Paper Title:

"The Latest Progress of Research on the Social Risks and Regulation of International Artificial Intelligent in Medical Treatment Based on CiteSpace Method"

Paper Link:

https://sci-hub.se/10.1109/tocs50858.2020.9339758

1. Summary:

The paper conducts a comprehensive analysis of the social risks and regulatory frameworks associated with the application of AI in medical treatment. It explores ethical dimensions, legal considerations, and emerging trends in the dynamic intersection of AI and healthcare.

1.1 Purpose:

The primary goal of the paper is to investigate and understand the ethical, social, and legal aspects surrounding the integration of AI technologies in medical treatment. It seeks to identify key challenges, emerging trends, and the overall impact on healthcare practices.

1.2 Data Source and Collection:

Utilizing the Web of Science (WOS) core set database (2000-2019), the paper retrieved 789 relevant literatures. A manual search further narrowed down to 128 articles. CiteSpace 5.0 R4 SE software facilitated visual analysis, examining authorship, organization, nations, and keywords.

1.3 Analysis:

Publication Trends:

Analysis spanning 2000-2019 revealed a growing interest in AI's social risks and regulation in medical treatment. The paper identifies thematic clusters such as robot therapists, ethical dilemmas, and private standards.

Author and Keyword Clustering:

Through author co-citation and keyword analysis, the paper identifies influential contributors globally and highlights seven thematic clusters, providing a nuanced understanding of the evolving research landscape.

1.4 Conclusion:

The paper concludes with a synthesis of findings, emphasizing the importance of ongoing ethical considerations, legal frameworks, and international collaborations in guiding the responsible development and implementation of AI technologies in healthcare.

2. Limitations:

While the research offers valuable insights, limitations include a narrow scope in manual searches and potential biases in data collection. Recommendations for future work involve expanding the scope and addressing biases for a more comprehensive analysis.

3. Synthesis:

The synthesis of the paper underscores the transformative impact of AI on medical treatment. It emphasizes the need for a proactive approach to ethical considerations, robust legal frameworks, and global collaboration to navigate the challenges and opportunities presented by AI in healthcare.