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Reflections on artificial intelligence

Reflexiones sobre la inteligencia artificial

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"The true sign of intelligence is not knowledge but imagination".

Albert Einstein

What is the definition of artificial intelligence?

The Real Academia Española (1) defines artificial intelligence (AI) as the "scientific discipline that is responsible for creating computer programs that execute operations comparable to those carried out by the human mind, such as learning and logical reasoning". The term AI was coined by Stanford University Emeritus Professor John McCarthy in 1955, who defined it as "science and engineering to make intelligent machines" (2). Currently, almost 70 years after the term was first used, AI is understood as: "a set of technologies that allow machines and computers to simulate human intelligence" (3).

I have been a psychiatrist for more than 25 years and the idea that a machine could replace me, or any psychiatrist, is difficult to accept, but I understand that it is possible. This possibility should lead us to reflect on areas or aspects in which a machine could and/or could not replace us. Such idea should generate directions that will help new generations incorporate AI into their daily practice, in a professional and ethical manner always supporting patient care.

What can AI do?

AI is present in our daily life, probably even without realizing it, when, for instance, we access information, use social media, employ facial recognition for various procedures and operating security systems. Currently, in medicine, AI is used, besides, to facilitate early detection of diseases, allow a better understanding of their course, to optimize drug doses, discover new treatments (4) and in several other areas depending on the specialty. However, in our country, it is not routinely used in psychiatric care. Although probably many psychiatrists are using it, we hope that such is always for the benefit of the patient and not for a personal gain. It can be noted that the main strength of AI is the very rapid analysis of data patterns (4), that is, in the area of competence related to knowledge. Let's imagine having unlimited access to multiple databases of psychiatric information, a great ability to synthesize, analyze it, and make decisions using all the available information; those are, precisely, the objectives and actions of AI. We could, then, conclude that AI would have an advantage in everything related to the specialty's area of knowledge which, in turn, reaffirms the importance of following and utilizing the scientific evidence and incorporating AI in the daily practice of psychiatrists. It can even be said that, in terms of knowledge, the machine wins.

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In what areas could the psychiatrists win?

We could win, and it could be hoped with great advantage, in the attributes that supposedly all doctors, including psychiatrists, certainly possess, such as empathy, compassion, honesty, integrity, altruism, responsibility, respect, commitment (5) – all of them factors which can be assumed, for now and hopefully never, could be acquired by a machine. The advantages can also be present in the effective communication, fundamental basis of the doctorpatient relationship. If such link is only based on knowledge --hopefully updated and evidence-based-- but not in an essential humanism, would it not be then only a sort of a sophisticated machine-patient relationship?

When I started writing this editorial note, I had the idea of describing how difficult it would be to replace us; now, however, I have doubts. What would patients say if they had to choose between the machine or the doctor? Do we always offer the patient, in each consultation, what a machine could not offer him/her? Do we listen to him/her as human beings that deserve to be listened? Do we treat him/her as every person deserves to be treated? Is it going to be easy or difficult to replace us? I pose these questions inviting the readers to reflect on them and to answer them with absolute honesty. Compared with the genuine attributes of the doctors, I would say that the machines should not win, but if the doctor loses the essence of his/her mission, we would be handing absolute victory to the machines.

We must prepare ourselves, and prepare the new generations, to challenge this situation in a responsible way, always reminding them that we are not just machines full of knowledge, but psychiatrists with all the attributes that patients expect us to provide in each consultation. It depends only on us whether patients choose us over machines.

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