

The disruptive power of Artificial Intelligence. Ethical aspects of gerontechnology in elderly care

Gerontechnology based on Artificial Intelligence (AI) is expected to fulfill the promise of the so-called 4pmedicine and enable a predictive, personalized, preventive, and participatory elderly care. Although empirical evidence shows positive health outcomes, commentators are concerned that AI-based gerontechnology could bring along the disruption of elderly care. A systematic conceptualization of these concerns is lacking. In this paper, such a conceptualization is suggested by analyzing the risks of AI in elderly care as “4d-risks”: the depersonalization of care through algorithm-based standardization, the discrimination of minority groups through generalization, the dehumanization of the care relationship through automatization, and the disciplination of users through monitoring and surveillance. Based on the 4d-model, strategies for a patient-centered AI in elderly care are outlined. Whether AI-based gerontechnology will actualize the 4p-perspective or bring about the 4dscenario depends on whether joint efforts of users, caregivers, care providers, engineers, and policy makers will be made.

Does a patient become just a bunch of numbers and statistics?

Unfortunately, yes

The increased use of technology in nursing with its focus on the patient as body may undermine the holistic approach to nursing practice and limit the ability of nurses to integrate the patient’s individual experience of illness into the clinical process.

How would a machine emphasize with patients, especially elderly people?

The machine emphasizes with patients by bed sensors, wearable sensors for vital functions, floor sensors, and sensors for measuring the use of electricity.

How could we permit a machine to make vital decisions about people lives?

By machines such as by bed sensors, wearable sensors for vital functions, floor sensors, and sensors for measuring the use of electricity patient data is collected, analyzed and vital decisions are made based on this data.

And finally, do we really have equal opportunities of benefiting from this technology?

Yes, we have a great opportunity to benefit from technology in this field, especially if we were able to judge or reduce the risks (4ds)resulting from it.

Advantages of this paper:

This paper highlighted an important problem, which is the disruptive power of Artificial Intelligence in elderly care field, and most of the risks (4ds) are also discussed at length.

Disadvantages of this paper:

I think it did not give effective ways to solve the problem of risks (4ds).