

COVID-19, Telemedicine and the Demise of the Physician's Touch

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Abstract

Even before the #MeToo movement, touching another person carried an element of risk. With the advent of the COVID-19 pandemic, that risk has intensified, due to the role of direct contact between individuals in spreading the infection. This is not to say that the danger of becoming infected by touching another person was unrecognized prior to the COVID-19 pandemic. Infection control practitioners have long extolled the benefits of washing hands between patients, and of isolating those in the hospital with known transmissible infections. Whereas in the distant past comforting patients by sitting on their bed and holding their hand was a part of the art of medicine, recent policies have made the practice an infection control no-no.

Recommendations: There is the need for a multidisciplinary approach and the relevance of psychiatrists and psychologists in pretreatment evaluation as well as in the course of treatment.

Keywords: COVID-19, Infection, Telemedicine

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Introduction

Until now, social distancing was enforced less stringently in the out-patient clinic than in hospital. COVID-19, of course, radically changed our perception of the health risks of direct contact with out-patients, and for that matter, people in general. As a consequence, social distancing is now as vigorously enforced in the out-patient setting as it is in hospital. Telemedicine – virtual clinic visits using platforms such as ZOOM – has enabled clinicians, for the most part, to do what needs to be done in caring for out-patients without having direct contact with them.

In many out-patient practices, telemedicine clinic visits are now the norm. In 2019, for example, the Veterans Administration completed some 2.5 million telehealth encounters, whereas in 2020, such visits are on track to exceed 6,000,000 [1]. Prior to the pandemic, the Center for Medicare & Medicaid Services (CMS) supported 13,000 telehealth visits per week [2]. By May 2020, the number had risen to 1.7 million per week. In view of this rapid, massive increase in telemedicine activity, many practices now are considering expanding their telemedicine programs substantially should reimbursement for such visits continue once the COVID-19 pandemic ends.

The advantages of telemedicine visits are numerous. Aside from their infection control value with regard to the social distancing they provide, telemedicine clinic visits are convenient, cost-effective and efficient. In fact, many patients prefer them over in-person visits, finding virtual clinic visits easier to attend, while still meeting their medical needs [3].

Unfortunately, many of the most vulnerable patients lack the technology required for telemedicine visits or are uncomfortable with the process. Moreover, while such visits are desirable from an infection control stand point, the lack of physical contact

between physicians and their patients during virtual clinic visits has a number of downsides.

Surveys have shown that the laying on of hands in some manner by the physician is expected by most patients when being seen [4]. Women, in particular, generally report a positive reaction to being touched in a professional situation. This was revealed in a survey (albeit one conducted prior to the #Me Too movement) in which Dr. Jeffrey D. Fisher and colleagues [5] found that “the affective and evaluative response” to touch by a professional was uniformly positive for women, though more ambivalent for men.

Materials

Touching, in fact, has probably always been an important part of physicians' interaction with patients. In the 2nd century C.E., Galen, who derived inspiration from the ancient Egyptians through Hippocrates, promoted the importance of the physician's touch in taking the pulse and temperature, and in palpating the body, especially the abdomen. Over a millennium and a half later, Sir William Osler wrote that the “whole of medicine is in observation” – not just in terms of what the physician sees and hears, but what he/she feels with the fingers, and sometimes, smells or tastes, which of course is not possible during a telemedicine clinic visit. Although instruments to aid vision (e.g., ophthalmoscopes) and hearing (e.g., stethoscopes) have been developed and can be used by physician assistants to convey clinical information to the physician, no aid for the sense of touch exists.

The physical examination, during which touch plays such an important role, is a unique opportunity to spend meaningful time with the patient which enhances care in ways that are material as well as intangible. When a physician touches a patient, both parties experience an affirmation of the doctor-patient

relationship. The bond established between doctor and patient by physical contact also serves to amplify the information being communicated. When the touch is exploratory, instantaneous, inexpensive results are obtained with a minimum risk to the patient, from which clues to diagnoses are revealed, that are of value in directing additional testing, sometimes obviating the need for testing altogether. The physician's touch can be reassuring to the anxious patient. Moreover, a thorough physical examination involving the extensive laying on of hands by physicians instills confidence in patients that their physician is being thorough. Only by touching the patient, can the physician (or for that matter a surrogate such as a physician's assistant or nurse practitioner) take the pulse, measure the blood pressure, detect abnormal lymph nodes, ferret out occult mammary tumors, evaluate the abdomen for abnormalities such as a pulsating aneurysm, mass or enlarged liver or spleen, or perform a pelvic, testicular or neurological examination. None of these, of course, can be done during a telemedicine clinic visit.

Such examinations continue to be a cornerstone of the patient evaluation. Most investigations looking into the relative contributions of the history, physical examination and test results in making diagnoses cite 60-80%, 10-20% and 10-20%, respectively [6,7]. However, their effects are additive and, therefore, integrative. In a survey of inadequacies of the physical examination as a cause of medical errors and adverse events published in 2015 by Abraham Verghese and colleagues [8] at Stanford University, 208 cases were identified in which failure to perform a proper physical examination or misinterpret the findings of such, resulted in missed or delayed diagnoses, incorrect treatment or other adverse consequences. Ninety-four (45%) of the physical findings missed or misinterpreted involved touching the patient. In a related survey published in 2003, Dr. Brendan M. Reilly [7] at the Cook County Hospital in Chicago determined that nearly one in every four inpatients treated at his institution had pivotal findings on physical examination with a potential for substantially affecting their care. In 12 of the 26 cases (46%) cited in the manuscript, the pivotal finding was one detected by touching the patient.

In 1980, at the Tennessee Regional Meeting of the American College of Physicians, Dr. R. H. Kampmeier [9], who authored a book on physical diagnosis used by most medical students at that time, mused about what it was like when he was in training. He said:

“My generation of medical students did laboratory work which encompassed routine blood counts and sedimentation rate, urinalysis and the PSP test for renal function, the Ewald test meal, Lyon gallbladder drainage and stool examination, and sputum examination for the acid-fast organisms, eosinophils, and Curschmann's spirals.”

Conclusion

As a result of enactment of the Clinical Laboratory Improvement Act of 1988, student labs where such tests were performed are now closed. No longer do medical students obtain immediate gratification from diagnoses revealed by tests performed with their own hands. Given the speed with which telemedicine is transforming clinical encounters, one wonders (and worries) whether future physicians in the twilight of their careers will muse. “In my day, we touched patients routinely. It was done during nearly every visit. There was no art of medicine without a physician's touch”.

References

1. <https://www.beckershospitalreview.com/telehealth/va-taps-philips-for>.
2. <https://www.beckershospitalreview.com/telehealth-providers-doing-more-visits-t>.
3. Morris NP. Staying apart during a pandemic. *JAMA Intern Med.* 2020;180:1047-8.
4. Bruhn JG. The doctor's touch: tactile communication in the doctor-patient relationship. *South Med J.* 1976;71:1469-73.
5. Fisher JD, Rytting M, Heslin R. Hands touching hands: affective and evaluative effects of an interpersonal touch. *Sociometry.* 1976;39:416-21.
6. Hampton JR, Harrison MJG, Mitchell JRA, et al. Relative contributions of history-taking, physical examination and laboratory investigation to diagnosis and management of medical outpatients. *BrMed J.* 1975;2(5969):486-9.
7. Reilly BM. Physical examination in the care of medical inpatients: an observational study. *Lancet.* 2003;362:1100-5.
8. Verghese A, Charlton BC, Kassirer JP, et al. Inadequacies of physical examination as a cause of medical errors and adverse events: a collection of vignettes. *Am J Med.* 2015;128:1322-4.
9. Kampmeier RH. Medicine as an art: the history and physical examination. *South Med J.* 1982;75:203-10.

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