

# Patients and general practitioners have different approaches to e-mail consultations

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## ABSTRACT

**INTRODUCTION:** The few extant Danish studies on e-mail consultations were undertaken before it became mandatory under Danish law to offer patients this form of consultation. This study investigates the ways in which patients and general practitioners communicate with each other by e-mail, explores factors influencing this means of communication and puts into perspective the potential of e-mail consultations in patient treatment.

**MATERIAL AND METHODS:** The study is explorative and based on an individual interview and four qualitative focus group interviews. The empirical data were analysed from a social constructivist and a practice-theoretical approach.

**RESULTS:** The study indicated that patients wanted to be able to use the general practitioner (GP) as a sparring partner in e-mail consultations. They expected a reply in case of uncertainties. The GPs found it difficult to handle complicated medical problems by e-mail and they tended to send a standard reply. A number of patients perceived the wording of the standard reply as a rejection of their problem. Patients highlighted the logistical advantages of e-mail consultations, the physical separation of doctor and patient which made it easier for them to disclose psychological or intimate issues. The GPs preferred short uncomplicated questions with no option for the patient to enter into a discussion.

**CONCLUSION:** Patients and GPs have different approaches to e-mail. The development of clear guidelines for patients and revised guidelines for GPs regarding e-mail consultations is therefore recommended.

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General practice in Denmark has gradually been implementing e-mail consultations. Since 2009, general practice has been required to offer patients e-mail consultations as a supplement to the other forms of consultation [1]. E-mail consultation is one of many measures designed to further digitise public health in Denmark in response to calls by the Danish parliament for greater efficiency of the health sector to raise the level of quality of its services and to ensure security and renewal [2]. 2008 saw 1.2 million e-mail consultations – one year before it became a requirement for physicians to offer this service. By 2013, the number of e-mail consultations had

increased markedly, reaching four million – equivalent to 11.2% of all GP consultations in Denmark [3].

The relatively few Danish studies concerning e-mail consultations were undertaken before it became mandatory to offer patients this form of consultation [4]. First movers, i.e. enthusiastic patients and GPs, conducted these studies which showed that the GP's enthusiasm for e-mail consultation and his communication skills affect the patient's approach to the medium [5].

E-mail consultations have typically been used to communicate test results, order drugs and for quick questions [4, 6, 7]. Patients primarily experience the benefits of quick access to their GP [5, 8] and the benefits of not having to consider the time of the day when they communicate with their GP [6, 7, 9]. Other patients were more reserved, indicating that they needed to know their GP well prior to adopting this method of consultation. Some patients required an invitation from their GP prior to an e-mail consultation [4, 5, 6].

GPs express concerns regarding their use of time, lack of personal contact with the patients, acute issues and loss of income [10]. The GPs emphasise that e-consultations are appropriate for solving the patients' administrative problems (such as booking a consultation, renewing prescriptions, receiving test results) and the ease of access to general practice allows for greater continuity in the treatment of the patients, especially for patients with chronic diseases [9, 11]. Some foreign studies have focused on IT security in e-mail consultations, an issue that has not been examined by the Danish studies [8, 10].

It is clear from previous studies on e-mail consultations that it is a complex field where patients and doctors are expected to work together on the issues presented by the patients. Do the parties form a consensus in this meeting or do they have different expectations of how the e-mail consultation should be used? This study investigates the ways in which patients and GPs communicate with each other by e-mail, identifies the factors influencing this means of communication, and puts into perspective the potential of e-mail consultations for patient treatment.

## MATERIAL AND METHODS

The material is based on an individual interview and

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qualitative focus group interviews with patients and GPs who have experience with e-mail consultations, and a patient questionnaire collecting data on socioeconomic and demographic factors, computer skills and health [12]. Patients were recruited a) by a mailshot through an internal mailing list at Roskilde University and b) through randomised selection, where 128 e-mails were sent randomly to patients classified by age by the "Emar" e-mail system of a general practice clinic in the Capital Region of Denmark. About 1,200 out of a total of 6,000 patients associated with this practice had registered for e-mail consultations. The criteria for participating in the study were experience with e-mail consultations and an age and gender range. Students and patients who were interested in participating contacted the study coordinator by private mail. Patients from the three focus groups consisted of six women and one man in the first interview, three women and one man in the second interview and two women and one man in the third. The patients received oral and subsequently extensive written information about the focus group interview.

The 27 GPs received an oral invitation and subsequently an informal letter about the focus group interview. The five participating GPs were men and women from urban and rural medical practices, solo and health centre practices. The material was coded, categorised and analysed using an abductive approach [13]. By applying different theoretical approaches, we accomplished a deeper understanding of the field. Thereby, the overall themes from the study appeared as:

- a) Settings in the field of study. Settings are derived from The Ottawa Charter and denote the context in which the individual lives his life and takes action regarding his health [14].
- b) How the stakeholders conduct e-mail consultations.
- c) The importance of the medium.

The empirical data were analysed from a social constructivist [15] and a practice-theoretical [16] approach in which communication between GP and patient is understood as a social process created in the interaction and affected by outer circumstances.

*Trial registration:* journal no. 2012-41-0063 at the Danish Data Protection Agency.

## RESULTS

The main findings of the study are that GPs and patients have different perceptions of the purposes for which e-mail consultations are suitable. The GPs prefer to give concise answers by e-mail, and they are particularly concerned that misunderstandings may arise and that too much of their time may be used. Patients see e-mail

consultations as an opportunity for a quick health check and personal coaching.

### Reason for contact

The study indicated that more patients turned to their GP for a so-called "health check": a general health check including blood pressure measurements and so on, with the expectation that the GP would grant their wish. The patients wanted the kind of correspondence with the GP in which they could use the GP as a sparring partner. They also expected the GP to reply in case of uncertainties.

*Patient: "But then the GP also has the possibility of replying, if he [the GP], feels that there's something which is unclear, right? They [the GPs] can then reply and ask, what exactly do you mean by that?' Or, how are you with other symptoms?' Or something like that, right?"*

The GPs pointed out that not every problem is suitable for e-mail consultation. They found it difficult to handle complicated medical problems by e-mail, partly because they found that it was difficult to evaluate the patient's problem without a physical meeting, and partly because they were concerned about potential misunderstandings of what was said in the e-mails. As a result, they found themselves spending considerable amounts of time composing their e-mails.

*GP: "It is something that is very difficult to judge, because they [the patients] ask such diffuse questions: 'I am a bit tired' or, 'it hurts a bit there' or, 'I have a spot there'. It is impossible for us to judge if this is such an easy question or if we might be overlooking some kind of really serious disease".*

In such cases, most GPs responded to the e-mail with a standard reply that said that the question was not suitable for an e-mail consultation. The GP told the patient to book a time for a personal consultation. The tone and the wording, i.e. that the problem is not suitable for e-mail consultation, were experienced by a number of patients as a rejection of their problem.

### Fear of the medium/workload

The GPs considered the recommendations for e-mail consultations by the Danish Medical Association (PLO) and the Region's Board for Wages and Tariffs (RLTN) as the guidelines for e-mail consultations. The GPs preferred short uncomplicated questions with no option for the patient to enter into a discussion. Several GPs put off replying to the patients, so that the patients did not get used to quick responses.

*GP: "I have to admit that I let them [the patients] stew a bit on purpose. Because they ought not to get used to thinking that they will receive an answer 10 min. after they asked the question".*

Patients considered quick responses from the GP to their e-mail requests to be the best approach, for example the same day. They did not consider how urgent their question was before they sent the e-mail. The patients thought that they disturbed the GP less by sending him or her an e-mail than by telephoning or visiting the surgery. The participating GPs said that they had up to four e-mail consultations a day, fewer than they had expected. They expected this figure to increase. At one of the surgeries, the clinic nurse replied to some of the e-mails received.

### E-mail consultations: benefits and potential

Patients highlighted the logistical advantages of e-mail consultations in particular. They stressed that it was nice to avoid telephone queues, and some patients said that the telephone queue could cause them to delay or fail to contact the GP.

*Patient: "Okay, there may be some times when I should go to the GP, but I simply do not bother to take time off work in the middle of the day or something".*

The patients primarily used the media for test results, but also for problems that they found difficult to present by telephone or in personal consultations. The physical separation of the doctor and the patient in the e-mail consultation made it easier for the patients to disclose psychological or intimate issues. Additionally, e-mail consultations afforded patients with the opportunity to communicate privately with the GP even in places that are not so private, such as the workplace.

Patients appreciate the opportunity to communicate in writing. It gives them time to express their problem in words; this can be difficult in a hurried personal consultation, and it helps them remember the recommendations made by the GP.

*Patient: "Not having enough time [at personal consultation] to put [a health problem] into words can be quite daunting".*

Patients saw the potential benefits of links to relevant websites with valid information about their disease that GPs could include in their e-mail responses.

*Patient: "It could have been very nice if there [in the GP's e-mail] had been a reference to [the disease], like you could get a brochure in your hand, you could also just as well go onto the Internet, and then just explore something more specific about it, and then look at the chapter and look at such and such".*

Patients also pointed out that it should be possible to attach documents and images to consultation e-mails. This would allow them, for example, to send a picture of a skin rash.

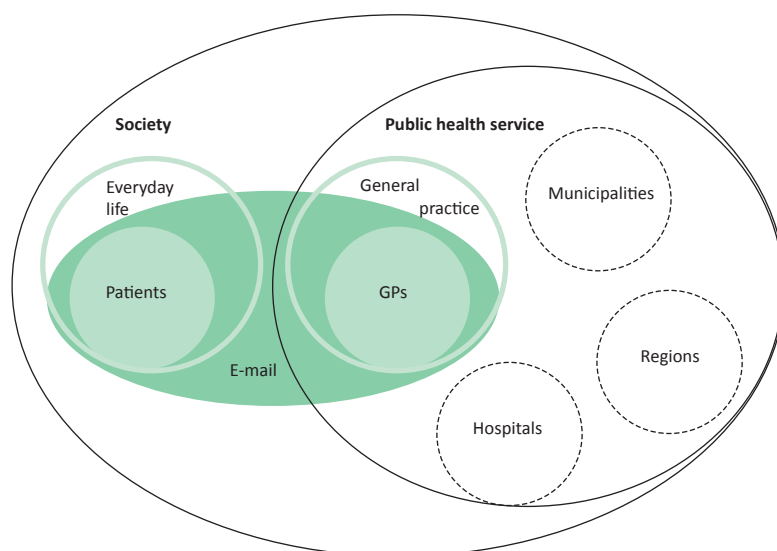
### DISCUSSION

The significance of the differences between the patients'



FIGURE 1

Simplified figure showing the setting in which e-mail communication between general practitioners (GPs) and patients takes place. The setting is constituted by the public health service, general practice, the patients' everyday lives and the e-mail consultation. Furthermore, the figure illustrates how society affects patients and general practice.



and the GPs' context are discussed, as is the potential for increased patient involvement.

### Settings

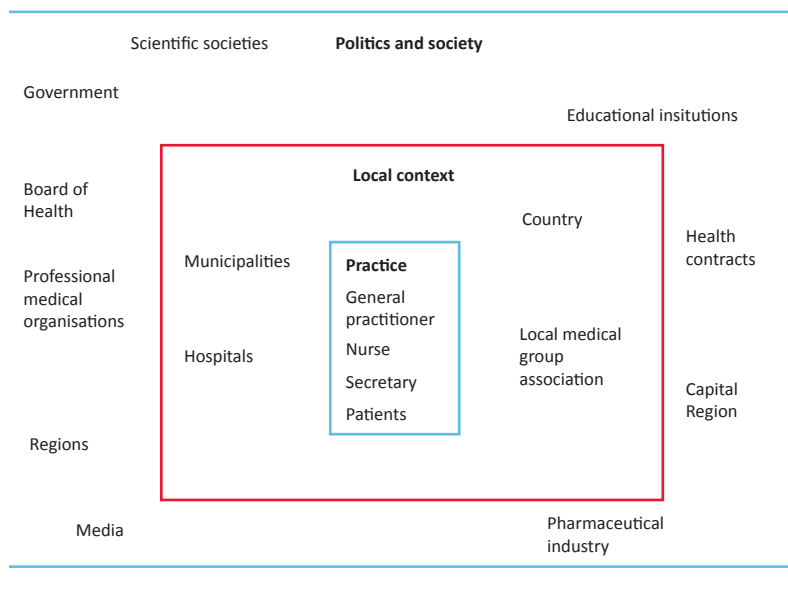
Patients' communication by e-mail is affected by a number of factors from their everyday lives, such as where they work, or the way their family and friends use e-mail (Figure 1). Society also affects the patient's health-related actions. For example, patients are expected to assume responsibility for their own health and to deal with risks and warning signs [17].

GPs' e-mail communication is affected by their working life, everyday life and the health care that general practice forms part of. Moreover, it is governed by authorities that also want to influence the GP's work (Figure 1 and Figure 2). Furthermore, general practice is an independent profession affected by market thinking, where profits, staff and customer orientation are important.

E-mail communication is on the cusp of conversation and written material; it has the characteristics of both forms, such as the possibility of quick responses (almost synchronous communication), informal tone and editing and structuring, which increases the risk of misunderstandings [18]. This concerns the patients and the GPs alike [4]. The GPs feel that they forfeit an important dimension in their communication if they cannot observe the patient's body language and feelings [8, 19]. On the other hand, GPs may unwittingly use technical

FIGURE 2

Simplified figure showing the field of stakeholders that influence general practice.



terms and academic expressions, which can influence the patient's understanding of the text in the e-mail [20]. Moreover, the medium may primarily accommodate the resourceful patients [8]. The study thus shows that difficulties arise when patients and GPs communicate with each other through a written medium. By using predefined guidelines for e-mail consultations, it will probably be possible to minimise the risk of such misunderstandings.

### Patient involvement

The written medium gives patients a unique possibility to formulate their agenda without having to rush, to review the GP's reply, and to discuss the content with others. Similarly, it allows the patient to bring up difficult issues such as melancholy and depression, as also reported in other studies [6, 8, 7, 11, 19].

E-mail consultations afford patients the unique possibility to participate actively in their own treatment, since they can ask questions at any time about things they do not understand; patients also have the opportunity to discuss their problems with the GP. This type of discussion, or sparring, may support the patient, but can also increase the GP's understanding of the patient's situation.

The tone of the GP's standard replies is misunderstood by some patients, who see it as a dismissal of their problem. Other studies also indicate that there are problems with standard replies, so it may be appropriate to reassess these and render them more personal and appreciative [6].

### CONCLUSION

Patients and GPs have different approaches to the use of e-mail for communication. The recommendation of clear guidelines for e-mail consultations for patients and GPs seems to be justified. The medium has a potential as a platform for sharing information and images and for helping patients to learn more about their conditions by providing links to articles and websites.

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