

Correspondence

Virtual physical examination in video consultations: A valid inspection component of physical examination?

The use of telemedicine to provide consultations at remote places is possible these days with advances of digital technology in audio, video, messaging, chat, especially in synchronous mode. Among the available modes of communication, video consultations (VCs) are more appropriate for remote consultations in view of better examination that is reassuring to the treating doctor. VCs provide real-time audiovisual assessment of the patient and enable appropriate treatment. VCs offer potential advantages to patients (in terms of cost and convenience of travel) and the healthcare system (cost-effective). Telemedicine is used for consultation¹ and on-consultation training (for primary care physicians)² models.

One of the contentious issues among physicians in the direct-to-patient, bi-directional live, real-time VCs is the inability to perform a complete physical examination. A complete physical examination consists of general and systemic physical examination. A general physical examination includes examination for pallor, pulse, oedema, nutrition, nails, skin, hair, cyanosis, icterus and lymph nodes. A systemic physical examination is a detailed examination of the four major systems of the body: respiratory, cardiovascular, gastrointestinal and nervous systems. The four methods of physical examination are inspection, palpation, percussion and auscultation.

We propose a new concept of 'virtual (inspection) physical examination' (ViPE) specifically for VCs. A stand-alone live VC provides an excellent opportunity for ViPE, a partial physical examination that includes only the inspection part of physical examination where inspection on rest as well as inspection on instruction (tremor, deglutition, gait, etc.) can be carried out. A ViPE can also assess the side-effects of medications such as extrapyramidal symptoms (tremor, slowness in gait, even akathisia and dystonia).

There is a need to evolve the methodology to validate the concept of ViPE in different clinical scenarios. The three possible methods to validate ViPE could be: First (subjective method), during an ongoing VC, clinicians may be asked to rate, on a 5-point Likert scale, the experience of ViPE in comparison with in-person consultation in case the same patient visits him/her: worst, worse, similar, better and best. Second (objective method), on experimental basis, examine patients by one clinician first in a ViPE followed immediately by an in-person inspection component of physical examination and compare both findings. Third and last (comparative method), examine the same patients in a ViPE by one clinician and by an in-person inspection independently by another clinician and then compare both findings. Validation of VCs with a scientific method will provide confidence not only to the clinician but also to the patient.

There is a need to adopt various techniques and scales related to in-person consultations to a newer mode of VC for future medical practice. For example, the Unified Parkinson's Disease Rating Scale was created specifically for telemedicine based on visual impressions only and it has shown higher reliability and validity.³ Similarly, we suggest disease-by-disease adaptation to integrate VCs in future clinical practice across primary care and specialist care.

In the present Covid-19 pandemic, some countries such as the USA and India encouraged the use of telemedicine as a method of infection-free teleconsultations for both doctors and patients. We believe that Covid-19 should act as a catalyst for exponential increase of VCs in clinical practice across the globe.⁴ Hence, the concept of a ViPE is more important to build confidence among telemedicine-naïve physicians. A telemedicine training programme for future physicians shall integrate

into ongoing and prospective undergraduate medical and residency programmes. Advances in technology may integrate the remaining important methods of physical examination such as palpation and auscultation into telemedicine consultations in the future.

Conflicts of interest. None declared

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Narayana Manjunatha
Channaveerachari Naveen Kumar
Suresh Bada Math
Department of Psychiatry
Tele-Medicine Centre
National Institute of Mental Health and Neurosciences
Bengaluru
Karnataka
India
manjunatha.adc@gmail.com