

Editorial

The role of telemedicine as a digital transformation of (orthopedic) patient care in the pandemic era

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The world was shocked on March 11, 2020, as the World Health Organization declared a global pandemic of a virus named SARS-CoV-2, which its first case was reported in China in December 2019. The world stopped spinning for a while, as the COVID-19 global pandemic hit us hard which caused significant burdens to the global health care systems. It is much understandable that a huge concern and anxiety has been roaring around both patients and health care providers concerning the health crisis. Perhaps, the only silver lining of all this challenging period is that ongoing public health urgently needs a reformation of its system. One of the most elemental changes has been the application of telemedicine into daily basis clinical care.

One of the biggest advantages of digital health is improved patient outreach. Access to healthcare services is undoubtedly one of the most discouraging challenges for many patients in Indonesia. Telemedicine uses technology to remotely deliver clinical care.¹ With the breakthrough apps in telemedicine, we expect a lot more patients can access healthcare services. Several benefits of telemedicine have been described such as improvement of health care access, lower overall cost unit, high patient satisfaction rate.²

Telemedicine in Orthopedic surgery

Pain and function impairment are the two most common causes for patients to seek medical care. As orthopedic surgeons, we are (perhaps) specifically and intensively trained to assist patients with these symptoms. We strive to get a full and detailed history and performed a meticulous and systematic physical examination for which will deliver around 70 – 80% of our working diagnosis. The next step is usually to order the correct supplemental imaging or laboratory work which will bring us to nearly 100% of the diagnosis. Through a shared and well-informed discussion, both doctor and patient will decide

whether to have a surgical approach or conservative treatment. When we look at the process above, there are 2 imperative components involved to achieve this unique relationship, which is trust and active communication. And from the way we see it, these 2 components were able to be reached by telemedicine or a traditional face-to-face appointment.

Telemedicine can almost assist all orthopedic care processes described above in most orthopedic scenarios.³ By using a text messaging platform, a surgeon can get a full scenario of a patient history and a patient-reported outcome measures after a certain procedure. By using video, a surgeon can check the range of motion of joint, gait, and strength.⁴ Using telemedicine, a surgeon is given a chance to triage which patient will need further face-to-face examination. For this reason and at the most majority of orthopedic patients, telemedicine may offer a more convenient approach compared to those traditional outpatient clinic visits.

Besides these benefits, some issues may be lacking in telemedicine. One might argue that the patient-surgeon relationship is built on an emotional bond which sometimes is better with a face-to-face visit. Physical exam, by means palpation on the patient is also a great loss in telemedicine.⁵ From a broader perspective, regulatory support by the authorities, liability, and reimbursement often become the challenges and barriers in telemedicine. The regulatory barrier is often closely associated with reimbursement by private payment models (private insurance). There are also challenges in increase in liability resulted from diagnosis making, recommendation of surgical treatment, and “under-standard” follow-up as the inability to perform a proper full physical exam after a procedure.

One special thought on this, because many orthopedic surgeons are now “competing” to provide telemedicine

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care, those who are not able to provide may be left behind in this competition. In other words, this is a survival of the fittest competition and those who are not ready may perhaps lose future surgical patients. Although the pandemic and recent changes have improved the ability of health care providers to care for patients remotely and have led to a dramatic rise in the number of telemedicine visits being offered, more sustainable and comprehensive changes are still required to support the integration of telemedicine into daily practice. Indonesia does have a promising market and trajectory of telemedicine technologies. One great challenge is to make sure that telemedicine served its purpose of providing accessible universal healthcare, not only for the private payment model but also for the subsidized services (BPJS insurance). Given the benefits and challenges of integrating telemedicine into orthopedic surgery practices, can we say that this system will remain beneficial once the pandemic resolves or just temporary after it expires? One thing we sure, the global pandemic has been a strong stimulant to this great deal of positive change. (EK)

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