Confidentiality and the telephone in family practice: a qualitative study of the views of patients, clinicians and administrative staff

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Background. Confidentiality is considered a cornerstone of the medical consultation. However, the telephone, previously used mainly to negotiate appointments, has become increasingly employed as a means of consultation and may pose new problems in respect to maintaining confidentiality.

Objective. As part of a qualitative investigation into the views of patients, doctors, nurses and administrative staff on the use of telephone consulting in general practice, we set out to explore the impact of the use of this medium on perceptions of confidentiality.

Method. We used focus groups of purposively selected patients, clinicians and administrative staff in urban and rural areas.

Results. Fifteen focus groups comprising 91 individuals were convened. Participants concerns centred on overheard conversations, the receptionist role in triage, difficulty of maintaining confidentiality in small close-knit communities, errors in identification, third party conversations and answering machines. Telephone consulting, depending on the circumstances, could pose a risk or offer a solution to maintaining confidentiality.

Conclusions. Many of the concerns that patients and health care staff have around confidentiality breaches both on the telephone and face to face are amenable to careful management. Although rare, identification error or fraud can be a potentially serious problem and further thought needs to be given to the problem of misidentification on the telephone and the use of passwords considered.

Keywords. Access, confidentiality, evaluation, health care quality, physician–patient relations, telephone consulting.

Introduction

Whatever, in connection with my professional practice or not in connection with it, I see or hear in the life of men, which ought not to be spoken abroad, I will not divulge, as reckoning that all such should be kept secret. Hippocrates\textsuperscript{1}

One of the cornerstones of the medical consultation is that patients expect that what they tell their doctor or nurse will be kept confidential.\textsuperscript{2} However, arranging and partaking in a modern general practice consultation may involve the cooperation of several individuals including more than one doctor, reception and secretarial staff, nurses, health care practitioners, pharmacy staff and students. The patient too may invoke the assistance of family members and friends to make appointments, collect prescriptions, take messages or accompany them in the consultation. This increasing complexity inevitably increases the risk of breaching confidentiality. Consultations too have changed. The telephone, previously used mainly to negotiate appointments, has become...
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increasingly employed as a means of consultation\textsuperscript{3,4} and almost all out-of-hours calls in the UK and other countries are now initially triaged in this way,\textsuperscript{5,6} raising practical concerns, especially with mobile phones, about ensuring confidential environments.

Most of the research carried out on confidentiality in primary care consultations has been in relation to adolescent health\textsuperscript{7,8} and in the context of acquired immune deficiency syndrome HIV/AIDS.\textsuperscript{9} There is also an e-health and research governance literature\textsuperscript{10} on data security.\textsuperscript{11} By contrast, surprisingly little research has explored the views of patients and primary care professionals despite the acknowledged importance and gravity with which it is viewed by regulatory bodies.\textsuperscript{2,12–14} There have been no studies in primary care which have specifically explored the confidentiality issues of the use of the telephone.

As part of a broader qualitative investigation into the views of patients, doctors, nurses and administrative staff on the use of daytime telephone consulting in general practice, among our aims we specifically sought to explore the impact of the use of the telephone in primary care on perceptions of confidentiality. This paper focuses on the main themes we found in relation to confidentiality and telephone consulting. The term ‘consulting’ in this paper refers to an exchange of clinical information between a clinician and a patient (for example history taking, discussing test results or providing other information and treatment advice) whereas the term telephone ‘conversation’ includes all telephone interactions including discussions between non-clinical staff for example about making appointments and passing on test results.

Methods

We used focus groups because they have the advantage of using group dynamics to stimulate discussion, yield insights and generate ideas to pursue a topic in depth\textsuperscript{16} and are particularly suited to subjects with which participants are familiar and likely to hold diverse views. We approached GPs, practice nurses, administrative staff and patients and conducted focus groups in urban (Lothian) and rural (Highland) regions. We aimed to recruit a maximum variation sample encompassing people from a range of ages, both genders, living in urban and rural areas and with varying views about telephone consulting.

Recruitment

We purposively selected 39 practices in Lothian and Highland for recruitment of health care staff on the basis of training status, practice list size, deprivation indices and rurality. To aid purposive sampling, we wrote to the practice manager, senior receptionists, practices nurses and GPs in each practice and asked them to complete a screening questionnaire designed to capture their current use of and attitudes to telephone consulting. In addition, we approached GPs attending a large annual conference of widely scattered remote and island-based GPs and using the same screening questionnaire recruited participants to a focus group.

Patient recruitment was conducted from seven purposively selected GP practices using national databases (ISD Scotland)\textsuperscript{17} based on deprivation, practice size and rurality. A screening questionnaire similar to that used for staff was posted to the most recently consulting 15 or 30 (depending on practice size) patients. We plotted the distance recruited patients lived from their general practice using electronic mapping aids.\textsuperscript{18} In addition, as telephone advice calls about children are common,\textsuperscript{19} we recruited parents from a ‘mother and baby group’ in Lothian.

Focus groups lasted around 1 hour. A topic guide, incorporating similar questions for professional and patient groups, was used to stimulate relevant free flowing discussion. Focus groups were audio-recorded, transcribed verbatim and entered into a qualitative analysis software programme (NVivo 7).\textsuperscript{20} Concurrent data analysis allowed emergent themes to be incorporated into the topic guide and explored in subsequent interviews. Data generation continued until saturation occurred.\textsuperscript{16}

Analysis

We used a framework-based approach\textsuperscript{21} as this is particularly useful for applied or policy relevant qualitative research and makes use of the efficiency gained through relatively structured data generation, based on pre-set aims. Subthemes were charted into overarching themes and used to define concepts, identify important phenomena and allow associations to be drawn and explanations of the data to be considered.

Two researchers, PW (a psychologist) and BM (a GP), independently analysed data and agreed coding allocations with a sample of these jointly agreed codes being independently checked by HP (a GP) and DH (a social scientist). Deviant cases and possible conflicting interpretations were actively sought. Our preliminary conclusions were fed back to a multidisciplinary group of clinical and lay participants to check agreement with findings and assist interpretation.

Ethical approval was obtained from Lothian Multicentre Research Ethics Committee (ref 06/MRE10/27) and local research and development offices.

Results

Staff from 30 (86%) of 35 practices completed screening questionnaires. We conducted 10 focus groups with health care professionals and administrative staff...
and five with patients (see Table 1). Those responding did not significantly differ demographically from non-responders. Participants encompassed a range of ages, social backgrounds, rural/urban location and views on and experience of telephone consulting (see Table 1).

The main themes in relation to confidentiality were concerns about overheard conversations, the receptionist role in triage, difficulty of maintaining confidentiality in small close-knit communities, errors in identification and identity fraud, third party conversations (where one individual e.g. a parent or spouse speaks on behalf of a patient) and answering machines.

**Overheard conversations**

Many of the concerns expressed by both professionals and patients centred on overheard telephone conversations. There was potential for this to happen in the surgery, at home, at work and with mobile phones in public places.

*In the surgery reception.* The surgery reception area was considered a particularly troublesome source of confidentiality breach; patients phoning in, for example, sometimes have their personal details loudly confirmed by the receptionist within earshot of patients sitting in the waiting room and occasionally waiting patients subsequently heard a doctor being given a summary of the patient’s complaint or results being given. Even vague overheard comments on results such as ‘its negative’ could give rise to speculation even if the nature of the test was not divulged.

However, such breaches in the reception were not confined to the telephone and indeed the telephone was often seen as a ‘more’ confidential medium particularly in some smaller less well sound-proofed surgeries.

**Table 1** Characteristics of focus group participants

<table>
<thead>
<tr>
<th></th>
<th>Invited</th>
<th>Returned screening questionnaire</th>
<th>Actually participated groups</th>
<th>No. of groups</th>
<th>Age range</th>
<th>Gender (male/female)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Lothian</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Patients</td>
<td>127</td>
<td>38</td>
<td>17</td>
<td>3</td>
<td>19–85</td>
<td>5/12</td>
</tr>
<tr>
<td>Admin staff</td>
<td>62</td>
<td>17</td>
<td>17</td>
<td>3</td>
<td>31–51</td>
<td>0/17</td>
</tr>
<tr>
<td>Nursing staff</td>
<td>61</td>
<td>18</td>
<td>7</td>
<td>1</td>
<td>32–60</td>
<td>0/7</td>
</tr>
<tr>
<td>GPs</td>
<td>140</td>
<td>34</td>
<td>14</td>
<td>2</td>
<td>37–61</td>
<td>9/5</td>
</tr>
<tr>
<td><strong>Highland</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Patients</td>
<td>70</td>
<td>35</td>
<td>16</td>
<td>2</td>
<td>18–83</td>
<td>8/8</td>
</tr>
<tr>
<td>Admin staff</td>
<td>18</td>
<td>10</td>
<td>2</td>
<td>1</td>
<td>44–67</td>
<td>0/2</td>
</tr>
<tr>
<td>Nursing staff</td>
<td>11</td>
<td>7</td>
<td>7</td>
<td>1</td>
<td>32–54</td>
<td>0/7</td>
</tr>
<tr>
<td>GPs</td>
<td>34</td>
<td>11</td>
<td>11</td>
<td>2</td>
<td>26–57</td>
<td>5/6</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>91</td>
<td>15</td>
<td></td>
<td>15</td>
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</tbody>
</table>

You never know who is listening in to the conversation. It is as simple as that. Alright they maybe only hearing half of it, but half of it is enough to draw your own conclusion. (Urban female patient, 21 years)

When I first fell pregnant I had an issue ... I asked to make an appointment with the midwife and there was [sic] people in the reception who knew me and one person [receptionist] at one desk shouted “when is the midwife in?” and I hadn't even told people that I was pregnant and half of the town knew. So if it was on the phone at least they wouldn’t have known who it was. (Urban female patient, 30 years)

... in the XX surgery, if you were in with the doctor and talking loud enough half the community centre could hear. I think that there is a huge element of advantage in telephone conversations in that you are talking directly to the doctor, even if somebody was listening ... unless the doctor mentions your name they wouldn’t know who they were talking to. (Rural male patient, 62 years)

**Overheard telephone conversations during consultations and in working areas.** Doctors were aware that urgent calls for advice interrupting consultations were a potential source of confidentiality breach and did their best to avoid confirming the patient’s identity aloud. Similarly, in small communities where staff members were often related or neighbours, calls relayed through to the coffee room or answered in the reception area could breach confidentiality and attempts were therefore sometimes made to avoid such scenarios as is exemplified by the following expressed concerns:

Sometimes we have an issue of confidentiality within the practice because where we do our telephone calls, ... is in the back office when there are usually people milling round ... because the notes are there and we usually have a run of them to do ... OK the whole staff have got confidentiality, [signed confidentiality contracts] but it is not ideal. I often feel uncomfortable about that and often take a more personal conversation through to my room but it is all time ... (Rural female doctor, 40 years)

**Phoning patients at work or home.** Clinicians were generally sensitive to confidentiality issues when they were phoning patients at work, checking that they felt comfortable to speak and occasionally altering their questioning style to maintain privacy.

It can be quite interesting discussing their intimate symptoms when they work in a call centre. You
have to pitch your questions to ‘Yes or No’ answers. (Urban male doctor, 49 years)

I always check, … ‘This is X, can you speak’. I always say that to them then we know … or ‘Can you ring me back when you can’. (Rural male doctor, 46 years)

A similar problem could occur with mobile phone consultations which might catch the patient in a public place.

If you are phoned back on a mobile, I mean you can be standing in a bus-queue and they are asking you all those personal questions and you are sort of … well what do you do? Do you say ‘I will phone you back’ or do you answer them? I think it depends if you felt that if this was your only shot at a doctor. (Rural male patient, 83 years)

In general, patients were less concerned about calls to their home, although there was a possibility of a visitor or family member being present when they took a call who could overhear half the conversation. Participants particularly expressed concerns about teenagers’ confidentiality, especially in relation to sexual health.

Leaving messages and caller identification
The telephone could both enhance and endanger confidentiality. For example, dialler identification could be used by a parent to establish that a call had come from the surgery and question their child. Conversely, a phone call might avoid a young person being seen attending a surgery, with the risk that this may be relayed to their parents.

We had a pregnant teenager who was due to go into XXX and didn’t go, what do you do, that is tricky? (Urban male GP, 54 years)

One of the things on phone-backs is that our surgery doesn’t blank out anyone [caller identification not disabled] if phoning somebody and they are not in and even if they [the surgery] haven’t left a message they [patient or family] know the surgery has phoned but you might be wanting to phone to speak to the teenage daughter. Or you try—that is actually a very useful one to get a mobile phone contact for, you might have a pregnancy test result that no one knows and then mum phones up and says “what do you want the surgery for?” — Nothing, wrong number … Obviously with sensitive results you want a very clear route back to the patient. (Rural female doctor, 42 years)

Speculation in small communities
A particular problem arises in small communities where attendance at the doctors was seen as a cause for gossip and speculation not only among other patients but also among reception staff who may be related to the patient. Telephone consulting could avoid this as requests for sensitive medications such as ‘Viagra™’ (sildenafil) could be arranged directly with the doctor over the phone and dispensed from non-local chemists.

… but confidentiality here I think it is a huge problem, certainly in the XX clinic if you go along there the whole community knows you have been to the doctor and they all want to know what you have been there for and they jolly well will find out! (Rural male patient, 62 years)

Sharing information with reception staff on the telephone
Several patients were unhappy at being asked to provide information to receptionists and thought this was more likely to happen on the telephone. Some receptionists, however, felt such requests for information were important to help decide priority or to decide suitability for a telephone or face-to-face consultation. This was encouraged by some doctors, but some receptionists were unhappy about it and felt it placed too much responsibility on them.

That is one [experience] that I have had, it has not been pulled out of me but basically it was said “what is wrong with you” but if you don’t get past that hurdle, the fact is that you will not be seeing a doctor. (Urban male patient, 58 years)

We do ask them what it is, … obviously we wouldn’t give them 5pm if they think they are going to need swabs for example so we just say to them it is to help us to give you the most appropriate appointment. (Urban practice manager, 43 years)

We have been in trouble before for saying that was not an emergency appointment, they say it’s an emergency I am not going to say it is not an emergency, I am a receptionist not a doctor. (Urban receptionist, 46 years)

Identity error and fraud
One concern raised predominantly by health care staff, although considered relatively uncommon, was the possibility that telephone consulting might facilitate identity error and fraud. However, even face-to-face consultations were not immune from this problem. In close-knit rural communities, it was less problematical, although several generations of family members with the same name could be challenging. When asked their view of the use of passwords or personal identification numbers (PINs) as potential safeguards, patients were more favourably disposed to this than clinical staff who could only see drawbacks to their use. Reception staff withheld information if they had any suspicions.
Somebody came in claiming to be their sister but somebody knew it wasn’t the person. It made us think that it is worse on the phone. We ask for peoples dates of birth for giving out results and things, but that is all. We had a discussion about whether we should change the system somehow but it just seemed impossible. (Urban assistant practice manager, 38 years)

However, even face to face this could be a problem as this patient found.

[My friend] went to the doctors and he got a prescription wrote out to him and the doctor said you are looking very, very well and he gave a prescription for XXX because he thought it was his dad because the wrong notes have been pulled. He said “are you retired now”, he thought now I am only 55 here. (Urban male patient, 54 years)

Third-party conversations
Doctors and nurses expressed the view that while it would be relatively unusual for someone to come along to see a clinician about their spouse or other family member’s test result or to consult about their symptoms without them being present, such discussions happened more frequently by telephone. This could occur by accident (the patient was out when the doctor phoned) or by design (for elderly patients or older teenagers) and often left the clinician or receptionist in a quandary. It was not always clear to what extent permission had or might be given to hold the consultation. Clinicians and receptionists took a pragmatic stance, being occasionally willing to discuss non-controversial blood results, but rarely willing to reveal more sensitive information such as pregnancy test results.

I find consent to be difficult. I am always very keen to be as helpful as I can, but if it is the daughter phoning about a confused dad … Normally if you are there in the same house it is all implied and you are all together, but there is sometimes an uncertainty [on the phone] because you are really going pretty far down the line of breaching the confidence … I think it is quite understandable but sometimes you feel a wee bit gullible, does Dad know what is going on in this conversation? (Urban male doctor, 57 years)

Answering machines
Health care staff were very loathe to use answering machines, as even leaving a message saying ‘the surgery called’ might be enough to breach the confidentiality of a teenager. If the answering machine message was in the known voice of the recipient and the message relatively un controversial (please call the surgery), some would leave a message.

We take the patients phone number and we ask them if they have an answer-machine can we use it and, because it is for something specific like that [routine blood result], usually … we also ask their permission to give the result to your spouse …., I have never actually had a patient who said “No”. (Rural nurse, 48 years)

If they are just pregnant and only their partner knows and we have to be really, really careful. (Urban receptionist, 38 years)

Discussion
As far as we are aware, this is the first study which has explicitly explored issues of confidentiality related to telephone use by in-hours primary care. It is clear this is an important topic for both patients and staff, with the risk of overheard conversations being the area of most concern. This was particularly concerning in close-knit communities, where the use of the telephone, depending on the circumstances, could pose a risk or offer a solution to maintaining confidentiality. Identification error or fraud was considered a rare, but potentially serious problem with no agreed simple solution.

Strengths and limitations of the study
Our investigation was limited to ‘in-hours’ telephone consulting and we are aware that our findings may not be transferable to the out-of-hours context. It is important that future research focusses on this area. While there is always a risk with qualitative research that important viewpoints may be missed, our purposive sampling framework and use of screening questionnaires ensured recruiting people with a range of experience and views about telephone consulting. We sought out discordant views and continued data generation until saturation occurred. We recognize the potential influence of our own health care and sociological backgrounds on data interpretation; however, we sent a summary of our findings and interpretation to participants for comments and presented findings at a multidisciplinary workshop. Respondents and delegates agreed with our interpretation of the findings, with comments largely confined to emphasising some aspects of our conclusions.

Interpretation of findings in relation to previously published work
The promise of confidentiality in the consultation allows two individuals, who may not know each other well, a high level of intimacy and permits a safe and constructive discussion of personal matters. Patients and health care providers in this study as in others...
confirmed that confidentiality is extremely important. The increasingly used medium of telephone consulting was considered to carry some carry some additional risk with respect to confidentiality in that identification could be difficult. Other researchers have identified what they considered to be sloppy practice in routine telephone identification. Although attempted identity theft was considered to be a potentially serious problem in our study, it was believed to be a rare occurrence happening in the main in certain high-risk contexts. Participants were more concerned with the deliberate or accidental overhearing of conversations. This problem was not confined to telephone consulting; it also occurred in face-to-face encounters, especially at the reception desk or in poorly sound-proofed small surgeries. Indeed, the telephone was seen as providing a means for much needed anonymity, particularly for those living in small close-knit communities. Clinicians felt uncomfortable with third-party conversations which seemed to happen more often with telephone consulting but tried to be pragmatic about revealing low-risk information. This was also found in a Spanish study where 95% of doctors interviewed had given some information to family member, largely assuming consent, but were careful about the types of information they gave.

Interestingly, contrary to the findings of research among teenagers, which indicates this group are particularly worried about confidentiality breaches, health professionals were particularly concerned about keeping their confidences.

Many of the concerns of adolescents and HIV/AIDS patients around issues such as overheard consultations, being identified by relatives and friends when attending the surgery or dealing with particularly sensitive areas such as sexual health, pregnancy, substance misuse and mental health, echo those of the adult patients we interviewed. Similar findings have also been expressed in an American focus group study of patients and primary care practice nurses on the subject of privacy.

Although the use of PINs or passwords has been suggested by others, in our study there was little enthusiasm for it among professionals who thought that they would be impractical and rural staff in particular, who knew their patients well and thought them unnecessary. Recent research, however, suggests that it is rare for staff even to check dates of birth or postcode which, while weak security measures, may at least prevent some ‘same-name’ errors. Interestingly, patients were more supportive of PINs seeing this as an extension of use in other contexts.

**Implications for clinical practice**

The telephone is an invaluable tool in medical practice. Many of the concerns that patients and health care staff have about confidentiality breaches, both on the telephone and face to face, are amenable to careful management (See Box 1). Given the emphasis placed on confidentiality by regulatory bodies, such management strategies should be mandatory. Maintaining confidentiality in small rural surgeries is particularly challenging, but should be achievable with suitable procedures. Although rare, identification error or fraud is a potentially serious problem and further thought needs to be given to the problem of misidentification on the telephone and pragmatic solutions (e.g. using PINs or passwords) considered.

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Ethical approval: Lothian Multicentre Research Ethics Committee (ref 06/MRE10/27) and local research and development offices.
Conflicts of interest: none declared.

References

20. NVIVO [QSR International Ltd]; 2006.