Engaging caregivers in at-home surveillance of children with uncomplicated severe acute malnutrition

Although outpatient care has been shown to be highly effective, cost-effective and acceptable across a variety of settings, only 10% of children with severe acute malnutrition (SAM) receive treatment each year. Limited health infrastructures and trained personnel can constrain the number of children who receive treatment at facilities. Prior research in nutrition has shown that mothers have the ability to diagnose SAM immediately following training, similar to community health workers.

To assess the feasibility of shifting clinical surveillance to caregivers of children admitted for outpatient treatment of SAM, the authors conducted a pilot study in the Maradi region, Niger, to assess caregivers’ understanding and retention of key concepts related to the surveillance of clinical danger signs and anthropometric measurements. At the time of a child’s admission to outpatient SAM treatment, a nurse provided a short training (less than 30 minutes) to groups of no more than 10 caregivers on two topics: (a) clinical danger signs in children with SAM that warrant facility-based care and (b) methods to measure and monitor their child’s mid-upper arm circumference (MUAC). Caregiver understanding was assessed using standardised questionnaires before training, immediately after training and 28 days after training.

A total of 128 caregivers of children aged 6 to 59 months with uncomplicated SAM were enrolled. Knowledge of most clinical danger signs (e.g., convulsions, oedema, poor appetite, respiratory distress and lethargy) was low (0–45%) before training but increased immediately after and was retained 28 days after training. The majority of caregivers correctly implemented the four steps to measure their child’s MUAC immediately following training and the correct methods were retained 28 days after.

Results provide preliminary evidence to suggest that, with minimal training, caregivers with relatively low education can understand the key concepts of clinical warning signs and MUAC measurement for the surveillance of their malnourished children at home. Task-shifting of clinical and anthropometric surveillance to mothers may provide a feasible model to reduce the frequency of health facility visits, reduce the burden on resource-limited health systems and caregivers and help to detect clinical warning signs before serious complications develop in SAM children.

Co-implementing vitamin A supplementation with seasonal malaria chemoprevention

High-dose vitamin A supplementation (VAS) for children 6–59 months of age is recommended by the World Health Organization (WHO) as a proven low-cost intervention to reduce child mortality. In Nigeria, VAS is delivered during twice-yearly maternal, newborn and child health (MNCH) campaigns at the health facility level. However, coverage has been noted to be low (less than 15% in some States). Seasonal malaria chemoprevention (SMC) is a community-based, door-to-door intervention delivered by community distributors (CDs) in four monthly cycles during peak malaria transmission. Given the low VAS coverage, this study aimed to explore the feasibility and acceptability of integrating VAS with community-level SMC in Dange-Shuni local government area in Sokoto State and provide pragmatic evidence to guide potential implementation and scale-up.

A pilot study was undertaken using a mixed method approach, with qualitative focus group discussions (FGDs) and key informant interviews as well as quantitative components (baseline and endline comparisons of VAS and SMC coverage following integration of services). At baseline, 1.6% of children had received VAS and 69.7% had received SMC (n=188). In comparison, at endline 59.4% of children received VAS and 75.6% had received SMC (n=197). Input from FGDs highlighted that there was a positive response to integration and high levels of acceptability across all stakeholders (including caregivers, CDs, state-level and national-level health programme officials). All stakeholders appreciated the advantages of household-based delivery of VAS over the current health-facility based delivery. However, participants raised issues in terms of potential confusion for caregivers in administering VAS and SMC simultaneously and potential for rejection of these due to social norms. CDs noted that integration increased their workload substantially, without a reduction in daily coverage targets, which led to issues in the quality of service provided. Additional training and remuneration packages for CDs were recommended in order to successfully integrate VAS and SMC. These findings support the rationale for implementation of integrated VAS and SMC campaigns. If validated in additional settings, the intervention should be scaled up incrementally to achieve national coverage, with barriers addressed along the way.


Research snapshots