

## EDITORIAL

## Artificial intelligence and healthcare: An ethical dilemma

Artificial intelligence (AI) has the potential to change the world of medicine in many ways that were formerly inconceivable. It could revolutionize the traditional methods of diagnosing, treating, and monitoring patients.<sup>1</sup> AI is capable of identifying intricate patterns and trends within vast datasets, thereby facilitating the transmission of vital information for disease surveillance and the early detection of outbreaks.<sup>2</sup> In addition, AI can aid in the process of developing personalized healthcare plans by analyzing patient-specific data and predicting the progression of diseases.<sup>3</sup> The implementation of AI can enhance the administration of healthcare services to underserved communities, optimize the allocation of resources<sup>4</sup>, and integration of the public and private sectors are crucial.<sup>5</sup>

Recently, the U.S. White House has released a blueprint for an AI Bill of Rights, which consists of five principles and related practices to guide the design, use, and deployment of automated systems to safeguard the rights of the American public in the age of AI.<sup>6</sup> AI can also be used to perform complex duties in healthcare, allowing doctors more time to communicate with patients more effectively and earn their trust. For example, in the case of skin cancer, AI algorithms can analyze images of skin lesions and provide additional insights to dermatologists.<sup>7</sup> Implementing AI in healthcare can aid in the promotion of healthcare and medicine worldwide and facilitate access to healthcare and medicine on a global scale. The use of AI in public health has raised a number of ethical issues that must be addressed to ensure the technology's ethical and responsible application.

Some of the ethical challenges include social gaps, medical consultation, privacy and data protection, informed consent, empathy, and sympathy.<sup>8-10</sup> To create accountability and decide who should bear responsibility for using AI in medical decision-making, it is critical to address the legal and ethical issues raised by its deployment.<sup>11</sup> In addition, the problem of socioeconomic inequality is one of the ethical conundrums connected to the use of AI in health. Importantly, effective implementation and operation of AI technologies frequently require substantial infrastructure, resources, and specialized knowledge. If these resources are confined in affluent regions or

institutions, access to AI-driven healthcare may become unequal across countries and regions. Therefore, AI has a potential to exacerbate existing healthcare disparities.<sup>12</sup>

Although AI can help forecast patient outcomes and inform treatment choices, it cannot replace the crucial role that human touch and empathy necessary for the healthcare.<sup>13</sup> AI systems might require frequent access to sensitive patients data leading to legal issues.<sup>15</sup> Moreover, individuals may find it difficult to completely comprehend AI healthcare algorithms due to their complexity. It can be difficult to convey to patients the complexities of AI algorithms and their potential repercussions, impacting informed consent.<sup>16</sup>

In conclusion, the integration of AI in healthcare presents intricate ethical dilemmas that require a holistic strategy. To address these concerns, it is essential to establish clear ethical guidelines and standards that focus on patient safety, privacy, and autonomy. It is possible to prevent the perpetuation of prejudice and reduce healthcare disparities by emphasising the significance of training on AI algorithms. To discover viable solutions to the ethical challenges posed by AI in healthcare, widespread adoption of AI technologies, extensive teamwork, and partnerships between various stakeholders require collaborative efforts. We can navigate the ethical complexities and harness the potential of AI in healthcare to enhance patient outcomes while upholding ethical and social justice.

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