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Teleconsultation in geriatrics: Impact on professional practice

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ABSTRACT

Teleconsultations in medicine are encouraged by authorities and decision-makers to improve access to specialty services for isolated patients. For elderly patients in geriatric hospitals, they thus avoid trips to consult with specialists. However, teleconsultation can modify clinical practice and it may be abandoned for reasons not related to technical issues. Qualitative research on the impact of teleconsultation on medical practice and organisation are thus crucial for an understanding of the changes it can generate.

Methods: We used qualitative methods to analyse the impact on professional work practices and care organisation of an initially experimental and then permanent teleconsultation system using a video conference system set up between a geriatric hospital and a tertiary care hospital. Sixty-six teleconsultations (56 during the experimental phase and 10 when the system was in routine use) were observed and ten semi-structured interviews were carried out with the actors in the teleconsultations.

Results: Our study shows that the uses of teleconsultation affected work practices of both the consulted specialist and the geriatrician who participated in the consultation alongside the patient. The interactions of specialists with the patient were more difficult than in a face-to-face setting and delegation of the clinical examination of the patient depended on a specific form of cooperation and on trust in the person doing the examination. New kinds of relationships between health professionals contributed to sharing and transmission of knowledge between practitioners. While teleconsultations established alliances between geriatricians and specialists, they none-the-less called for a certain humility on the part of geriatricians. In order for these relationships to become routine and to facilitate interaction among participants, the project manager carried out important work during the experimental phase of the teleconsultations by organising these interactions. Finally, the teleconsultations went through several local reorganisations, especially within the geriatric hospital. These included changes in the geriatrician's schedule and the added presence of an assistant knowledgeable in telemedicine.

Conclusions: Specialists found the system used for teleconsultation between a geriatric hospital and a tertiary care hospital to be suitable for their consultations. The main advantage brought about by the teleconsultation system studied resulted from its collaborative nature, which created relationships between health professionals. This resulted in improved care for elderly patients. However, using the system required effort on the part of both the specialists and the geriatricians. Adapting to the system was facilitated by coordination work carried out by the project manager during the experimental phase that created a favourable

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context for cooperation between actors, allowing diagnoses to be made at a distance. Finally, teleconsultations do not appear suitable for all specialties, by reason of the limits imposed on the delegation of tasks, or to all situations. They require setting up new forms of organisation that must be encouraged by decision-makers.

1. Introduction

Teleconsultations enable health professionals to carry out patient consultation at a distance and to give access to secondary care or specialist services, for example. Teleconsultation appears convenient for patients unable to be moved around, either because they are in a closed institution (a geriatric hospital, a prison or psychiatric ward for example) [1–4] or because they live in areas difficult to reach [5–7]. Numerous experiments with teleconsultation have been carried out across the world [8], but many did not lead to its installation in spite of initial enthusiasm on the part of participants, who saw in it a way of dealing with problems in the organisation of care [7,9]. There are many reasons for these failures. The various techniques used (phone call, videophone, video conference, etc.) may constitute important limiting factors [10,11] and in this regard, video conferencing is increasingly used since it allows good-quality transmissions at an affordable cost [11–14]. However, along with technical difficulties, the impact on the organisation of care and professional practice is frequently mentioned as a possible factor jeopardising the establishment of telemedicine systems [10,15,16]. This is similar to what is known in general in the field of medical informatics as well as in Computer Supported Cooperative Work (CSCW) [17–22] which addresses the way information technology impacts cooperative works and practises. For this reason, recommendations have been made, both in scientific publications [23–26] as well as in manuals and guidelines [27–29] to evaluate cultural and organisational changes that may be brought about by telemedicine.

In France, teleconsultation has long remained at a very experimental stage due to lack of a legal framework. But since 2009, it is not only authorised but even encouraged, in order to respond to problems linked to medical demography, to a lack of physicians in certain specialties and to the ageing of the population. Indeed, remote consultation appears particularly suitable for older patients who are difficult to transfer between institutions [2,4]. In France, as in other countries, a major problem concerns access to specialists by patients in geriatric hospitals. Usually, in order to gain access to a specialist consultation, patients must be transferred to another hospital, which frequently takes more than half a day (preparation for departure, delayed ambulances, waiting room time, etc.) for a consultation that takes less than 30 min. These trips are not only expensive, but also stressful and tiring for very elderly patients who often have cognitive impairments.

Recently, a teleconsultation system called Telegeria HD[1] was developed between a geriatric hospital and a specialist hospital, with the objective of facilitating patient access to specialists. The system is similar to the one used in videoconferencing and transmits pictures between two institutions in real time and on high definition screens. Following an experimental phase lasting nine months, the system was adopted for routine use, and more than 1500 teleconsultations had been carried out as of September 2012.

In this article, we analyse the organisational impact of Telegeria HD, with the goal of understanding the processes of adaptation to clinical needs, clinical routines and the organisation of care that enabled the long-term adoption of this system for use with the elderly.

1.1. *Background on the impact of teleconsultation on professional activities and the organisation of medical care*

1.1.1. *Teleconsultation: a medical act with group characteristics*

In many cases, an important change brought about by teleconsultation results from its collective nature [9,30]. This is true for Telegeria HD where the geriatrician and other health professionals (nurses, physical therapists) participate alongside the patient in the teleconsultation by the specialist. Thus, teleconsultation establishes relationships among health professionals who usually don't work together in the presence of a patient. In this way, teleconsultation can change a traditional face-to-face act of consultation with the patient into an act necessitating collaboration, but also learning, with the videoconference system becoming a tool for interaction [30].

In general, the coordinated meeting of physicians promotes sharing of knowledge and expertise of a professional nature [10,30]. However, this new form of interaction brings together professionals who may be from different levels of the medical hierarchy, and this asymmetry of expertise may become a source of frustration or awkwardness [9,10].

1.1.2. *Limitations on clinical routines*

Teleconsultation also has an impact on the way the physician establishes a diagnosis since he or she is unable to carry out a direct clinical examination of the patient. For the specialists, the use of the system requires a good deal of adjustment. First, they must adapt to communicating with patients in a setting different from face-to-face consultations [18,31,32]. Moreover, specialists who base their diagnosis mainly on signs discovered clinically through palpation or a thorough examination have difficulties during teleconsultation because they must delegate those tasks most important to their professional activity to a non-specialist physician or even to another health professional (physiotherapist, nurse) [33]. From previous analyses, it is apparent that teleconsultation is not always suitable for all specialties because of the limits imposed by the delegation of tasks [9,34].

[1] For more information and presentation of Telegeria HD, see: http://www.telegeria.fr.