

The Impact of Mobile Health (mHealth) in Maternal Health Services [Response to Letter]

Chiyembekezo Kachimanga^{1,2}, Wingston Felix Ng'ambi³, Doctor Kazinga¹, Enoch Ndarama⁴, Mercy Ambogo Amulele⁵, Fabien Munyaneza¹, Ibukun-Oluwa O Abejirinde^{6,7}, Thomas van den Akker^{2,8}, Alexandra V Kulinkina^{1,9,10}

¹Partners in Health Malawi, Neno, Malawi; ²Athena Institute, Vrije Universiteit Amsterdam, Amsterdam, Netherlands; ³Health Economics and Policy Unit, Department of Health Systems and Policy, Kamuzu University of Health Sciences, Lilongwe, Malawi; ⁴Ministry of Health, Neno, Malawi; ⁵Medic, Nairobi, Kenya; ⁶Women College Hospital Institute for Health System Solutions and Virtual Care, Toronto, ON, Canada; ⁷Dalla Lana School of Public Health, University of Toronto, Toronto, ON, Canada; ⁸Department of Obstetrics and Gynaecology, Leiden University Medical Center, Leiden, Netherlands; ⁹Swiss Tropical and Public Health Institute, Allschwil, Switzerland; ¹⁰University of Basel, Basel, Switzerland

Correspondence: Chiyembekezo Kachimanga, Partners in Health Malawi, Post Office Box 56, Neno, Malawi, Email chembekachimanga@yahoo.co.uk

Dear editor

The authors express gratitude to the letter submitted by Rashati and Akbar¹ in response to our study titled "Impact of mobile health (mHealth) use by community health workers on the utilization of maternity care in rural Malawi: a time-series analysis".² We are happy that the authors of the letter acknowledge that our study is insightful and presents promising results on the impact of mHealth use by community health workers (CHWs) in the context of maternity care in limited resource settings.

Several limitations were pointed out in the letter. These limitations have been addressed in our paper as well as in other related studies that we published previously.²⁻⁴ Firstly, the letter stresses the need to implement mHealth with additional behavior and structural interventions to realize the long-term impact of mHealth use by CHWs on facility-based births. Our previously published and other studies have shown that mHealth alone (and more broadly CHWs) may be ineffective if not implemented alongside context-specific community and facility-level interventions.³⁻⁶ In addition, a study in Rwanda showed that mHealth use by CHWs improved maternal and child health outcomes in settings where mHealth was implemented alongside broader health system strengthening interventions like additional training, mentorship, and provision of equipment and supplies.⁵ We agree that potential behavioral and structural interventions should be added to mHealth, although the choice of interventions will be based on contextual factors and the needs of the communities.

The second limitation raised is the potential effect of cultural and logistical barriers on the impact of mHealth on postnatal care (PNC). As we explained in our paper, cultural factors may have hindered the impact of mHealth use by CHWs on PNC. Additionally, challenges with PNC workflow may have affected the impact of CHWs' mHealth use. Further studies can explore how addressing cultural barriers could improve the impact of mHealth on PNC use.

Lastly, the letter comments on considering sustainability, ensuring that mHealth is user-friendly and interoperable and that CHWs are supported during mHealth implementation. In our recent systematic review, we found out that the success of mHealth use by CHWs indeed depends on factors outside the technology itself.⁴ While CHWs require long-term technological and digital infrastructure support, including the availability of free phones, accessories, and free internet connectivity, as well as the usability of mHealth software, social factors are equally important in ensuring the sustainability of mHealth. In our systematic review and exploration of mHealth use in Malawi,³ the perceptions from communities, CHW relationships, trust, continuous training and mentorship, and incentives ensured success and long-term sustainability. CHWs identified social factors as critical enablers.

Like the authors of the letter, we hope that future studies can address these limitations and that our lessons learned with regard to mHealth use by CHWs in Neno, Malawi, can benefit those in other contexts.



Disclosure

The authors report no conflicts of interest in this communication.

References

1. Rashati D, Akbar PS. The impact of mobile health (mHealth) in maternal health services. *Int J Womens Health*. 2025;17:771–772. doi:10.2147/ijwh.S521762
2. Kachimanga C, Ng'ambi WF, Kazinga D, et al. Impact of mobile health (mHealth) use by community health workers on the utilization of maternity care in rural Malawi: a time series analysis. *Int J Womens Health*. 2025;17:245–257. doi:10.2147/ijwh.S497100
3. Kachimanga C, Mulwafu M, Ndambo MK, et al. Experiences of community health workers on adopting mHealth in rural Malawi: a qualitative study. *Digit Health*. 2024;10:20552076241253994. doi:10.1177/20552076241253994
4. Kachimanga C, Zaniku HR, Divala TH, et al. Evaluating the adoption of mHealth technologies by community health workers to improve the use of maternal health services in Sub-Saharan Africa: systematic review. *JMIR mHealth uHealth*. 2024;12:e55819. doi:10.2196/55819
5. Ruton H, Musabyimana A, Gaju E, et al. The impact of an mHealth monitoring system on health care utilization by mothers and children: an evaluation using routine health information in Rwanda. *Health Policy and Planning*. 2018;33(8):920–927. doi:10.1093/heapol/czy066
6. Kachimanga C, Dunbar EL, Watson S, et al. Increasing utilisation of perinatal services: estimating the impact of community health worker program in Neno, Malawi. *BMC Pregnancy Childbirth*. 2020;20(1):22. doi:10.1186/s12884-019-2714-8

Dove Medical Press encourages responsible, free and frank academic debate. The content of the International Journal of Women's Health 'letters to the editor' section does not necessarily represent the views of Dove Medical Press, its officers, agents, employees, related entities or the International Journal of Women's Health editors. While all reasonable steps have been taken to confirm the content of each letter, Dove Medical Press accepts no liability in respect of the content of any letter, nor is it responsible for the content and accuracy of any letter to the editor.

International Journal of Women's Health

Publish your work in this journal

The International Journal of Women's Health is an international, peer-reviewed open-access journal publishing original research, reports, editorials, reviews and commentaries on all aspects of women's healthcare including gynecology, obstetrics, and breast cancer. The manuscript management system is completely online and includes a very quick and fair peer-review system, which is all easy to use. Visit <http://www.dovepress.com/testimonials.php> to read real quotes from published authors.

Submit your manuscript here: <https://www.dovepress.com/international-journal-of-womens-health-journal>

<https://doi.org/10.2147/IJWH.S528712>