



The downsides of artificial intelligence in healthcare

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TO THE EDITOR

I read with interest the recent article published in this journal regarding the treatment of chronic back pain with the use of artificial intelligence (AI). The authors highlighted the contribution of AI in pain medicine, especially in assisting patients with the correct interpretations of their MRI, CT, X-ray, and other imaging modalities [1]. In conclusion, AI has a lot of benefits in the healthcare system. I firmly support this claim since many medical practitioners have already validated the usefulness of this technological advancement. In robot-assisted surgery (RAS), for example, AI goes hand in hand with the surgical procedure. Integrating AI-based systems into medical technology is crucial to improve both the surgeons' and patients' experiences. By empowering physicians in every step of their career and elevating the level of care, AI can reshape surgical robotics, launch the healthcare industry to new heights and ultimately serve as a gateway to automated care [2]. On the other hand, I also want to point out the various downsides of AI in the healthcare system generally that should not be taken for granted. It is essential to take note that AI must help humans to at least minimize errors, if not eliminate them, and not complicate or cause more problems.

One of the downsides of AI is the absence of an emo-

tional bond between the health professional and the patient. The harmonious doctor-patient relationship plays a vital role in the attainment of treatment and healing, thus is considered a keystone of care [3]. This kind of relationship is based on trust, and upon entering into this engagement, the doctor respects the autonomy of the patient, maintain the needed confidentiality, makes clear the kinds of treatment available, secures informed consent, and provides the highest standard of care [4]. The level of trust of the patient in the doctor must be sufficient, since it contributes to the success of any treatment or medical procedure. In the same way, the patient must also feel a sense of empathy and care from the doctor. In RAS, the machine is entirely rational. It is not programmed to have any feelings of compassion for patients, especially those who are in deep pain or suffering during the medical procedure. While there are AI technologies that are being developed to enhance caring and compassion for patients, the doctor's "human touch and voice" is incomparable with the machine's performance in providing hope and assurance in the alleviation of pain and suffering. In diagnosing patients, human doctors have a unique way of making behavioral observations and showing a sense of empathy with patients that no machine can. These observations are essential in making the appropriate prescription and preventing further complica-



tions. In the same way, with RAS, there is the possibility of human error when operating the robotic system and also mechanical failure. System components such as robotic arms, cameras, robotic towers, binocular lenses, and instruments can fail. In other cases, the electrical current in the mechanical device can leave the robotic arm and be misapplied to surrounding tissues, resulting in accidental burn injuries. In addition, RAS can cause nerve palsies due to extreme body positioning or direct nerve compression that may occur when using robots [5]. We must remember that no procedures should be applied when we are uncertain of their impact on the patient's health and safety.

We cannot deny the fact that AI has already been contributing a lot to the healthcare system in many ways. On the other hand, AI cannot replace humans since the latter are still the creators or source of the former. Doctors must always remember that their patients are vulnerable beings whose life is just as precious as their own. Thus, they have to establish a genuinely intimate and empathetic connection with their patients and this bond can never be provided by machines [6]. To reconcile the issue, both AI and humans must work hand in hand for the success of health care without enslaving each other but providing the best possible care for the public.

DATA AVAILABILITY

Data sharing does not apply to this article as no datasets were generated or analyzed for this study.

CONFLICT OF INTEREST

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