

ORIGINAL RESEARCH

The TeAMS Toolkit: A co-designed tool to support team-based management of children with acute malnutrition at Migori County Referral Hospital

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Abstract

Malnutrition is a leading contributor to deaths in children, with six times higher risk for hospital mortality among wasted children compared to those who are well nourished. Although national guidelines for management of acute malnutrition have been available for decades, adherence to them remains suboptimal. In this exploratory mixed method study, health workers who provide care to children with severe acute malnutrition at Migori County Referral Hospital (MCRH) identified an important barrier to implementing care according to guidelines. Through a participatory co-design process, we identified the content and features they preferred in a toolkit to help address the challenges faced when a nutritionist is not available. The co-design process incorporated feedback from 24 pre-pilot surveys, 18 design sessions with health workers, and a consensus meeting with 6 health workers representing all cadres to refine the Team Approach to Malnutrition Services (TeAMS) Toolkit prior to piloting. The Toolkit included sections on (1) teamwork skills, (2) roles and responsibilities, (3) summarized information from the Integrated Management of Acute Malnutrition guideline, and (4) monitoring and documentation. The TeAMS Toolkit was then piloted for ten weeks and then the usability and feasibility of the toolkit and the perceived competence, teamwork attitudes, and role perceptions of health workers were assessed using quantitative surveys and qualitative interviews. Usability of the toolkit was scored as 77.4/100 on the System Usability Scale, which indicates good usability of the tool. This aligned with qualitative feedback that highlighted the benefits of having this easy reference, especially for feeding prescriptions. Pre/post surveys identified an increase in mean scores on five out of six measures of teamwork attitudes, including knowing your own role (3.74/5 to 4.26/5) and sharing information (3.79/5 to 4.42/5). Participants described a change from a perception that offering feeding was only for the nutritionist to one of ensuring that feeding was provided in good time by other team members in case a nutritionist was not available. In this pilot study, the co-designed TeAMS Toolkit supported multi-disciplinary care for children with SAM. Further refinement and alignment with updated guidelines will ready this resource for delivery at additional facilities.

Keywords: Severe Acute Malnutrition, Teamwork, Co-design, Roles, Usability