Editorial

Nursing the future: How artificial intelligence empowers critical care nurses to revolutionize intensive care unit rehabilitation

Amir Emami Zeydi [a] iD | **Samad Karkhah** [b*] iD

a.   Department of Medical-Surgical Nursing, Nasibeh School of Nursing and Midwifery, Mazandaran University of Medical Sciences, Sari, Iran
b.   Department of Medical-Surgical Nursing, School of Nursing and Midwifery, Guilan University of Medical Sciences, Rasht, Iran

***Corresponding author(s):** Samad Karkhah (MSc), Department of Medical-Surgical Nursing, School of Nursing and Midwifery, Guilan University of Medical Sciences, Rasht, Iran.
Email: sami.karkhah@yahoo.com
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Critical care nurses are at the forefront of providing specialized care to critically ill patients in the intensive care unit (ICU) [1]. With the advent of artificial intelligence (AI), they have been equipped with powerful tools and technologies that have significantly changed their approach to physical rehabilitation [2]. AI systems offer ICU nurses the ability to analyze and interpret complex patient data, from vital signs and lab results to movement patterns and therapeutic progress. Using this wealth of information, nurses can make informed decisions about the most appropriate timing, intensity, and specific exercises for each patient's rehabilitation journey [3, 4]. This level of precision and individualization allows critical care nurses to create customized rehabilitation plans that address each patient's unique needs, optimizing the potential for successful recovery. In addition, AI-powered rehabilitation systems provide critical care nurses with real-time feedback and guidance during rehabilitation sessions. Through the use of wearable devices and sensors, AI systems monitor patient movement to ensure exercises are performed correctly and safely [5]. Nurses can then use this immediate feedback to make necessary adjustments to the rehabilitation program, address potential problems, and provide personalized encouragement to patients. This real-time feedback not only increases the effectiveness of the rehabilitation process, but also promotes patient engagement and motivation, leading to improved outcomes [3-5]. AI also plays a critical role in facilitating seamless communication and collaboration among the healthcare team. AI-powered platforms enable critical care nurses to securely access and share patient information, rehabilitation progress, and treatment plans with other healthcare providers. This streamlined flow of information enhances interdisciplinary collaboration, allowing critical care nurses to work closely with physicians, therapists, and specialists to provide comprehensive and coordinated care. Integrating AI into communication platforms ensures that critical care nurses have access to the most up-to-date information, enabling them to make informed decisions and adjust the rehabilitation plan as needed [2, 6, 7]. In addition, AI systems help critical care nurses predict and prevent potential complications associated with ICU rehabilitation. By analyzing historical data and patterns, AI algorithms can alert nurses to potential risks such as falls, infections or pressure ulcers. This proactive approach allows ICU nurses to take timely preventative action, improving patient safety and reducing the likelihood of adverse events [3, 7, 8].

While AI serves as a powerful tool in ICU rehabilitation, it is important to emphasize that it does not replace the essential role of critical care nurses in providing compassionate and holistic care. The expertise, empathy and human touch of critical care nurses remain irreplaceable. Instead, AI acts as an invaluable ally, augmenting their skills and helping them make informed decisions that optimize patient outcomes [3, 4, 9-11]. It seems that the integration of AI into physical rehabilitation in the ICU can led to a paradigm shift in patient care, with critical care nurses playing

a pivotal role. Through AI, critical care nurses can deliver personalized rehabilitation programs, provide real-time feedback, facilitate seamless communication, and prevent potential complications. As we move forward, it is imperative to recognize the importance of AI technologies and provide critical care nurses with the training and resources necessary to realize their full potential, ensure optimal patient outcomes, and advance the field of critical care nursing.

Authors' contributions
Substantial contributions to the conception or design of the work; or the acquisition, analysis, or interpretation of data for the work: AEZ, SK; Drafting the work or revising it critically for important intellectual content: AEZ, SK; Final approval of the version to be published: AEZ, SK; 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: AEZ, SK.

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Not applicable.

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We do not have potential conflicts of interest with respect to the research, authorship, and publication of this article.

Using artificial intelligent chatbots
None.

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