REHAB DIRECT

Recent Advances of AI in Healthcare

Implication for clinical practice: a systematic literature review

AI improves efficiency and outcomes in diagnosis and treatment but requires ethical governance and data safeguards.

Context

- To review and classify recent studies on AI in healthcare, highlighting benefits, challenges, ethical issues and social sustainability.

Methods

- Approach: Systematic review using Webster & Watson methodology.
- Data Sources: Scopus, Web of Science, PubMed.
- Selection: 132 peer-reviewed articles analysed.
- Framework: Four dimensions—AI healthcare activities, advantages/disadvantages, ethical issues and social sustainability.

Results

- **Applications:** AI widely used in diagnosis, treatment, remote patient monitoring, hospital management, and fraud detection.

- **Benefits:** Faster decision-making, cost reduction, improved patient outcomes, and workflow optimisation.

- **Challenges:** Data quality, integration, privacy concerns, ethical issues and lack of standardisation.

- **Emerging Trends:** Use of machine learning, telehealth, and DNA testing for rapid diagnostics.

Reference

IKitsios, F., Kamariotou, M., Syngelakis, A. I., & Talias, M. A. (2023). Recent Advances of Artificial Intelligence in Healthcare: A Systematic Literature Review. Applied Sciences, 13(7479).