

Changes in susceptibility to life threatening infections following treatment for severe acute malnutrition among Kenyan children.

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Background

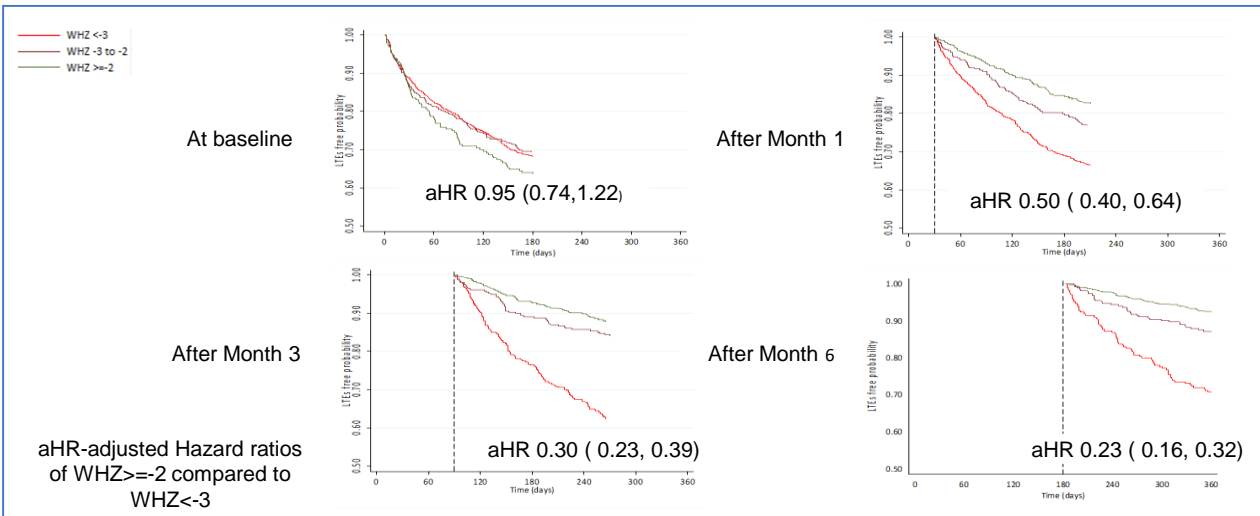
- Case fatality and Life-Threatening Events (LTE) among children with Severe Acute Malnutrition (SAM) remain common, despite treatment.
- Apart from anthropometric recovery, SAM treatment should reduce susceptibility to LTE.
- We examined associations between anthropometry during follow-up and LTE.

Methods

- Secondary analysis of a double-blinded, RCT ([NCT00934492](#)) of daily co-trimoxazole prophylaxis in SAM in Kenya (2009 to 2014).
[Berkley JA, Ngari M, Thitiri J et al. LANCET ID 2016 4\(7\);e464-73](#)
- 1,778 children recruited and randomized to daily co-trimoxazole prophylaxis or matching placebo for six months, and followed up for 12 months post-discharge.
- **Eligibility:** aged 2-59 months, HIV negative, had SAM defined by MUAC or oedema
- **Outcome:** LFE after index admission discharge defined as events requiring hospitalization or causing death.
- **Exposures:** WHZ score at months 1, 3 & 6:(WHZ \geq -2; WHZ -2 to -3; WHZ<-3).

Results

- Compared with WHZ<-3, WHZ \geq -2 was associated with lower risk of LTE after months 1, 3 and 6.
- LTE risk reduction was more at month six than at months one & three.



Conclusions

- Anthropometric response was associated with substantial LTEs risk reduction.
- However, this reduction in risk lagged behind anthropometric improvement.

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