Ethics of AI in global health research

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A regulatory framework for AI-health research in the Caribbean

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Introduction

The convergence of Artificial Intelligence (AI), big data methods, and microsystems engineering makes AI-based algorithms for computational neuroscience one of the fastest growing fields of neuro-medical research[1], however, ethical issues such as incidental findings and privacy concerns, transparency and bias, and algorithm discrimination arise[2].

To protect the participants in such research endeavours, robust and appropriate regulations for research involving AI should be implemented across all Caribbean states, which would be in keeping with the objectives of the research protections proposal approved within the Caribbean Community and Commons Market (CARICOM) in 2015 [3].

Commentary

In 2015, the Caribbean Public Health Agency (CARPHA), the regional public health institution in the Caribbean with the responsibility for providing strategic direction in analyzing, defining, and responding to the public health priorities of the 24 member states across the Caribbean, presented the Ministers of Health of the Caribbean Community (The COHSOD) with a 'green paper' proposal to regulate the conduct of research with human participants to provide 'best practices'; ensure consistency and harmonization throughout the Caribbean; and through legislation protect the inhabitants of countries in the region from 'ethics dumping' and harmful exploitative research activities[3]. Currently, no legislation for research with human participants exists in any of these countries, except for Guyana and the Bahamas.

The COHSOD was requested to establish a regional regulatory framework for research involving human participants by approving model legislation for CARICOM countries to regulate research along with regulations for sanctions for non-compliance. CARPHA's proposal was put to the vote and approved unanimously, with the approved green paper being sent to the CARICOM headquarters in Guyana for the legislative draughtsmen to prepare the legislation. However, since then, nothing further has been heard.

With the need for conducting ethical reviews of health research protocols across the Caribbean at a high standard[4], and the current accelerated use of AI in the collecting and processing of health data for research, the legislation and regulations which should have been prepared at the CARICOM Headquarters will need updating to address the new ethical issues posed by AI in health research.

Recommendations

The scope of the CARICOM draft regulations on research should be expanded and updated to provide a more comprehensive research ethics framework that would enable all Caribbean countries to address the new realities and challenges posed by the use of AI in health-related research.

References

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