

Brought to you by [INTERNATIONAL ISLAMIC UNIVERSITY MALAYSIA](#)

Scopus

[Back](#)

The Roles of Artificial Intelligence in Interprofessional Healthcare Education: A Systematic Scoping Review

[Journal of Multidisciplinary Healthcare](#) • Review • Open Access • 2026 •

DOI: 10.2147/JMDH.S626516

[Agustina, Hana Rizmadewi](#)^a ; [Hasanah, Aliya Nur](#)^b; [Yulita, Intan Nurma](#)^c; [Megatami, Noviani](#)^d; [Atout, Maha](#)^e; [+2 authors](#)^a Department of Fundamental Nursing, Faculty of Nursing, Universitas Padjadjaran, West Java, Bandung, Indonesia[Show all information](#)

0

Citations

[Full text](#) [Export](#) [Save to list](#)[Document](#)[Impact](#)[Cited by \(0\)](#)[References \(28\)](#)[Similar documents](#)

Abstract

Background: Artificial intelligence (AI) is increasingly being introduced into healthcare education, with emerging applications that may support interprofessional education (IPE). However, current evidence on the use of AI in IPE remains limited, and the distinction between AI-enabled technologies and other digital educational approaches has not been consistently described.

Objective: This scoping review aimed to map the existing evidence on the application and roles of AI in interprofessional healthcare education and to identify current research trends, educational outcomes, and knowledge gaps. Methods: This review followed the Joanna Briggs Institute (JBI) methodology for scoping reviews and is reported according to PRISMA-ScR guidelines. Five databases (PubMed, Scopus, CINAHL, ERIC, IEEE Xplore) were searched for studies published

between 2014 and 2024. Eligible studies included those examining AI applications in IPE involving healthcare students or professionals. Data were extracted, charted, and synthesised using descriptive and thematic analysis. Results: Fifteen studies met the eligibility criteria. Most studies evaluated immersive virtual reality or simulation-based educational environments, while only a subset incorporated explicit AI functionalities, such as intelligent virtual agents or adaptive AI systems. Reported educational outcomes included improvements in communication, teamwork, collaborative learning, and learner confidence. However, the evidence was heterogeneous with respect to study design, intervention characteristics, and outcome measures, and most studies evaluated short-term educational outcomes rather than long-term competence or patient-related outcomes. Limited methodological rigor, inconsistent reporting of AI components, and ethical considerations were also identified. Conclusion: Current evidence suggests that AI-enabled technologies may support interprofessional healthcare education, particularly when integrated into immersive learning environments. Nevertheless, the available evidence remains limited and heterogeneous. Future research should clearly distinguish AI from other digital educational technologies, employ more rigorous study designs, evaluate long-term educational and clinical outcomes, and address ethical considerations to support responsible implementation in healthcare education. © 2026 Agustina et al.

Author keywords

artificial intelligence; healthcare education; interprofessional education; machine learning; scoping review; virtual reality

Funding details

Details about financial support for research, including funding sources and grant numbers as provided in academic publications.

Funding sponsor	Funding number	Acronym
Indonesian Ministry of Higher Education, Science and Technology		
Lembaga Pengelola Dana Pendidikan See opportunities by LPDP		LPDP
EQUITY Program	4303/B3/DT.03.08/2025, 3927/UN6.RKT/HK.07.00/2025	

Funding text

This research is funded by the Indonesian Endowment Fund for Education (LPDP) on behalf of the Indonesian Ministry of Higher Education, Science and Technology and managed under the EQUITY Program (Contract No. 4303/B3/DT.03.08/2025 and 3927/UN6.RKT/HK.07.00/2025).

Corresponding authors

Corresponding
author

H.R. Agustina

Affiliation

Department of Fundamental Nursing, Faculty of Nursing, Universitas
Padjadjaran, West Java, Bandung, Indonesia

Email address

hana.rizmadewi@unpad.ac.id

© Copyright 2026 Elsevier B.V., All rights reserved.

Abstract

Author keywords

Funding details

Corresponding authors

About Scopus

[What is Scopus](#)

[Content coverage](#)

[Scopus blog](#)

[Scopus API](#)

[Privacy matters](#)

Language

[日本語版を表示する](#)

[查看简体中文版本](#)