LETTER TO EDITOR

Cultivating Connections: Leveraging Mobile Health to Enhance Online Health Community Engagement

Peigham Heidarpoor¹, MD; Marzieh Katibeh², MD, PhD; Mina Shahmizad¹, MSc student; Masomeh Kalantarion³, PhD

¹Department of Community Based Education of Health Sciences, School of Medical Education and Learning Technologies, Shahid Beheshti University of Medical Sciences, Tehran, Iran; ²Department of Public Health, Centre for Global Health, Aarhus University, Aarhus, Denmark; ³Department of Medical Education, School of Medical Education and Learning Technologies, Shahid Beheshti University of Medical Sciences, Tehran, Iran

Corresponding Author:

Masomeh Kalantarion, PhD; Department of Medical Education, School of Medical Education and Learning Technologies, Shahid Beheshti University of Medical Sciences, Postal code:19857-17443, Tehran, Iran **Tel/Fax:** +98 21 26210092; **Email:** Kalantarion65@gmail.com

Received: 1 October 2024 Revised: 18 December 2024 Accepted: 25 December 2024

DEAR EDITOR

Effective community engagement is essential for high-quality healthcare delivery. It helps providers understand and serve the unique needs of diverse populations. Traditional community engagement often relies on one-way information dissemination or superficial interactions, which fail to foster genuine, reciprocal partnerships.¹

The global prevalence of smartphones is rapidly increasing, with projections indicating that by 2025, two-thirds of the global population will use these devices. In some low-income countries, access to mobile phones and the Internet is more common than access to safe electricity and clean water. However, barriers such as digital literacy, inadequate resources, and unreliable Internet access hinder the effective use of mobile health (mHealth) technologies.² This letter aims to focus on the role of mHealth in promoting women's health, enhancing community engagement among healthcare providers, particularly community health workers, and facilitating medical students' education in health promotion and community engagement.

Information technology can shift care from doctor-centered to patient-centered. Studies indicate that sharing information and social support—either face-to-face or online—improves health outcomes. Participation in online health communities (OHCs) relies on users' psychological attraction, allowing anonymous sharing of health information. Ongoing engagement is vital, with emotional support influencing participation.³

To enhance health information validity, ease of access, quality, and urgency are essential. Discussion forums can foster interaction, helping members address similar health issues. Increased sharing and information-seeking behaviors contributed to higher levels of participation, with healthier individuals more likely to share information, while those encountering health challenges were more inclined to seek support.³ Thus, using mobile technology in online environments effectively boosts health promotion participation.

Women are crucial in enhancing their health and that of society. Women's health extends beyond maternal and reproductive issues; they play a key role in addressing non-communicable

Copyright © 2025 The Author(s). This is an open-access article distributed under the terms of the Creative Commons Attribution-NonCommercial-ShareAlike 4.0 International License. disease risk factors, especially in resource-limited settings. The Global Strategy for Women's, Children's, and Adolescents' Health outlines three goals: survive (ending preventable deaths), thrive (ensuring health and well-being), and transform (creating enabling environments). While policies often focus on the first two, achieving them requires the third, which necessitates social participation.⁴

Community involvement, particularly from disadvantaged groups, can promote equitable care. The World Health Organization (WHO) recommends community participation to improve maternal and child health, fostering social change regarding access to services and gender dynamics.⁴ Mhealth can enhance women's health by improving access to services, knowledge, and economic stability. The effectiveness of health applications depends on user demographics, suggesting that personalization and cultural considerations can boost mHealth usage. Women in developing countries can effectively engage in online health initiatives if the necessary conditions for participation are met. Mhealth service delivery can facilitate this engagement.

Women in remote areas often refer to the lowest level of health services. It can be reasonably deduced that the utilization of this technology by health workers will serve to diminish health disparities, particularly concerning women. The removal of technical and cultural barriers has the potential to enhance the attitude of health workers towards the utilization of mHealth. With training, the mHealth application was easy to use, even for community health workers who did not have a lot of experience with smartphones.⁵

The provision of health services and the utilization of technology are more advanced in developed countries than in less developed ones. One potential solution to this issue is the integration of Mhealth and medical education. In this instance, the provision of educational resources and the involvement of physicians at varying levels will be facilitated. In the wake of the COVID-19 pandemic and the proliferation of online education, the WHO has underscored this matter.⁶ Medical students may not have the opportunity to visit rural and underprivileged areas during their studies due to distance and cost. By using mobile technology and creating OHCs, it is possible to provide the conditions for these students to have a better understanding of socioeconomic factors and experience online service learning and a better understanding of community engagement. They could integrate mobile-based reflective journaling exercises, wherein students document their experiences, challenges, and evolving perspectives on community engagement. Similarly, healthcare training programs could leverage mobile apps or virtual reality simulations to expose the learners to diverse cultural beliefs, communication styles, and community-based resources. By weaving these elements into the fabric of mHealth experiences, medical educators can help trainees develop the mindsets, skills, and dispositions necessary to become effective, community-centered healthcare providers.

In conclusion, mobile health (mHealth) technologies have substantial potential to enhance community engagement across various demographics, including women, medical students, and community service providers. By improving access to information and facilitating online interactions, mHealth empowers women to take control of their health while also fostering the involvement of medical students in health promotion initiatives. It is crucial to address barriers to digital access to ensure these technologies effectively meet the diverse needs of all groups, ultimately leading to improved health outcomes and a more engaged community.

Acknowledgment

We thank the healthcare professionals, community health workers, and organizations dedicated to advancing women's health. Their insights and commitment have been vital in shaping this discussion.

Authors' Contribution

MKal conceived the idea. MKal, PH, and MS wrote the initial draft of the letter. MKat and PH critically revised the letter. All authors have reviewed and approved the final draft and are responsible for the letter's content and similarity index.

Funding

No funding was received for conducting this study.

Conflict of Interest: None declared.

Declaration on the Use of AI

We employed ChatGPT-4 (OpenAI) solely to improve the clarity, coherence, and grammatical quality of the text. All modifications made by the AI have been carefully reviewed and approved by the authors to ensure accuracy and alignment with the research objectives.

Please cite this article as: Heidarpoor P, Katibeh M, Shahmizad M, Kalantarion M. Cultivating Connections: Leveraging Mobile Health to Enhance Online Health Community Engagement . IJCBNM. 2025;13(2):164-166. doi: 10.30476/ijcbnm.2025.104216.2616.

References

- 1 Durrance-Bagale A, Marzouk M, Tung LS, et al. Community engagement in health systems interventions and research in conflict-affected countries: a scoping review of approaches. Global Health Action. 2022;15:2074131.
- 2 McCool J, Dobson R, Whittaker R, et al. Mobile health (mHealth) in low-and middle-income countries. Annual Review of Public Health. 2022;43:525-39.
- 3 Mirzaei T, Esmaeilzadeh P. Engagement in online health communities: channel expansion and social exchanges. Information & Management. 2021;58:103404.
- 4 Marston C, Hinton R, Kean S, et al. Community participation for transformative action on women's, children's and adolescents' health. Bulletin of the World Health Organization. 2016;94:376-82.
- 5 Kachimanga C, Mulwafu M, Ndambo MK, et al. Experiences of community health workers on adopting mHealth in rural Malawi: A qualitative study. Digital Health. 2024;10:20552076241253994
- 6 He Y, Xie Z, Li J, et al. Global Trends in mHealth and Medical Education Research: Bibliometrics and Knowledge Graph Analysis. JMIR Medical Education. 2024;10:e52461.