Defaulters in general practice: reasons for default and patterns of attendance

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SUMMARY. A series of 40 patients in general practice who failed to attend for their appointments were studied to look at their patterns of attendance over the previous five years, together with their reasons for default. The group not only defaulted more often than a group of age and sex matched controls but made significantly more visits to the surgery. Seventeen of the patients increased their default rate as their attendance rate increased over the five year period. The main reasons patients gave for defaulting on the occasion studied were: feeling too ill to attend (eight patients), resolution of symptoms (six) or forgotten/confused appointment time (seven). Four patients were thought by the general practitioner to need a home visit, two of whom were suffering from depression. Further research is needed to define those who would be expected to need a visit.

Introduction

PATIENTS who fail to attend for their appointments are a source of puzzlement and frustration to doctors, but rarely are they followed up. Defaulters have been investigated in primary care centres in the USA but little has been published about UK patients until recently. The literature is beginning to contain articles which recognize the importance of this area of research.

The rate of default from appointments depends on the clinic being attended and the population of patients being studied. Research from primary care centres in the USA quote default rates between 5% and 30%.[1-3]

American studies have shown defaulters to have a variety of features: low socioeconomic status,[2,4] a larger family,[1] more psychosocial problems,[3-6] less likely to have a chronic medical problem than controls,[6] and more likely to feel better at follow up.[6] Younger adults are more likely to fail to attend than older ones.[1,2,5] Older adolescents are more likely to fail to attend than younger adolescents, especially if they (rather than the parents), make the appointment.[7] Defaulters are less likely to have a telephone,[4,8] and are more likely to have been late for previous appointments.[5] Race is a predictor of default in some studies[5,9] but not in others.[1-4]

Authors differ in their attitude to the consequences of missed appointments. Bigby[6] suggests that follow up might not be worth the inconvenience or expense to the patient and perhaps also to the doctor. However, Hammersley[10] showed an increased morbidity in the defaulters of a diabetic clinic.

Most investigations into defaulters have been performed by questionnaire and have concerned default from either hospital outpatients or community screening clinics. No one has investigated defaulters retrospectively over a period greater than 12 months, nor has anyone investigated primary care defaulters in the context of attendance frequency in general practice. Little has been published about the reasons for intended attendance and for the default, but the data available from previous studies suggest that default is more of an administrative nuisance than a health concern.[6]

Clinical experience shows that there are probably two types of defaulter: the one-off defaulter in the otherwise compliant patient and the patient who often fails to attend.[11] In order to assess whether default is a cause for concern about the welfare of the patient a study was designed to look at patterns of attendance of a small group of defaulters, together with their reasons for default.

Method

Practice

The practice population comprises 11 000 patients who live in a segment of urban north Leeds stretching from the inner city to the suburbs. The practice has four full time partners and two part time partners with one trainee. All consultations are by appointment. The social class structure was similar to the national average, with a number of students who live in lodgings in the practice area. Prior to any surgery the receptionist notes the date of the appointment and after the surgery the notes for any patient who fails to attend are marked 'DNA'.

Test patients and controls

A series of 40 patients who failed to attend an appointment at the author's surgery over a period of five months were visited by the doctor within 24 hours of default. A return visit was made if necessary. This default will be referred to as the index default. The test patients were interviewed, examined and if necessary treated. Once their confidence had been gained and they no longer seemed threatened by the visit, patients were politely asked the reason for not attending the surgery. A note was made of their occupation, marital status and whether they had a telephone or not.

The patients' notes were analysed and the number of attendances and defaults noted for each 12 month period over the last five years. For simplification the five year period was split into three parts. The period of 12 months up to and including the day of the index default; the 12 months prior to this and the previous three years.

Forty age–sex matched controls were selected from the age–sex register. As the prime objective of the study was to look at the attendance patterns and reasons for default rather than the personal characteristics of defaulters, the controls were not interviewed. Previous research has shown a relationship between default and age and it was therefore decided to account for this by using age–sex matched patients rather than patients who attended the surgery at the same time as the index default occurred.

Statistical analysis of the data was prepared using the Mann Whitney U test.

Results

A total of 40 visits was made; 12 patients were not interviewed as they were not at home on two occasions. One person refused an interview and thus a total of 27 patients was interviewed. Generally people were surprised at the visit, but apart from the person who refused an interview, all patients were extremely

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cooperative, once they had realized that the visit was meant to help and not to reprimand. Many patients were grateful for the visit. For the patients who were not interviewed some of the data reported here were available from the notes.

Personal characteristics

Twenty six of the sample were female and 14 male. The age range was one month to 69 years with 27 patients under 30 years. Twenty one patients were single and 16 married or cohabiting. Two were widowed. Sixteen were not in paid employment (student, unemployed, or retired) and 15 patients were in paid employment, 14 of whom were in social class 3, 4 or 5. Marital status was not known for one patient and socioeconomic status was not known for nine patients.

Attending habits

The test patients had attended significantly more often than the controls in previous years (Table 1); a median of five appointments (range 0–25) over the preceding year versus three (0–15) for controls ($P<0.01$). Both groups had increased their attendance frequency over the five years, but not to a significant extent.

Default habits

The median number of defaults in the previous year was three in the test patients compared with zero for controls ($P<0.005$) (Table 1). Test patients defaulted significantly more often than the controls during the rest of the five year period. The number of defaults had increased over the five year period, significantly so for test patients within the last year compared with the year before. Figure 1 shows a plot of the distribution of default frequency over the five year period prior to and including the index default. One-third of the defaulters (30%) had only defaulted once in the five-year period (the default which was the basis of the study). However, the remainder (70%) had defaulted two or more times compared with 15% of the controls and 28% had defaulted six or more times compared with none of the controls. While no meaningful statistical analysis can be performed on such small numbers, the patients with more than six defaults over the previous five years tended to be older, have more psychosocial diagnoses, attend more often and be

Table 1. Median number of appointments kept and defaulted by test patients and controls.

	Median (range) number of appointments		
	Test patients ($n=40$)	Control patients ($n=40$)	
Appointments kept			
Within last year	5 (0–25)	3 (0–15)	$P<0.01$
Between 1–2 years before	4 (0–18)	3 (0–10)	$P<0.01$
Between 2–5 years before[a]	3 (0–22)	1.8 (0–6.3)	NS
Within last 5 years	20.5 (0–104)	11 (0–37)	$P<0.025$
Appointments defaulted			
Within last year	3 (1–12)	0 (0–3)	$P<0.005$
Between 1–2 years before	0.5 (0–14)	0 (0–2)	$P<0.005$
Between 2–5 years before[a]	0.3 (0–7)	0 (0–1)	$P<0.005$
Within last 5 years	4 (1–49)	0 (0–5)	$P<0.005$

[a] Median taken over three years divided by three to give an annual figure.

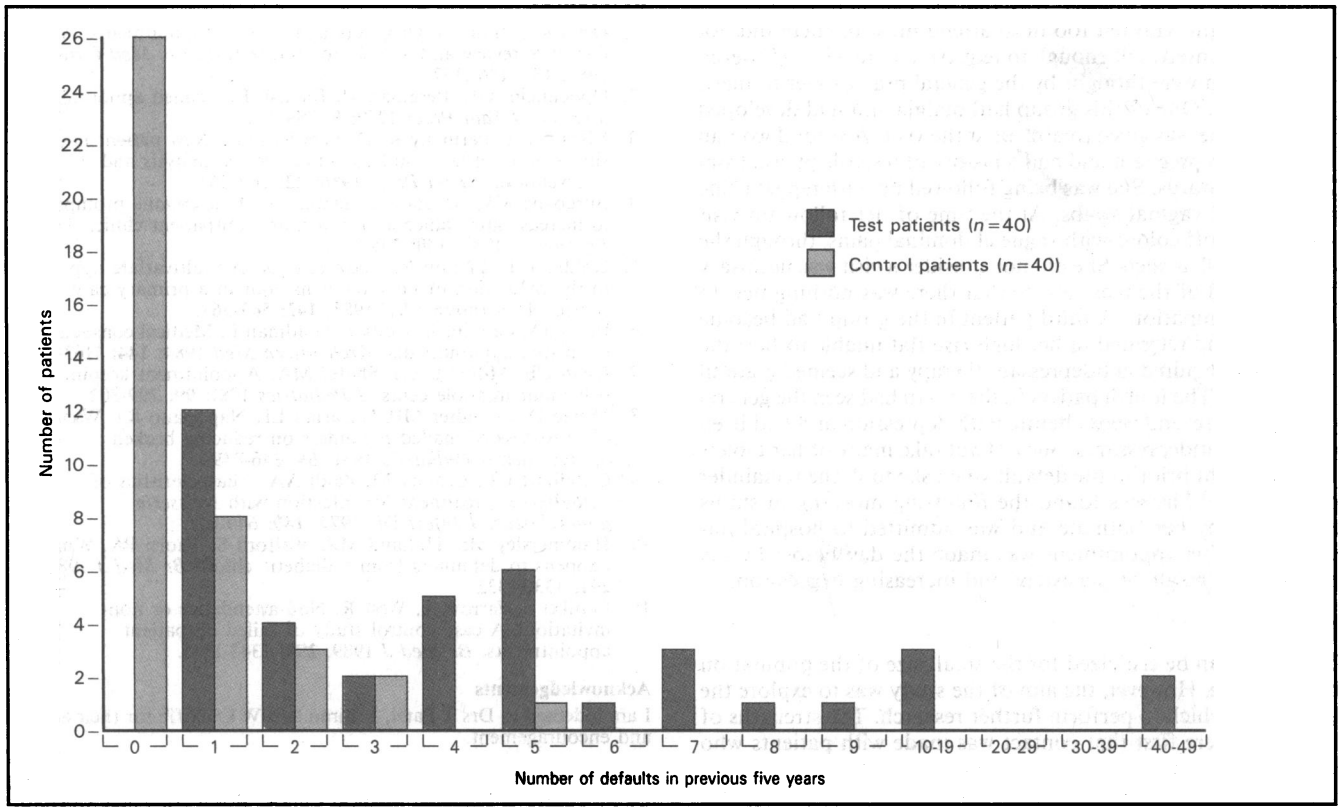

Figure 1. *Frequency distribution of defaults in the previous five years (including the index default) for test patients and controls.*

less likely to have a telephone than the test patients with six and less defaults. The patients who had only defaulted once (the index default) had usually experienced some random event which had prevented their attendance at the surgery, such as traffic delays or sudden deterioration of their health (either intercurrent illness or unexpected deterioration in the condition for which they were going to see the doctor).

Default as a function of attendance

Complete data on attendances were available for 34 patients. Of 20 patients who had an increasing rate of attendance over the five year period, 17 also had an increasing rate of defaults; the other three patients improved their appointment keeping. The remaining patients demonstrated no direct relationship between the two parameters.

Reason for making appointment

Eight of the test patients had failed to keep a doctor initiated follow up appointment, of which three had a psychiatric diagnosis. A further three patients had current psychiatric illness, three were to attend for ear, nose and throat problems, three for abdominal symptoms and two for vaccination (plus one follow up vaccination). A variety of reasons were given in a further nine cases. The reason for intended attendance was not ascertained in 12 patients as a result of failure to contact the patient or failure to elicit a reason during the interview.

Reason for default

Patients had various reasons for defaulting on the occasion studied: not well enough to attend surgery (eight patients); resolution of symptoms, mostly non-specific pyrexia (six patients); forgotten appointment or muddled date/times (seven patients); transport problems, for example car breaking down (three patients). Two patients denied making the appointment, one of whom refused further discussion. One patient was mentally subnormal and it was unclear why that patient had defaulted.

Of the eight who felt too ill to attend most of them did not consider themselves ill enough to request a home visit. However, four of them were thought by the general practitioner to merit a home visit. One of this group had otalgia and had developed a pyrexia. She was given treatment at the visit. A second woman was 24 weeks pregnant and had a history of a sterile pyuria from 20 weeks onwards. She was being followed up with repeat urine analysis and vaginal swabs. At the time of her follow up visit she become off colour with vague abdominal pains, through she did not feel ill as such. She did not consider a visit was necessary but was glad of the reassurance that there was nothing new to find on examination. A third patient in the group had become depressed and retreated to her high rise flat unable to face the world. She required antidepressant therapy and seemed grateful for the visit. The fourth patient in the group had seen the general practitioner several weeks before with depression and had been started on antidepressants. She did not take many of her tablets until the night prior to the default when she took the remainder of the bottle. She was found the following morning in status epilepticus by her flatmate and was admitted to hospital immediately. The appointment was made the day before by the patient as a result of persistent and increasing depression.

Discussion

The study can be criticized for the small size of the population of defaulters. However, the aim of the study was to explore the ground on which to perform further research. The strengths of this study were first that contact was made with patients who defaulted, secondly an insight has been gained into the potential seriousness of the problem in some cases, and thirdly that patterns of attendance over a long time scale have been studied.

It may be that patients who are frequent defaulters have a low threshold for making appointments and so when the time comes to attend the surgery, their symptoms from self-limiting illnesses have gone and they have less need to see the doctor. They are less likely to have a telephone[4,8] and so are more likely to fail to cancel the appointment.

Defaulters are not a homogeneous group of individuals, rather default is the final common pathway in a multiplicity of events. However, defaulters can be split into two broad groups: those in whom it can be seen as a isolated event and those who persistently fail to attend.[11] The borderline between the two is arbitrary, but the present study would indicate that a useful cut-off point might be six defaults in five years. Further research is needed to establish whether patients who default more often than this are different in their consulting and psychosocial background.

Intercurrent illness or rapid deterioration in health can occur in people who are normally good at keeping appointments. It is interesting that recent work has shown that 9% of patients who failed to attend a hospital outpatients department were too ill to attend.[11] A larger study is needed to explore these findings further in order to predict who would need a home visit after defaulting.

In view of the findings of this study the occurrence of a defaulted appointment during the surgery should suggest two questions to the doctor: first, why? and, secondly, does it require any action? The answer to these problems lies with the doctor's knowledge of the patient. Frequent defaulters probably have a low threshold for making appointments and hence have a high attendance rate. Frequent defaulters, like frequent attenders, should alert the doctor to the possibility of a psychosocial diagnosis. Of more concern is the person in whom a default is out of character with their usual behaviour. An unexpected default in a previously depressed or presently ill or pregnant patient may be the signal for a home visit.

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