Telemedicine and the doctor–patient relationship

Telemedicine alters traditional concepts of what constitutes the doctor–patient relationship by interposing a physical distance between doctor and patient during their consultation. Although such a separation is not new, doctors having used the telephone for over a hundred years[1], the recent addition of a visual component to long accepted audio links marks a quantum change and defines what we currently understand to be telemedicine. Clinical signs, X-rays and pathological specimens that previously needed verbal description, can now be viewed directly by the distant clinician – this is clearly a diagnostic advance. Paradoxically the advance in diagnostic accuracy offered by telemedicine may be seen in some quarters as a threat to professional power. Such a reaction is not entirely unexpected; a similar response has greeted each technological diagnostic advance since the stethoscope[2]. Professional resistance to telemedicine, where it exists, is compounded by the increasing polarisation of attitudes among those who feel strongly that telemedicine is an unacceptable way to practise medicine, and those who view it as the technique of the future[3].

Although direct physical examination is not possible with current telemedicine techniques, experience shows that most diagnoses can, in fact, be made through history taking and with a proxy examination performed by the practitioner who is with the patient. The specialist, giving advice by telemedicine, acts as a source of information and provides an opinion, leaving the choice of appropriate clinical action to the teleconsulting practitioner and the patient. The pivotal question is: does telemedicine enhance or detract from the therapeutic relationship between doctor and patient?

The doctor–patient relationship is often regarded as the 'gold standard' that underpins health care delivery. However, this may simply reflect nostalgia for a bygone age. Patients are increasingly expressing dissatisfaction with the treatment they receive from doctors who practise in the traditional 'doctor knows best' way, because they do not get enough information during their consultations[4]. Hence the doctor–patient relationship now has two components: there is the empathetic component that requires an understanding of the individual and a tailoring of treatment options to the patient (the 'art of medicine') and the need for expert technical knowledge (the 'science of medicine'). The expanding volume of medical literature makes it difficult for doctors, generalist or specialist, to keep pace with the diagnostic and therapeutic options that the science of medicine is making available. At the same time, increasing specialisation within medicine narrows the range of individual medical expertise, and means that doctors need expert help with less frequently managed, and less familiar, medical conditions. Patients expect a consultation that encompasses art *and* science from their doctor, both of which require the trust of the patient. If doctors are unable to assure patients of their technical (scientific) knowledge, this undermines the magic of the art of medicine. How can the busy and relatively isolated doctor, especially when working in primary care, keep in touch with the growth in knowledge? Could telemedicine be the answer?

Reliance on traditional modes of practice, and a blind belief in the doctor–patient relationship as a sacrosanct interaction, create a potential schism between the expectation that doctors are a source of information for patients about all aspects of health care, and the need to develop methods of producing doctors who can function effectively in that capacity. In this context, telemedicine can enhance the process by permitting doctors to say 'I don't know' and allowing them easy access to an expert opinion, if required. As yet, no consensus exists as to whether telemedicine enhances or damages the traditional practice of medicine. Most work to date has focused on the doctor, rather than the patient, although there are clear advantages for patients in terms of the rapidity of diagnosis and the avoidance of travel. Perhaps these advantages to patients will outweigh any perceived disadvantages to practitioners. Somewhat belatedly, attention is being given to training medical students and junior doctors in communication skills; it is interesting to note that video is increasingly being used as a teaching medium.

In the purists' view of the doctor–patient relationship, telemedicine devalues the art of medicine. This viewpoint implies an incongruity between the medium and the message. Is this real and, if so, does it justify resisting the introduction of telemedicine into clinical practice? This is an important question for those who are currently deciding how telemedicine will feature in their strategic plans for health care delivery, and because the support of doctors is crucial if telemedicine is to become a viable method of clinical practice. A rational answer can only be found by assessing the evidence from evaluations based on real experiences of using telemedicine, and not in perpetuating the paranoia with which new technology is often greeted in medicine.

The issue of the doctor–patient relationship is not

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an abstract one. Health services in all industrialised countries are grappling with the pressure to supply more and better health services at lower cost. Telemedicine offers the possibility not only of radically altering the way that health care services are supplied, but also of reducing the cost. In the UK the National Health Service retains its founding principles of providing health care free at the point of delivery, but is beset by the economic consequences of living up to this remit. Changing the traditional methods of consultation to take advantage of telemedicine where appropriate must be based on solid evidence that it reduces costs, lowers clinical risk, or makes it possible to provide appropriate health care services that cannot otherwise be provided. Doctors and other health care workers need to explore all possible means of sustaining the provision of public health care if rationing and other exclusions of patients from health care services are to be avoided.

The experience of the last few years shows an inexorable growth in the use of telemedicine because of changing costs and clinical acceptance. The early telemedicine trials were in remote areas where geographical distance and inhospitable climate demanded a change in clinical practice and justified the price premium. As the technology required for telemedicine has fallen in price and risen in performance, it has moved from special purpose videoconferencing equipment to personal computers. The locus of telemedicine activity has also shifted from pioneering work in places like Scandinavia and Australia to routine use in North America and Western Europe. The lessons learnt from remote telemedicine offer solutions to everyday dilemmas in delivering health care to prisons, minor injuries clinics, dermatology services and to the export of medical expertise.

Whether as spectators or participants in the current telemedicine experiment, we all have a common interest in finding out whether it offers a way of re-establishing the doctor–patient relationship as the lynchpin of health care delivery. If telemedicine is not the answer, then we need to find ever more radical solutions to maintain health care as the basic right we have come to expect since the Second World War. The stakes are high and telemedicine deserves a suspension of prejudice to allow an unbiased evaluation of how it may contribute to maintaining the art of medicine whilst adding to the science by which it is practised.

References

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