

Simplified tools for delivery of acute malnutrition treatment by community health workers in humanitarian contexts

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Introduction

Globally, 50 million under-five children suffer from acute malnutrition. With treatment available only in health facilities, life-saving services are inaccessible for many in humanitarian contexts. The International Rescue Committee led a user-centred design process to develop simplified job aids, tools, and a protocol for low-literate community health workers (CHW) to deliver acute malnutrition treatment at the community level. Following a pilot study in Northern Bahr El Ghazal State, South Sudan, the simplified package was further adapted and piloted by four other organisations in contexts where children have limited access to facility-based treatment (Niger State, Nigeria; Isiolo and Turkana Counties, Kenya; Nsanje, Malawi).

Methods

Prospective mixed-methods feasibility studies on community-based treatment outcomes for uncomplicated cases of childhood acute malnutrition were conducted. Each study trained CHWs on the simplified package and tested performance against the protocol prior to selecting a subset who passed a pre-determined CHW performance benchmark of 80% on a cumulative performance score comprised of various tasks (similar exam but not standardized across contexts due to differences in policies). In South Sudan and Nigeria, CHWs treated children with severe acute malnutrition (SAM) who had mid-upper arm circumference (MUAC) 9-<11.5 cm or bilateral pitting oedema, and in Kenya, CHWs additionally treated children with moderate acute malnutrition (MAM; MUAC 11.5-<12.5 cm). CHWs received supervision visits where supervisors scored CHWs' performance. Children were tracked over time to capture their treatment outcomes.

Ethics

This research was approved by the Ethics Review Board (ERB) of the International Rescue Committee and respective national ERBs.

Results

Median of 57 CHWs (range 44-67) were deployed and median of 238 children (43-308) treated. The following results exclude Kenya data. Reported adherence to the protocol was high across all contexts, with notably lower scores for treatment week 2 distribution of albendazole (e.g. 84% in Nigeria vs >95% for most tasks). The recovery rate from SAM to full recovery was 100% (23/23) in Malawi, 73% (179/245) in Nigeria, and 75% (146/195) in South Sudan. Treatment from CHWs was generally well-received by community members, but CHW experienced challenges from caregivers of children who did not qualify for treatment. In Nigeria and South Sudan, caregivers whose MAM child was referred were frustrated by the long distance to the nearest MAM treatment facility. In South Sudan, where data from nearby health facilities were available, the facility-based drop-off from outpatient therapeutic programme recovery (SAM to MAM) to targeted supplementary feeding programme enrolment for MAM treatment was 45%, suggesting the continuum of care was significantly better in the community-based programme that treated children from SAM to full recovery.

Conclusion

CHWs in our multi-site study showed high adherence to an acute malnutrition treatment protocol, regardless of CHW literacy level, with treatment outcomes demonstrating high continuity of care from SAM to MAM to full recovery.

Conflicts of interest

None declared.

