (Table 1). The relative proportion of psychotropic prescriptions to all prescriptions was also lower in the study practice than in the other areas.

Table 1. Prescribing frequencies in the study practice, the local area and Northern Ireland.

	Prescriptions per 1000 population per year	
	Total no. ^a	No. (%) for psychotropic drugs
Study practice	3540	278 (7.9)
Local area ^b	7843	989 (12.6)
Northern Ireland	8664	817 (9.4)

^aRefers to number of items prescribed. ^bEastern Board.

A total of 245 patients were identified as having an active psychosocial problem during the four months of the study — 77.7% female, 22.3% male. Of these, 154 had been prescribed a psychotropic drug. There was no significant difference in sex distribution or social class between those receiving and those not receiving psychotropic medication. However, significantly more of the patients receiving psychotropic medication were aged over 45 years ($P<0.001$) (Table 2).

No significant difference was observed when the marital status of patients receiving or not receiving psychotropic medication was compared ($P=0.053$).

Interestingly, six other patients were noted to have been prescribed a psychotropic drug during the study period but they were not identified as having psychosocial problems. Three had presented with backache, one with supraspinatus capsulitis and two had complained of dizziness.

Table 2. Age distributions of patients receiving or not receiving psychotropic therapy.

Age (years)	No. (%) of patients		
	Receiving psychotropic drugs	Not receiving psychotropic drugs	Total
<15	0	5	5
15–44	36 (23.4)	46 (56.0)	82 (35.5)
45–59	38 (24.7)	21 (23.1)	59 (24.1)
60–79	58 (51.9)	16 (20.9)	74 (40.4)
>79	22	3	25
Total	154 (100.0)	91 (100.0)	245 (100.0)

$\chi^2 = 30.91$, 2 degrees of freedom, $P<0.001$.

Home environment

The two groups showed no significant difference in their type of home (bedsit/flat, terraced house, semidetached house, detached house) or the location of their home (urban, suburban). However, patients taking psychotropic drugs were significantly more likely to live alone and less likely to have children in the household than those not receiving psychotropic medication ($P<0.001$) (Table 3).

Table 3. Occupants of the homes of patients receiving or not receiving psychotropic therapy.

Occupants	No. (%) of patients	
	Receiving psychotropic drugs	Not receiving psychotropic drugs
Lives alone	52 (33.8)	15 (16.5)
Spouse only ^a	51 (33.1)	20 (22.0)
Other adult only	26 (16.9)	15 (16.5)
Child + adult and/or spouse	22 (14.3)	35 (38.5)
Child only	3 (1.9)	6 (6.6)
Total	154 (100.0)	91 (100.0)

$\chi^2 = 26.34$, 3 df, $P<0.001$. ^a One patient lived with spouse and one other adult.

Physical, mental and social problems

Of the 245 patients identified as having an active psychosocial problem only 74 (30.2%) were free from any physical problem. Comparison of the physical problems of the two groups of patients showed a significant difference ($P<0.001$) — approximately 75% of the patients who did not receive psychotropic medication had an acute physical problem, compared with 40% of those who received psychotropic medication (Table 4).

Table 4. Physical problems of patients receiving or not receiving psychotropic therapy.

Physical problem	No. (%) of patients	
	Receiving psychotropic drugs	Not receiving psychotropic drugs
None	59 (38.3)	15 (16.5)
Acute only	40 (26.0)	59 (64.8)
Acute and chronic	21 (13.6)	9 (9.9)
Chronic only	34 (22.1)	8 (8.8)
Total	154 (100.0)	91 (100.0)

$\chi^2 = 36.95$, 3 df, $P<0.001$.

A greater percentage of those receiving psychotropic medication (85.0%) than of those not receiving psychotropic therapy (72.5%) had a history of past physical illness ($P=0.026$). However, similar percentages of those receiving and those not receiving psychotropic medication had had a history of previous mental illness (approximately 60%).

Social problems were evident in 65% of the total sample but in 35% of cases no social or situational factor was perceived to be contributing to the patient's mental problem. A greater percentage of those receiving psychotropic medication (40.0%) than of those not receiving medication (26.4%) had no evident social problem ($P=0.04$). The types of social problem which were most frequently noted were relationship problems (noted in 17% of the total sample), bereavement (10.7%), family illness (15.8%), employment difficulties (8.5%), social isolation (11.9%), alcohol abuse (5.1%), finance (2.3%) and housing (1.7%). In some cases more than one social problem was evident.

Personnel involved in management

There was no significant difference between the two groups in the frequency with which a social worker was involved in management of the patients' problems ($P=0.38$). Of the total sample, social workers were involved in 22% of cases. In addition, there was no significant difference between the two groups in the frequency of consultations with psychiatrists and psychologists, or of regular follow-up consultations with general practitioners. Overall, psychiatrists were involved with 8% of the patients and psychologists with 3%. Forty per cent of the patients had regular consultations with general practitioners.

Psychotropic drugs prescribed

There was a significant difference in the age groups for which the different types of psychotropic drugs were prescribed ($P<0.001$); the majority of hypnotic drugs were prescribed to the elderly but sedative and antidepressant drugs were prescribed in similar proportions to all age groups (Table 5).

Table 5. Different types of psychotropic drugs prescribed by age group of patients ($n=143$).^a

Age (years)	No. (%) of patients		
	Prescribed sedatives	Prescribed hypnotics	Prescribed antidepressants ^b
<45	24 (34.3)	6 (11.3)	6 (30.0)
45–59	19 (27.1)	7 (13.2)	8 (40.0)
>59	27 (38.6)	40 (75.5)	6 (30.0)
Total	70 (100.0)	53 (100.0)	20 (100.0)

$\chi^2 = 21.63$, 4 df, $P<0.001$. ^aEleven patients were excluded from the analysis because they were prescribed two types of medication simultaneously. ^bAntidepressant and tranquilizer combinations were classified with antidepressants; only one patient received such a preparation.

Discussion

In Northern Ireland the Central Services Agency regularly provides general practitioners with information about the cost of their prescribing relative to other practices in the same area. Information regarding comparative prescribing rates of specific drugs is not, however, automatically provided. It was thus of interest to the doctors of the study practice to discover their comparatively low rate of prescribing psychotropic drugs. No forewarning of this study was given and it was carried out retrospectively so that knowledge that their prescribing was to be studied could not have contributed to this observation.

Of the six patients who received psychotropic medication without having evident psychosocial problems four were prescribed a benzodiazepine for muscle relaxation. All types of mental and social problems were denied by the patients with dizziness and while the doctor's diagnosis did not justify his prescription he must have felt that some psychological problem existed in these cases.

The observation that the study sample was mainly female is not surprising. A previous study from Northern Ireland reported that 73.5% of tranquillizers were prescribed to females.³ Tessler and colleagues⁵ reported a survey which noted that 66% of regular diazepam users were female. Surveys reported by Goldberg and Huxley⁶ indicate that the level of psychiatric disorders among females in the community is about twice that of males, and females consult their general practitioner more frequently than males.

Over 50% of the patients receiving psychotropic medication were over 60 years of age. It may be that younger people are thought to be more able to use personal and environmental resources to cope with psychosocial problems. Furthermore, 75% of the hypnotic drugs prescribed were for patients over 60 years of age. Since it is the elderly who are most at risk of becoming confused or drowsy or of falling and sustaining injury, this observation should heighten concern that psychotropic drug prescribing is carefully monitored.

Of the patients presenting with psychosocial problems those who received a psychotropic drug were relatively more likely to live alone, or with a spouse only and relatively less likely to have a child or children in the household than those who did not receive psychotropic medication. Perhaps where there were children in the household the doctor was more wary of prescribing psychotropic drugs or perhaps he attributed the presenting problem to a social problem which was less likely to be altered by drugs.

Approximately two-thirds of the study patients had a concurrent acute or chronic physical problem and this proportion is similar to that observed in surveys in London and in the USA.⁶ This compares with 39% of regular diazepam users acknowledging a physical problem in their responses to questionnaires.⁵ A physical problem may be used to give respectability to attending the general practitioner with a psychological problem but in many cases an element of psychological illness may complicate the physical problem. Williams⁷ reviewed the prescribing of psychotropic drugs for physical ill-health and gave recognition to the relationship between physical and psychiatric morbidity. Recent studies have shown that psychiatric illness in medical patients may often be unrecognized but its early detection may be worthwhile.⁸

Interestingly, patients receiving psychotropic medication were less likely to have acute physical problems than those not receiving psychotropic medication. Perhaps the presence of an acute physical problem in conjunction with a psychosocial problem provided the doctor with a concrete base from which he could counsel without recourse to adjuvant psychotropic drugs.

It was observed that a history of previous psychiatric morbidity in a patient did not influence the likelihood of being prescribed psychotropic medication. Previous psychiatric morbidity might confer more seriousness to present symptoms, so

that it could have been expected that psychotropic drugs would be prescribed more frequently. However, the present data did not take into account how the previous symptoms had been treated and the above observation may reflect a constancy of critical psychotropic prescribing in this general practice over past years.

Recognized social problems featured more prominently among those for whom psychotropic drugs were not prescribed. Perhaps the doctors felt more confident in treating these patients without drug therapy when definite environmental problems were identified. Where no social problems were identified it could be construed that there was more pressure on the doctor to prescribe a psychotropic drug in order to be seen to be doing something helpful.

In the present study 36.2% of cases did not receive psychotropic drug therapy: this compares with 29% in a previous study.⁹ McPherson and Feldman⁹ concluded that a clinical psychologist could make a useful contribution to management in 77% of general practice cases where psychological factors were considered relevant. These authors did not consider that general practitioners have adequate time or training to deal with psychological problems. While 3% of the patients in the present study were referred to a psychologist, a further 22% were referred to a social worker whose role in counselling was often similar to that of the psychologist. If McPherson and Feldman's advice is to be followed, the rate of referral to other counsellors would be trebled but the present study does not show that the involvement of a social worker, psychologist or psychiatrist is associated with a reduction in psychotropic prescribing.

Whether or not minor affective disorders actually need psychotropic medication is a matter of debate;¹⁰ simple counselling may be equally effective. However, the present study does provide evidence in defence of the general practitioner who is accused of prescribing a pill for every ill. While psychotropic prescribing could probably be further curtailed without detriment to patients, there is evidence that selective criteria are being used in writing psychotropic prescriptions.

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Address for correspondence

Dr M.E. Cupples, Department of General Practice, Dunluce Health Centre, 1 Dunluce Avenue, Belfast BT9 7HR.