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Session Name : Ethics Education

Session Topic : Ethics Education

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AI in Healthcare: Current Trends and Ethical Issues **(보건의료 AI 도입 현황 및 윤리적 시사점)**

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Recent advances in AI-based technologies, extending even to robotics, signal the arrival of an era in which AI goes beyond simple assistance to serve as an active guide in healthcare. This session explores current trends in the rapidly expanding use of artificial intelligence (AI) in medicine, along with the ethical challenges that accompany its implementation. In addition, with the emergence of AI agents, the session examines important concepts surrounding moral agency in healthcare, including autonomy, intentionality, accountability, and self-awareness. Key ethical principles that must be considered in the application of AI in healthcare are introduced through the FUTURE-AI guidelines: fairness, universality, usability, robustness, traceability, and explainability. These principles encompass minimizing bias, ensuring applicability across diverse clinical settings, maintaining stable performance, providing transparent reasoning for AI-driven decisions, and establishing systems for accountability and monitoring. Furthermore, the WHO guidelines highlight core ethical issues in medical AI, including patient safety, privacy protection, and the necessity of maintaining human oversight. Through these discussions, the session aims to help participants understand why legal and ethical considerations are essential in the adoption and use of medical AI, apply medical ethics principles to real-world AI scenarios, and strengthen the sense of responsibility and problem-solving capacity required of healthcare professionals in the Korean medical environment. AI is not a technology that replaces clinicians; rather, it reshapes the roles and responsibilities of healthcare professionals. To ensure sustainable and trustworthy use of AI in future healthcare settings, strong ethical safeguards and human-centered oversight systems will be essential.

Keywords: AI, ETHICS, HEALTHCARE