Telephone consultations at the emergency service, Copenhagen County: analysis of doctor–patient communication patterns

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Background. Experience from 10 telephone consultation courses in 1995, arranged for the emergency service in Copenhagen County, has demonstrated that this type of communication requires specific skills on the doctor’s part, especially because the doctor cannot see the patient, patients are frequently in some sort of ‘crisis’ and, on the basis of limited information, the doctor in charge has to arrive at a prompt diagnosis in order to advise or refer the patient.

Methods. Using video-supervised role-play we compiled and organized the experience of 152 doctors. During the courses we developed principles to help doctors to optimize the information output and reliability of their telephone consultations. The doctors playing their ‘patients’’ role had the opportunity to experience the situation from the patient’s point of view and were later able to give the ‘doctor’ valuable feed-back.

Results and conclusions. This ‘experimental consultation procedure’ constitutes a new research method, at the interface between educational and traditional scientific research. The process in question is a feed-back one, in which findings can be applied and tested instantly, or with little delay, to produce new results. These can be put to use in practical clinical work and tested in new ‘laboratory experiments’.

Keywords. Communication patterns, emergency service, out-of-hours service, telephone consultations, video-supervision.

Introduction

Is it possible to think of some generalized principles as to how a successful telephone consultation with the emergency service should develop? On the basis of our experience during courses in Copenhagen County, which included video-supervised role-play, we believe it is.1 Much has already been written regarding the specific issues and difficulties involved with telephone consultations, especially regarding the fact that patient and doctor often have vastly different views of the problem and that the doctor often fails to obtain essential information on the patient’s medical history.2-11

Most doctors who take a job with the emergency service do so because they have to as GPs or in order to make money. Telephone consultations are quite difficult; this makes the issue of how to minimize the time spent for each telephone consultation, while still obtaining an optimal yield of information, a highly interesting one.

Emergency service telephone consultations make specific demands on the doctor, who:

• cannot see and normally is not familiar with the patient;
• frequently talks with patients who are in some sort of ‘crisis’ (excited, anxious, aggressive, taciturn, impatient, etc.);
• is often pressed for time during work (1–6 minutes per call);
• has to arrive at a decision (diagnosis, referral or treatment) based on limited information;

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• has to consider administrative and organizational circumstances, e.g. how to minimize the number of visits and handle data-processing systems;
• has to deal with misuse of the emergency service and/or drug abuse.

The 24-hour service offered by the emergency service is increasingly in demand, just as round-the-clock shopping and other similar conveniences are. In addition, the emergency service is often faced with unrealistic expectations, such as repeated requests for renewals of oral contraceptive and asthma prescriptions, requests for acute referral to radiography, arthroscopy or even CT-scans.

In 1995, statistics for Copenhagen County comprised 53,959 bedside visits, 50,347 consultations and 123,948 telephone consultations. In Copenhagen County an agreement was entered into between the Public Health Insurance and PLO (the GPs’ national organization in Denmark) to attempt to limit the number of bedside visits—a fact which the general public considers a debasement of service. Such circumstances, combined with patients’ anxiety over the acute problem and general watchfulness towards unfamiliar doctors, may leave the doctor-on-call with an anxious and aggressive patient.

If doctors fail to devise specific tools for handling such aggressive patients, this may cause them to reinforce negative expectations in patients and eventually obtain an incomplete medical history—which in turn may lead to an excess of bedside visits and over-medication, to doctors-on-call returning from duty exhausted and dispirited and to patients filing complaints. In 1994, 18 complaints about the emergency service in Copenhagen County were filed, most of which could be ascribed to poor communication. This fact, however, also makes it clear that the vast majority of telephone consultations actually evolve without problems.

Methods

Course organization

After the members of the General Practice Committee of Copenhagen County had themselves participated in a course, they invited the authors to organize a mandatory 1-day course in 1995 for all referring doctors-on-call of the emergency service. Their decision was also justified by a wish to improve the image of the emergency service and reduce the number of complaints filed, and by providing the emergency service committee with an opportunity to convey some practical and administrative information to the referring doctors-on-call.

The medical company Novo-Nordisk sponsored the courses, which were held at their premises at Bagsværd. Furthermore, Novo covered the tuition fees, meaning that participation was free of charge. Ten courses were held, each with two 3-hour modules, interrupted by a lunch-break, and followed by general information from an official of the emergency service committee. Each course included 16 doctors. They split into groups of eight which took turns playing the role of ‘doctor’ and ‘patient’. The courses were attended by a total of 152 doctors.

During previous consultation courses we had routinely utilized video-supervised role-plays. We entered a kind of experimental setting—a consultation lab—where we and our colleagues tried to build up our consultation tools and skills. 12, 13 We have found that this laboratory set-up (though not the guidelines for the consultation process) lends itself to direct transfer to the telephone consultations in an emergency-ward context.

Prior to each role-play, the ‘doctor’ was asked to go outside while colleagues and supervisor helped the ‘patient’ work out her or his character. ‘Doctor’ and ‘patient’ would then sit down at either side of a screen, each with a phone in front of them, their backs facing the colleagues. The plays were videotaped, and the supervisor recorded their duration.

The following step was a review and supervision of the videos according to a matrix and a few general rules, to make sure that all participants felt they were given a fair deal, and to involve everyone in an active fashion. 14, 15

First participants helped design the ‘patient’ character, and the supervisor ascertained that the patient would be able to answer the key questions. 16 Afterwards, when the roleplay had started, it would soon become obvious to everyone present—including the ‘patient’—that by asking the key questions the doctor would have been able to elucidate the health problem much earlier, which would thus have expedited a solution. The laboratory setting soon produced a secure and experimental atmosphere in the group, which in turn encouraged an animated professional debate on the clinical situations.

The course objective was to train the doctors—in the minimum amount of time—how to:

• establish a good understanding with the patient;
• uncover the patient’s ideas, concerns and expectations;
• check up on relevant differential diagnostic deliberations;
• negotiate further procedures with the patient.

Based on the instructor’s preconceived expectations and experience gained during the initial courses, the following proposal emerged for a telephone consultation chronology to be used with the emergency service:

(i) Doctor introduces himself and encourages patient to talk.
Doctor leaves patient time to speak without interruption for about 10 seconds.
Doctor asks for patient’s civil registration number.

(ii) Key questions to elicit patient’s ideas, concerns and expectations:
“‘What made you call right now?’
‘‘What do you think is wrong?’
‘‘What are you concerned about?’
‘‘What do you think I/a doctor could do for you?’

(iii) Key questions to clarify the reason for the patient’s call:
‘‘If I understand you correctly, you think that . . . Is that so?’
‘‘Do you feel there is any further important information I need to have?’
‘‘You mean to say that you would like me to . . . ?’’

(iv) Negotiation.

(v) Key questions with regard to safety netting:
‘‘How do you understand what I just told you?’’/‘‘What did you make of our conversation?’’
‘‘Call back, call if deterioration?’
‘‘What is patient to do if things take an unexpected turn?’
‘‘Do you have the patient’s ’phone number?’’

These questions should be considered as guidelines, depending on the patient’s own narrative.16

Evaluation
Courses being mandatory, participants would be somewhat reluctant when they first appeared for the course sessions. Generally, however, their recalcitrance would evaporate as soon as we got the role-plays started. The mandatory status of such courses has proved crucial as a quality assurance measure (e.g. of the referral function of the emergency service); otherwise those doctors who most needed the course would not be taking it.17 In the present study they became part of the general context of the course in which they, and their colleagues, received guidance in a secure atmosphere, both on professional and communication problems.

In order to evaluate the efficiency of the courses, the authors, in co-operation with the emergency service committee of Copenhagen County, made an attempt to collate the pre- and post-course telephone consultations of 10 randomly selected doctors. However, we failed to obtain sufficient participation on the part of the doctors, their participation in evaluation being voluntary.

However, in their own right, the videotaped role-plays provided a valuable bulk of experience collected by those working as telephone-referring doctors. When playing the ‘patient’, a doctor could think up a role to mediate her or his own experience—augmented by that of his colleagues—with particularly ‘troublesome’ patients. Later, the video-recordings were copied to audio tapes and used for a verbatim transcript. A few

selected extracts are given and commented on in the following section.

Results
We present a selection of communication patterns used during the telephone-consultation process which have proved successful to varying degrees, in terms of creating a rapport with the patient as quickly and safely as possible. Furthermore, the plays incorporate vital parts of the clinical experience gained by the doctors during work. The results are given below, in accordance with the chronological phases of the telephone-consultation process.

Introduction
From the very first role-plays, it became obvious that the first few seconds of a telephone consultation are crucial to the entire process, i.e. that doctor meet the patient in an open and friendly manner, which will often reassure an anxious and aggressive patient: “Good evening. This is the emergency service, Dr Hansen speaking. [Please tell me what you are calling about.]”

If the patient had immediately begun in an aggressive tone, demanding a visit, it would have worked fine to verbally oblige the patient by saying something like, “Yes I’m sure I should do that, but first please tell me a little about what this is about.” Now, if the doctor had not said ‘yes’, but instead something that the patient might have interpreted as scepticism—i.e. if he did not give a reply to the patient’s request for a visit, or perhaps said that he was not sure the patient could have the desired visit—this might have increased the patient’s anxiety, and consequently his animosity.

It proved productive to leave the patient some time (approximately 10 seconds) in which he or she could explain his or her call. Then the doctor, using meta-communication (i.e. communication on how and what to communicate), would ask the patient for his civil registration number: “In order to help you [visit you, prescribe medication, etc.] I’ll just need to have your civil registration number, otherwise I cannot get your name on my screen.” If the patient sounded quite aggressive and/or demands an immediate visit, the doctor might have asked: “Do you mean to say that you think I should request an ambulance?” This proved helpful for the patient who was confused because of an acute, serious problem, and it helped to bring aggressive patients ‘back on their feet’: ‘Oh, no—easy, doctor, I didn’t mean that!’ So, ever since, we have called this litmus-test question the ‘ambulance test’.

Ideas, concerns and expectations
In order to form a picture of the health problem presented by the patient, the doctors would ask, “How long has this been going on?”, “Where does it hurt?”,
or "What's your temperature?" Then the doctor would ask a number of closed-end questions, based on his own conceptions of what could be wrong. This form of questioning proved inexpedient in more than one way:

- it often was quite time-consuming and laborious for the doctor;
- 'patients' got annoyed at being interrogated before they had even had a chance to present their own story;
- when the doctor interrupted a 'patient's' narrative, the 'patient' would stop talking;
- and, surprisingly, this often caused the doctor to miss important bits of information.

Most doctors were very quick to make up their minds as to what the patient's problem was and would stick to their decision with an amazing stubborness for the duration of the telephone consultation.  

Few doctors made use of the key questions, while several used a neutral paraphrase of them, e.g. "He's had a temperature for three days—then why are you calling me right now?" Later doctors playing patients were able to report that it would have made a vital difference if the doctor had offered the patient a 'space' in which to talk about his concerns. This implies that as a patient, one will find it a lot more difficult to express one's concern than for instance plainly stating, "Because his temperature has mounted to 39.7 centigrade . . ." If the patient's concern is not clarified the conversation will turn into a 'quasi' one; neither party gets to verbalize what this is really about: the little or big fear that this could be something serious, or fatal, or the mere fact of night drawing near.

Another frequent problem arose when the doctor was unable to obtain a sufficient medical history, e.g. when an immigrant called the emergency service and said, "My son very sick—doctor come now!" Then the referring doctor was faced with a situation where the patient had such trouble making himself understood or describing his symptoms that the doctor had to provide information by personal observation. A prompt realization of this saved time and frustration for all parties involved, though some doctors were nettled by the fact that in this way foreigners were offered a 'better' service. In other role-plays, situations arose when doctors refused a bedside call on a very uncertain diagnostic basis, e.g. "My wife very sick, stomach-ache—you come", on which the doctor concluded that it was a case of an infection, so they would have to wait and see.

In order to clarify patients' expectations relative to recurrent health problems, such as backaches or migraine, several doctors would ask: "What does your GP normally do?" This question often proved quite informative.

During the 10 courses, we were gradually able to accumulate experience from our colleagues and pass it on to the participants during the following course. In the process we realized how much difficulty our colleagues had using the one key question that, from the 'patients' experience, we had found to be a particularly central one, which would rapidly clarify the situation: "What are you concerned about?" Therefore, during the last three courses we asked the person playing the doctor to put forth this one question during the role-play. Much to our surprise they invariably failed to, as they forgot. However, the role-plays helped to elucidate the fact that patients, having decided to call the emergency service, were concerned, apprehensive and sometimes agitated. This caused them to perceive the doctor's words in an incomplete or distorted way. It also meant that the doctor's questions could easily confuse the patient, and thus lead him 'astray' from whatever made him call in the first place—with the implied risk of misdiagnosis and misreferral.

In addition, those playing patients confirmed that using the questions about the patient's concerns would more promptly and with more certainty have led the doctors to a relevant clarification, thus solving the problem. Thus role-play can be used as a method to spot questions that work, in that one can check with the 'patient' whether a given question would have opened up whatever the 'patient' had on his mind and caused him to call. It also helps the doctor to become familiar with using key questions.

**Explication of patient's presentation**

Many doctors would sum up what their patient had said and then use the summary as a basis for a few additional questions. Also, it was obvious that doctors' summaries had a positive impact on the doctor-patient relationship.

Often the explication of the patient's presentation would coincide with the clarification of expectations, etc. However, if a patient later filed a complaint, it also had to be possible to point out that the patient had a responsibility to provide the doctor with correct information. Thus, the key question there was also meant as a safety measure for the doctor who did not feel sure that the patient's information was sufficient. This proved crucial in the story of 'young Peter and his cornflakes':

P: "Is this the emergency service? I have a four-year-old grandchild. And you know, he just doesn't want to eat his cornflakes. I sure don't know if I sprinkled too much sugar over them. Damn it, you've got to come and have a look at him."

D: "I... don't understand ... You are telling me you sprinkled too much sugar over them?"

[More talk about sugar and cornflakes, left out here.]

D: "So there is no more important information I need to have? You see, what you just told me
won’t be enough for me to send a doctor to see you.”

P: “Not enough? The poor devil is lying here with a 40 degree fever, and I cannot stir him up.”

D: “We’d better send an ambulance, then?”

P: “Yes, and better right away!”

So this proved to be the question that was decisive in making the doctor realize how serious the problem was.

**Negotiation**

Before negotiation the doctor would often ask a few questions to supplement the medical history, such as: “Can he incline his head towards his chest?”, “Does the back pain radiate into his left arm?”, “Did he pass stools?”, “What is his temperature?”, “Does he stay quiet, or does he play?” This category of questions is familiar to any GP, so we will pass over them in this context.

The initial negotiation phase would normally be an effort to persuade the doctor that a physician should have a look at the patient. Then, when the doctor had been persuaded (e.g. by a relative) that the patient needed to be looked at, the doctor would have to align the patient’s ideas, concerns and expectations to the actual situation. As the patient was unable to see the actual workload of the doctor, or to appreciate the circumstances of the emergency service, the doctor would have to explain the situation, for instance to the father of a 2-year-old:

“I think we should take a look at him, when he has such a headache and fever. Right now you’ve got a three-hour wait for a visit. Now, you live in Lyngby, so perhaps you could go to our outpatient’s clinic at Herlev Hospital. They have practically no waiting-time.”

If the doctor thought that the patient should be seen in consultation (even though the condition did not require a visit), there would often be another negotiation on transportation, when patients stated a number of ‘excuses’, e.g. the child had fever, it was cold outside, the car was out of order, they didn’t have the money for a cab, or mother was alone, with several children asleep. This negotiation sometimes faced the doctor with a dilemma, e.g. *vis-à-vis* the parents who feared that their child had appendicitis, but could not spare the money for a cab, and they would have to wait for the doctor for at least 2 hours. Would the doctor have incurred liabilities if the appendix had ruptured during the wait, or should the doctor have taken precautions and called an ambulance at once? In some cases, doctors tended to be guarded in realizing how serious the problem was, and thus too reluctant to call an ambulance. For instance: a woman in her third trimester had soaked 3–4 menstrual pads for the past hour, had pain and felt dizzy. The doctor resolved to have the doctor attend to her (2–3-hour wait).

Negotiations could also be about what treatment the doctor could offer, e.g.:

D: “I think it would be a sensible thing to send a doctor to look at your wife. But you should know that at the emergency service we are instructed not to administer morphine. It’s something of the sort that your wife normally gets for her migraine?”

P: “Yes.”

D: “You know, I can’t promise the doctor coming to see her will be able to give her some morphine.”

Most patients considered a doctor who refused to come arrogant. This was associated with the relationship of strength–weakness between a person in need of help and a person able to give it. However, as the allocator of limited resources, the doctor would frequently find that he had to refuse, because of higher-level decisions regarding services such as visits and injections of opiates. But the doctor could certainly choose to state his ‘no’ in a friendly manner:

“However much I would like to oblige you I just cannot . . . I don’t find it within my powers to . . . / Regulations are that . . .”

**Safety-netting**

Providing an adequate safety net is the doctor’s guarantee for easy sleep at night and a preventive measure against the unexpected. Most doctors were quite good at giving the patient a shared responsibility, for instance a patient with backache: “If the pain gets worse, or if you start having trouble passing urine or stools, then call back, please.” However, fewer remembered to inquire into how the patient had understood the information provided or to ask if the patient had any further questions.

**Doctor’s piloting of the conversation**

“When you wish to truly succeed in directing another person to a given point, your first consideration has to be: meeting him right where he is, and start there. This is the secret of any expert assistance . . .”

It was characteristic of most of the doctors that they were directing the discourse strongly—presumably in the belief that they were saving time. Most doctors felt insecure when they did not find out right away what the nature of the patient’s complaint was, e.g. ‘stomachache’. This made them interrupt their patients, ignore
their questions and put forward the familiar closed-end questions, e.g. ‘When did it start? Where is the pain located?’”, thus interrupting the patient’s narrative. Therefore, the doctor needs to learn to endure his own diagnostic uncertainty until the patient has supplied a detailed picture of his/her situation and the assistance required.

Directing the discourse at an early stage impeded communication, both for doctor and patient, which in turn produced an incomplete medical history, with the risk that the doctor missed important bits of information, such as symptoms indicating meningitis.

A simpler way (as mentioned earlier) would be to start by obliging a worked-up patient who wants to ‘order a bedside visit by a doctor’: ‘Well, I’m sure we can manage that, but you’ll have to help me/give me a little more information and tell me what’s the problem’— and then let the patient do the talking. By giving a positive reply and accommodating the patient, the doctor gets the benefit of a ‘bonus point on his account’, which will prepare the ground for making the patient more responsive to the doctor during the following discourse.19

Viewed at a distance, it would seem that doctors want their patients to fit nicely into their own universe. Mishler once described the situation as if doctor and patient appear to belong to two separate worlds (the world of medicine and the life-world).20 If the doctor takes over at an early stage, the doctor–patient discourse will reflect the doctor’s attempt to make the patient ‘fill in the gaps’ in a picture he has formed in his own mind right from the beginning. And even if the doctor’s picture may change during the process, he is in danger of misleading the patient. A doctor’s picture of the situation can never become anywhere near as precise and complex as the patient’s, so, whenever possible, the doctor should take care to have the patient with him as a guide all along the way.

Moreover, the role-plays made heavier demands on the doctor than most everyday consultations, in that a ‘patient’ would sometimes include specific difficulties, e.g. by impersonating a patient he himself ‘loved to hate’. In a few cases, the doctor actually came up with new, alternative ways to deal with the patient.

These courses helped to focus attention on our clinical methods for providing relevant information from the patient in a prompt and concise way. After a few seconds, when most doctors started asking closed-end questions or interrupted the patient, the ‘patient’ would experience something resembling a power struggle with the doctor, who was trying to maintain his role as the one who had the say, like a homing missile that seems to steer by a set of specific targets. Practice in using chronology and key questions has provided significant fixed points when trying to counteract this tendency. This type of training is a first step towards quality assurance and development of emergency-service functions. It also involves the unlearning of less helpful habits, where a doctor’s closed-end questions meet the patient with a cognitive approach, while it is concern (i.e. something affective) that makes the patient call. Role-plays with video-review provide an adequate setting for colleagues to meet and have an open and stimulating time together, where everyone has got something to learn, and nobody is perfect. Thus participants become accustomed to reflecting on their own clinical method and communication behaviour.21

The validity of the key questions developed in the consultation lab is determined by their usefulness and applicability as experienced by ‘the patient’. The transferability of key questions must be tested ‘live’.

The video-recorded role-plays represent a major bulk of experience that can be systematized by analysis, as we have attempted in the present paper. Therefore, this type of laboratory, followed by analysis, represents a research method whose findings can quickly be redirected to the users (doctors), and in which the validity and applicability of the results can be tested. This makes the consultation lab a connecting link between educational theory and research.

We would have liked to conduct a blindfold evaluation, based on the doctors’ videotapes before and after, in order to evaluate the changes that the courses had produced in doctors’ behaviour. We hope to be able to do this in conjunction with future courses.

Discussion

After the participants had taken turns playing doctor and patient, had completed several rounds of 2–6 minutes and had come to realize how much easier the doctor could have got down to the nitty-gritty as soon as possible, without overlooking differential diagnoses, several started using key questions. Though at first the key questions felt awkward and rarefied, they did work. In several role-plays, a ‘patient’ felt that the doctor pretended not to hear him, which ‘the patient’ might read as arrogance on the part of the doctor. However, this was rather the result of the doctor’s ill-advised use of closed-end questions—a habit which perhaps lingered on from his time as a house officer. In the emergency service and in general practice we are faced with non-referred health problems, which require more open-ended questions to investigate the health problems.

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