EDITORIAL

Artificial Intelligence versus nurses: A new challenge in caring human being

Estrin Handayani[1] ✉, Jimmy Choo[2]

Author information
[1] Department of Nursing, Universitas Muhammadiyah Magelang, Indonesia
[2] Department of Healthcare, The University of Leeds, United Kingdom

✉ estrinhandayani@ummgl.ac.id

Artificial Intelligence (AI) has the potential to significantly impact the field of healthcare, including the role of nurses in hospitals or other settings. A quiet revolution in nursing care is underway as AI quietly takes its place beside dedicated healthcare professionals in the bustling corridors of modern care. In this era of technological advancement, AI is finding a meaningful role in transforming the landscape of patient care, the role of nurses, and the heartbeat of any hospital. AI algorithms, silently at work in the background, analyze patient records, historical data, and vitals, presenting a comprehensive snapshot of each patient's health status. This digital development empowers nurses with predictive insights, highlighting potential risks and enabling a proactive approach to patient-centered care. In the realm of diagnostics, AI showcases its prowess. Nurses, supported by intelligent algorithms, receive nuanced analyses of diagnostic tests, allowing for more precise interpretations of clinical findings. Using AI will lift the burden of manual data interpretation, giving nurses more time to focus on critical thinking and compassionate care.

One of the remarkable transformations unfolds in patient monitoring. AI-driven sensors continuously gather real-time data, from heart rates to oxygen levels, creating comprehensive information. Nurses, now freed from the constraints of routine checks, receive timely alerts for any deviations, allowing them to intervene swiftly and prevent potential complications. A group of nurses engages in an innovative training session to update about AI usage. Also, AI-powered virtual reality simulations recreate lifelike scenarios, offering a hands-on experience beyond textbooks. Clinical nurses navigate complex medical situations, honing their skills in a risk-free environment. Personalized care plans, tailored to each patient's unique needs, materialize through the collaborative efforts of nurses and AI. The amalgamation of clinical expertise and data-driven insights results in care plans that consider the illness and the individual, fostering a holistic approach to healthcare. Yet, ethical considerations should be further explored in this era of technological marvels. Nurses, as the guardians of patient well-being, stand at the forefront of ensuring the ethical use of AI. They care for patient privacy, advocate for transparency, and navigate the delicate balance between technology and human touch.

As the day winds down, nurses gather for a debriefing session. The synergy between human intuition and AI analytics is a recurring theme. Through shared experiences, they exchange insights on how AI has become an invaluable ally, enhancing their ability to provide quality care and fostering a new era of healthcare delivery. In the ever-evolving narrative of healthcare, AI emerges not as a replacement for the human touch but as a silent partner, amplifying the capabilities of nurses. Together, they navigate the complex tapestry of patient care, driven by a shared goal — to ensure the well-being of those under their watchful care. In the corridors of a state-of-the-art healthcare facility, the integration of AI is heralded as a groundbreaking advancement poised to revolutionize patient care. However, as the narrative unfolds, the story takes a nuanced turn, revealing not just the promises but also the subtle shadows cast by the advent of AI in healthcare. As nurses and physicians navigate the digital landscape, AI algorithms hum quietly, processing vast amounts of patient data to offer predictive insights and support clinical decision-making. Yet, this seamless integration is not without its complexities, and the first side effect to emerge is the inherent challenge of balancing technological reliance with the human touch.

The relentless pursuit of efficiency through AI-driven automation brings about a reevaluation of traditional roles. The side effect is a potential erosion of certain aspects of the deeply human and empathetic connection that has long been the hallmark of healthcare. Nurses, once sole bearers of comfort and compassion, find themselves juggling the demands of technology alongside the needs of the patients. Another side effect surfaces in the realm of data privacy. The algorithms designed to enhance patient care by sifting through personal health records become a concern. The delicate dance between AI's analytical prowess and the imperative to safeguard patient confidentiality

requires vigilant oversight. Nurses, custodians of patient well-being, navigate this ethical terrain, ensuring that the promises of AI do not compromise the sacred trust between healthcare providers and those under their care. As AI algorithms permeate diagnostics, a paradox unfolds. While the precision of AI enhances diagnostic accuracy, the potential for overreliance on these technologies introduces a risk of diagnostic inertia. The narrative contemplates the delicate equilibrium between the amplified capabilities of AI and the necessity for human intuition to challenge, validate, and contextualize diagnostic findings.

Furthermore, the cost implications of integrating AI present a side effect that merits consideration. The investment in advanced technologies necessitates a reevaluation of healthcare economics. The narrative explores the potential consequences of healthcare accessibility, posing questions about equity and the risk of creating a divide between technologically advanced and resource-constrained healthcare settings. In this unfolding story, the side effects of AI in healthcare become integral plot points, reminding stakeholders to tread carefully in this transformative journey. Nurses, at the intersection of technology and patient care, emerge as advocates for balance, ethical considerations, and preserving the human connection that defines the essence of healthcare. While acknowledging the potential pitfalls, the narrative underscores the importance of thoughtful integration, where the benefits of AI complement rather than overshadow the intrinsic values of healthcare. While AI holds great promise in improving healthcare outcomes, it is essential to approach its integration thoughtfully, considering ethical implications, ensuring proper training for healthcare professionals, and maintaining a patient-centered focus. The collaboration between AI and nurses can potentially enhance the efficiency and effectiveness of healthcare delivery. Further studies are required to describe the dynamic role of AI in nursing care.

Keywords: Artificial Intelligence; nursing care; nursing improvement; quality of life; clinical nursing practice