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

Moses Ngari¹, Laura Mwalekwa¹, Molline Timbwa¹,², Per Ole Iversen³, Greg Fegan¹, James A. Berkley¹,²,⁴


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

- 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=-2; WHZ -2 to -3; WHZ<-3).

Results

- Compared with WHZ<-3, WHZ ≥-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.

Acknowledgements

The trial was funded by the Wellcome Trust

The CHAIN Network is funded by the Bill & Melinda Gates foundation.