

Defaulting from a new hypertension clinic in Malaysia

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CONTINUITY OF MANAGEMENT is necessary for the psychological and physical care of a patient with a blood pressure high enough to need continuing treatment. It is wasteful of clinic time if many patients fail to keep their appointments. The sort of person who defaults and why he does so may teach us about the patient's attitude to his illness and how it and the treatment affect his life.

Because of the high rate of defaulting from a newly-opened hypertension clinic in the University Hospital, University of Malaya, we have investigated who defaults and why by studying the rate of defaulting and by comparing a group of defaulters with a group of regular attenders. We were especially interested in the demographic and socio-economic status of the two groups.

There are few published studies on defaulting from clinics and we could find none referable to a developing country. The University Hospital provides routine medical care for many patients living in the state of Selangor and several specialist facilities for the whole of Malaysia. The ethnic groups of patients treated are predominantly Chinese, Malay and Indian.

Methods

PART 1: The attendance records for the first six

months of the clinic from July to December 1968 were studied. Appointments were divided into two categories: Those attending the clinic for the first time were called new appointments and those re-attending the clinic or transferred from the special clinic for cardio-vascular diseases were called repeat appointments.

The proportion of each group which defaulted was calculated and the ethnic group distribution of the defaulters was compared with that of the new attenders.

PART 2: The Pair Study. From September 1968, each defaulter who had previously attended the clinic was sent a postcard with a new appointment which most kept. If this second appointment was missed, the patient was selected for special study. Each defaulter was paired with a regular attender matched by first attendance at the clinic within seven days of the first attendance of the defaulter. The first 20 pairs selected in this way and who lived in the state of Selangor were studied.

A medical social worker, assisted by a translator when necessary, visited as many of these patients as possible in their homes in the following nine months. By means of an unstructured interview, she tried to

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assess factors contributing to the patient's satisfaction or dissatisfaction with the clinic. The following items were investigated:

- Occupation and claimed income.
- Past illnesses possibly related to hypertension, such as stroke, angina, myocardial infarction and transient cerebral ischaemic attacks.
- Travel to the clinic; was it difficult for the patient? How many miles did he have to travel? Did he travel by bus, car or on foot?
- Complaints about the waiting to see the doctor, waiting at the dispensary, dislike of drugs and their side effects.
- Factors not covered in the informal conversation were systematically enquired after.

Results

The numbers and percentages of new and repeat appointments kept and missed are shown in Table 1.

Table 1. Appointments at the clinic July to December, 1968

	New appointments		Repeat appointments	
	Attended	Missed	Attended	Missed
Number	60	32	450	181
Percent	65	35	71	29

The difference in the number of new and repeat appointments kept and missed is not significant ($X = 1.539, p > 0.2$).

The ethnic group distribution of those defaulting was compared to that of all patients attending for the first time in the first 15 months of clinic. The results are shown in Table 2.

Table 2. Ethnic group distribution of defaulters and first attenders.

	Defaulters		All first attenders	
	Number	Percent	Number	Percent
Chinese	127	60	296	64
Malay	23	11	42	9
Indian	58	27	108	23
Other	5	2	16	4
Total	213	100	462	100

The ethnic group difference between defaulters and first attenders is not significant. ($X = 2.367, n=3, p > 0.3$).

Part 2.

In the pair study, of the 20 defaulters, three could not be interviewed. One was not traceable at the address given, one had moved too far away for interview and one refused to allow the interviewer into her house. Four of the 20 regular attenders could not be interviewed. Two had moved away and become defaulters by the time of the interview. One was not known at the address given and he and a fourth moved away during the civil emergency of May 1969.

Two of the regular attenders were interviewed in hospital because transport to their homes was difficult.

Table 3 compares all the factors looked at in those who were interviewed.

Table 3

	Defaulters	Regular Attenders
Number	17	16
Mean Age	53	46
Male : Female	11 : 6	10 : 6
Chinese : Malay : Indian	7 : 5 : 5	9 : 0 : 7

	Defaulters	Regular Attenders
Occupation *		
Unemployed	5	1
Unskilled, semi-skilled, housewife	10	5
Skilled, women with servants	2	10
Physical Health		
Stroke	5	3
Effort dyspnoea	2	1
Angina pectoris	1	0
Myocardial infarct	0	1
Malignant hypertension	0	1
Transient cerebral ischaemic attacks	0	1
Number physically affected by hypertension	8	7
Travel		
Easy	10	11
Difficult	7	5
Miles to clinic	9	6
Private car	3	7
Bus	12	9

Complaints

Wait for doctor	3	7
Wait for dispensary	3	6
Seen by different doctors	3	4
Dislike of drugs	2	1
Angry with hospital	1	0
Side effects from drugs**	2	8

* The social class difference between the groups was significant ($X^2 = 9.586$, $n = 2$, $p < 0.01$).

** The difference in incidence of side effects from drugs was significant ($X^2 = 5.699$, $n = 1$, $p < 0.02$).

The most important reason for each defaulter not attending was:

Now living temporarily or permanently too far away from hospital	6
Preferred to attend other doctor nearer home.	3
Could not manage bus because of stroke.	2
Could not get time off work to attend. (A lorry driver and a cook)	2
Very dissatisfied at waiting too long, lack of explanation about his illness and lack of advice from the doctor	1
Felt that his illness was not serious enough to matter	1
Depressed after death of an only daughter and no longer cared about himself.	1

Drugs

Twelve defaulters and ten regular attenders were taking less than 1g. daily of Methyldopa, 2 of each group took 1-2g. and two regular attenders more than 2g. daily. Three of each group were taking Reserpine 0.1 mg. twice daily and all patients were taking Bendrofluazide 5 mg. each morning. It is plain that the drugs used and their doses were similar in two groups.

The side effects of drugs of which the two defaulters complained were giddiness on standing; and those of which the regular attenders complained were giddiness on standing in six, drowsiness in two, and stuffy nose in two.

Five of the defaulters attended again after being interviewed at home and have since attended regularly.

Discussion

Despite its importance, there is little published work on the frequency of or reasons for defaulting from clinics. Knox and Dugdale (1) found that for children it was often the defaulting child who needed most help. They showed, with examples, the importance of visiting the homes of defaulters. In a study of hospitals in Britain (2), 13% failed to keep outpatient appointments but 4% turned up without appointments.

Backett and others (3) found that out of 11,533 new appointments to attend outpatient clinics in N.E. Scotland, 1,217 failed to keep the appointment; however, all but 545 (5% of the total) attended hospital at a later date. Most of those who defaulted had been waiting longer for the appointment than those who attended.

Chamberlain (4) found in two district hospitals in England that 15% in one and 24% in another failed to keep the second appointment. She suggested that defaulting might be because patients knew they could so easily get a further appointment if needed and that if they felt well, they would not bother to attend.

Newill and others (5) studying attendances at a diabetic clinic at Cleveland, Ohio, found that over a 15-year period, 50% of active attenders did not attend for longer than five years. Sussman and others (6) have further studied defaulting from this diabetic clinic. They used a pair technique similar to that reported here but also planted an observer in the waiting area to assess attitudes to the clinic. The most significant difference between regular attenders and defaulters was that defaulters felt that they could look after themselves and did not need to attend the clinic. They found no difference between the groups in the frequency of complaints about seeing different doctors, about fees or transport. Suggestions for improving the clinic were to reduce waiting time and to see the same doctor at each visit. The patients in the present study made the suggestions but could offer no advice on how to achieve these aims.

A study in Dundee, Scotland, on outpatient medical care (7) showed that an important factor in inadequate medical care was the failure to explain the treatment regime to the patient but even with explanation, patients did default when they felt well. Forsyth and Logan (8) found that about 8% of outpatients ceased to attend after six months although it was plain that the consultant expected them to return. The investigators suggested that often the next appointment was not, in fact, given to the patient but that he was told to make his own appointment after certain investigations had been completed.

In our study, the frequency of missed appointments was the same for first visits as for subsequent ones — about 30%. This suggests that the hypertension clinic was not any more deterring to patients than the other hospital clinics. Most of the patients with new appointments had been referred from other clinics in the hospital and only a very few came direct from wards or doctors elsewhere.

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Table 2 shows that ethnic group breakdown of defaulters is the same as that of all those attending for the first time. Whilst it has been suspected that Malays have tended to use Western medicine a little less readily than non-Malays, those who did reach the clinic appeared to value its service.

Table 3 shows that the chief difference between the defaulters and regular attenders was that the defaulters were in a lower socio-economic class as judged by the sophistication of employment. There were more defaulters out of work, more doing unskilled or semi-skilled work, more found travel difficult and had to travel by bus than regular attenders. Caldwell and others (9), studying dropouts from a hypertension clinic in Detroit, found the most important factor associated with a high dropout rate was low socio-economic status.

The regular attenders complained more about the service given and of side-effects of treatment. This was probably because they had selected themselves as a more sophisticated group than the defaulters. Although educational background was not formally recorded, skilled workers and women employing servants would, in Malaysia, normally have had more formal education than unskilled or semi-skilled workers. They would be less prone to accept the clinic and their management uncritically.

They would also have been more able to communicate easily with the doctor about drug side-effects. Regrettably, the personalities of the patients in the two groups were not studied.

The fact that seven defaulters were not living at their original address at the time of appointment was surprising. In May 1969, in the middle of the survey, there was a civil emergency with curfews and other disruptions. This prolonged the study and was responsible for some patients moving home. Work was hard

to find for unskilled people and the need to move where work could be found or moving to live with a relative when out of work may have accounted for some of the changes of address.

The Department of Medical Social Work had funds for assisting people with the cost of transport and these were of great help in running the clinic. The fact that one man defaulted for lack of money for transport suggests that we had failed to explain the help available to him. Everyone working with patients knows only too well the type of person who continually demands extra attention: the one man in this study who was intensely dissatisfied was like this. He may have been justified in some of his complaints as patients did sometimes have to wait more than an hour to see the doctor and a similar period to collect their medicine from the dispensary. Similar waiting periods were found in a study in British hospitals (2) in which 11% of patients waited more than an hour to see the doctor in the outpatients.

Nevertheless, in most of the interviews, we were encouraged by the appreciation shown by both the regular attenders and defaulters.

There is no doubt that we failed at times to explain about the illness and advise the patient about an attitude to it. This lack of general advice was likely to have been the cause for defaulting in the man who felt he did not need treatment.

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1. Knox E., and Dugdale A. E., the Child who did not attend. *Lancet* 1.812, 1966.
2. Waiting in Outpatient Departments:- Nuffield Provincial Hospitals Trust, 1965. Oxford University Press.
3. Backett E. M., Sumner G., Kilpatrick J., and Fordyce I. D. Problems and Progress in Medical Care. Series 2. P.99 Nuffield Provincial Hospitals Trust. Oxford University Press. 1966.
4. Chamberlain J., *Ibid* P. 68.
5. Newill V. A., Badger G., and Liewbow I., Diabetes Research Programme, September, 27th 1957. University Hospitals, Cleveland, Ohio. (Mimeograph).
6. Sussman M. and Keller C. A study of Factors associated

with Attendance and Non-Attendance at an Outpatient Diabetic Clinic. (Mimeograph of working paper - personal communication) 1969.

7. On the management of Outpatient care; Further studies in Hospital and Community: Nuffield Provincial Hospitals Trust 1962. Oxford University Press.
8. Forsyth G., and Logan R., Gateway or Dividing Line? Nuffield Provincial Hospitals Trust, 1968. Oxford University Press.
9. Caldwell J. R., Cobb S., Dowling M. D. and De Jongh D: The Dropout problem in antihypertensive treatment. *J. Chronic Dis.* 22:879-592. 1970.