

RESUMO - INTELIGÊNCIA ARTIFICIAL E SAÚDE

ETHICAL CHALLENGES OF ARTIFICIAL INTELLIGENCE IN HEALTHCARE: A SYSTEMATIC REVIEW OF ETHICAL IMPLICATIONS IN CLINICAL PRACTICE

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Introduction: Artificial intelligence (AI) is transforming healthcare by offering advancements in diagnostic accuracy, early disease detection, personalized therapy, and the efficiency of healthcare systems. Through the analysis of complex data, the technology improves clinical decision-making and therapeutic outcomes. Its applications extend to telemedicine, drug discovery, and the automation of administrative processes, impacting both clinical practice and research. However, its incorporation raises ethical challenges, such as data privacy and security, algorithmic biases, lack of system transparency ("black box"), and the definition of responsibilities in the face of adverse events. These challenges impact the fundamental principles of bioethics, such as autonomy, beneficence, non-maleficence, and justice, potentially exacerbating health

inequalities and dehumanizing the doctor-patient relationship. Objective: To identify and analyze the main ethical dilemmas regarding the use of AI in clinical practice, from the perspective of bioethics and medical responsibility. Methods: A systematic literature review was conducted using articles from the PubMed database with the descriptors "Artificial Intelligence," "Medical Ethics," and "Clinical Practice." Studies published in the last ten years were included, encompassing systematic reviews and analytical articles focusing on the ethical implications of AI in clinical practice. Study selection was performed by reading titles, abstracts, and subsequently, full texts. Results: Studies demonstrate that, despite the clinical benefits of AI, its implementation poses significant ethical challenges. The presence of algorithmic biases can lead to discrimination and inequities in healthcare, while the opacity of models compromises explainability and hinders the attribution of responsibility in cases of adverse events. Issues related to privacy, security and data ownership were also widely reported, in addition to concerns about the potential dehumanization of the doctor-patient relationship. The need for robust regulatory systems, continuous risk assessment, and the development of ethical guidelines is fundamental to ensuring the safe, equitable, and reliable use of these technologies. Conclusion: It is concluded that, despite the potential to improve clinical practice, the use of AI poses significant ethical challenges, including algorithmic biases, system opacity, privacy risks, and uncertainties regarding accountability. The physician remains irreplaceable as a moral agent, ensuring that the final decision preserves the doctor-patient relationship as a space of trust, listening, and care. AI should serve life without replacing human action. Its ethical use requires subordination to comprehensive care, avoiding the reduction of the patient to data or algorithms, and reaffirming medicine as a vocation of service to life, truth, and solidarity.

Palavras-chave: artificial intelligence; ethics; medical; clinical medicine; bioethics; algorithmic bias.