

Clinicians' Perspectives on the Use of AI applications in Diagnosing and Managing Patient"

Background:

The healthcare industry has increasingly embraced the integration of Artificial Intelligence (AI) technologies, aiming to improve the efficiency, accuracy, and personalization of patient care. AI applications, such as machine learning algorithms, diagnostic imaging analysis, and decision support systems, are rapidly advancing in both diagnosing diseases and managing treatment plans. While AI has shown great promise in supporting clinicians, its adoption and use in clinical practice remains complex and multifaceted.

Objective:

The objective of this study is to investigate the awareness of AI among Pakistani Doctors to assess Clinicians' Perspective to assess Medical Application of AI in diagnosing and managing patients.

Method:

A cross-sectional study was done. We conducted an online survey by making a Questionnaire using google forms to assess perspective of Clinicians about AI in Healthcare and its risks.

Results:

A total of 220 participants completed the questionnaire. Only n=44 (20%) stated that they had good familiarity with AI. However, a major population n=125 (57%) consider that AI has useful application in medical field. According to respondents AI can deliver vast amount of clinically relevant high-quality data in real time followed by speeding up of processes in health care. Respondents agreed that the area in which AI is most useful is Biopharmaceutical research and development n=80 (36.4%) and assist in diagnosing patients n=46 (20.9%). n=144 65% feared that AI is prone to medical errors that can affect patient care. Most of clinicians have concern that AI can not be used to provide opinions in unpredicted situations due to inadequate information. Around 50% of the population disagreed the fact that AI is superior to the clinical experience of human doctor but clinicians has a very mixed opinion about AI taking essential part in future. However, around 50% of the respondents feared that AI can replace their job in future.

Conclusion:

This study suggests that Clinicians have favorable attitude towards the usefulness of AI in Medical Field and it has the potential to essential decision making in 5-10 years in health care. However, AI can erode the clinicians' thinking process and it can replace jobs in future.

Key Words:

Artificial Intelligence, Health care, Clinicians, Pakistan.