

PRACTICE OBSERVED

Practice Research

List size and patient contact in general medical practice

D WILKIN, D H H METCALFE

Abstract

One hundred and ninety nine general practitioners collected data on consultations with patients for a representative sample of recording days. The number of consultations and amount of time spent in patient contact were positively correlated with the number of registered patients (list size), whereas the consultation rate and the amount of time spent with each patient were negatively correlated. These relations, however, were not too strong, and there was considerable variation among doctors, particularly for those with lower list sizes. These findings have implications for issues concerning quality of care and the potential effects of reductions in patient list size.

Introduction

Surprisingly little information is available on the number of patients seen by general practitioners, the amount of time spent with each patient, or the length of time doctors spend in surgery and on home visiting. Still less is known about the relation between the number of patients on a general practitioner's list and the frequency and duration of contacts between doctor and patients. Such information is relevant to debates about the quality of care in general practice if it is assumed that the amount of time available is a constraining factor in the achievement of quality. Since the remuneration of general practitioners

is related to the number of patients on the list there is a potential conflict between the understandable desire to maximise income and the desire to provide high quality care. The most comprehensive review of the information available on these subjects was provided by Butler in 1980, who summarised the evidence from many small and a few larger studies of general medical practice. With respect to the time spent in consultations with patients each week, including immediately associated activities such as administration and travelling to home visits, he estimated that the average lay between 35 and 42 hours, but that the range was somewhere between 25 hours and 55 hours. The mean duration of each surgery consultation was estimated to be between 5.0 and 6.5 minutes and each home visit between 10 and 15 minutes. In examining the frequency of contact on the basis of 80 observations derived from 24 different studies the mean surgery consultation rate (consultations per patient per year) was 3.2 and the home consultation rate 1.3. The largest provider based study, the Second National Morbidity Study, reported an overall consultation rate for 1971-2 of 3.2. In contrast, the largest consumer based study, the General Household Survey, reported a consultation rate of 3.8-7.

Apart from building a descriptive picture of general practice, Butler used the available studies to examine the relations between list size and the frequency and duration of patient contact. He concluded that the available data were inconclusive with respect to the amount of time spent with patients. The total time spent in the practice was as likely to reflect personal and idiosyncratic considerations as any systematic variation in list size. With respect to the average duration of consultations the evidence suggested that list size was not usually an important determinant of the duration of consultations. Consultation rates did show a broad negative association with list size for both surgery and home consultations. Butler was careful, however, to point out the weaknesses of the data on which these conclusions were based. In particular, he drew attention to the fact that most of the reported studies were of self selected practitioners, and differences in the

Department of General Practice, DHSS Research Unit, University of Manchester
D WILKIN, MSc, PhD, senior research fellow
D H H METCALFE, FRCS, MRC, professor of general practice
Correspondence to Professor D H H Metcalfe, Rushdole Health Centre, Manchester M14 5NP.

TABLE I—Frequency and duration of patient contact by list size

	List size			Total patients (n=199)
	<2000 (n=57) (100%)	2001-2500 (n=73) (100%)	>2500 (n=69) (100%)	
No. of consultations per week				
<80	17 (30)	2 (3)	3 (4)	22 (11)
80-120	9 (16)	10 (14)	1 (1)	20 (10)
120-160	16 (28)	6 (8)	6 (9)	28 (14)
160-200	6 (10)	16 (22)	11 (16)	33 (16)
200-240	6 (10)	15 (21)	15 (22)	36 (18)
240-280	1 (2)	11 (15)	12 (17)	24 (12)
>280	4 (7)	10 (14)	20 (29)	34 (17)
Consultation rate				
2.0-2.49	11 (20)	3 (4)	10 (15)	24 (12)
2.5-2.9	6 (10)	13 (18)	10 (15)	29 (14)
3.0-3.49	6 (10)	16 (22)	22 (32)	44 (22)
3.5-3.9	2 (3)	7 (10)	13 (19)	22 (11)
4.0-4.49	1 (2)	12 (17)	8 (12)	21 (10)
4.5-4.9	1 (2)	12 (17)	2 (3)	23 (11)
5.0-5.49	1 (2)	12 (17)	2 (3)	23 (11)
5.5-5.9	1 (2)	12 (17)	2 (3)	23 (11)
6.0-6.49	1 (2)	12 (17)	2 (3)	23 (11)
6.5-6.9	1 (2)	12 (17)	2 (3)	23 (11)
7.0-7.49	1 (2)	12 (17)	2 (3)	23 (11)
7.5-7.9	1 (2)	12 (17)	2 (3)	23 (11)
8.0-8.49	1 (2)	12 (17)	2 (3)	23 (11)
8.5-8.9	1 (2)	12 (17)	2 (3)	23 (11)
9.0-9.49	1 (2)	12 (17)	2 (3)	23 (11)
9.5-9.9	1 (2)	12 (17)	2 (3)	23 (11)
10.0-10.49	1 (2)	12 (17)	2 (3)	23 (11)
10.5-10.9	1 (2)	12 (17)	2 (3)	23 (11)
11.0-11.49	1 (2)	12 (17)	2 (3)	23 (11)
11.5-11.9	1 (2)	12 (17)	2 (3)	23 (11)
12.0-12.49	1 (2)	12 (17)	2 (3)	23 (11)
12.5-12.9	1 (2)	12 (17)	2 (3)	23 (11)
13.0-13.49	1 (2)	12 (17)	2 (3)	23 (11)
13.5-13.9	1 (2)	12 (17)	2 (3)	23 (11)
14.0-14.49	1 (2)	12 (17)	2 (3)	23 (11)
14.5-14.9	1 (2)	12 (17)	2 (3)	23 (11)
15.0-15.49	1 (2)	12 (17)	2 (3)	23 (11)
15.5-15.9	1 (2)	12 (17)	2 (3)	23 (11)
16.0-16.49	1 (2)	12 (17)	2 (3)	23 (11)
16.5-16.9	1 (2)	12 (17)	2 (3)	23 (11)
17.0-17.49	1 (2)	12 (17)	2 (3)	23 (11)
17.5-17.9	1 (2)	12 (17)	2 (3)	23 (11)
18.0-18.49	1 (2)	12 (17)	2 (3)	23 (11)
18.5-18.9	1 (2)	12 (17)	2 (3)	23 (11)
19.0-19.49	1 (2)	12 (17)	2 (3)	23 (11)
19.5-19.9	1 (2)	12 (17)	2 (3)	23 (11)
20.0-20.49	1 (2)	12 (17)	2 (3)	23 (11)
20.5-20.9	1 (2)	12 (17)	2 (3)	23 (11)
21.0-21.49	1 (2)	12 (17)	2 (3)	23 (11)
21.5-21.9	1 (2)	12 (17)	2 (3)	23 (11)
22.0-22.49	1 (2)	12 (17)	2 (3)	23 (11)
22.5-22.9	1 (2)	12 (17)	2 (3)	23 (11)
23.0-23.49	1 (2)	12 (17)	2 (3)	23 (11)
23.5-23.9	1 (2)	12 (17)	2 (3)	23 (11)
24.0-24.49	1 (2)	12 (17)	2 (3)	23 (11)
24.5-24.9	1 (2)	12 (17)	2 (3)	23 (11)
25.0-25.49	1 (2)	12 (17)	2 (3)	23 (11)
25.5-25.9	1 (2)	12 (17)	2 (3)	23 (11)
26.0-26.49	1 (2)	12 (17)	2 (3)	23 (11)
26.5-26.9	1 (2)	12 (17)	2 (3)	23 (11)
27.0-27.49	1 (2)	12 (17)	2 (3)	23 (11)
27.5-27.9	1 (2)	12 (17)	2 (3)	23 (11)
28.0-28.49	1 (2)	12 (17)	2 (3)	23 (11)
28.5-28.9	1 (2)	12 (17)	2 (3)	23 (11)
29.0-29.49	1 (2)	12 (17)	2 (3)	23 (11)
29.5-29.9	1 (2)	12 (17)	2 (3)	23 (11)
30.0-30.49	1 (2)	12 (17)	2 (3)	23 (11)
30.5-30.9	1 (2)	12 (17)	2 (3)	23 (11)
31.0-31.49	1 (2)	12 (17)	2 (3)	23 (11)
31.5-31.9	1 (2)	12 (17)	2 (3)	23 (11)
32.0-32.49	1 (2)	12 (17)	2 (3)	23 (11)
32.5-32.9	1 (2)	12 (17)	2 (3)	23 (11)
33.0-33.49	1 (2)	12 (17)	2 (3)	23 (11)
33.5-33.9	1 (2)	12 (17)	2 (3)	23 (11)
34.0-34.49	1 (2)	12 (17)	2 (3)	23 (11)
34.5-34.9	1 (2)	12 (17)	2 (3)	23 (11)
35.0-35.49	1 (2)	12 (17)	2 (3)	23 (11)
35.5-35.9	1 (2)	12 (17)	2 (3)	23 (11)
36.0-36.49	1 (2)	12 (17)	2 (3)	23 (11)
36.5-36.9	1 (2)	12 (17)	2 (3)	23 (11)
37.0-37.49	1 (2)	12 (17)	2 (3)	23 (11)
37.5-37.9	1 (2)	12 (17)	2 (3)	23 (11)
38.0-38.49	1 (2)	12 (17)	2 (3)	23 (11)
38.5-38.9	1 (2)	12 (17)	2 (3)	23 (11)
39.0-39.49	1 (2)	12 (17)	2 (3)	23 (11)
39.5-39.9	1 (2)	12 (17)	2 (3)	23 (11)
40.0-40.49	1 (2)	12 (17)	2 (3)	23 (11)
40.5-40.9	1 (2)	12 (17)	2 (3)	23 (11)
41.0-41.49	1 (2)	12 (17)	2 (3)	23 (11)
41.5-41.9	1 (2)	12 (17)	2 (3)	23 (11)
42.0-42.49	1 (2)	12 (17)	2 (3)	23 (11)
42.5-42.9	1 (2)	12 (17)	2 (3)	23 (11)
43.0-43.49	1 (2)	12 (17)	2 (3)	23 (11)
43.5-43.9	1 (2)	12 (17)	2 (3)	23 (11)
44.0-44.49	1 (2)	12 (17)	2 (3)	23 (11)
44.5-44.9	1 (2)	12 (17)	2 (3)	23 (11)
45.0-45.49	1 (2)	12 (17)	2 (3)	23 (11)
45.5-45.9	1 (2)	12 (17)	2 (3)	23 (11)
46.0-46.49	1 (2)	12 (17)	2 (3)	23 (11)
46.5-46.9	1 (2)	12 (17)	2 (3)	23 (11)
47.0-47.49	1 (2)	12 (17)	2 (3)	23 (11)
47.5-47.9	1 (2)	12 (17)	2 (3)	23 (11)
48.0-48.49	1 (2)	12 (17)	2 (3)	23 (11)
48.5-48.9	1 (2)	12 (17)	2 (3)	23 (11)
49.0-49.49	1 (2)	12 (17)	2 (3)	23 (11)
49.5-49.9	1 (2)	12 (17)	2 (3)	23 (11)
50.0-50.49	1 (2)	12 (17)	2 (3)	23 (11)
50.5-50.9	1 (2)	12 (17)	2 (3)	23 (11)
51.0-51.49	1 (2)	12 (17)	2 (3)	23 (11)
51.5-51.9	1 (2)	12 (17)	2 (3)	23 (11)
52.0-52.49	1 (2)	12 (17)	2 (3)	23 (11)
52.5-52.9	1 (2)	12 (17)	2 (3)	23 (11)
53.0-53.49	1 (2)	12 (17)	2 (3)	23 (11)
53.5-53.9	1 (2)	12 (17)	2 (3)	23 (11)
54.0-54.49	1 (2)	12 (17)	2 (3)	23 (11)
54.5-54.9	1 (2)	12 (17)	2 (3)	23 (11)
55.0-55.49	1 (2)	12 (17)	2 (3)	23 (11)
55.5-55.9	1 (2)	12 (17)	2 (3)	23 (11)
56.0-56.49	1 (2)	12 (17)	2 (3)	23 (11)
56.5-56.9	1 (2)	12 (17)	2 (3)	23 (11)
57.0-57.49	1 (2)	12 (17)	2 (3)	23 (11)
57.5-57.9	1 (2)	12 (17)	2 (3)	23 (11)
58.0-58.49	1 (2)	12 (17)	2 (3)	23 (11)
58.5-58.9	1 (2)	12 (17)	2 (3)	23 (11)
59.0-59.49	1 (2)	12 (17)	2 (3)	23 (11)
59.5-59.9	1 (2)	12 (17)	2 (3)	23 (11)
60.0-60.49	1 (2)	12 (17)	2 (3)	23 (11)
60.5-60.9	1 (2)	12 (17)	2 (3)	23 (11)
61.0-61.49	1 (2)	12 (17)	2 (3)	23 (11)
61.5-61.9	1 (2)	12 (17)	2 (3)	23 (11)
62.0-62.49	1 (2)	12 (17)	2 (3)	23 (11)
62.5-62.9	1 (2)	12 (17)	2 (3)	23 (11)
63.0-63.49	1 (2)	12 (17)	2 (3)	23 (11)
63.5-63.9	1 (2)	12 (17)	2 (3)	23 (11)
64.0-64.49	1 (2)	12 (17)	2 (3)	23 (11)
64.5-64.9	1 (2)	12 (17)	2 (3)	23 (11)
65.0-65.49	1 (2)	12 (17)	2 (3)	23 (11)
65.5-65.9	1 (2)	12 (17)	2 (3)	23 (11)
66.0-66.49	1 (2)	12 (17)	2 (3)	23 (11)
66.5-66.9	1 (2)	12 (17)	2 (3)	23 (11)
67.0-67.49	1 (2)	12 (17)	2 (3)	23 (11)
67.5-67.9	1 (2)	12 (17)	2 (3)	23 (11)
68.0-68.49	1 (2)	12 (17)	2 (3)	23 (11)
68.5-68.9	1 (2)	12 (17)	2 (3)	23 (11)
69.0-69.49	1 (2)	12 (17)	2 (3)	23 (11)
69.5-69.9	1 (2)	12 (17)	2 (3)	23 (11)
70.0-70.49	1 (2)	12 (17)	2 (3)	23 (11)
70.5-70.9	1 (2)	12 (17)	2 (3)	23 (11)
71.0-71.49	1 (2)	12 (17)	2 (3)	23 (11)
71.5-71.9	1 (2)	12 (17)	2 (3)	23 (11)
72.0-72.49	1 (2)	12 (17)	2 (3)	23 (11)
72.5-72.9	1 (2)	12 (17)	2 (3)	23 (11)
73.0-73.49	1 (2)	12 (17)	2 (3)	23 (11)
73.5-73.9	1 (2)	12 (17)	2 (3)	23 (11)
74.0-74.49	1 (2)	12 (17)	2 (3)	23 (11)
74.5-74.9	1 (2)	12 (17)	2 (3)	23 (11)
75.0-75.49	1 (2)	12 (17)	2 (3)	23 (11)
75.5-75.9	1 (2)	12 (17)	2 (3)	23 (11)
76.0-76.49	1 (2)	12 (17)	2 (3)	23 (11)
76.5-76.9	1 (2)	12 (17)	2 (3)	23 (11)
77.0-77.49	1 (2)	12 (17)	2 (3)	23 (11)
77.5-77.9	1 (2)	12 (17)	2 (3)	23 (11)
78.0-78.49	1 (2)	12 (17)	2 (3)	23 (11)
78.5-78.9	1 (2)	12 (17)	2 (3)	23 (11)
79.0-79.49	1 (2)	12 (17)	2 (3)	23 (11)
79.5-79.9	1 (2)	12 (17)	2 (3)	23 (11)
80.0-80.49	1 (2)	12 (17)	2 (3)	23 (11)
80.5-80.9	1 (2)	12 (17)	2 (3)	23 (11)
81.0-81.49	1 (2)	12 (17)	2 (3)	23 (11)
81.5-81.9	1 (2)	12 (17)	2 (3)	23 (11)
82.0-82.49	1 (2)	12 (17)	2 (3)	23 (11)
82.5-82.9	1 (2)	12 (17)	2 (3)	23 (11)
83.0-83.49	1 (2)	12 (17)	2 (3)	23 (11)
83.5-83.9	1 (2)			

of time spent in patient contact. We have also shown negative correlations between patient contact and consultation times, and the amount of time devoted to each patient on the doctor's list. In common with other studies we have found these relations to be weaker than might be expected if list size were the major determinant of the amount of time the general practitioner can devote to patient care. This was particularly evident for the lower list sizes. Large lists consistently generate more consultations and more time spent in direct patient contact and they impose restrictions on the consultation rate and the amount of time devoted to individual patients. Though smaller lists seem to facilitate the opposite, it appears that the general practitioner exercises a larger element of choice, or that other constraints become more powerful.

As list size falls below 2500 it seems to have less effect on the frequency and duration of patient contacts. Consultations in total continue to fall, and the amount of time the general practitioner spends in surgery and on home visits continues to fall, but from the patient's perspective the likelihood that frequency of contact and time available will increase seems to depend on other factors. At present the average list size for general practitioners in the UK stands at roughly 2100. There is no evidence from this study that further reductions below this size would have any great impact on the time available to individual patients, except insofar as these result from reductions in the highest lists. This does not, however, mean that other important aspects of patient care, which we have not examined, might not be affected. As we have already emphasised, we do not know enough about the relations between the amount of patient contact, the quality of care provided, and health outcomes of patients.

If list size explains only a small part of the variation among general practitioners in frequency and duration of patient con-

tact what other variables might be implicated? We have examined a wide range of factors, but the most interesting one that might be thought to be important and we shall discuss these in detail in future papers. In particular we were able to examine the influence of doctors' other paid commitments outside general medicine, such as hospital appointments and local authority work. These did not explain much of the variation in patient contact variables. Although doctors who spent more than eight hours a week on other commitments tended to spend less time with patients, the differences were only small. At least as interesting is that the larger number of doctors who spent up to three hours on outside commitments spent more time in patient contact in their own practices than their colleagues who had such commitments.

We hope that this paper will help to stimulate debate about the quality of care and the future development of general medical practice. We think that the evidence raises important questions about the relation between time, quality, and outcome, which emphasise the need for more research into primary health care.

References

- 1 Butler PJ. How many patients. *Qualitative Papers on Social Administration*, 64 (London: Bedford Square Press, 1966).
- 2 Department of Health and Social Security. *Morbidity statistics from general practice*. London: HMSO, 1979.
- 3 Subcity. *Report of the Survey of General Practitioner Workload 1981*. London: HMSO, 1983.
- 4 Wilkin M, Gifford JHM, Hallam L, Cooke M, Hodgkin PK. Area variations in the pattern of care in urban general practice. *Br Med J* 1984;289:229-32.
- 5 Wood J. The problems of primary care in inner cities. *Br Med J* 1984;289:229-32.
- 6 Wood J. An general practitioners in inner Manchester worse off than those in other areas. *Br Med J* 1983;287:1249-52.

Accepted 2 November 1984

ONE HUNDRED YEARS AGO

The present system of shop-labour, on which we commented in a recent article, is now generally regarded, and with justice, as one of the gravest social dangers of our time. Anyone may obtain, in almost any quarter, reliable evidence of its merciless, polite, and unpretentious tyranny. Medical men have frequent occasion to notice and to treat its consequences, except insofar as they may readily be believed that the young of both sexes are the chief sufferers, and that the majority of these are women. The reasons for this fact are not difficult to discover, and are to be found in the general physical and mental state of the female, in her comparatively sudden development during youth, and in the fact that, save in the mere matter of muscular strain, her share of fatigue is equal to that of her masculine fellow-worker, the hygiene of her surroundings often more frail than his, and her remembrance less powerful. No woman, even when her prime of strength is able to support for weeks or months a strain of twelve or fifteen hours of daily work, without intermission, under the most favourable circumstances. At present, many employers of labour expect the young half-developed girl "hands," whom their economy teaches them to engage, to do as much in workrooms encumbered with woollen goods, or hung with trimmings of every kind of dye (very commonly soxous), unventilated, dusty, and overheated—to do all this for a miserable wage of some fifteen shillings a week, and even require, with a coarse buffing of satire, that these poor girls shall bind themselves over to wear a smiling countenance. Human endurance is elastic, but within limits. At first the weekly rest, short though it is, may establish a rebound sufficient to cover the appearance of exhaustion, but, in the not very long run, nature will have her way. Disease, which judgment, without any undue indulgence, might have prevented, appears, and the further history of such a case lies within the province of the practitioner. All these troubles might be avoided with ordinary consideration, and without interference with the fair development of trade. They exist, notwithstanding, even in those establishments which are subject to

inspection under the Factory Act, and notoriously in the most fashionable quarters. Inspectors would do well to remember that shop-women run the risk of dismissal if they state their case to them, that employers are often too glad to make light of real grievances, and that, for true insight, their own shrewdness must chiefly be depended on. Only by a wider and deeper, though not necessarily an intrusive, official scrutiny, assisted, if necessary, by some method of regular book-notation, in which shop-assistants shall participate, can we hope to deal effectively with the scandal of commercial life. (*British Medical Journal* 1884;ii:670.)

A jury's opinion of medical treatment is not likely to be worth much on its merits, but when it comes to be regarded—or at least given to the world—as a judgment, it ceases to be the ridiculous and becomes offensive. What possible place or power can a jury claim to exercise in the criticisms of medical treatment? The only plausible pretence for so doing is a difference of opinion among skilled witnesses, and if the profession were true to itself and its members loyal to the dignity and interest of their cloth, no such "difference" would be allowed to reach the public ear. It is no idle requirement that the College of Physicians make when it formally imposes on its members and licentiates the obligation to refrain from accusing any practitioner of professional ignorance, except before competent judges; not, certainly, regarding lay jurors in that light. This is a rule which ought to govern the whole profession. It is unfortunate that in ethics an ought is so sought; a jury may, of course, determine, as a matter of public procedure, that a certain practitioner, either by neglect or malpractice, injured a patient, but it is not prepared to decide some one has been injured, it is clearly inadmissible to pronounce judgment as to the merits or demerits of particular medical treatment, to say that it was "improper." A recent incident at Leeds, to which we will not more specifically allude, has suggested these remarks. (*British Medical Journal* 1884;ii:1027.)

Repeat prescriptions: was Balint right?

PHILIP M J TOMBLESON

The demand for a repeat prescription is the expression of the need for a continued human contact . . . arrangements have to be made to reduce the intimacy created by this need. The indirect contact is an effective method of reducing this intimacy. Treatment or Diagnosis, 1970.¹

Abstract

The results of a study of repeat prescriptions in a semi-rural general practice of 2716 patients showed that 97 patients had not attended for review of their drug treatment for over 12 months. Nearly 80 patients seemed to elude contact; the motivation for this behaviour was divided between pride and fear. A psychological study showed pronounced phobic features in the group that was most closely aligned to the patients having repeat prescriptions described by the Balint group.

Introduction

In 1983 a study of repeat prescriptions by a trainee general practitioner coincided with a "What sort of doctor?" visit by two colleagues, when mild criticism was made of the lack of a "time-stop" on the repeat prescription cards in current use. From the results of the study we isolated 97 patients who had appeared to abuse the system and had not attended for at least a year for review of their drug treatment.

The practice population contained 20% of patients aged over 65, and repeat prescribing was higher—57/1000 patients (corrected)—than the mean of 42/1000 patients described by the Birmingham Research Unit in 1983.² Nevertheless, the average number of prescriptions per person on the National Health Service list is 0.44, significantly lower than the national average of 0.56. The average basic price per prescription was also at £3.39 (national average £3.62).

Results

Ninety seven patients who had been receiving unmonitored repeat prescriptions for longer than 12 months in January 1983 were classified as seen elsewhere, inappropriate for recall, deniers, avoiders, and unclassified.

SEEN ELSEWHERE

Twenty one patients were being seen elsewhere. Five were attending an eye hospital (glaucoma, cataract, and blindness) and received monthly prescriptions for eye drops; interestingly, one patient with blindness from vitreous haemorrhages had chronic lymphatic leukaemia when checked by us. Four patients were aged and infirm with osteoarthritis and immobility, one very independent woman received gold injections for her rheumatoid arthritis, and one young man suffered from multiple sclerosis. All six were seen regularly by the district nurse.

Three subnormal young men were resident trainees at a special

establishment and monitored regularly by a psychiatrist; two patients had pancreatic disease and were reviewed by interested specialists; one patient was on home dialysis; a patient was under hospital care for asthma; a child received long term antibiotics for renal pathology; a retired man had had close supervision of his myeloma at hospital for six years; another man attended a London hospital for his Parkinson's disease.

INAPPROPRIATE FOR RECALL

Fifteen patients were inappropriate for recall. Four had taken alcohol for gout for many years; three teenagers had occasional salbutamol inhalers for lifelong mild asthma; two men with excellent control of schizophrenia were in regular employment; two patients with years of relapsing endogenous depression were in lengthy remission; two patients with minor arthropathy were content with their medication. One patient with an ileostomy and one with a colostomy received regular supplies their appliances and were working full time. It is arguable that some of these patients should have regular checks; indeed, the rectal stump of the ileostomy patient was excised at a later date because of bleeding and the high risk of malignancy.

DENIERS

"Certain patients prize their independence and deny infirmity, and chafe bitterly under the restriction that a medical regime imposes." Groves aptly described the above group as "minor deniers," reserving the term "major deniers" for patients who disregard their health so flagrantly as to establish a chronic form of suicide. In this group of 30 patients there seemed to be a handful of patients who paradoxically took their drugs regularly yet continued to court disaster. Mostly, however, they seemed to be independent people who spurned the sick role offered to them; although usually compliant in their drug taking, their hypertension, asthma, epilepsy, or diabetes proved to be poorly controlled when they finally attended the surgery. The deniers were classified as follows: cardiovascular 8; endocrine (diabetes, thyroid, adrenal) 5; asthma 3; gastrointestinal 3; epilepsy 2; others 9, total 30.

In some patients denial was not the sole motive; this was well illustrated by a man whose frankness at interview gave an early clue to the complexities of the repeat prescriber. A sudden deterioration in his asthma had frightened him into seeing a Harley Street specialist despite an apparently successful attempt by us to help. On return from his stay in a private hospital a tentative query as to his failure to attend the surgery was honestly and eloquently answered. "Firstly, my mother was a Scot; in our house nobody was allowed to be ill. Secondly, pride was in the father and provider for children would never let me accept I was an asthmatic any more than a drinker can admit he is an alcoholic. Thirdly, my father and brother both had diabetes. I've always been afraid you'd find something else wrong with me and it was a great relief to be told I was quite fit by the hospital." At the end of this consultation his peak flow was 600/min, and the doctor-patient relationship much improved.

AVOIDERS

Twenty nine patients were avoiders. Many corresponded closely to those described by the Balint group in Treatment or Diagnosis as "difficult to satisfy; not easily tolerating proximity or intimacy." The reader is left with the impression of an enigmatic group of people who avoid close relationships for some undefined reason. This is not to include a high proportion of "elderly single" patients who are divorced or separated because of these emotional difficulties, although the inclusion of widowed patients makes this suspect (our group contained only one who was separated, two divorced, and four widowed).

As expected, most of our group were taking regular psychotropic medication. On psychological testing one strong factor emerged—phobic personality resistant to change. Avoiders took the following drugs: psychotropics 17; cardiovascular 6; analgesics 2, others 4. During the study two patients changed doctor. A young woman with deep seated fears and obsessions projected onto her supposed facial acne had inveigled prescriptions for ointments, antibiotics, and the contraceptive pill (not for contraception) for over a year. Progress seemed to be made after two long interviews, but the never attended again and left the practice, presumably because her doctor came "too close." Her phobic anxiety that would not be men was such that she would vomit before and after social contact with a young man, and

without partners. In childhood he had been in an isolation hospital for several weeks with diphtheria on discharge he believed he had been a carrier and infected two young neighbours who died. He declined treatment for his anxiety but gradually became more relaxed in the surgery; his blood pressure was maintained at 140/95 mm Hg with minor alteration in treatment and he never persuaded his reluctant wife to attend for a cervical smear. A businessman in his 50s had suffered panic attacks since his teens. He had had psychotherapy and behavioural treatment over the years without success and remained on a small dose of propranolol and an anxiolytic drug, which was obtained by his wife with a repeat prescription card. Attempts to arrange therapy had failed.

Table 1. FEAR QUESTIONNAIRE

Name Age Sex Date

Choose a number from the scale below to show how much you would avoid each of the situations listed below because of fear or other unpleasant feelings. Then write the number you chose in the box opposite each situation

0	1	2	3	4	5	6	7	8
Would not avoid it		Slightly avoid it		Definitely avoid it		Markedly avoid it		Always avoid it
1. Injections or minor surgery								
2. Eating or drinking with other people								
3. Hospitals								
4. Travelling alone by bus or coach								
5. Walking alone in busy streets								
6. Being watched or stared at								
7. Going slow for from home								
8. Going into crowded places								
9. Talking to people in authority								
10. Sight of blood								
11. Being criticised								
12. Going slow for from home								
13. Thought of injury or illness								
14. Speaking or acting to an audience								
15. Large open spaces								
16. Going to the dentist								
17. Other situations (describe)								

leave blank =

Age-Male = Female =

Now choose a number from the scale below to show how much you are troubled by each problem listed, and write the number in the box opposite

0	1	2	3	4	5	6	7	8
Hardly at all		Slightly troublesome		Definitely troublesome		Markedly troublesome		Very severely troublesome
18. Feeling miserable or depressed								
19. Feeling irritable or angry								
20. Feeling tense or panicky								
21. Feeling nervous or jittery								
22. Feeling you or surroundings are strange								
23. Other feelings (describe)								
Total <input type="text"/>								

FIG 1—Questionnaire used to interview un supervised repeat prescribers

it is hardly surprising that she left her male doctor when he began to intensify their relationship. An elderly couple had been denied their usual prescription for a hypnotic on joining the practice in 1981 by an overenthusiastic trainee. Although this was rectified, this shake start never led to a good relationship, and the angry couple left at the time of the study, probably knowing about it and deciding to change doctor before another attempt was made to disrupt their repeat prescriptions. Phobias were commonly uncovered in these avoiders. A 40 year old farmer with asthma persistently failed to attend for blood pressure checks, although he took his (medicative) tablets regularly. When he eventually attended he was obviously terrified, and his blood pressure was 210/125 mm Hg. Among other fears, he confessed to a terror of injections, although he often injected animals himself

A married woman in her 50s had continued for several years on a previous doctor's prescription of a thiazide diuretic and occasional diazepam. At interview she admitted to considerable anxiety when leaving the house, in shops, and in open spaces. Interestingly, she had taken a job with the Hospital Car Service, which had been of great benefit to her. The relation of alcoholism to phobias is well established and may be more complex than previously thought.³ A patient who was separated from his wife had had a known alcohol problem for years and pancreatitis in the past. He had been warned off Drinamyl (flunitrazepam) and amphetamine with difficulty in 1976 only to become dependent on hemineurin and nitrazepam; he would often run out of these and, failing to gain supplies sufficiently early, would endure several unpleasant days until the next prescription was due. He had

been seen by psychotherapists, clinical psychologists, and psychiatrists, and inpatient treatment had not helped. Early morning attacks of panic had been a feature of his life even before his dependency; these feelings were helped by a stiff drink, and he often remained absent for the rest of the day.

PHOBIA SCORING

Fifty five of the 59 patients who were identified as un supervised "repeat prescribers" were interviewed by me, using the Isaac Marks Fear Questionnaire (fig 1 and 2).⁴ The scoring system for this differentiates between anxiety provoked by agoraphobia, blood-injury, and social phobia. A further section relates to anxiety-depression, with five non-phobic symptoms found in phobic patients. The latter was added to the phobic rating score to obtain a total score for each patient, although in only one case did this section appreciably influence the scoring.

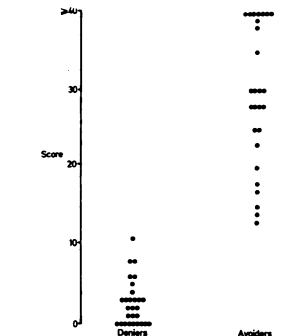


FIG 2—Scattergram of scores from the fear questionnaire

By using the scores from the fear questionnaire two groups were isolated—"deniers" (low phobia scoring) and "avoiders" (high scoring). Most patients could be correctly grouped by personal knowledge, but several who were thought to be deniers had high phobia scores; these were mainly patients with cardiovascular disease who scored high on the blood-injury section. Patients who were being psychotropic drugs scored high on all three subgroups and consistently high on group 17 ("Other situations") (fig 1) with heights, knives, mugging, body control, cancer, family health, tunnels, and being alone as samples. They welcomed the opportunity to discuss problems that they had been unable to verbalise before and felt better for it; the fear questionnaire became a therapeutic tool and began to take precedence over the prescription pad.

Implications

Finding a high phobia score in patients who were receiving repeat prescriptions raises the question of whether their prescriptions were appropriate. Two studies of alcoholics using the fear questionnaire showed that over half of a group of 60 alcoholics suffered from phobias for which they had found alcohol beneficial. They considered their fears to have prevented

their drinking problems but to have worsened when their alcoholism became established until a heavy drinking bout would worsen their fears considerably. Thus greater fearfulness with greater dependence on alcohol became the end result of a form of avoidance behaviour.

It seems possible that an analogy may be drawn with the consumption of anxiolytics by patients with phobias; if this is considered as a function of repeatedly avoiding fear (through the suppressant effect of tranquillisers) then it may be argued that the phobia/tranquilliser/phobia effect may cause the pattern of pill taking to become established and then entrenched. The conundrum remains of the low dose tranquilliser takers with a high level of fear, such as those shown in this study. The effectiveness of the anxiolytic must be nearly at placebo level, yet disrupting the repeat prescription habit causes distress. Presumably even placebo taken for phobic anxiety count as an avoidance and are counterproductive.

Conclusion

Before this study I thought that I had a well ordered practice with a tightly controlled system of repeat prescriptions. Uncovered was a hornet's nest of willfully independent, poorly monitored patients and a group of repeat prescribers who seemed predominantly phobic in nature. This latter group were thought in the past to have gained some undefined benefit from their tenuous contact, but it is 15 years since the Balint group study, and behavioural theory has now influenced our thinking in much the same way as Michael Balint's did; one might theorise that these patients with their phobic traits use the pills as the easy option—to avoid the painful hard work needed to face up to, and deal with, their phobias. Perhaps our collusion with them as doctors is motivated by a similar fear of disturbing the status quo.

I thank Dr John-Mark Dick for exposing the deficiencies of my repeat prescription system in his trainee project and Dr Isaac Marks for permission to use his fear questionnaire in this study.

References

- 1 Balint M, Hunt J, Joyce K, Mannar M, Woodcock J. Treatment or Diagnosis, a Study of Repeat Prescriptions in General Practice. London: Tavistock Publications, 1970.
- 2 Druvy VGM. Repeat prescribing—a review. *Br Coll Gen Pract* 1982;32:42-5.
- 3 Groves JC. Taking care of the fearful patient. *Br Med J* 1978;286:183-7.
- 4 Small L, Stockwell T, Carter S. The phobic patient. *Br Med J* 1983;287:113-7.
- 5 Druvy VGM. A prevalence study. *Br J Psychiatry* 1984;146:53-7.
- 6 Druvy VGM, Hodson G. Alcohol and phobias. *Br J Psychiatry* 1984;146:58-63.
- 7 Marks JM, Mathews A. Blood phobias: self-control for phobic anxiety. *Behav Res Ther* 1971;9:1-7.

(Accepted 10 October 1984)

ONE HUNDRED YEARS AGO It is satisfactory to note that the important Government department over which Mr Mundella presides, as Vice-President of the Council of Education, is alive to the sanitary necessity of providing playgrounds for the children attending public elementary schools. In reply to a memorial sent by the Manchester and Salford Sanitary Association in favour of the provision of suitable playgrounds for school children, the Education Department states that it has long been the policy of the department to require a playground to be attached to a school, especially to an infant school, and that in every case in which loans are made to school boards for the purpose of providing schools, the department always requires that a playground shall adjoin each school, although, in very crowded town districts, the cost of obtaining a site for the purpose is often very serious. The reply further states that, if there be any schoolhouses now under the jurisdiction of school boards which are without playgrounds, the department will be glad to give assistance to school boards in supplying them. (*British Medical Journal* 1884;ii:711.)

MIL-Sussex Postgraduate Centre, Cuckfield, Sussex RH10 5HQ
PHILIP M J TOMBLESON, MB, MRCP, General Practitioner