

Application of ChatGPT in Nursing Education

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The emergence and innovation of technology persistently change the Teaching-Learning process. Chat Generative Pretrained Transformer (ChatGPT), is an artificial intelligence (AI) based chatbot, with advanced text-generating skills. The study aims to identify the positive effects and pitfalls of the application of ChatGPT in nursing education. A scoping review was performed from March 2023 to June 2024 on the databases; Science Direct, Google Scholar, and PubMed, to identify the publications between 2022 and 2024. Twenty-nine articles were eligible for the study from the initial search strategy 5320. The positive effects of ChatGPT in nursing education were categorized according to the Technological Pedagogical Content Knowledge (TPCK) model. Early identification of learning needs on natural language processing, designing course materials, and crafting lesson plans were subsided under content knowledge. Personalized feedback and enhanced critical thinking were categorized under the pedagogical model and timely feedback subsided under both pedagogical and content knowledge. New insights into patient care and treatment options, and alternative learning tools to analyze large data sets were subsided under technological knowledge, continuing education and research subsided under both technological and pedagogical knowledge. Lack of humanity, limited understanding, limited creativity, lack of consistency and reliability, misinformation, and student misuse were identified as the pitfalls of ChatGPT. It is vital to integrate ChatGPT into learning-teaching platforms in nursing education. It is recommended that AI be incorporated into the curriculum to enhance the quality of nursing care with practical learning experiences. Nurse educators are advised to consider AI-powered simulation programs in the curriculum.

Keywords: *AI in nursing education, TPCK model, nursing education*