



LETTER TO THE EDITOR

Mobile health: opportunities and challenges

Zahra Omidali^{1*}, Zeynab Naseri¹, Razieh Javanmard¹

¹ Student Research Committee, Ahvaz Jundishapur University of Medical Sciences,
Ahvaz, Iran

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TO THE EDITOR:

Mobile health refers to the use of mobile phones and other wireless technologies such as tablets, personal digital assistants (PDAs) and wearable devices in health care, including preventive health care, disease surveillance, support for treatment plans, tracking epidemics and managing chronic diseases. According to studies, due to obstacles such as financial limitations, poor health infrastructure, shortage of qualified medical staff, geographical limitations, uneven distribution of health and treatment services, especially in developing and less developed countries, and on the other hand, increasing access to mobile phones and their undeniable acceptance among the general public, it seems that a significant capacity for using mobile health apps has been created and the use of mobile technologies in the field of health can be helpful (1-2). COVID-19 can be considered a turning point for the use of telemedicine, including mobile health technology, which highlights the need for the implementation of digital technologies (3).

Convenience of using mobile technologies, helping to distribute health care services fairly, reducing geographical and climate constraints for receiving health care services, personalization for each individual, motivating users to participate in managing their health, reducing health care costs, reducing the care gap between patients and healthcare staff, especially doctors, are among the opportunities that mobile health offers to users (4-5).

* **Correspondence to:** Department of Health Information Technology, School of Allied Medical Science, Ahvaz Jundishapur University of Medical Sciences, Postal Code: 61357-15794, Ahvaz, Iran Email: omidali.z@ajums.ac.ir

About the authors:

Zahra Omidali, Zeynab Naseri, and Razieh Javanmard; BSc, MSc student in Medical Informatics, Department of Health Information Technology, School of Allied Medical Science, Ahvaz Jundishapur University of Medical Sciences, Ahvaz, Iran

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It is noteworthy that based on the studies, to take full advantage of the benefits of mobile health, some measures such as correct training of users, providing continuous support services, using behavior change techniques for better acceptance of technology by users, paying attention to confidentiality and security of users' information have been suggested (4).

Among the obstacles in this field are the challenges related to the lack of information security and data management, lack of privacy of individuals, issues related to implementation costs, return on investment and insurance reimbursement, unequal access to mobile technologies, especially in deprived areas, poor network coverage in less developed areas, rejection and disinterest of users, lack of adequate e-health literacy, age and level of users' specifications, Challenges faced by employees with new technology, cultural and social barriers, the possibility of inaccurate information from some mobile health programs, and in some cases insufficient evidence about current practices of mobile health use (1, 5-7).

Overall, mobile health technologies have a high potential to deal with inequities in health services. Patients (along with patients) also consider the use of mobile health tools as an opportunity for better access to health services, so mobile health has a considerable acceptance among users. The increasing penetration of smartphones and the expansion of wireless network coverage have equipped digital health systems with new possibilities. This leads to the increasing adoption of mobile health in digital health (1).

At last, it is anticipated that in the near future the use of mobile technologies and its acceptance among people and medical staff, especially doctors, will increase progressively so that it will become an integral part of health care services.

REFERENCES

1. O'CONNOR S, O'DONOGHUE J, GALLAGHER J, KAWONGA T. UNIQUE CHALLENGES EXPERIENCED DURING THE PROCESS OF IMPLEMENTING MOBILE HEALTH INFORMATION TECHNOLOGY IN DEVELOPING COUNTRIES. *BMC HEALTH SERVICES RESEARCH*. 2014;14:1.
2. CHOUDHURY A, SHAHSAVAR Y, SARKAR K, CHOUDHURY MM, NIMBARTE AD. EXPLORING PERCEPTIONS AND NEEDS OF MOBILE HEALTH INTERVENTIONS FOR NUTRITION, ANEMIA, AND PREECLAMPSIA AMONG PREGNANT WOMEN IN UNDERPRIVILEGED INDIAN COMMUNITIES: A CROSS-SECTIONAL SURVEY. *NUTRIENTS*. 2023;15(17):3699.
3. HINCAPIÉ MA, GALLEGOS JC, GEMPELER A, PIÑEROS JA, NASNER D, ESCOBAR MF. IMPLEMENTATION AND USEFULNESS OF TELEMEDICINE DURING THE COVID-19 PANDEMIC: A SCOPING REVIEW. *J PRIM CARE COMMUNITY HEALTH*. 2020;11:2150132720980612.
4. LYZWINSKI LN, ELGENDI M, MENON C. USERS' ACCEPTABILITY AND PERCEIVED EFFICACY OF mHEALTH FOR OPIOID USE DISORDER: SCOPING REVIEW. *JMIR mHEALTH AND uHEALTH*. 2024;12:e49751.
5. SHAHBAZI M, BAGHERIAN H, SATTARI M, SAGHAEEANNEJAD-ISFAHANI S. THE OPPORTUNITIES AND CHALLENGES OF USING MOBILE HEALTH IN ELDERLY SELF-CARE. *JOURNAL OF EDUCATION AND HEALTH PROMOTION*. 2021;10.
6. TAKUWA M, MBABAZI SE, TUSABE M, MULINDWA B, MAKOBOR PN, MULERWA M, ET AL. MOBILE HEALTH ACCESS AND UTILISATION IN UGANDA: KNOWLEDGE, ATTITUDES AND PERCEPTIONS OF HEALTH AND VETERINARY WORKERS. *TELEMEDICINE AND E-HEALTH*. 2023;29(6):912-20.
7. SCOTT KRUSE C, KAREM P, SHIFFLETT K, VEGI L, RAVI K, BROOKS M. EVALUATING BARRIERS TO ADOPTING TELEMEDICINE WORLDWIDE: A SYSTEMATIC REVIEW. *J TELEMED TELECAR*. 2018;24(1):4-12.