

## *Repeat prescribing via the receptionist in a group practice\**

JEAN MADELEY, B.SC. M.B., B.S.  
General practitioner, Nottingham

### Summary

As concern has been expressed about danger to patients, a survey about repeat prescribing via the receptionist was carried out in a group practice.

About one quarter of the prescriptions in the study period were 'receptionist repeats' and these were compared with a group of repeat prescriptions obtained in the course of consultation. The receptionist repeat group contained a higher proportion of the over 65s, and relatively more men than women, though the consultation repeats and the group as a whole, were heavily biased towards women. Hypnotics and drugs to relax bronchial spasm were found more commonly among the 'receptionist repeats.'

This group of patients tended to have been taking their medication for a significantly longer period than their consultation fellows, often for more than five years. Although categorised as 'receptionist repeats,' two thirds of these patients were seen by a doctor more often than six monthly. No direct evidence of any serious danger or disadvantage to the patients was found.

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### Introduction

In May 1971, I carried out a short survey in a group practice in North London during the course of my elective period in the final year. This was at the request of the doctors in the practice who wanted information about patients receiving a prescription via the receptionist (receptionist repeat). They were compared with a group of patients also obtaining a repeat prescription, but during a consultation (consultation repeat).

The purpose of the survey was to assess the extent of the habit, why it was used, whether the patients involved differed from their fellow patients, what sort of drugs they were receiving and, above all, see if receptionist repeats were harmful.

### Method

Data were obtained from basic practice records and from four questionnaires:

- (1) The first questionnaire was attached to a carbon copy of every prescription issued from the premises during a two-week period, and dealt with basic matters such as age, sex, social class, type of drug, diagnosis and length of time on medication.
- (2) The second questionnaire was used on a smaller, randomly selected group of patients who were visited and questioned in more detail about their knowledge, reliability of administration, and their opinions about drug efficacy.
- (3) The third questionnaire was for the doctors. It asked about the patients visited, to try and assess the doctor's knowledge of the patient, his reason for so prescribing, and his satisfaction with the individual situation.
- (4) The last was a more general questionnaire for the doctors about their policy on repeat prescribing.

Drugs were classified according to a modified classification from the *Monthly Index of Medical Specialties (MIMS)*, and diagnoses by a modified World Health Organisation classification. Data processing was done by the University of London Computer Centre, using a packaged programme, Biomedical BMD 08D, giving chi-squared tables.

\* Based on work done while a medical student.

## Results

### (1) *Extent of the habit*

An average of 498 transactions per week between doctor and patients was obtained. This compared well with the average for the previous six months. Of these transactions, 69 per cent led to a prescription being given.

Of these, 49 per cent were new prescriptions 30 per cent were consultation repeats, and 22 per cent were receptionist repeats. Thus 52 per cent of prescriptions were repeats. This compares with 25 per cent (Dunnell and Cartwright, 1972) and 41 per cent (Balint, *et al.*, 1970) in two other surveys.

The new prescriptions were not further studied and a survey group of 370 was identified of which 210 were consultation repeats i.e. 57 per cent, and 160 were receptionist repeats i.e. 43 per cent. These figures were arrived at after correction for overlap between the two groups.

Dunnell and Cartwright (1972) found that in their group 48 per cent always saw their doctor for a prescription whereas 31 per cent usually did not. This can be compared with the above results.

Basic information about this group of 370 consultation and receptionist repeats obtained from questionnaire 1 was examined and the two groups were compared.

A smaller random sample of 85 was then chosen of whom 61 were contacted and visited. Questionnaires 2 and 3 gave more information about this group, which seemed to be a valid sample, as it did not differ significantly from the parent group of 730 in terms of age, sex, and social class. The larger group of 370 was, however, significantly different from the whole age-sex structure of the practice (tables 1 and 2). It was thus already a selected group, as might be expected.

### (2) *Reasons for repeat prescribing*

Information was derived from questionnaires 2, 3 and 4.

The doctors' policy statements varied; all of them prescribed via the receptionist at times, and did not vary much in their habits, despite what they thought. The reasons for so prescribing were time, convenience of doctor and patient, and the variable value of consultation. Criteria stressed heavily in the choice of patients were stability, reliability and knowledge. Amphetamines, medihalers, and patients of a suicidal tendency were in theory excluded from the receptionist repeat group.

Questioning of doctors and patients about reasons in individual cases showed:

<i>Doctors</i>	<i>Patients</i>
Chronic established condition	Doctor convenience .. .. 12
sensible patient .. .. 16	Convenience (both) .. .. 7
Established unhappy situation .. 11	Incapacity . . . . . 6
Patient incapacitated .. .. 2	Patient convenience .. .. 3
	No point in coming .. .. 2

In the vast majority of 'consultation repeats' the doctor reason given was need for additional psychotherapy, which correlated well with the number of patients who "liked to see the doctor."

Evidence from questionnaires 2 and 3 suggests that 'receptionist repeat' patients were not significantly more reliable, knowledgeable or better known by the doctor than their fellows who visited the surgery more often. And in contrast to policy, amphetamines and 'Medihalers' were prescribed through the receptionist, though rarely and in very small quantities.

Thus although correlation between individual assessment of patients and doctors was good, the ideal criteria laid down in general policy statements were not met in practice.

### (3) *Basic data*

(a) *Age.* The data obtained from questionnaire 1 is shown in table 1.

TABLE 1  
AGE AND SET

<i>Age</i>	<i>Receptionist repeats</i>	<i>Consultation repeats</i>	<i>Total</i>
15	8 5	13 6	21 5.7
15-44	51 32	96 46	147 39.7
45-65	47 29.3	63 30	110 29.7
65 plus	54 33.7	38 18	92 24
Totals	160	210	370

The practice age-sex register showed:

<i>Age</i>	< 15 19.9%	45-65 26.2%
	15-44 45.9%	65 plus 11.7%

TABLE 2  
REPEAT PRESCRIPTIONS ANALYSED BY SEX

<i>Sex</i>	<i>Receptionist repeats</i>	<i>Consultation repeats</i>	<i>Total</i>
Male	63 39%	56 27%	119 32%
Female	97 61%	154 73%	251 68%
Total	160	210	370

The practice age-sex register showed that 56% of patients were female.

By comparison with the practice records, the whole survey group was already biased in favour of the over-65 group. The 'receptionist repeat' patients were an even older group, whereas in the consultation repeat group the 15-44 age group predominated.

The whole group was biased towards females. There were, however, significantly more males in the receptionist repeat group than in the consultation repeat group.

It is difficult to compare these figures with Dunnell and Cartwright's findings, but their figures also show an upward trend with age of chronic medicine takers (11 per cent of the 21-24 age group compared with 55 per cent in the 75 plus group). They also show a preponderance of females among chronic medicine takers (31 per cent of the women interviewed were taking long-term medication compared with 20 per cent of the men).

(b) *Social class.* There was no significant difference found between receptionist and consultation repeats.

(c) *Diagnoses.* These were evenly distributed between the two groups.

(d) *Length of time on medication.* Among the 370 patients, 586 drugs were prescribed and the length of time the patient had been taking the preparation was recorded for each drug.

From table 3 it can be easily seen that the 'receptionist repeat' patients had been taking their medication for a significantly longer period.

(e) *Length of time covered by current prescription.* This was assessed according to the instructions usually given, though this sometimes proved difficult either because of the nature of the drug e.g. skin application, or because of lack of instruction on the prescription. The result of comparison between receptionist and consultation repeats was significant. The trend was towards

shorter length prescriptions for consultation repeats. The majority of both groups received more than one month's supply (50 per cent for consultation repeats and 70 per cent for receptionist repeats). Up to 100 tablets at a time were prescribed, including prescriptions for barbiturates. But this was equally likely to happen in the consultation repeat group.

TABLE 3  
LENGTH OF TIME DRUG PRESCRIBED

<i>Time</i>	<i>Receptionist repeat</i>		<i>Consultation repeat</i>		<i>Total</i>
5 years	85	36	62	18	147 25
1-5 years	118	50	114	35	232 50
1-11 months	31	13	109	33	140 20
1-4 weeks	1	0.5	38	11.5	39 5
1 week	NIL		8	2.5	8
Total	235		331		586

(f) *Doctors.* There was no significant difference between the doctors in the practice in their prescribing habits. However, a group of patients was identified, making up about ten per cent of the survey, who saw no fixed doctor to obtain their medication. A significantly greater number of these patients were in the receptionist repeat groups. They seemed to be a younger group, containing more children and young adults, and significantly more men.

(g) *Drugs.* Among the 370 patients 586 drugs were prescribed, 153 patients had two or more drugs, and 60 patients had three or more drugs. A modified *MIMS* classification was used. Almost every group of drugs was represented at least once, but not all these are shown here. The following make up 80 per cent of the drugs prescribed as repeats and more than 80 per cent of the diagnoses are represented:

<i>Drugs</i>		<i>%</i>	<i>Diagnoses</i>	
Sedatives	105	18	Psychological	187
Hypnotics	86	14	Respiratory and E.N.T.	52
Analgesics and anti-inflammatory	37	6.5	Cardiovascular	38
Bronchial spasm relaxants	35	6	Skin	30
Antidepressants	28	4.7	Alimentary	29
Oral contraceptives	27	4.6	C.N.S.	28
Diuretics	22	3.7	Musculoskeletal	27
Topical corticosteroids	19		Prophylactic	27
Antibiotics	19		Endocrine	24
Anticonvulsants	19			
Antihistamines	17			
Cardiac reactants	16			
Vascular reactants	15			
Erythropoietic	14			
Anti-obesity	10			

Thus psychotropic drugs accounted for 36.7 per cent of the drugs prescribed and all C.N.S. drugs nearly 40 per cent. Comparison with Dunnell and Cartwright's survey shows that C.N.S. drugs accounted for 24 per cent of all medicines first prescribed one year or more before interview, a smaller proportion than in the present survey.

Hypnotics, bronchial spasm relaxants and anticonvulsants were significantly commoner in the receptionist repeat group, whereas sedatives, antidepressants and diuretics were commoner in the 'consultation repeat' group.

Hypnotics were analysed into barbiturate and non-barbiturate preparations:

TABLE 4  
ANALYSIS OF HYPNOTICS

<i>Hypnotic</i>	<i>Receptionist</i>	<i>Consultation</i>	<i>Total</i>
Barbiturates	27	13	40
Nitrazepam	15	21	36
Others	8	3	11
Totals	50	37	87

Others included 'Welldorm,' 'Mandrax' and 'Chloral.' A significant difference was found between the two groups. Barbiturates were much commoner in the 'receptionist repeat' group and nitrazepam commoner in the 'consultation repeat' group.

Among the sedatives, diazepam was the commonest drug, and also the commonest drug overall, being prescribed 47 times. Bronchial spasm relaxants were of several different varieties, including 'Medihalers' and mixed preparations containing barbiturates.

Old people obtained significantly more analgesics, bronchial spasm relaxants and diuretics and fewer sedatives. Women were given significantly more sedatives than men, who were given more analgesics and bronchial spasm relaxants.

(4) *Data from the smaller group of patients*

The information above was based on the larger group of 370 patients. This section deals with information gleaned from questionnaires 2 and 3 about the sub-group of 61 patients who were visited. An effort was made to measure subjective impressions and assess quality of care. This group did not differ significantly from the parent group in age, sex or social class.

(a) *Patient knowledge.* A three-point scale was used to assess knowledge of diagnosis and drug prescribed. No significant difference was found between the receptionist and consultation repeat patients. More than half had good knowledge.

(b) *Accuracy of administration.* Eighty per cent of patients said they took their medication as directed. Less than one per cent took more than directed and five per cent less than directed. Dunnell and Cartwright found one per cent taking more than directed, 19 per cent less than directed, and, as above, 80 per cent as advised. The doctors had been asked to assess the individual reliability of the patients visited. The two assessments correlated well, though the doctors were more pessimistic. There was no difference between receptionist and consultation repeats in accuracy of administration, although the doctors said they used this as a criterion.

(c) *Dosage variation by doctor.* Twenty per cent of all repeat prescription patients had had their dosage of medication increased during the time of taking the drug, ten per cent reduced, 50 per cent maintained the same, and 20 per cent variable. There was no difference between receptionist and consultation repeats.

(d) *Warnings or advice given by doctors about medication.* This was to try and assess whether patients were given any indication of dangerous side-effects which ought to make them consult the doctor. Eighty per cent did not remember being given particular instructions, but of those that did the receptionist repeat patients predominated.

(e) *Effectiveness and incidence of side-effects.* Ninety per cent thought their medication was effective. Twenty-nine per cent of these had noticed side-effects and 71 per cent no side-effects. Only one person visited thought their medication was ineffective and had side-effects. No difference was found between consultation and receptionist repeats. Dunnell and Cartwright found that 66 per cent of all drugs taken were thought to have "helped a lot." Only 56 per cent first prescriptions came into this category, but 78 per cent of tenth and subsequent prescriptions.

(f) *Necessity for emergency visit.* An effort was made to assess whether an emergency visit from a general practitioner or to casualty had been necessary during the time on the medication which might have been related to the drug. In five out of the 61 a visit was necessary which could

have been related to the drug, but there was no difference between receptionist and consultation repeat patients.

(g) *Frequency of consultation.*

TABLE 5  
FREQUENCY OF CONSULTATION

<i>Frequency</i>	<i>Receptionist repeats</i>	<i>Consultation repeats</i>	<i>Total</i>
Six monthly or less	9 31%	0	9 14.7%
Three to six monthly	4 13.8%	1	5 8.3%
One to three monthly	13 44.8%	11 34.3%	24 39.4%
More than monthly	3 10.3%	20 62.5%	23 37.6%
Totals	29	32	61

The receptionist repeat group was not a group of patients left indefinitely without a consultation. Table 5 shows how often the visited sample of 61 patients saw their doctor, the figures being obtained from the practice records. More than 75 per cent of all repeat patients were seen three monthly or more frequently, but only just over half of the receptionist repeats. Nine patients, or one third of receptionist repeats were seen less often than six monthly. There was no difference with age. "Poor knowledge" patients were, however, seen more frequently.

(h) *Doctor satisfaction.* In questionnaire 3 the doctors were asked to assess the reliability of individual patients. They were also asked about their patients and assessed according to a three point scale about their knowledge of the patient. Eighty per cent of them had 'good knowledge' and they tended to know better the patients they had known longer.

TABLE 6  
LENGTH OF TIME KNOWN

<i>Length of time known</i>	<i>6/12-1 yr</i>	<i>1-5 yrs</i>	<i>5 yrs +</i>	<i>Totals</i>
Knowledge poor		1		1
Medium	4	8	2	14
Good	3	13	30	46
Total	7	22	32	61

Another assessment they were asked to make was about their satisfaction with the individual situation and hence whether or not they thought they were seeing the patient often enough. In only 11 out of 61 cases did they think they would like to see the patient more often. The remaining 50 were considered to be seen often enough or too much.

### Discussion

This was a small, but valid, sample survey, in one practice only, but partly comparable with the results of two other surveys involving repeat prescribing. The practice was a self-selected one—its doctors were obviously already worried about the phenomenon of repeat prescribing. It might be interesting to compare results from this practice with those from a practice not particularly interested in the problem.

Interpretation of results in a survey like this depends on imponderables, such as rights and

attitudes of individual doctors and patients, and the thorny problem of what constitutes good medical care. Objective criteria of the latter are difficult to obtain, so no hard and fast rules about right and wrong can be laid down.

Repeat prescriptions formed about 25 per cent of the prescriptions issued on the surgery premises in any one week. The patients getting these prescriptions may be considered to be potentially an at risk group, more chronically dependent on their medication than their fellows who visit the surgery more often. They contain a relatively larger proportion of another at risk group, the over 65s, who may, of course, find it more difficult to visit the surgery and may be visited at home by doctors or ancillary workers, but it is possible that their medication may not be adequately supervised.

Women seem to dominate the whole group of repeat prescriptions, although less the receptionist repeats. They are therefore probably more at risk from the amount of drugs consumed, particularly psychotropic ones, than from lack of follow-up. Men obtain repeat prescriptions as a whole less often but more of their prescriptions are receptionist repeats. It may be that they are less often ill, less often obtain a prescription, or get better more quickly and therefore do not need a repeat, but it may be that they have not so much time to visit their doctor because of work and could therefore be being deprived of medical care or follow-up.

The distribution of drugs involved, is, of course, only available for this practice. Psychotropic drugs figure hugely in the results. In the country as a whole they are often used in suicide attempts. None of the patients interviewed had made a suicide attempt using drugs given, but in a number of cases the amounts prescribed were well able to cause death, though this was equally true of the consultation repeat group. More research is needed on the relationship between suicides and repeat prescriptions. Increase in dosage of drugs is another potential worry, and 20 per cent of the group had had their dosage increased by the doctor. Very few patients admitted themselves to be taking more than prescribed, but guilt may suppress the truth. And the problem of under-administration of necessary drugs must also be borne in mind.

It must of course be remembered that receptionist repeat patients in this practice *are* seen by their doctor, in most cases more often than six monthly. But a third of the small interviewed group, nine out of 29, were seen less than six monthly. This group of patients might well be considered at risk.

The degree of risk is difficult to assess. None of the crude objective criteria used led to the belief that any of the patients seen had suffered serious morbidity as a result of repeat receptionist prescribing. Yet many doctors feel guilty about the habit. It is difficult to know to what extent their guilt is justified, but it is to be hoped that this survey may help to put this guilt into perspective.

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