Using eLearning to improve and retain knowledge of community health workers in maternal and neonatal health in Rwanda: A prospective cohort study

Christian Mazimpaka¹, Yves Sangwa¹, Victor Ndaru hutse¹, Samson Radeny¹, Dieudonne Ndatimana¹, François Niragire², Beatrice Mukamana³, Josee Uwamariya¹, Clovis Kabanda¹, Angelique Nyirafaranga¹, Marie Chantal Uzayisenga¹, Chris Adrien Kanakuze⁴, Jean Claude Gasamagera¹, Jacqueline Umunyana¹, and Erigene Rutayisire⁴

¹IntraHealth International Inc
²University of Rwanda College of Business and Economics
³Rwanda Biomedical Center
⁴University of Rwanda College of Medicine and Health Sciences Huye

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Abstract

Background: In Rwanda, Community Health Workers (CHWs) serve a crucial function in providing community-based maternal and neonatal health (CBMNH) services. However, limited access to refresher training contributes to knowledge gaps among CHWs, affecting their confidence and ability to execute their roles effectively. This study aimed to evaluate the impact of eLearning on enhancing and maintaining CHWs’ knowledge of CBMNH. Methods: This prospective cohort study, conducted from April-October 2021 in two Rwandan districts, evaluated knowledge acquisition and retention among 36 Community Health Workers (CHWs) participating in an eLearning course. Knowledge scores were measured using a structured questionnaire administered pre-training, post-training, and at a six-month follow-up. Descriptive analysis and paired t-tests were used to assess mean score differences, exploring the effectiveness of this eLearning approach. Results: This study demonstrated an improvement in Community Health Workers’ (CHWs) performance scores following eLearning training, with an average rise from 86.5% to 98.2%. The improvement was sustained at a six-month follow-up. Statistical significance was found between age category and CHWs’ pre and post-test performance (p=0.01, p=0.04 respectively), and between years of experience and pre-test scores (p=0.02), highlighting demographic influences on training outcomes. Conclusions: The results of this study suggest that eLearning is an effective method for enhancing and retaining CHWs’ knowledge of CBMNH. The findings support the use of eLearning as a valuable strategy for strengthening the capacity of CHWs in Rwanda and other countries with similar contexts.

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