

Telephone consultations in general practice: an additional or alternative service?

ANDREW BROWN

DAVID ARMSTRONG

SUMMARY

Background. There is conflicting evidence about whether telephone consultations in general practice represent additional or alternative contacts with the general practitioner.

Aim. A study set out to assess the characteristics of patients using the telephone to consult the general practitioner and whether telephone consultations were used as an additional or an alternative service to surgery consultations during surgery hours.

Method. The study took place in one practice that has run a 'phone-in clinic' for five years. A questionnaire on perceptions of and attitudes towards telephone consultations was sent to 259 patients who consulted the general practitioner by telephone and to an age-sex matched group of patients whose medical records indicated that they had never consulted the general practitioner by telephone. For both groups, numbers of repeat prescriptions and consultations in the preceding year were determined from medical records.

Results. Those who consulted the doctor by telephone were significantly more likely to be aware of the phone-in clinic, to have a telephone at home, to have children aged under five years at home and to be receiving repeat prescriptions and repeat prescriptions for psychotropic drugs compared with those who had never consulted by telephone. Eleven of 226 patients who consulted by telephone (5%) indicated that they would definitely not have made a surgery appointment or home visit request (that is, they represented additional general practitioner workload) while 120 (53%) used the telephone consultation as an alternative to making a surgery appointment and 22 (10%) used the telephone consultation as an alternative to requesting a home visit.

Conclusion. It appears that the telephone service was being used largely as an alternative access point to the doctor. General practitioners should not be apprehensive about the possible increase in workload generated by introducing telephone consultations, for example in phone-in clinics.

Keywords: telephone consultation; consultation process; workload; patients' attitudes.

Introduction

DOES direct access to the general practitioner by a telephone consultation offer an additional or an alternative service for patients? Many general practitioners believe that telephone consultations reduce the number of home visits and surgery consultations.¹ Yet in a study of 33 family medicine clinics in the

United States of America a 40% increase in telephone calls was found for clinics that allowed telephone access to the doctor.² In the United Kingdom, a survey of 152 patients found that 74% would have made an appointment to see the general practitioner and 13% would have asked for a home visit had they not spoken to the doctor by telephone; this means that at most the remaining 13% could have represented new work created by telephone access to the general practitioner.³

A study set out to assess the characteristics of patients consulting the general practitioner by telephone and whether telephone consultations were used as an additional or an alternative service to surgery consultations during surgery hours.

Method

The study was undertaken in 1992 in a practice of 6000 patients that has three principals and one registrar (trainee). The practice has an appointment system only and all consultations are recorded on computer. A 'phone-in clinic' has been advertised for five years and is held between 08.30 hours and 08.55 hours, Monday to Friday, on a separate telephone line. At other times of the day, the reception staff either pass the telephone call to the general practitioner concerned, if available, or take a message for the doctor to return the patient's call. Emergency calls are passed immediately to the general practitioner on emergency duty.

A questionnaire was developed to elicit patients' perceptions of and attitudes towards telephone consultations. The questionnaire also requested sociodemographic information. It was sent to all patients who consulted by telephone over a four-week study period during usual surgery hours (08.30–18.00 hours Monday to Friday and 08.30–12.00 hours on Saturday, that is 51 hours per week) within 24 hours of their telephone consultation. A repeat mailing to non-respondents took place two weeks later. Patients who telephoned a second time during the study period were not sent a second questionnaire. At the end of the four weeks, an age-sex matched control group of patients, identified by a computer search as never having consulted by telephone, was sent a similar questionnaire. Details of repeat prescriptions and the number of consultations (face-to-face and telephone consultations) in the preceding year were determined from patients' medical records.

Data were entered on to computer and analysed using the SPSSPC statistical programme. Chi square tests and Mann Whitney U tests were used to investigate whether there were any differences between groups.

Results

Of 149 patients using the phone-in clinic, 140 (94.0%) returned a questionnaire, as did 101 out of 110 patients who telephoned their general practitioner at other times of the day (91.8%). Of 259 patients in the control group, 215 (83.0%) returned a questionnaire. Eighty one of the control group patients reported having telephoned a doctor in the past and were therefore excluded from the study, leaving 134 patients in the control group.

When data for the patients using the phone-in clinic and for those who telephoned the doctor at other times of the day were analysed separately, no significant differences were found; data from the two samples were therefore grouped together for subse-

A Brown, MSc, MRCP, general practitioner, Burford, Oxfordshire. D Armstrong, MSc, PhD, FRCPG, FFPHM, reader in sociology as applied to medicine, Department of General Practice, United Medical and Dental Schools of Guy's and St Thomas' Hospitals, London.

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quent analyses. The sociodemographic characteristics of patients who consulted by telephone and who had never consulted by telephone (the control group) are shown in Table 1. Those who consulted the general practitioner by telephone were significantly more likely to be aware of the phone-in clinic, to have a telephone at home, to have children aged under five years at home, to be receiving repeat prescriptions and to be receiving repeat prescriptions for psychotropic drugs compared with those in the control group. The mean age of those having a telephone consultation was 48.7 years compared with a mean age of 52.8 years for those in the control group. The group having a telephone consultation had had a mean of 8.9 consultations in the previous year compared with a mean of 2.6 consultations in the control group (Mann Whitney U test $P<0.001$).

Those consulting by telephone were then divided into the 31.5% who would have preferred an appointment with the general practitioner rather than the telephone consultation and the 68.5% who were happy with the telephone consultation. Those who would have preferred a face-to-face consultation were significantly less likely to have their own transport and were more likely to live alone compared with those who were happy with the telephone consultation (Table 2). Thirty four of 69 patients preferring a face-to-face consultation (49.3%) and 51.7% of 151 patients preferring a telephone consultation thought that it was never difficult getting an appointment. The mean age of those preferring a face-to-face consultation was 55.3 years compared with 45.7 years for those happy with the telephone consultation (Mann Whitney U test $P<0.01$). Those preferring a face-to-face consultation had had a mean of 9.7 consultations in the previous year compared with 8.2 consultations among those happy with the telephone consultation (Mann Whitney U test $P<0.05$).

To determine to what extent the availability of the telephone consultation affected general practitioner workload, those who consulted the doctor by telephone were asked whether they would have made an appointment to see the doctor or requested a home visit if a telephone consultation had not been available. Of the 226 patients who answered the question, 11 (4.9%) would definitely not have made a surgery appointment or home visit request and, as such, represented additional work created by having telephone access to the doctor. A total of 120 patients (53.1%) indicated that they had had a telephone consultation as

Table 1. Sociodemographic characteristics of those consulting a general practitioner by telephone and those who had never consulted by telephone (control group).

Characteristic	% of respondents with characteristic	
	Telephone consulters	Control group
Aware of phone-in clinic ($n = 101/132$) ^a	84.2	38.6 ***
Has telephone at home ($n = 241/134$)	97.5	88.8 ***
Has own transport ($n = 240/133$)	80.0	72.2
Women ($n = 241/134$)	71.4	70.1
Has children aged <5 years at home ($n = 240/134$)	24.6	8.2 ***
Lives alone ($n = 239/106$)	13.4	26.4
Receives repeat prescriptions ($n = 241/134$)	74.3	52.2 ***
Receives repeat prescriptions for psychotropic drugs ($n = 241/134$)	13.3	5.2 *

^a = number of respondents in telephone consulters group/control group.

*Only patients not using phone-in clinic were asked this question. χ^2 test:
* $P<0.05$, *** $P<0.001$.

Table 2. Perceptions of the telephone consultation and sociodemographic characteristics of patients preferring a face-to-face consultation rather than the telephone consultation and those happy with the telephone consultation.

	% of respondents	
	Preferring face-to-face consultation	Preferring telephone consultation
<i>Perceptions of telephone consultation</i>		
GP understood all problems ($n = 70/153$)		
	71.4	80.4
Satisfied with consultation ($n = 68/152$)		
	97.1	91.4
Telephone frequently engaged ($n = 65/145$)		
	56.9	63.4
<i>Sociodemographic characteristics</i>		
Has telephone at home ($n = 71/153$)		
	97.2	99.3
Has own transport ($n = 71/153$)		
	63.4	88.2 ***
Women ($n = 71/153$)		
	69.0	73.2
Has children aged <5 years at home ($n = 70/153$)		
	17.1	27.5
Lives alone ($n = 70/153$)		
	21.4	9.8 *
Receives repeat prescriptions ($n = 71/153$)		
	80.3	71.9
Receives repeat prescriptions for psychotropic drugs ($n = 71/136$)		
	18.3	12.5

n = number of respondents in group preferring face-to-face consultation/preferring telephone consultation. χ^2 test: * $P<0.05$, *** $P<0.001$.

an alternative to making a surgery appointment and 22 patients (9.7%) indicated that they had used a telephone consultation as an alternative to requesting a home visit. A third of patients (73, 32.3%) were undecided and may represent either additional or alternative workload. Sixty five of these patients could have represented probable surgery appointments and eight could have represented home visit requests.

Finally, to study the extent to which the telephone consultation was used by patients to facilitate their ongoing medical care, those who consulted by telephone were divided into those who had consulted by telephone four times or fewer in the preceding year (low consulters) and those who had consulted more than four times (high consulters). Telephone consultations represented a mean of 50% of all consultations among 86 high consulters compared with a mean of 17% of all consultations among 155 low consulters.

Discussion

Why do patients reach for the telephone to talk with their doctor? Inability to get to the surgery seems only a small part of the explanation since most patients in this study had their own transport and those preferring telephone consultations were significantly more likely than those preferring face-to-face consultations to have transport. More persuasive is the argument that patients who are high users of general practitioner services find the telephone a useful alternative to face-to-face consultations and that without it they would seek medical advice in a face-to-face consultation.⁴ A maximum of 185 patients were saved a visit to the surgery, as well as 30 home visits being avoided, representing 15 consultations and three home visits per week for each doctor. Only 11 patients (5%) would not have pursued the contact and therefore can be considered to be additional work created by having telephone access to the doctor. Even allowing for some additional work being concealed among those who would have prob-

ably requested surgery appointments and home visits, the picture is of the telephone service being used largely as an alternative access point to the doctor.

The findings of this study would suggest that general practitioners should not be apprehensive about the possible increase in workload generated by introducing telephone consultations, for example in phone-in clinics. Patients approve of telephone consultations,^{5,6} and general practitioners can be reassured that telephone accessibility does not lead to an additional but to an alternative workload. Telephone consultations should therefore be seen as a valuable part of access to primary health care.

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Address for correspondence

Dr A Brown, Coachford House, Burford, Oxfordshire OX18 4SH.

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Oral contraceptives and cervical neoplasia

TRYING to disentangle the relationship, if any, between the use of oral contraceptives and the development of cervical neoplasia presents a classic epidemiological dilemma. Cigarette smoking increases the risk of cervical neoplasia and users of oral contraceptives smoke more than non-users. Users of oral contraceptives are more likely to have cervical smears taken and at more frequent intervals than non-users; the more frequently that smears are taken the more likely it is that cervical dysplasia is detected. On the other hand, the more that dysplasias are detected and treated the less likely it is that they progress to carcinoma *in situ* and to invasive cervical cancer. Further confusion can occur when comparing users with non-users of oral contraceptives; many of the latter may use barrier methods of contraception, which protect against cervical neoplasia.

It is possible to obtain reasonably accurate data on these variables and adjust the calculations of risk so that like is compared with like. The most frustrating problem, however, is to obtain reliable data on the sexual behaviour of users and non-users of oral contraceptives and also of their male partners. Yet sexual habits are strongly associated with cervical neoplasia: the risk increases with the frequency of coitus of the woman, and with multiple sexual partners, and if her regular male partners have multiple sexual partners.

These comments are prompted by a report from a hospital-based case-control study carried out in Thailand, Mexico and Chile under the supervision of the World Health Organization. The cases were patients admitted for the treatment of cervical carcinoma *in situ*; the controls were patients admitted who did

not have carcinoma *in situ*. Hospital controls are less likely to be representative of the general population of women than controls selected from the community. The history of past use of oral contraceptives was obtained from cases and controls. The relative risk was derived by comparing the relative proportions of women in the two groups who had formerly used oral contraceptives. Analyses of the data were adjusted for each of the likely confounding variables discussed previously, although the quality of data relating to sexual habits, as in all studies, remains dubious.

The results showed a significantly increased overall relative risk of cervical neoplasia from any use of oral contraceptives of 1.34; this rose to 2.04 after five years of use, and declined to essentially normal levels four to five years after stopping use. These results are in general agreement with studies which have been reviewed by Brinton (*Contraception* 1991; **43**: 581-595).

In a study by Beral and colleagues, with a cohort design, it was shown that, although carcinoma *in situ* (and invasive cervical cancer) rates were increased in users of oral contraceptives, the risks of endometrial and ovarian cancers were reduced, so that overall there was no increase in mortality from genital tract cancers (*Lancet* 1988; **2**: 1331-1335). Interestingly, there were data presented which suggested that cervical smears might be less effective in detecting cervical neoplasia in oral contraceptives users than in non-users.

The association of oral contraceptive use and cervical neoplasia can be explained by three possible mechanisms: oral contraceptives may cause some cases of cervical neoplasia; women whose lifestyle puts them at greater risk of cervical neoplasia may choose to use oral contraceptives; or women who choose to use them may adopt a more risky lifestyle.

For clinical purposes the reality is that users of oral contraceptives are at higher risk of cervical neoplasia than non-users. Is there justification for more intense screening of these higher risk women? The answer can only be determined through research aimed specifically at resolving this issue; the cost-effectiveness of more intensive screening will have to be evaluated. My view is that, in the meantime, users of oral contraceptives should be carefully monitored to ensure that they do not miss having a cervical smear at the recommended intervals.

CLIFFORD R KAY
Consultant, RCGP Manchester Research Unit

Source: Ye Z, Thomas DB, Ray RM and the WHO collaborative study of neoplasia and steroid contraceptives. Combined oral contraceptives and risk of cervical carcinoma *in situ*. *Int J Epidemiol* 1995; **24**: 19-26.

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Food for thought...

'Direction and hope are not solely the needs of deprived areas — they are the needs of all people. You can test this yourself by reflecting on your own life: when you know what you stand for, with whom you identify and where you fit into the whole, you feel competent for the journey ahead. When you feel good about all these things you feel hopeful. When you feel hopeful, getting out of bed in the morning is not such a bad thing.'

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