

ARTIFICIAL INTELLIGENCE: FRIEND OR FOE?

CLINICAL CASE

The medical director of a health center is given the opportunity to acquire an App that will assist patients with the initial treatment of influenza. The App works through an artificial intelligence (AI) system and recommends specific treatments based on the patient's symptoms. Patients start by filling out a questionnaire, after a self-assessment by the patient, the App suggests some clinical management: observation at home, symptomatic treatment with paracetamol, visit to the family doctor, or go to the emergency room. The App also monitors the patient's progress. This tool would be useful in the early detection of influenza and to avoid overcrowding emergency departments. In addition, if the number of patients with the flu visiting healthcare centers could be reduced, it would prevent the spread of contagion.

The medical director feels that the *App* could be useful both for patients and to ease pressure on the emergency department during epidemic periods when many patients with seasonal flu often come in. However, he is not sure whether the program meets the ethical standards of healthcare. Should the healthcare facility purchase this *App*?

ETHICAL ANALYSIS OF THE CASE

AI has grown exponentially in recent years. It is being used in medicine as a complementary tool in different ways: diagnosis and treatment, decision-making, management, research, and also in preventive medicine. The appropriate use of AI tools in medicine can improve certain procedures, provide information on public health (because a large amount of data is handled), and can help to optimize certain resources.

However, its use raises ethical and professional concerns that, to date, have not been thoroughly addressed. It is a complex technology that is not without its problems. Some ethical issues to be considered are; the quality of care offered, i.e., its real benefit in terms of efficacy and safety; how personal data (and large databases) are processed; the guarantee of confidentiality and data protection; informed consent, both of the patient and the professional (knowledge of its purpose, benefits and risks, alternatives), because the patient must have expressly consented to the use of AI.

Given its complexity, the physician must carefully select which patients are suitable candidates for the use of AI applications, being especially aware of populations like the elderly who often struggle with the use of technology and are already more vulnerable.

POSSIBLE COURSES OF ACTION

- ✓ Acquire the application and refer all consulting patients to it.
- ✓ Acquire the application and let each physician decide whether to use it.
- ✓ Train healthcare professionals in the use of AI and, specifically, this application. That way they will be able to use it and better inform patients.
- ✓ Acquire the application and, through a process of informed consent, let patients decide whether to use it.
- ✓ Open a telematic consultation channel to provide additional technical support to patients who have difficulties with the App.
- ✓ Enable teleconsultation for those patients who, despite using the App, request medical support.
- ✓ Consult the civil liability insurer about its coverage in the use of this tool and, in general, of AI.
- ✓ Consult the College of Physicians whether this application is in accordance with deontological standards.
- ✓ Study the characteristics of the App: scientific validation, data processing, how consent is given, etc.
- ✓ Reject it, because it cannot be guaranteed that the App will provide the same quality of care as face-to-face care.

RECOMMENDED COURSES OF ACTION

- ✓ Firstly, a thorough study should be made to determine whether this tool has been scientifically verified: whether it guarantees the same quality of care as a face-to-face consultation. Only then can its use be considered. The first priority is to provide optimal health care for patients.
- ✓ In addition, the *App* must have ethical and deontological guarantees: confidentiality, consent, etc. The current code of ethics establishes that all ethical standards are applicable when health technologies are used in healthcare practice.
- ✓ If the *App* is approved (maintains the quality of care and is safe) and meets all other ethical issues, its use can be considered. However, before doing so, it should be verified that it complies with current deontological and legal regulations on AI.

- ✓ After all the above-mentioned points, if the use of the *App* is deemed appropriate, it may be used. Before doing so, healthcare professionals must be trained in the tool.

DISCUSSION

AI should not be interpreted as a substitute for a healthcare professional. The basis of healthcare is still the face-to-face clinical relationship. However, practitioners can use technology (AI) if it enhances the care activity. Therefore, AI-based healthcare resources should not be shunned. Technological tools can be a complement to healthcare activity as long as they are beneficial for patients.

AI should be used with ethical and legal guarantees to protect both the patient (confidentiality and protection of personal data, information, consent) and the professional (establishment of responsibilities, training). Proper management of patient data is essential because these can be used by AI to "learn" (machine learning) and improve its functions (algorithms), especially when population-based information and Big data are used.

Lastly, there is the question of equity in healthcare. There are patients who are more vulnerable to new technologies, especially those with few resources and aging citizens who are victims of the digital divide. With the risk that they may receive poorer healthcare, health systems must ensure that all patients, and not just the "technological" apt, are optimally cared for. AI has to be an ally in healthcare, not a problem.

Sgd.: ASISA-Lavinia Bioethics and Health Law Committee
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