

ABSTRACTS: VOLUME 8, SPECIAL ISSUE {8th Undergraduate Conference}

THE PHARMACIST'S NEW AI ASSISTANT: A PARTNER OR CONTESTANT

Shatha Alqawasmeh¹, Tartel Anes khader Zaiton¹, Reema Alshweiki¹

Supervisor: Bahaa Al-Halawani¹

¹ Department of Pharmacy, Faculty of Pharmacy and Medical Sciences, Hebron University, Hebron, Palestine

Abstract

Introduction: In recent years, artificial intelligence (AI) has emerged as a transformative force across multiple sectors of life, from education and finance to transportation and health care. Among the most prominent innovations are large language models (LLMs) such as ChatGPT, Gemini, DeepSeek, and Copilot, which are capable of understanding and generating natural language with near-human proficiency

Objective: The purpose of this study was to assess and compare the accuracy and efficiency of AI chatbot platforms vs. licensed pharmacists in answering pharmaceutical inquiries in different areas such as drug–drug interactions, adverse drug reactions, dose recommendations, prescriber clarification, contraindication, and patient counselling.

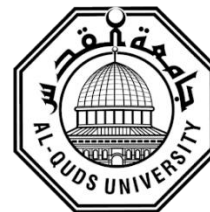
Method: A comparative cross-sectional study was conducted in evaluated the accuracy of five AI chatbot platforms versus 273 licensed pharmacists in answering pharmaceutical consultation questions. Participants responded anonymously to a validated 14-question survey based on real-life clinical scenarios across multiple pharmacy domains. AI platforms were tested using Arabic inputs to reflect real-world patient interactions.

Results: Among 273 pharmacists (mean experience 8.55 years), 75.5% used AI tools like ChatGPT for information, with younger pharmacists adopting AI more frequently ($p < 0.001$). Pharmacists showed strong knowledge in drug interactions (79–92% correct), adverse drug reactions (73–81% correct), dosing (93% correct), and contraindications (>90% correct). Prescription interpretation accuracy ranged from 71% to 77%. AI platforms excelled in side effect recognition, dosing, and contraindications (up to 100% accuracy) but lagged in complex counseling (40%).

Conclusion: AI chatbot platforms serve as valuable adjunct tools in pharmacy practice, enhancing access to drug information and supporting clinical decisions. However, they cannot fully replace pharmacists' expertise, particularly in tasks requiring clinical judgment and personalized patient communication.
Keywords: Pharmacists, artificial intelligence, chatbot platforms, integration, competition.



PalStudent Journal
A Palestinian Scientific Journal for the Youth



Key Words: Artificial Intelligence, Pharmacists, Chatbot Platforms, Clinical Decision Support, Pharmacy Practice

PalStudent Journal

Correspondence concerning this article should be addressed to the mentioned authors at the mentioned institutes.

Copyright © 2026 Al-Quds University, Deanship of Scientific Research. All rights reserved.

E-mail: research@admin.alquds.edu

Palestine, Abu Dis, Al-Quds University