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Implementation of artificial intelligence in the nursing profession: Barriers & facilitators

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To the Editor

Nurses make up the largest group of healthcare professionals worldwide and are therefore more likely to be heavily exposed to artificial intelligence (AI) technologies due to their significant workforce [1, 2]. The utilization of AI techniques in nursing is being implemented to improve decision-making processes, advance patient care, and optimize the delivery of services [3-5]. Considering the wide use of AI in this profession, there are several barriers and challenges in this path, which can be facilitated by removing these barriers. Some of these barriers are changing the intrinsic nature of healthcare delivery, ethical risks, the validity of evidence, the fairness of outcomes, and the traceability of harm caused by algorithmic activity [6]. Nursing technologies currently in use gather and utilize healthcare data that can anticipate future events that have the potential to obstruct the delivery of care [7]. The precise and safe development and deployment of AI in mental health nursing requires careful consideration of the nuances of clinical complexities, while also ensuring adherence to ethical nursing principles [8]. AI can harm the patient-nurse communication. However, AI has potential benefits to serve patients and improve care delivery and patients' outcomes [9]. Robot nurses and AI applications have been shown to alleviate the burden on nurses, improve the quality of patient care, and reduce the potential for medical errors and malpractice [10].

In general, it is recommended that nursing policy makers and managers pay special attention to the implementation of AI to improve the quality of nursing care. Also, it is suggested that researchers in the nursing profession design well-designed studies to evaluate the implications of implementing AI to improve the quality of nursing care.

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Authors' contributions

Substantial contributions to the conception or design of the work; or the acquisition, analysis, or interpretation of data for the work: MHG, AZK, ZA, MJG; Drafting the work or revising it critically for important intellectual content: MHG, AZK, ZA, MJG; Final approval of the version to be published: MHG, AZK, ZA, MJG; Agreement to be accountable for all aspects of the work in ensuring that questions related to the accuracy or integrity of any part of the work are appropriately investigated and resolved: MHG, AZK, ZA, MJG.

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Competing interests

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Using artificial intelligent chatbots

None.

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