

Effectiveness of community health workers in improving early initiation and exclusive breastfeeding rates in a low-resource setting: A cluster-randomized longitudinal study

Dorothy Mituki-Mungiria¹  | Prisca Tuitoek² | Aniko Varpolatai³ | Douglas Ngotho⁴ | Elizabeth Kimani-Murage⁵

¹Department of Human Nutrition, Egerton University, Egerton, Kenya

²Muranga University College, Muranga, Kenya

³School of Education, University of Western Ontario, London, ON, Canada

⁴Faculty of Health Sciences, Egerton University, Egerton, Kenya

⁵African Population and Health Research Center, Nairobi, Kenya

Correspondence

Dorothy Mituki-Mungiria, Department of Human Nutrition, Faculty of Health Sciences, Egerton University, P.O Box 536-20115, Egerton, Nakuru, Kenya.
Email: dorothymituki@egerton.ac.ke

Abstract

Little evidence exists in Kenya on the potential of community health workers (CHWs) in promoting exclusive breastfeeding (EBF) and early breastfeeding initiation (EBI) in resource-restricted settings where very low EBF rates (2% to 12%) have been documented. The study utilized CHWs and assessed their effectiveness in promoting EBF and EBI. The cluster-randomized longitudinal design was used and sixteen villages from Kiandutu Slum in Thika randomly assigned into either intervention group (IG) or comparison group (CG). Pregnant women attending Maternal Child Health (MCH) clinic were recruited. The IG received nutrition education sessions conducted by CHWs at home, two prenatally and six postnatally, plus the routine MCH care. The CG went through routine MCH care only. Infants feeding data were collected at 6, 10, 14, and 24 weeks postpartum by research assistants blinded to the intervention allocation. Differences in EBF and EBI in the two groups were tested using χ^2 tests, Kaplan–Meier survival analysis and generalized estimating equations. Of the 526 recruited in the study, 431 remained and were included in the analysis (IG = 176) and CG (255). The prevalence of EBF at 24 weeks was 45.3% in the IG compared with 15.0% in the CG, revealing a statistically significant difference log rank = 20.277, (1, $n = 314$) $p < .001$. The difference was not statistically significant in EBI prevalence between the IG (58.2%) and CG (60.3%; $\chi^2 = 0.008$, $p = .928$). The CHWs have potential effectiveness in promoting EBF but not EBI. The link between the health center and CHWs should be strengthened to promote EBF.

KEYWORDS

breastfeeding initiation, community health workers, exclusive breastfeeding

This is an open access article under the terms of the Creative Commons Attribution License, which permits use, distribution and reproduction in any medium, provided the original work is properly cited.

© 2020 The Authors. *Food Science & Nutrition* published by Wiley Periodicals, Inc.