A Follow-up on Children with Severe Acute Malnutrition treated with Ready-to-Use Therapeutic Food in Rural Philippines

Annika Kruse, Class of 2020, Department of Ecology and Evolutionary Biology
International Care Ministries, Manila, Philippines
Funded by the Princeton Center for Health and Wellbeing

Introduction:
- Undernutrition contributes to 50% of all deaths in children under 5.
- Malnutrition can cause impairment to motor development, alterations to metabolism, irreversibly stunted growth, increased risk of dying from common infections, and serious chronic diseases in adulthood.
- Ready-to-Use Therapeutic Food (RUTF) is the standard primary community-based treatment for severe acute malnutrition (SAM) in many countries including the Philippines.
- RUTF is an energy dense, nutritionally enriched food that contains primarily peanuts, oil, sugar, milk powder, and vitamin and mineral supplements. Across the world, UNICEF has found RUTF to be the most effective treatment for SAM.
- Several studies have recently highlighted the need for more research on the outcomes of SAM patients post-RUTF treatment.

Objectives:
This research study seeks to investigate the long term effects and perceptions of RUTF treatment for SAM in the rural Philippines. Through the interviews, we tried to learn more about a SAM patient's experience after RUTF, including the types of food available to those in extreme poverty and how easily patients could access them. We investigated what was understood as nutritious food among this population, and identified barriers and challenges to receiving treatment.

Methods:
- **Study Design:** In depth, semi-structured qualitative interviews in Dumaguete, Negros Oriental, Philippines
- **Participant Selection:** Previous SAM patients and their parents, 1-2 years post-RUTF treatment
- **Analysis:** Performed using Nvivo coding of common themes in translated interview transcripts

Results:
- 2014: Philippines signs onto the Scaling Up Nutrition movement
  - A commitment to the international movement to end global malnutrition led to government action and the creation of several national policies surrounding nutrition
- 2016: Department of Health takes action
  - DoH released new National Guidelines on the Management of Severe Acute Malnutrition for children under 5 years
- Ready-to-Use Therapeutic Food (RUTF) is standardized as the primary community-based treatment for SAM cases without complications
  - All health facilities and non-profit organizations changed their treatment regimens for SAM to include RUTF

Discussion:
- **Low treatment adherence**
  - Children with SAM often fail to consume the prescribed daily amount of RUTF
  - Mothers had to use various strategies to get children to eat more
  - Excess RUTF was shared among family and community
- **Education**
  - Parents often did not know their child was malnourished
  - Families were taught how to maintain a garden
- **Social Support**
  - Several parents wished that they had more social support and time to spend with their SAM child to ensure treatment compliance

Conclusion:
RUTF can be a very effective treatment for SAM when children are able to complete the regimen. However, more research is needed on how to improve treatment adherence.

Acknowledgements:
I would like to thank Maricar Almeda, Siwon Lee, Dr. Lincoln Lau, and the rest of the ICM staff in Manila and Dumaguete for providing me with this amazing opportunity and for assisting me with the research project. I would also like to thank the Center for Health and Wellbeing for sponsoring this internship through the Global Health and Health Policy program and Princeton University.