**The Use of Artificial Intelligence in Nursing Practice: A Review of Recent Literature**

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NR449: Evidence Based Practice

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July 30, 2023

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The revolutionary technology known as artificial intelligence (AI) has the potential to revolutionize several industries, including healthcare. Investigating the applications of artificial intelligence in nursing practice has gained popularity recently. AI, particularly machine learning (ML) techniques, has the potential to enhance patient care and medication delivery. By supporting patients, doctors, managers, and politicians in making decisions, AI has the potential to substantially change the way healthcare is delivered. With a focus on medicine delivery, this study intends to undertake a literature review on the applicability and challenges of AI in nursing practice. Understanding how artificial intelligence (AI) may enhance patient care, optimize treatment plans, and raise overall pharmaceutical safety is the significance of this work. In order for AI to completely deliver on its promise, problems like poor data quality and unpredictable drug effects must be resolved.

**Clinical Question**

This research attempts to look into how artificial intelligence (AI) is used in nursing practice and any issues that may arise. The potential enhancements that AI might bring to medication administration and patient care are what give this topic its significance (Ahmad et al., 2021). Though its effectiveness is heavily reliant on the quality of the data, AI, particularly machine learning (ML) techniques, has the potential to help patients, doctors, managers, and even politicians in making choices. This article emphasizes the necessity to control variability and uncertainty in drug reactions at both the individual and population levels while describing the issues with utilizing ML algorithms for medication management.

**Levels of Evidence**

The use of AI in nursing care, especially the use of ML techniques for medication management and patient monitoring, is the subject of this article. To solve this problem, primary sources of evidence like peer-reviewed research articles are sought for. These sources have the trustworthy information and conclusions required for evidence-based nursing practice.

**Search Strategy**

A systematic review was done to find relevant articles using several databases, including PubMed-Medline, Scopus, CINAHL, Web of Science, and Nursing & Allied Health. To guarantee a thorough and organized evaluation, the search was extended until July 2023, and the PRISMA principles were followed. The search phrases included "artificial intelligence in nursing care," "machine learning in medication management," "AI applications in patient monitoring," and others. The goal was to find publications that discussed the many uses of artificial intelligence in nursing care, such as early illness diagnosis, clinical decision-making assistance, patient monitoring, workflow optimization, and nursing education.

**Refinement Decisions**

Several refining selections were taken throughout the search to restrict the search results and identify the most relevant articles. The investigation concentrated on recent publications within the previous five years to guarantee that the material was current and up to date. Furthermore, the inclusion criteria were designed to pick articles that expressly explore the application of AI in nursing practice while eliminating articles that did not address the issue directly or were not primary sources. These refining judgments resulted in the selection of 21 articles for inclusion in the review.

**Identification of the Two Most Relevant Articles**

Two articles were identified as highly relevant to the topic of AI in nursing practice:

***Artificial Intelligence and Medication Management***

This article explores the immense potential of machine learning approaches in assisting drug management decision-making for patients, doctors, managers, and policymakers. However, it emphasizes that the efficiency of ML algorithms is dependent on data quality and the resolution of the medication frame issue (Motulsky et al., 2021). Improving data quality at the time of collection, including standardized data and shared data models, is one of the implementation challenges. The chapter emphasizes the significance of addressing variability and uncertainty in drug exposure and results to support the effective implementation of AI technologies in everyday care.

***Applications of Artificial Intelligence in Nursing Care: A Systematic Review***

This systematic review summarizes the different uses of artificial intelligence in nursing care, such as early illness diagnosis, clinical decision assistance, patient monitoring, workflow optimization, and nursing education (Martinez-Ortigosa et al., 2023). According to the assessment, AI-based solutions may boost patient and healthcare worker autonomy, optimize workflows, and improve efficiency in wound treatment and other care activities. The research concludes that AI in nursing practice has the potential to alter the present healthcare system by providing nursing practitioners with practical help and assuring high-quality and safe patient care.

**Conclusion**

In nursing practice, artificial intelligence, especially machine learning approaches, offers great potential for enhancing medication administration and patient care. However, effective implementation confronts various hurdles, including data quality and the medication frame issue. AI-based solutions may successfully help decision-making and improve patient outcomes by addressing these problems and considering the unpredictability and uncertainty in drug exposure and results. According to the findings of the systematic study, AI applications in nursing care have the potential to revolutionize processes, boost efficiency, and provide high-quality care. Nursing practitioners, managers, and supervisors may benefit from using artificial intelligence as a useful resource to improve decision-making processes and priorities patient safety and well-being. The evaluated publications emphasize the need to remain current on the newest breakthroughs in AI and ML in nursing practice, as well as the need for more research and improvements in this sector. As AI technology evolves, healthcare practitioners must embrace evidence-based practices and appropriately use AI technologies to maximize their potential advantages for patient care.

**References**

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