Challenges of Social Media Platforms Used for Teleconsultation in Breast Cancer Management During Covid-19 Outbreak in Countries with Limited Resources

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According to WHO recommendations, during the COVID-19 pandemic, many elective activities of hospitals and medical centers were suspended or postponed. Cancer care, in general, and breast cancer care, as the most common cancer in women, are among the most crucial activities suspended or postponed in many centers. Since any delay in breast cancer diagnosis and management puts patients at risk, there was no choice for medical centers and physicians but to communicate with their patients through phone calls, Social Networks (SN), or Telemedicine Platforms (TP).[1] The use of telemedicine was unexpectedly high and inevitable, especially for the elderly and low-income population.[2]

Telemedicine is not a new concept. It was first introduced in April 1924 with the concept of radio doctor and has been around in USA and Canada for more than five decades.[3] Nevertheless, the widespread use of modern telemedicine is a relatively new concept in most parts of the world, especially in regions where health services are not easily available for the public or in critical situations where health authorities force quarantine. During the outbreak, in order to lessen the risk of patients getting infected by COVID-19 in their referral to hospitals, in many centers, physicians were asked to communicate with

their patients through phone calls, which had certain obvious disadvantages: During phone communication, it is not possible to send relevant documents. In this type of communication, the patient is also required to understand all the explanations provided by the physician and ask questions in a short period of time.[1,5] Other challenges such as technical support in TP, instructions, and access to special gadgets like webcams and microphones are the possible barriers in this regard.[6] Therefore, some physicians prefer to use public social networks (SN) such as WhatsApp, Telegram, etc., as a medium to communicate with their patients in which the exchange of information and documents is much easier than a phone conversation. Obviously, in making any communication with the patients, medical and legal considerations (i.e., HIPPA) should be strictly observed. In some countries with minimal HIPAA protection regulations and limited resources, physicians may use SN just to overcome force-major situations. On the other hand, the use of SNs for professional communication can be heavily criticized by ethics committees when Telemedicine Platforms (TP) are available.[7,8] This article hallmarks the limitations of social networks in the care of patients that need to be considered before adopting their widespread use in medicine.

Physician-patient communication

According to medical ethics and professionalism codes, physicians are prohibited from communicating with patients through an uncontrolled private space.[9] This open communication among physicians and the patients may make both the patients and physicians

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vulnerable to personal and professional risks. The physicians may confront a request or a claim in the private contact that would be problematic, such as non-professional requests, sexual comments, etc. Since the general rules of real clinics and medical centers are the same in virtual clinics, communication through virtual clinics and TPs is safe and valid. Furthermore, the two-person communication environment is potentially accessible by supervisors if necessary.

Patients' privacy
Patients' privacy is among the most important subjects in medical professionalism. Since the SNs are not designed to limit access and share files and information, using them as a platform for communication facilitates unlimited communication; however, it may also increase the risk of disclosing patient information.[10] In fact, TPs have strict protocols to protect medical information from the widespread distribution of patients' medical data. All the strict protocols applied in real hospitals and medical centers to protect the patients' records and information have proper counterparts in TPs.

Claims and complications
One of the most important issues in medicine is complications and errors in the field of medicine. Looking at this subject, this form of communication between physicians and patients makes the management of potential claims more complex. In SNs, the patients may give incomplete or incorrect information and, therefore, may receive inappropriate guidance and medical advice. In the case of a complication or even in order to discredit or harass the physician, text correspondences, voice messages, and file-sharing can be edited or simply deleted by either the patient or the physician and are not protected from fraud and can therefore be a major threat to both physicians and patients in case of a claim. In contrast, in the virtual standard clinic in a standard TP, all correspondences and information are registered in the software archives as it is done in a real clinic or hospital, which are accessible whenever necessary. This information is unchangeable and cannot be deleted or edited by any party. The security of the medical content of the records and communications benefits from a higher standard than social networks in maintaining the confidential medical information of individuals.

Financial issues
Communication with the patient in the social media space cannot cover financial issues. In fact, anyone who provides patients with medical teleconsultation has agreed to give free medical advice because financial transactions through these networks are illegal almost universally. According to the tariff announced and applied in a virtual clinic, this financial transfer is made through a well-known legal transaction approved by the authorities and the health administration.

Closure of a consultation and follow-up session
In teleconsultation, like the physical clinics, the patient can ask questions and receive answers. In SNs, the communication between the physician and the patients is endless[9] though in TPs the session can be closed at the end of the discussion after a secure communication in which the patient has received the answer to all his/her questions and medical recommendations. Initially, this issue does not seem important, but it can frustrate the physicians when the number of patients and, as a consequence, the number of consultations and questions increase. To end a session in SNs, there is no choice but to block the number of the patient, which may be annoying for the patient and complicate further communications in future sessions. hisT means that blocking the patients' phone numbers will deprive them of further consultation. Even if the patient communicates with the physician using a new different SN account, the archives of the previous communications will be lost. In contrast to SNs, further consultation remains feasible and easy to apply for patients in virtual clinics.

Quality of monitoring
It is clear that in teleconsultation, we do need to monitor the whole process in terms of the quality of responses, response time, the completeness of the consultations, the satisfaction of the patients, etc. From the viewpoint of administration and monitoring, the quality assurance of the consultations is almost impossible when the physician uses SN to communicate with the patients, whereas this monitoring is easily applicable in virtual clinics using TPs. Clearly, by receiving the feedback of the patients, the quality improvement of the process will be a practical goal that is accessible in virtual clinics.

Physicians' privacy
The physicians' private information, e.g. the phone number, is disclosed when SNs are used for teleconsultation. Furthermore, scheduling appointments is not feasible, and patients can send any message to their physician whether or not it is urgent. In a virtual clinic, the patient does not have personal information such as the phone number of the physician. Therefore, it is not possible to share this information with other people, which may cause further disturbances for physicians. Furthermore,

sharing the name of the virtual clinic will be a desirable event.

Multidisciplinary approach and team working

From the viewpoint of the scientific and medical content of the consultation, the possibility of multidisciplinary decision-making and patient referral to other physicians in different specialties is among the most prominent advantages of the virtual clinics using comprehensive telemedicine platforms, especially in cancer management.[12] This is even faster and more feasible than real clinics, while these facilities cannot be applied in SN communications.

Technical issues

SNs are designed for communication through short messages and are not a proper substitute for professional meetings. One of the major problems is the lack of reminders for the follow-up sessions. Physicians need to sort the messages based on the diagnosis, urgency, etc., which also is not possible through SNs, and unnecessarily lengthens the time of appointments. Furthermore, there is always a chance that the physician misses or forgets to answer a patient's question and the platform should send an alarm in these cases which is not applicable in SNs.

Also, telemedicine has its drawbacks and pitfalls. For instance, there is no possibility of any health care needing any direct contact or intervention, e.g. physical examination, interventional radiology, surgery, radiotherapy or chemotherapy. But given the visual aids, doctors can analyze the symptoms and in some extent, the signs, X-Rays and lab results that the patients present.

In summary, it can be concluded that although communication between physicians and patients through social networks is feasible and easy, it has its significant disadvantages and should not be applied when Telemedicine Platforms are available. The disadvantages of SNs limit their use to situations in which comprehensive virtual clinics are not accessible. Virtual clinics using telemedicine platforms provide the patients with a better, safer, legal, and scientific medical counselling environment. However, it is important to note that these only apply in the areas that are low-resource. Even in these situations, physicians and health centers that use SN as a medium of communication with their patients should strictly observe the medical ethic codes and their use should be strictly limited to the force-major situations.

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