Ethical Dimensions of Artificial Intelligence Development in Health Services

Olivia Dulschi[a*]

[a] Uxbridge College, Park Rd, Uxbridge UB8 1NQ, Middlesex, United Kingdom

Abstract

Purpose of the article The purpose of this article is to discuss the arise of artificial intelligence technologies, the current level of AI development and the potential ethical challenges such as robots or programs overtaking nurses or doctors' jobs in the future.

Methodology/methods The research has been achieved through numerous readings, interviews with professionals in the AI field and online presentations of Microsoft AI systems.

Scientific aim The aim of this is article is synthesising information regarding the Artificial Intelligence systems and orienting them towards practical activities in the health service. By generating addition knowledge of this subject, I believe it will help raise awareness of the benefits coming from AI systems implementation and warn scientists and practitioners to comply with ethical standards in the use of AI systems.

Findings The subject of AI in medicine has been often discussed in the scientific world, and since then has caused controversy in terms of technology and sociology. The modern society has not yet realised that AI has already been used in medicine for a period of time. There are decision support systems such as DXplain which offers a list of possible diagnosis when symptoms are introduced; Da Vinci robotically surgical system uses robotic arms, precise movements and magnetised vision to assist doctors when performing precision surgery. The main fear towards AI is that it could potentially overtake hundreds of job and its accurate diagnosis abilities. The research has allowed us to identify the current progress of AI technologies. There are currently 90 startups in the health industry. The programs are attempting to perform thorough investigations on HIV progression, precision treatment of cancer, drug creation etc. In the UK National Health Service (NHS) has already announced the plans of trying AI mobile apps to help millions of Londoner via real time text message conversation. Due to the lack of humanitarians and limited sources, smart solutions are required to assist the large number of patients. The paper answers the question of ethical issues and to what level the UK population agrees or disagrees the usage of AI technologies in the health service.

Conclusions It is hoped that this research will help scientists understand what potential harm they might cause to the society if they ignored ethical and moral issues. Moreover, it can serve as a guide for the community lacking information regarding the current level of AI development. It can help understand to what extent AI can be used without causing any harm and benefits of using it in health services to help patients.

Keywords: Artificial-Intelligence, AI-systems, healthcare, medicine, science, ethical-issues, Information-technologies

JEL Classification: M15, I19

---

[*] Corresponding author. Tel.: +447828823802.
E-mail address: dulschi.olivia@gmail.com.