

Geriatric Medical Informatics (GMI) as a new field of health informatics

Khadijeh Moulaei¹, Kambiz Bahaadinbeigy^{2*}

¹Department of Health Information Technology, Faculty of Paramedical, Ilam University of Medical Sciences, Ilam, Iran

²Digital Health Team, Australian College of Rural and Remote Medicine, Brisbane, QLD, Australia

Article Info

Article type:

Letter to Editor

Article History:

Received: 2023-08-02

Accepted: 2023-09-10

Published: 2023-09-23

* Corresponding author:

Kambiz Bahaadinbeigy

Digital Health Team, Australian
College of Rural and Remote
Medicine, Brisbane, QLD, Australia

Email: kambizb321@gmail.com

ABSTRACT

As our population ages, the need for specialized medical care for older adults is becoming increasingly important. At the same time, advances in information technology are revolutionizing the way we approach healthcare, providing opportunities for improved diagnosis, treatment, and patient outcomes.

Keywords:

Geriatric Medical Informatics

Health Informatics

Medical Informatics

Cite this paper as:

Moulaei K, Bahaadinbeigy K. Geriatric Medical Informatics (GMI) as a new field of health informatics. *Front Health Inform.* 2023; 12: 157. DOI: [10.30699/fhi.v12i0.485](https://doi.org/10.30699/fhi.v12i0.485)

DEAR EDITOR

I am writing to express my opinion for the establishment of a new field of health informatics called Geriatric Medical Informatics (GMI). As our population ages, the need for specialized medical care for older adults is becoming increasingly important. At the same time, advances in information technology are revolutionizing the way we approach healthcare, providing opportunities for improved diagnosis, treatment, and patient outcomes.

GMI would focus on the application of information technology to the unique healthcare needs of older adults. On the other hand, Geriatric medical informatics is a field that uses technology and data analytics to improve the care of older adults. By collecting and analyzing data about an individual's health history, medications, and other relevant information, healthcare providers can develop personalized treatment plans that address their unique needs [1]. It involves the application of information science, computer science, and healthcare expertise to develop, implement, and

evaluate innovative technological solutions that enhance the delivery of healthcare services to elderly patients.

This approach has the potential to improve the quality of care provided to older adults, reduce healthcare costs, and improve overall patient outcomes. By leveraging the power of technology and data, we can improve the lives of older adults and ensure they receive the care they deserve [2]. Additionally, the benefits of GMI are numerous, including improved patient care and outcomes, more efficient healthcare delivery, and increased accuracy and completeness of patient data. By utilizing technology such as electronic health records (EHRs) and telemedicine, healthcare providers can better manage patient care, reduce errors, and improve communication among care teams [3]. GMI can also help address the unique healthcare needs of the elderly population. As individuals age, they often develop complex health conditions that require coordinated care and ongoing monitoring [4]. GMI can help healthcare providers track patient progress and ensure that they are receiving the appropriate

care at the right time. By improving healthcare delivery and patient outcomes, GMI has the potential to reduce healthcare costs and improve the quality of life for elderly individuals.

Overall, the establishment of Geriatric Medical Informatics as a field of study is long overdue. With the aging of our population, it is essential that we focus on developing new approaches to healthcare that are tailored to the needs of older adults. By harnessing the power of information technology, we can make significant strides in improving the quality of care and the lives of older adults. Therefore, I urge policymakers and healthcare leaders to invest in the development of geriatric medical informatics. By doing so, we can improve the quality of care provided to older adults and help them live healthier, more fulfilling lives.

ACKNOWLEDGMENTS

The authors thank the Central Library and Documentation Center of Kerman University of Medical Sciences for providing access to knowledge

base references required for this study.

AUTHOR'S CONTRIBUTION

Conceptualization and literature search, KHM; data analysis, KHM and KB; writing original draft preparation, KHM; writing, review and editing KHM and KB. The authors read and approved the final manuscript.

CONFLICTS OF INTEREST

The authors declare no conflicts of interest regarding the publication of this study.

FINANCIAL DISCLOSURE

This study was supported by Medical Informatics Research Center of Kerman University of Medical Sciences. The funder had no roles in study design, data gathering and analysis.

ETHICS APPROVAL

Not Applicable.

REFERENCES

1. Becla L, Lunshof JE, Gurwitz D, Schulte In den Bäumen T, Westerhoff HV, Lange BMH, et al. Health technology assessment in the era of personalized health care. *Int J Technol Assess Health Care*. 2011; 27(2): 118-26. PMID: 21450126 DOI: 10.1017/S026646231100002X [[PubMed](#)]
2. Gustafson DH, McTavish F, Gustafson DH, Mahoney JE, Johnson RA, Lee JD, et al. The effect of an information and communication technology (ICT) on older adults' quality of life: Study protocol for a randomized control trial. *Trials*. 2015; 16: 191. PMID: 25909465 DOI: 10.1186/s13063-015-0713-2 [[PubMed](#)]
3. Gu D, Li T, Wang X, Yang X, Yu Z. Visualizing the intellectual structure and evolution of electronic health and telemedicine research. *Int J Med Inform*. 2019; 130: 103947. PMID: 31450080 DOI: 10.1016/j.ijmedinf.2019.08.007 [[PubMed](#)]
4. Ngandu T, Lehtisalo J, Solomon A, Levälähti E, Ahtiluoto S, Antikainen R, et al. A 2 year multidomain intervention of diet, exercise, cognitive training, and vascular risk monitoring versus control to prevent cognitive decline in at-risk elderly people (FINGER): a randomised controlled trial. *Lancet*. 2015; 385(9984): 2255-63. PMID: 25771249 DOI: 10.1016/S0140-6736(15)60461-5 [[PubMed](#)]