

Title: Nurses' perspectives on privacy and ethical concerns regarding artificial intelligence adoption in healthcare

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Abstract: With the increasing integration of artificial intelligence (AI) technologies into healthcare systems, there is a growing emphasis on privacy and ethical considerations. Nurses, as frontline healthcare professionals, are pivotal in-patient care and offer valuable insights into the ethical implications of AI adoption. This study aimed to explore nurses' perspectives on privacy and ethical concerns associated with the implementation of AI in healthcare settings. We employed Van Manen's hermeneutic phenomenology as the qualitative research approach. Data were collected through purposive sampling from the December 7, 2023 to the January 15, 2024, with interviews conducted in Bengali. Thematic analysis was utilized following member checking and an audit trail. Six themes emerged from the research findings: Ethical dimensions of AI integration, highlighting complexities in incorporating AI ethically; Privacy challenges in healthcare AI, revealing concerns about data security and confidentiality; Balancing innovation and ethical practice, indicating a need to reconcile technological advancements with ethical considerations; Human touch vs. technological progress, underscoring tensions between automation and personalized care; Patient-centered care in the AI era, emphasizing the importance of maintaining focus on patients amidst technological advancements; and Ethical preparedness and education, suggesting a need for enhanced training and education on ethical AI use in healthcare. The findings underscore the importance of addressing privacy and ethical concerns in AI healthcare development. Nurses advocate for patient-centered approaches and collaborate with policymakers and tech developers to ensure responsible AI adoption. Further research is imperative for mitigating ethical challenges and promoting ethical AI in healthcare practice.

Keywords: Artificial intelligence; Ethical concerns; Healthcare; Nurses; Privacy.

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