

# ETHICAL ISSUES OF ARTIFICIAL INTELLIGENCE IN MEDICINE AND HEALTHCARE

## INFO

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Vol 02 Issue 01  
JAN-MAR 2024

ISSN Online: 2960-2599  
ISSN Print: 2960-2580

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## EDITORIAL

Artificial intelligence (AI) is revolutionizing the medical field along with its promising benefits for<sup>1</sup>. diagnosis, treatment, prevention, cure and improvement of diseases / illnesses and other mental and physical disabilities are all being managed by the growing usage of AI<sup>2</sup>. With many advantages; AI poses few serious ethical concerns, questions and issues.<sup>2, 3</sup> In the interest of public few ethical issues are under discussions in current technological and advancements era of AI<sup>3</sup>.

With the use of these machine based decision-making, that's routinely done by human may presents issues and questions about the informed consent, privacy, accountability, and openness to others<sup>3</sup>. So, scientific frame works, policies and standards are required to solve and overcome such crucial issues, for better manufacturing and development, using AI technology.<sup>4</sup> Asking patients to give their informed consent will be more difficult when AI algorithms are being used to take decisions and treatment choices. Because all patients have the leverage and freedom to reject or accept to participating in research, accepting or rejecting treatment and they should be well aware of how AI can affect their health. This is also mandatory to have a balance between patient's autonomy to withdraw from the trail or procedure anytime they want<sup>1</sup>.

AI-based procedures can also give upsurge to the privacy and the data security related issues, as health records, patient's data, their demographical and clinical information are very personal and sensitive that hackers may target them during data breaches<sup>5</sup>.

Moreover, AI is proficient in data analysis and drawing conclusions, because compassionate care is vital component of health care medicine, so it may be some time non-empathic, non-sympathetic and can hurt them emotionally. So, AI should enhance human connections and decisions should be made after human involvement<sup>1</sup>.

Even though artificial intelligence (AI) has a lot of promise and is revolutionizing healthcare, it is very important to take ethical concerns into account. It should be our top priorities to respect data security, patient's autonomy, informed consent, sympathies and empathies, etc. while incorporating AI technology into medical research and practice. We can take maximum advantage of AI tools for promising results to improve patient's outcomes while upholding the values and principles that define the medical profession by addressing these ethical issues. Without intensive and significant efforts to address these ethical challenges and issues, we cannot guarantee or ensure that AI will improve healthcare for everybody.

**REFERENCES**

01. Farhud DD, Zokaei S. Ethical issues of artificial intelligence in medicine and healthcare. Iranian journal of public health. 2021;50(11):i
02. Kumar P, Chauhan S, Awasthi LK. Artificial Intelligence in Healthcare: Review, Ethics, Trust Challenges & Future Research Directions. Engineering Applications of Artificial Intelligence. 2023;120:105894. doi:<https://doi.org/10.1016/j.engappai.2023.105894>
03. Davenport T, Kalakota R. The potential for artificial intelligence in healthcare. Future Healthc J. 2019;6(2):94-8.doi:10.7861/futurehosp. 6-2-94
04. Buruk B, Ekmekci PE, Arda B. A critical perspective on guidelines for responsible and trustworthy artificial intelligence. Medicine, Health Care and Philosophy. 2020;23(3):387-99
05. Khan B, Fatima H, Qureshi A, Kumar S, Hanan A, Hussain J, et al. Drawbacks of artificial intelligence and their potential solutions in the healthcare sector. Biomedical Materials&Devices. 2023;1(2):731-8