All the advances in telemedicine technologies today, especially in teleradiology, improved the global health care for patients worldwide. Teleradiology gave many positive things for health care in general and it has its own limitations or disadvantages as well. This editorial will cover all the advantages and disadvantages of teleradiology.

To summarize the advantages of teleradiology are; it helps to offer radiology services for rural areas, solve radiologists shortage, a second opinion from an expert to a local Radiologist, provides readings of a specialized radiologist in a certain field (pediatrics radiology, neuroradiology, cardiovascular imaging, etc.), solve delay of scans interpretation, decrease workload on other Radiologists, fast service, cut the cost, improve recruiting of medical professionals, give an educational chance to expand their experience in different regions, service available all the time, improving patient care, and prevent the need for patients to travel to find medical services or specialized experts.

To expand the previous points in details, teleradiology can provide services in rural areas where there is no a specialized Radiologist at any time. As well, in developing countries or where there is Radiologists shortage in any country. Teleradiology can provide access for expert Radiologists to overcome the shortage. Some Radiologists may need a second opinion to confirm their diagnosis which will help to decrease the chances of making a mistake. Other Radiologists face complex cases that required a specialized Radiologist in pediatrics imaging, nuclear medicine, musculoskeletal imaging, etc. In many cases, Radiologists can’t read all the medical imaging studies because there are too many cases that required too much time and by using teleradiology, it will allow other Radiologists to see the remaining cases to diagnose them which will decrease the workload on the busy Radiologist, decrease the waiting time for radiology reports, prevent worsening the patients’ on waiting conditions.

Teleradiology is a very fast service that decreases the cost by recruiting the available radiologists in their free time. Furthermore, teleradiology allows educational chances to see cases from different regions and some of these cases are complex which allows the Radiologists to learn more and more. The availability of a teleradiology system is for all the time (24/7/365) which truly improve the patient care. Teleradiology removed the need for patients to travel anymore to seek for a radiology expert diagnosis and opinion.

To summarize the disadvantages of teleradiology are; expenses of installing a teleradiology system, teleradiology system
Teleradiology pros and cons: Editorial


To explain the previous points in details, the limitations of teleradiology are; the cost of teleradiology systems is a barrier that do not allow some poor countries to purchase [1]. Teleradiology system maintenance can cost a lot [1]. It needs a network specialist to do the maintenance which is not available some times in rural areas and in developing countries. Some complex technical issues can take a while to fix which will cause a delay of the medical service. Another limitation is, the legal jurisdiction of a teleradiology system in a certain area where other from outside this area can’t use it because of the rules and regulations of this area. Overseas Radiologists which they can work from another country by using teleradiology, but they do not have a medical license in the country where they use the teleradiology system for, they can’t work for legal reasons. There is a need for an accreditation scheme for teleradiology service which will cost money and time. One of the most common limitation of teleradiology is the limited access to previous studies and patients’ histories which can lead to a wrong diagnosis [2]. Radiologists need specific training on who to use the teleradiology system which will cost money and time. Teleradiology is not allowing tele-radiologists to communicate with the local beneficiary clinicians to understand the case in hand which is a major limitation.

To improve teleradiology, many asking to decrease teleradiology cost, train more Radiologists and network experts on teleradiology systems, decrease the number of teleradiology systems breakdowns, start accreditation programs for teleradiology globally, allow more access for previous studies and patients’ histories, and allow more communication between tele-radiologists and local clinicians for better understanding.

Teleradiology is a huge problem-solver, but many issues need to be solved first to allow teleradiology positive impact on patients’ lives worldwide.

References