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Letter to the Editor



Artificial Intelligence and Geriatric Health

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To Editor,

Due to significant progress in the treatment and methods of disease prevention, the life expectancy of the world population has increased and as a result, the population of older adults is increasing (1). Artificial Intelligence (AI), which is rapidly developing with the aim of simulating and expanding human intelligence through machines, has provided a good opportunity to provide health services (2). Providing health services in the form of primary health care is one of the successful models that improves access to health services and reduces inequality, and the World Health Organization (WHO), with the reforms it has provided in the framework of providing services in the form of primary health care, uses new and advanced technologies. Considers it necessary based on the type of problems related to the health of society in the system of providing primary health care, and the complex and expensive nature of the technologies do not prevent them from being used in primary health care (3).

Artificial intelligence and the use of digital technologies can improve the provision of primary health care services in environments with poor resources in different ways. Therefore, if we want to use artificial intelligence in the provision of old age services, we must keep in mind the principles established in primary health care services. So that the use of new technologies can on one hand lead to the reduction of inequality in access to health services and on the other hand can lead to the improvement of the health of this group of people by targeting the most common health problems of old age.

At present, the use of artificial intelligence in the health services of the elderly has received more attention in several areas, including: early diagnosis of diseases, management of chronic diseases, support for mental health, facilitating communication with health services, and development of technology to improve lifestyle and support self-care (4,5). Apart from the fact that these studies are designed and implemented less in accordance with the principles of primary health care, they have the following limitations and require more detailed research for their safe use in health organizations in the care of the elderly:

- 1. The studies conducted do not have enough sample size to test and obtain reliable results.
- Examining several health problems in one study, which leads to inaccuracy in controlling variables and calculating the expected results.
- The accuracy of selected methods in predicting results.
- 4. The lack of multicenter studies, which makes it a little difficult to accept the results.
- 5. Clinical evidence in society that shows their universal use.
- 6. Compliance with the principle of confidentiality regarding consumer information.
- 7. How to monitor and evaluate services that can be provided with artificial intelligence.

It is hoped that considering the above-mentioned obstacles, effective studies on the application of artificial intelligence will be implemented in the areas mentioned in this article.

Competing Interests

The authors declare that they have no conflict of interest.

Ethical Approval

Not applicable.

References

1. United Nations Department of Economic and Social Affairs



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- (UN DESA). World Population Prospects 2019: Highlights (ST/ESA/SER.A/423). New York: UN DESA 2019.
- 2. Zhang C, Lu Y. Study on artificial intelligence: the state of the art and future prospects. J Ind Inf Integr. 2021;23:100224. doi: 10.1016/j.jii.2021.100224.
- 3. World Health Organization (WHO). Tables and Figures: How Experience Has Shifted the Focus of the PHC Movement. 2008. Available form: https://www.paho.org/hq/dmdocuments/2010/PHC_The_World_Health_Report-2008.pdf.
- 4. World Health Organization (WHO). Ensuring Artificial
- Intelligence (AI) Technologies for Health Benefit Older People. WHO; 2022. Available from: https://www.who.int/news/item/09-02-2022-ensuring-artificial-intelligence-(ai)-technologies-for-health-benefit-older-people.
- Saif-Ur-Rahman KM, Islam MS, Alaboson J, Ola O, Hasan I, Islam N, et al. Artificial intelligence and digital health in improving primary health care service delivery in LMICs: a systematic review. J Evid Based Med. 2023;16(3):303-20. doi: 10.1111/jebm.12547.