

Impact on child acute malnutrition of integrating small-quantity lipid-based nutrient supplements into community-level screening for acute malnutrition in Mali

Research snapshot¹

The impact of community-based management of acute malnutrition (CMAM) is often limited by low coverage of screening for acute malnutrition. A two-arm cluster-randomised controlled trial in 48 health centre catchment areas in the Bla and San health districts in Mali aimed to test the impact of distributing small-quantity, lipid-based nutrient supplements (SQ-LNSs) at monthly screenings held by community health volunteers (CHVs). Screening sessions included behaviour change communication on nutrition, health and hygiene practices (both study arms), and SQ-LNSs (one study arm). Impact was assessed on acute malnutrition screening and treatment coverage and on acute malnutrition incidence and prevalence. A repeated cross-sectional study (n = 2,300) with baseline and endline surveys was used to examine impacts on acute malnutrition screening and treatment coverage and prevalence. A longitudinal study of children enrolled at six months of age (n=1,132) and followed monthly for 18 months was used to assess impact on acute malnutrition screening and treatment coverage and incidence.

The intervention significantly increased acute malnutrition screening coverage (cross-sectional study: +40 percentage points [pp], 95% confidence interval [CI]: 32, 49, $p < 0.001$; longitudinal study: +28 pp, 95% CI: 23, 33, $p < 0.001$). No impact on treatment coverage or acute malnutrition prevalence was found. Children in the intervention arm, however, were 29% (95% CI: 8, 46; $p = 0.017$) less likely to develop a first acute malnutrition episode (incidence) and, compared to children in comparison arm, their overall risk of acute malnutrition (longitudinal prevalence) was 30% (95% CI: 12, 44; $p = 0.002$) lower. The intervention lowered CMAM enrolment by 10 pp (95% CI: 1.9, 18; $p = 0.016$), an unintended negative impact likely due to CHVs handing out preventive SQ-LNSs to caregivers of acute malnutrition children instead of referring them to the CMAM programme. Incorporating SQ-LNSs into monthly community-level acute malnutrition screenings and behaviour change communication sessions was highly effective at improving screening coverage and reducing acute malnutrition incidence, but it did not improve acute malnutrition prevalence or treatment coverage. Further research is needed on remaining barriers to CMAM uptake.



An 11 months old is admitted to a health centre in Kalabankoro, Mali, suffering from severe acute malnutrition

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¹ Huybregts L, Le Port A, Becquey E, Zongrone A, Barba FM, Rawat R, et al. (2019) Impact on child acute malnutrition of integrating small-quantity lipid-based nutrient supplements into community-level screening for acute malnutrition: A cluster-randomized controlled trial in Mali. *PLoS Med* 16(8): e1002892. <https://doi.org/10.1371/journal.pmed.1002892>

Supportive supervision to improve the quality and outcome of outpatient care among malnourished children in Uganda

Research snapshot¹

Suboptimal quality of paediatric care has been reported in resource-limited settings, but little evidence exists on interventions to improve it. This study aimed to test supportive supervision (SS) for improving

health status of malnourished children, quality of case management, overall quality of care, and the absolute number of children enrolled in nutrition services through a cluster randomised trial in Arua district, Uganda. Six health centres were randomised to receive SS or no intervention. SS specific to nutrition services was delivered at a high frequency by a team of two trained local staff to health centre staff at intervention centres (phase one). SS was later extended to community health workers (CHWs) (phase two). The primary outcome was the cure rate of children aged between 6 and 59 months enrolled in health centres for the management of severe or moderate acute malnutrition. Quality of case management was assessed by six pre-defined indicators; quality of care was assessed using the National Nutrition Service Delivery Assessment (NSDA) tool; and access to care was estimated by the number of children accessing health centre nutrition services.

1.56–2.34, $p=0.001$), quality of care as scored by NSDA (RR=1.57, 95% CI: 1.01–2.44, $p=0.035$) and correctness in complementary treatment (RR=1.52, 95% CI: 1.40–1.67, $p=0.001$) were significantly higher compared with the control group. With the extension of SS to CHWs, significantly more children (38.6%) accessed care from intervention health centres than they had previously (38.4% before extension of SS to CHWs and 62% after; RR=1.26, 95% CI: 1.11–1.44, $p=0.001$). The proportion of children accessing care in the control group was 45% in phase one and 49% in phase two. The authors conclude that SS significantly improved the cure rate of malnourished children and the overall quality of care and providing SS to CHWs significantly increased the crude number of children enrolled in nutrition services. More research is needed to confirm these results and evaluate the cost-effectiveness of SS.



children enrolled in nutrition services in Arua district, Uganda

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A total of 737 children was enrolled in the study. In the intervention arm, the cure rate (83.8% vs 44.9%, risk ratio (RR)=1.91, 95% CI:

¹ Lazerini M, Wanzira H, Lochoro P, et al. Supportive supervision to improve the quality and outcome of outpatient care among malnourished children: a cluster randomised trial in Arua district, Uganda. *BMJ Global Health* 2019;4:e001339. doi:10.1136/bmjgh-2018-001339