Reducing risk of mortality for sick and malnourished children

The risk of dying during and after childhood illnesses like diarrhoea, pneumonia, overwhelming infection, and malaria is high in low- and middle-income countries. The Childhood Acute Illness & Nutrition ("CHAIN") Network wants to improve the care of children and understand the factors increasing their chances of dying. The CHAIN study:

- Enrolled children aged 2-23 months who were sick at admission to nine hospitals in four African and two South Asian countries
- Collected information on children’s clinical, nutritional and social situation
- Followed up with children during their hospital stay and for six months after discharge

The CHAIN Study was made possible by the children and their caregivers who voluntarily participated in the study, engagement and support from community members and local Ministries of Health, and the leadership of health workers and researchers from all over the world.

FINDINGS OF THE CHAIN STUDY - ADDRESSED TO COMMUNITIES

**KEY RISKS AND COMPlications**

- Hospital / after discharge deaths
  - Sick children who are very thin (malnourished) are 5 times more likely to die in hospital or after discharge compared to non-thin children.

- After hospital discharge children may look better from their illness, but remain weak and susceptible to infection. CHAIN found half of all study deaths happened after discharge.

- Some sick children leave the hospital before they’re ready for discharge. CHAIN found children who left hospital against doctor’s advice were 2 times more likely to die.

**ACUTE CARE**

Take children who are thin or not growing well to medical care to reduce the potential of sickness like pneumonia and diarrhea.

**DISCHARGE**

Follow your doctor’s advice about when it’s the right time to leave hospital to help prevent deaths after discharge. When leaving, ask your doctor what follow-up facility visits are needed for your child, and how to recognize danger signs:
- Drowsiness
- Not able to feed well
- Breathing difficulty
- Persistent vomiting

**BACK HOME**

- Once back home children are still at risk, even if they seem to be recovered from illness. If you spot danger signs seek medical care for your child.
- Healthy parents and caregivers make for healthier children.

- Take any opportunity you can to look after your own and your family’s health and well-being, including what you eat and seeking medical care when you need it.

**Health Contributing Factors**

- Malnourished children don’t only suffer from lack of food. Their nutrition, health, and risk of dying are influenced by underlying diseases and their caregiver’s social and home environments.