Evaluation of the use and usefulness of telephone consultations in one general practice

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SUMMARY. In one practice with 14 000 patients an advice line was set aside at designated times to enable patients to speak directly to a doctor on the telephone. The aim of this study was to determine who used the line, why they called, the conditions callers presented with, the action taken by the doctor and whether patients and doctors thought the service was a good idea. A total of 277 calls were made during the five month study period. Responses to a questionnaire were received from doctors for all 277 calls and from 152 patients. It was found that most calls lasted about three minutes. Most of the callers (59%) were known to the doctor taking the call. Users of the advice line were most likely to be women, married people and people with children. Equal numbers of calls were received about new and existing problems. The most frequent reason for calling was to obtain the result of a test (21% of calls). The most frequent diagnosis by the doctors was chronic complaints for which the patient was already receiving treatment (19%). The data from patients and doctors were similar. In 30% of cases callers were advised to take medicine, mostly a prescription to be collected (16%), while a few callers received a home visit (7%). Doctors thought they provided reassurance in 26% of cases while callers thought they had received reassurance in 43% of cases. If the advice line had not been available three quarters of the respondents would have made an appointment and 13% would have asked the doctor to make a home visit. The majority of respondents (65%) said they would not have preferred a face-to-face consultation to the advice line. The vast majority of respondents (91%) were satisfied with their use of the advice line. The doctors were less happy with the calls, but regarded 64% as useful.

It can be concluded that a telephone advice service would be a useful and worthwhile addition to the services provided by a practice.

Keywords: telephone consultation; access to GP; consultation reason; GP utilization; doctor satisfaction; patient satisfaction.

Introduction

TELEPHONE consultations are widely used abroad.[1,2] In Denmark, a time is set aside when patients know they can speak to their doctor on the telephone. However, despite the fact that nearly all British households now have a telephone,[3] general practitioners in the United Kingdom seem ambivalent about telephone consultations. Ten years ago an editorial in the *British Medical Journal* stated that 'A common opinion seems to be that the telephone is a useful "tool" when doctors take the initiative but a nuisance when used by patients wanting to speak to their doctors' and asked 'Why are the British so reluctant to use it?'[4] Since then, although a great deal has been published on the use of telephones out of hours, very little has been published on the use of telephones to provide advice 'in hours'.[5,6]

A survey of patients' satisfaction with access to general practitioners in the north west of England found that a large proportion of patients would like direct telephone access to their general practitioner.[7] That study was replicated in the study practice — a training practice in Westhoughton, a town with a population of 25 000 in the north west of England, with seven partners and 14 000 patients and which already had an informal telephone system for patients. It was found that about 80% of the patients interviewed thought telephone consultations could be useful.[8]

Following a meeting of the north west of England Royal College of General Practitioners patient liaison group in autumn 1987 the partners decided to set aside a designated time, during office hours, in which patients would be able to speak directly to a doctor. The aim of this study, which began in May 1989, at the same time as the advice line, was to evaluate this initiative to determine who used the advice line, why they called, the condition they presented with, the action taken by the doctor, what the patients would have done if they could not have used the advice line, whether they had mobility problems, whether they would have preferred a face-to-face consultation and whether patients and doctors were satisfied with the telephone consultation.

Method

The advice line started at 10.30 hours each morning, ran for one hour and was answered by a doctor, whose sole task was to answer the calls. During times when there were no calls the doctor did paper work. The normal telephone number of the practice was used; calls were answered by the receptionist and passed to the doctor in the order they were received. The receptionist was advised that patients who telephoned to speak to the doctor at other times should be asked to ring back at the advice line time. No other screening of calls was made.

For the first three weeks the advice line was not publicized. Leaflets were than handed to patients in the surgery when they attended for a consultation or to collect a repeat prescription, and posters advertising the service were put up in the surgery.

The doctor receiving the calls was given the patient's records for each telephone consultation by the receptionist. The details of the telephone consultation were noted in the records as in any consultation. If the diagnosis was unclear or the doctor thought it appropriate, the patient was asked to attend the surgery. There was an open surgery at the same time as the advice line operated. All callers were advised to contact the surgery again should their condition deteriorate.

With the help of the patient liaison group, questionnaires were designed to collect data from the patients who called the advice line and from the general practitioners answering the calls. After or during each telephone consultation the doctor com-

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pleted a questionnaire, consulting the patient's records where necessary. The questionnaire comprised mostly closed questions concerning the nature of the presenting problem, what happened during the consultation and how useful the call was to the patient. The doctor also recorded the time that the call started and finished, taking the time from his or her wrist watch to the nearest half minute. Each day the names and addresses of the patients who had called the advice line were sent to a researcher who sent them a questionnaire together with a covering letter from the general practitioners explaining the study and assuring anonymity. The patient questionnaire comprised mostly closed questions and asked about the patient's experience of using the service and for demographic details. When a call was about a third party, the questionnaire was sent to the third party, providing the doctor had not indicated that a questionnaire should not be sent. When the call was about a child the child was sent a questionnaire and it was completed by one of his or her parents with the parent's own details.

The age and sex distribution of the callers was compared with that for the practice as a whole and with that of a randomly selected sample of patients attending the surgery (a researcher had thrown a die and selected the nth patient attending). These attenders had been interviewed in a previous study of patients' perceptions of the accessibility of the practice which had been carried out in the two months prior to this study.[8] Other demographic details of the callers were also compared with those of the surgery attenders and of the practice population as a whole.

Results

A total of 277 people used the advice line between 3 May and 7 October 1989. The general practitioners completed a questionnaire for all of these callers. Fifteen patients were not contacted for personal reasons, such as bereavement or marital problems. Ten callers were excluded from the analysis because their details were recorded incompletely by the doctor or because their records were unavailable. Of the 252 questionnaires sent out 152 were returned completed, a response rate of 60%.

Of the responding patients 108 (71.1%) called about themselves, 37 (24.3%) called about their child, and the other seven (4.6%) called about another relative or friend.

Patient characteristics

The age and sex distribution of the respondents is shown in Table 1 together with the distribution for the whole practice population, all patients whom calls concerned, questionnaire respondents and the sample of attenders.

If it is assumed that parents aged 21–40 years telephoned on behalf of patients aged under 16 years, then there is no difference in age distribution between the patients whom the telephone consultation concerned and those who completed a questionnaire. Assuming the 101 patients interviewed in the surgery were representative of practice attenders, patients in the age band 21–30 years were much more frequent users of the telephone service than they were attenders, while 31–50 year olds were less frequent users of the telephone service than they were attenders.

More women than men used the advice line (Table 1) while three quarters of the questionnaire respondents were women. Most respondents (80.2%) were married and this proportion was higher than that for surgery attenders (77.2%). Most respondents (61.8%) had one or two children under 16 years of age and more had two children (40.8%) than in the practice population as a whole (33.6%). The level of education received by the respondents was similar to that of the surgery attenders — among the respondents 40.8% left school aged 15 years or less while among the surgery attenders this figure was 47.5%. About half of the respondents (44.7%) were employed. The proportion of retired people (19.7%) and housewives (24.3%) who called the advice line was higher than among the practice population as a whole (13.9% and 9.9% respectively).

Table 1. Age and sex distribution of the practice population, all telephone patients, questionnaire respondents and practice attenders.

	% of patients			
		Telephone patients		
	Practice ($n = 13860$)	All ($n = 277$)	Questionnaire respondents ($n = 152$)	Attenders ($n = 101$)
Age (years)				
0–15	21.7	19.1	—	—
16–20	7.1	5.1	5.3	3.0
21–30	15.3	24.6	32.2	14.9
31–40	17.2	11.9	23.7	33.7
41–50	13.4	9.8	11.2	19.8
51–60	9.3	7.9	8.0	12.9
61+	16.0	15.5	17.1	13.9
No response	—	6.1	2.6	2.0
Sex				
Male	49.1	32.9	21.1	37.6
Female	51.9	65.3	75.0	62.4
No response	—	1.8	4.0	—

n = total number of patients in group.

Method of calling

Most of the 152 respondents (86.2%) used their own telephone, although a few (7.9%) called from work, 4.0% used a public telephone, and one patient used a neighbour's telephone. Two patients (1.3%) did not respond to this question. Among the respondents 85.5% reported that it was easy to get through to the surgery on the telephone, 11.9% that it was not easy and 2.6% did not respond to this question.

Table 2. Comparison of patients' and general practitioners' reports of telephone consultations.

	% of telephone consultations	
	Patients' report ($n = 152$)	GPs' report ($n = 277$)
New problem	48.7	44.0
Action taken by GP[a]		
Gave 'reassurance'	42.8	26.4
Advised to come in for consultation	29.6	30.3
Gave prescription	15.8	11.6
Advised to rest	9.2	6.5
Advised to change dosage or timing of doses of existing treatment	8.6	5.8
Visited	7.2	5.1
Advised to take home remedy	5.3	4.7
Referred to other GPs/health professionals in the practice	4.6	2.2
Administrative advice	—	11.6

n = total number of telephone consultations. [a] More than one action could be taken by the general practitioner.

Patients' reports of the telephone consultation

Of the 152 respondents 48.7% regarded their problem as a new problem (Table 2). The respondents felt that they had received reassurance from the doctor in 42.8% of telephone consultations. Thirty per cent of patients were told by the doctor to come to the surgery for a consultation — a third of these (33.3%) were told to come on the same day as they called. Sometimes the doctor advised rest (9.2%) and 7.2% of calls resulted in a visit from the doctor. Forty five respondents (29.6%) were advised to take medicine — 24 were told to collect a prescription, 13 were told to vary their existing treatment and eight were told to take a 'home remedy'.

Alternatives to the telephone consultation

Three quarters of the questionnaire respondents (73.7%) said they would have made an appointment to see the doctor if they had not spoken to the doctor on the telephone. A further 13.2% said they would have asked the doctor to make a home visit while 4.6% made another specific comment, indicating for example that they would have spoken to the health visitor or receptionist. The remaining 8.6% did not respond to this question.

Most of the 152 respondents lived within two miles of the surgery, but for 27.6% of the respondents it would not have been easy to get to the surgery — 15.1% said they had mobility problems, most frequently owing to physical disability.

The majority of respondents (64.5%) said they would not have preferred a face-to-face consultation to the advice line. Of the 40 respondents (26.3%) who expressed a preference for a face-to-face consultation, but could not wait, the majority (27) said they would have visited the surgery, while 17 would have asked for a home visit (some patients replied 'yes' to both options). The remaining 9.2% did not respond to this question.

Patient satisfaction with telephone consultation

The vast majority of the respondents (91.4%) said they were satisfied with their telephone consultation and many made favourable comments:

> 'I think the advice line is an excellent idea, it gives the patient personal contact with the doctor. I am sure it will be a big advantage to the practice. Also it will save using appointments when not necessary, leaving time free for those who need it.'

> 'I found it reassuring being able to speak to a doctor rather than have a receptionist act as judge to whether my complaint was justified.'

> 'For me the surgery is a bus ride away, sometimes it can be very inconvenient with a small child to find your illness cannot be cured with medication. Advice over the phone saves time for doctors and patients.'

> 'I think it is a good idea, some problems only need reassurance and this saves a journey especially for the old and mothers with babies.'

However, seven respondents (4.6%) were not satisfied and some of the reasons they gave for their dissatisfaction were:

> 'I had to phone three times before I got to speak to the doctor. First time the receptionist said I was a minute early and would not put me through, second time the doctor was engaged.'

> 'I feel that once the service becomes more widely known it may be difficult to get through. With all respect, would there be a great temptation to direct patients to the advice line rather than make surgery appointments or home visits?'

> 'If I was ill I would have to request a home visit as it is impossible to check on a breathing problem on the phone.'

Six patients did not respond to this question.

Results of doctors' questionnaire

Most of the 277 calls (96.0%) were dealt with by the seven practice partners (on a few occasions trainee doctors took some of the calls under supervision). With the exception of one part-time partner, the calls were shared evenly among the partners. The mean length of the 277 calls was 3.4 minutes (range 1.0–16.0 minutes, mode 2.0 minutes); three calls lasted over 10 minutes.

Most of the 277 patients (58.8%) were known to the doctor taking the call. The doctors classified 44.0% of the problems as new (Table 2).

The most common reason for the call was to ask for the results of tests or x-rays (Table 3). The most frequent diagnoses were chronic and acute complaints which were already receiving treatment while 7.2% of callers were worried about infections and rashes. Of the callers, 30.3% were advised to come to the surgery for a consultation (Table 2), but only 3.2% were advised to do so urgently, that is to attend the open surgery running concurrently. Administrative advice was given to 11.6% of the callers, for example, confirming that a letter had been sent requesting an outpatient appointment. Fourteen of the patients (5.1%) required a visit, two of them immediately and six within four hours. Two patients were referred to other general practitioners in the practice and four were referred to other health professionals.

The doctors were asked if the call was useful to the patient; the majority of the 277 calls were thought to be useful (63.9%), 2.2% were not thought to be useful and the doctor did not reply about 33.9% of the calls.

Table 3. Reason for telephone consultation recorded on the general practitioners' questionnaire.

Reason for telephone consultation	% of telephone consultations (n = 277)
Test results	20.9
Chronic complaint (receiving treatment)	18.8
Acute complaint (receiving treatment)	13.0
Worried about infections/rashes	7.2
Acute gastrointestinal upset	5.1
Upper respiratory tract problems	4.0
Anxiety/depression	2.9
Problems with existing therapy	2.2
Urinary symptoms	1.8
Family planning/contraceptive pill	1.8
Pregnancy worries	1.4
Vaccination queries	1.4
Bleeding	1.4
Pain	1.1
Post operative advice	1.1
Questions from carers	1.1
Hospital waiting times	0.7
Diet	0.7
Other single diagnoses	9.4
No reason given	4.0

n = total number of telephone consultations.

Discussion

As expected, women, married people and people with children were the major users of the advice line, complaints already

being treated were the major cause of the calls, and reassurance was a common 'treatment'. What was unexpected was that most respondents were happy speaking to the doctor on the telephone and only a quarter of the respondents used the service to speak to the doctor sooner than they would have if they had waited for a face-to-face consultation.

It can be concluded that patients would welcome a telephone advice service, most respondents in this study finding it helpful and convenient. The general practitioners in this practice find telephone consultations to be an effective use of their time as revealed in discussion at practice meetings. Calls can be handled faster than consultations and the initial fear that many of the callers would have to be asked to attend for a consultation has not been borne out by the results of the study.

Receptionists have reported at practice meetings that they find the advice line useful, because it enables them to deal positively with patients who ring to speak to a doctor, as patients can be asked to ring back during the advice line time. This is especially true for calls during surgery hours; the receptionists no longer have to decide if they should interrupt a consultation but can offer a definite arrangement to speak to a doctor. Other members of the primary health care team can also advise patients of the appropriate time to telephone to speak to a doctor. It is possible that as more patients become aware of the service, callers will have to queue; the possibility of offering callers a particular time to call would then have to be considered.

Changes have been made to the advice line in the light of experience. The line is now open only for half an hour between 11.30 and 12.00 hours. The reporting of normal test results has been delegated to the receptionists, who is given results which have been stamped 'normal tell patient' by the doctor who requested the test. The advice line is heavily in demand and 12 to 15 calls are routinely dealt with in one morning session. There is now little opportunity for other tasks to be performed by the doctor taking the calls. Originally the doctor operating the telephone line was alone in a consulting room but now the telephone consulting room tends to be a focus for those doctors who have finished their own surgery. This increases the risk of distractions but allows the doctor taking the calls to consult with a partner who knows the patient better.

This telephone consultation service, which was introduced with some trepidation, is now an integral part of the range of consultation options offered by the practice.

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