

Hashim Sayed Hoosini

Professor Sitaram Ayyagari

ITAI 2372

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Analysis of 2057- Michio Kaku – The Body (Ep.1) and AI Impact on Healthcare

In the documentary 2057 – The Body, scientist Michio Kaku illustrates what healthcare might look like in the future. He discussed new technologies, such as robot-assisted surgeries, brain implants, and bright clothing that monitors health.

At the time, these things sounded like science fiction. However, many of them are now real or in progress due to artificial intelligence (AI).

One key idea from the video is the use of robots for remote surgery. For example, a doctor in one city could do surgery on a patient in another city using a robot. Today, we have something similar called the da Vinci Surgical System. Doctors use it to do surgery with small tools and a camera. They sit at a computer and control the robot's arm. It helps them work more carefully and safely. Currently, doctors still need to be physically present with the patient. However, some tests indicate that surgery from a distance is possible as long as the internet connection is strong and fast (Topol 123).

The video also discusses brain chips, also known as brain computer interfaces (BCIs). These are special devices that connect the brain to a computer. In real life, companies like Neuralink and research teams like Brain Gate are working on this. They assist individuals who are unable to move or speak. With a brain chip, a person can move a mouse or type on screen just by thinking. This helps people with disabilities live better lives (Shih et al. 70).

AI is also widely used in disease diagnoses. For example, Google developed an AI called Deep Mind that analyzes eye scans and identifies potential issues. IBM made Watson, which helps doctors find cancer and other illnesses. These tools quickly analyze test results and medical images. Sometimes, they are even more accurate than humans (Esteva et al. 115).

Hospitals now use AI to help watch over patients. It checks their heart rate, oxygen level, and other body signs all the time. If something goes wrong, it tell the nurse or doctor right away. This can help stop the problem before it gets worse and can even save lives (Anis Davoudi,et Al). AI is also used to help doctors choose the best treatment for each person. It looks at your past health problems and your genes to understand what will work best for you. AI gives suggestions to the doctor. It also helps scientists find new medicines faster. This was very helpful during COVID-19, when new treatments were needed quickly (NLM).

However, these new technologies also bring problems. For example, brain chips raise privacy concerns. Who can see what is in your brain? Could someone hack it or control it? Another problem is that robot tools and AI software are costly. Only rich hospitals might be able to use them. That means that poor people or small hospitals may not receive the same level of care. This is unfair.

Also, AI is not always right. If it is trained with insufficient data, it can make mistakes. For example, if it mostly learns from one group of people, it might not work well for others. This could hurt people of different races, genders, or backgrounds. We must be cautious in how we train and utilize AI.

The documentary 2057 was very good at showing future technology. It guessed many things right. However, it did not discuss the ethical or fairness issues extensively. As we use AI more in healthcare it's important to make sure people stay in control. Doctors and patients should know how AI makes decisions. Everyone should receive the good quality of care, whether they are rich or poor.

In conclusion, the future is unfolding in 2057 – The Body is already underway. AI is already changing how we treat people, detect diseases, and develop new medicines. However, we must be wise and fair. AI should benefit all

people, not just a select few. We need good rules, safety, and respect for patients to ensure that healthcare remains human, safe, and accessible for everyone.

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