Impact of AI Applications on the Attitudes of Acute, Chronic, and Healthy Patients

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Methods
To conduct our research, we compiled multiple sources from academic journals that conducted studies regarding patient attitudes toward AI and the role that artificial intelligence had in the treatment of patients across different healthcare disciplines. We compared results from different studies and sources to determine the general feelings that patients had toward AI usage in their treatment. The research we conducted also showed results regarding the ethicality of AI usage and the effects it had on patient treatment.

Introduction
Our research aimed to determine the effects of artificial intelligence on patients and how it relates to ethical standards in the healthcare field. We directed our research to find out if the use of artificial intelligence in medicine is ethical. Our research allowed us to see the viewpoints of patients toward artificial intelligence usage in their treatment plans.

Results
In a study conducted by the Journal of Consumer Research, it was found that 39.8% of survey participants signed up for a stress test when it was going to be conducted by a human physician, compared to only 26.7% who signed up for the same test when it was going to be conducted by an automated provider. An additional study conducted by the International Journal of Human-Computer Interaction used an online survey system to determine patient trust levels toward an AI system compared to a human doctor even when the AI system was programmed with their individual conditions and desired treatment. The survey found that participants had lower trust levels toward the AI system even when the same care was provided as the human doctor. When treatment was suggested by a human doctor, participants were more likely to agree to said treatment than when it was suggested by the AI system. A final study conducted by the Journal of Medical Internet Research found that patients with both chronic and acute illnesses had more trust in the human physician than in the AI clinical application. The participants were provided with 6 different scenarios in which they would state if they preferred an in-person visit with a physician, an interaction with an AI application, or an interaction with an AI application that would be monitored by a human physician. Overall, the participants had a strong preference for human physicians and were much more likely to trust the recommendation that the human physician made when compared to the AI application.

Conclusion
Based off our research, we concluded that there is an ethical issue when it comes to the use of AI in healthcare. Patients have an attitude of distrust toward AI and the use of it in their treatment would violate patient autonomy, making it unethical. Patients are more likely to seek care if they know it is going to be provided by a physician, rather than an AI application. Because of this, it would be unethical to integrate AI use into healthcare, because patients will be less likely to seek care, which will indirectly cause them harm and violate the principle of non-maleficence.

Visual Information
Patients Who Scheduled a Medical Test With Differing Providers

Selected Bibliography
4. “The ability of computer systems to assume tasks for humans has improved efficiency in virtually every industry, including health care” by Daniel Hertzberg is licensed with USN&WR.

While the integration of AI systems may be beneficial in other fields, consumers of healthcare do not trust AI-generated advice when it comes to their medical care.