

## ***Repeat prescriptions in general practice***

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The term "repeat prescription" is well recognised in general practice. It commonly refers to the issue of a prescription to a patient who has a long-standing condition for which regular therapy is required, and where no direct face-to-face consultation between the patient and the doctor takes place. In this study we have extended this definition to include all prescriptions where there has been no direct contact between doctor and patient.

We arranged to investigate these prescriptions in three group practices in the Hythe Medical Centre and the Blackfield Group Practice Centre. Both centres are situated within three miles of each other, about ten miles from Southampton. It was hoped that the findings from this study might result in improvements in both the medical care of those receiving the prescriptions and in the organisation of the issuing of the prescriptions.

The three practices described consist of 14 doctors serving about 30,000 patients. The majority of these patients live in new council or private housing estates which have expanded a number of existing small villages on the west side of Southampton Water. Many of the patients are relatively new to the district, young and unsettled.

### **Method**

A pilot study was carried out for two weeks and the results showed that between 25 per cent and 33 per cent of these prescriptions, depending on which practice was concerned, provided drugs sufficient to last the patient for more than four weeks. Therefore, during the two months preceding the main survey, the quantities allowed on all these prescriptions were limited in such a way that the patient would have to request a further prescription at some time during the month of the survey. This ensured that all those regularly receiving repeat prescriptions were included and thus the total number for the month of the survey is higher than for a normal month.

The study was carried out during a period of 28 days. When a patient requested a prescription, the first half of the questionnaire was completed by secretarial staff. The second half of the questionnaire was completed by the doctor concerned. Information from the questionnaire was transferred to punch cards and the data were processed outside the medical centre. Confidentiality was maintained by giving each questionnaire a serial number and noting the name of the patient and the serial number on a separate sheet which was kept in the practice office.

### **Results**

The number of patients registered with the practices, at a point midway through the survey was 30,685. There were 1,133 requests for prescriptions received during the four weeks of the survey. In 41 (3.6 per cent) of these, the doctor decided not to issue a prescription without seeing the patient, and in 18 (1.6 per cent) he decided not to prescribe one or more items. Therefore 1,074 (94.8 per cent) of the requests made by patients were approved. The number of prescriptions requested was at the rate of 37 per 1,000 patients. The number of items issued as opposed to prescriptions which often included more than one item, was, 1,522, a rate of 50 per 1,000 patients.

The age and sex distribution of those who made a request for a prescription is shown in table 1.

The types of request were defined as follows:

Routine: regularly repeated drugs, e.g. thyroxine, digoxin,

Sporadic: irregularly repeated drugs, e.g. seasonal antihistamines, topical steroids,

Casual: non-repeating drugs, e.g. cough mixtures, anthelmintics,

Other: e.g. "lost or broke previous bottle".

TABLE 1  
AGE-SEX DISTRIBUTION OF ALL THOSE REQUESTING PRESCRIPTIONS DURING THE SURVEY

<i>Age</i>	<i>Male</i>	<i>Female</i>	<i>Total</i>
0-4	25 (5.6)	24 (3.5)	49 (4.3)
5-14	47 (10.5)	30 (4.4)	77 (6.8)
15-44	142 (31.9)	247 (36.0)	389 (34.3)
45-64	136 (30.5)	214 (31.1)	350 (30.9)
over 65	96 (21.5)	172 (25.0)	268 (23.7)
<b>TOTAL</b>	<b>446 (100)</b>	<b>687 (100)</b>	<b>1133 (100)</b>

There were 928 (81.9 per cent) routine requests, 118 (10.4 per cent) sporadic, 62 (5.5 per cent) casual, and the remainder consisted of 25 (2.2 per cent) which did not fall into any of these categories.

The length of time since the patient was last seen by a doctor was noted by reference to the patient's notes (table 2a). We were more concerned about those patients who routinely requested repeat prescriptions and these results are shown in table 2b. In both cases, about 70 per cent of patients had been seen within three months, about 23 per cent within 4-12 months, and a small proportion of patients (five per cent) had not been seen for more than a year.

TABLE 2a  
LENGTH OF TIME SINCE PATIENT WAS LAST SEEN, BY TYPE OF REQUEST AND BY SEX.  
ALL REQUESTS

<i>Time since last seen</i>	<i>Male</i>	<i>Female</i>	<i>Total</i>
Less than one month	113 (25.4)	194 (28.2)	307 (27.1)
1-3 months	190 (42.6)	314 (45.7)	504 (44.4)
4-12 months	116 (26.0)	140 (22.6)	256 (22.6)
More than 1 year	21 (4.7)	24 (3.5)	45 (4.0)
No record	2 (0.4)	10 (1.5)	12 (1.1)
Not seen at all	4 (0.9)	5 (0.7)	9 (0.8)
<b>TOTALS</b>	<b>446 (100)</b>	<b>687 (100)</b>	<b>1133 (100)</b>

TABLE 2b  
LENGTH OF TIME SINCE PATIENT WAS LAST SEEN, BY TYPE OF REQUEST AND BY SEX.  
ROUTINE REQUESTS ONLY

<i>Time since last seen</i>	<i>Male</i>	<i>Female</i>	<i>Total</i>
Less than one month	80 (21.5)	146 (26.3)	226 (24.4)
1-3 months	175 (47.0)	265 (47.7)	440 (47.3)
4-12 months	97 (26.1)	118 (21.2)	215 (23.2)
More than 1 year	20 (5.4)	19 (3.4)	39 (4.2)
No record	-	8 (1.4)	8 (0.9)
Not seen at all	-	-	-
<b>TOTALS</b>	<b>372 (100)</b>	<b>556 (100)</b>	<b>928 (100)</b>

The type of prescription issued was classified under disease or system involved and the distribution of these is shown in table 3. The three largest groups were psychiatric disorders and disorders of the cardiovascular and central nervous systems. Psychiatric disorders were responsible for almost a third of all drugs prescribed, and details of the drugs prescribed for these and for those prescribed for central nervous system disorders are shown in tables 4 and 5. Hypnotics were classified under central nervous system when they were issued to patients who were not obviously suffering from a psychiatric disturbance.

TABLE 3  
NUMBER OF ITEMS PRESCRIBED UNDER EACH DISEASE OR SYSTEM HEADING  
AND NUMBER OF PATIENTS IN EACH CATEGORY

<i>Disease/system</i>	<i>Number of patients</i>	<i>Per cent of requests</i>	<i>Number of items</i>	<i>Per cent of items</i>
Psychiatric	333	(29.4)	453	(29.8)
Central nervous system	152	(13.4)	160	(10.5)
Cardiovascular	148	(13.1)	190	(12.5)
Alimentary	137	(12.1)	149	(9.8)
Respiratory	129	(11.4)	157	(10.3)
Skin	123	(10.9)	136	(8.9)
Metabolic	92	(8.1)	96	(6.3)
Locomotor	71	(6.3)	85	(5.6)
Urinary tract	25	(2.2)	25	(1.6)
Obstetric/gynaecological	23	(2.0)	25	(1.6)
Ear, nose and throat	23	(2.0)	23	(1.5)
Eye	12	(1.1)	13	(0.9)
Miscellaneous	10	(0.9)	10	(0.6)
TOTAL	1278		1522	(100)

*N.B.*—The total number of patients here shown is more than the total number of requests (1,133) because some patients had drugs under more than one disease/system heading and they are therefore counted more than once.

TABLE 4  
DRUGS PRESCRIBED UNDER THE HEADING PSYCHIATRIC AND ISSUED TO 333 PATIENTS

<i>Drug</i>	<i>Number of items</i>	<i>Per cent</i>
Anti-depressants (other than M.A.O.I.)	127	} (29.6)
Monoamine oxidase inhibitors	7	
Tranquillisers	171	(37.8)
Hypnotics	134	(29.6)
Anti-parkinsonian (on phenothiazines)	6	(1.3)
For enuresis	1	(0.2)
Other	7	(1.5)
TOTAL	453	(100)

TABLE 5  
DRUGS PRESCRIBED UNDER THE HEADING 'CENTRAL NERVOUS SYSTEM'  
AND ISSUED TO 152 PATIENTS

<i>Drug illness</i>	<i>Number of items</i>	<i>Per cent</i>
Hypnotic (other than psychiatric)	69	(43.1)
Anticonvulsants	43	(26.8)
Migraine	19	(11.9)
Analgesic	11	(6.9)
Parkinsonism	7	(4.4)
Antibiotic	1	(0.6)
Other	10	(6.3)
TOTAL	160	(100)

The drugs prescribed for the cardiovascular system are in no way remarkable and are not shown in detail, but hypotensive agents predominate, followed by diuretics and digoxin. The drugs prescribed under the remaining systems (table 3) are also not detailed here, but individual results show that 30 per cent of prescriptions under alimentary system were for antacids. 64 per cent under respiratory system were for antispasmodics and inhalers (including 'Intal') and only 12 per cent for antibiotics. Over 50 per cent of prescriptions for the skin were for topical steroids.

### Discussion

Little has been written about the issuing of repeat prescriptions without direct consultation in general practice although this is a common practice in this country. Rider *et al.* (1969) discussed their repeat prescriptions in a study of the workload of their practice of 10,200 patients. During five separate weeks, 756 prescriptions were issued of which the age and sex distribution was similar to our study. They found that most prescriptions were for stress symptoms, chronic bronchitis, hypertension and epilepsy, although the precise figures are not specified.

The interpretation of the results of the present study is limited as there was no age-sex register for the practice population at the time. The only information we had was the number of patients registered with each practice and the number of patients over 65, derived from executive council figures. Another limitation was that we did not have information about the number of prescriptions issued during direct consultation with patients during the study. If we had had this information it would have been possible to calculate the proportion of the total prescriptions issued by the three practices without direct consultation.

Despite these disadvantages, certain aspects of this study merit consideration. Repeat prescribing constitutes a significant proportion of routine practice work—90–100 requests for prescriptions per week in a practice of 10,000. Of these, 95 per cent were complied with—in other words, the doctor thought the request reasonable both from his and the patient's point of view.

During the period of the study there were 6,864 surgery consultations. If all the 1,132 patients who requested repeat prescriptions had been seen this would have increased the number of consultations by 16 per cent. On the other hand, for each repeat prescription a record has to be retrieved, examined, dose confirmed, an entry made and the record refiled. This is, however, predominantly secretarial rather than doctor's time. Thus from the doctor's (and probably the patient's) point of view, the issuing of repeat prescriptions without consultation saves time.

Balint *et al.* (1970) studied the issuing of repeat prescriptions in great detail and found that where a patient regularly came for repeat prescriptions this was often as much a result of the doctor's needs as of the patient's. They also found that attempts to alter this situation often resulted in a recurrence of symptoms, in the need for more and not for less treatment and eventually in the return to a similar relationship. Thus they found that the "repeat prescription" itself served a therapeutic purpose. In other words it was the regular repeating rather than what was repeated that seemed to be of importance.

In this study 72 per cent of those requesting routine repeat prescriptions had been seen within three months. The frequency with which patients require to be seen may depend on the illness, in the broadest sense, or on the type of drug being issued. It is arguable that if they are being seen every three months in any case, they could be prescribed enough drugs for that period and need therefore not request repeat prescriptions in between. This might be a significant saving of time. The 23 per cent seen every 4–12 months seem to represent a very stable steady state—it would require identification of individual patients in this group to assess whether any change is indicated on medical or other grounds.

One of the most striking if not surprising findings was the number of requests for psychiatric drugs, i.e. about 30 per cent of all requests (table 3). There was some variation among the practices. In one practice psychiatric drugs formed about 40 per cent of requests, in another about 26 per cent and in the third about 20 per cent. It is not known whether these findings are due to differences in the practice population or to differences in approach on the part of the doctors to diagnosis and treatment. We found in our study that repeat prescriptions for

psychiatric drugs were issued to 1.1 per cent of the population and hypnotics alone to 0.7 per cent.

Stevenson and Gaskell (1971) in an urban practice of 2,600 had a total of 78 patients regularly receiving hypnotics—that is three per cent of the practice population. Parish (1971) made a retrospective survey of 13,259 patient records from a practice population of 133,081 during a period of one year. He found that 12.6 per cent of the population had been prescribed psychotropic drugs which included stimulants and appetite suppressants amounting to 1.02 per cent, and that 3.7 per cent received hypnotics.

Both these surveys include all prescriptions issued whereas our survey only includes those issued when the patients were not seen. Also Parish's population had 11.2 per cent over 65 years whereas we had only 7.4 per cent. Thus the figures are not comparable but they might suggest that most of our prescriptions for psychotropic drugs and hypnotics are issued in the surgery.

Repeat prescribing is an established practice which serves a purpose both from a medical and administrative point of view. Balint *et al.* (1970) showed that for some patients and doctors regular repeat prescriptions may be beneficial and furthermore that interference with this situation may not be successful. On the other hand, the uncritical issue of repeat prescriptions for some drugs with recognisable side-effects may cause rather than cure disease. Thus whereas repeat prescribing probably has to be accepted as part of the tradition of general practice, regular critical review of those patients receiving the prescriptions seems important in order either to avoid mishap or simply to decide not to alter anything.

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### CORRELATION BETWEEN ELECTROMAGNETIC RECORDING AND MATERNAL ASSESSMENT OF FOETAL MOVEMENT

These workers used a device to measure the change induced in an electromagnetic field by fetal movement and their results showed that the patients' subjective sensation registered about 78 per cent of the motions recorded by the electromagnetic device. They suggest that a daily count by the patient of foetal movements could be used to monitor foetal well-being in cases of high risk pregnancy. Pronounced reduction or cessation of foetal movements while heart sounds are still audible, may point to a severely distressed fetus.

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