

Background

The World Health Organization (WHO) recommends exclusive breastfeeding through six months of age followed by introduction of complementary feeding.¹

Ready-to-use supplementary food is:

- Fortified, lipid-based product
- Made from peanuts
- Used to prevent acute and chronic malnutrition

Guatemala has an estimated 43% chronic malnutrition rate.²

This study was carried out with the Wuqu' Kawoq clinic in Paquib, Tecpán, Guatemala, one of the first sites in Guatemala to use RUSF.

Successful interventions using RUSF to prevent chronic malnutrition require consistent consumption for at least 18 months. However, there is a lack of published information describing how the product has integrated into local cultures.

Objectives

1. To identify barriers and motivators associated with the culture-product interface
2. To develop targeted messages for optimizing the product's usage

Methods

Published literature suggests that traditional quantitative studies tend to overstate the actual consumption patterns of RUSF.

We elected to use a variety of ethnographic methods to describe how RUSF has integrated into the local culture:

1. Participant observation
2. Unstructured interviews
3. Focus groups

Setting:

- Paquib, Tecpán, Chimaltenango
- Agrarian town of 1,300 residents
- 57% of the children are stunted due to chronic malnutrition³
- Wuqu' Kawoq provides free RUSF to all children 6 months – 5 years of age



RUSF distribution



Downtown Paquib

Study protocol:

- 5 families agreed to 5 weekly home visits
- Each visit lasted 3-4 hours within early morning through afternoon hours
- Four focus groups were held to validate observations across a broad cross section of the community
- Grounded theory approach was used to create hypotheses from observed thematic patterns
- Conceptual framework was developed to deliver a targeted educational message to complement RUSF interventions

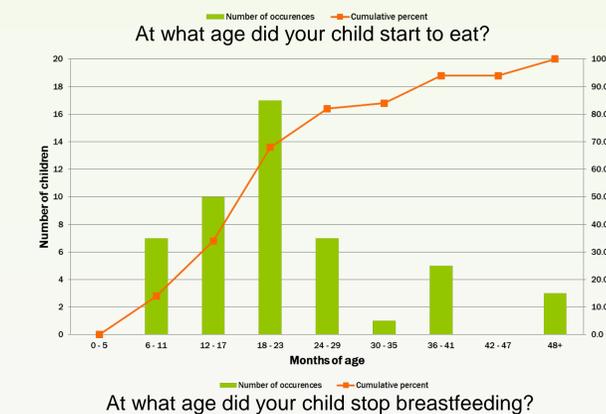
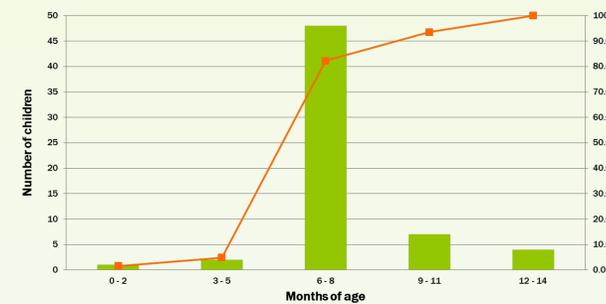
Results

While RUSF was generally well accepted, usage was consistently poor.

No children were observed to successfully adhere to the protocol of one tablespoon three times daily.

Breastfeeding practices were the most significant impediment to optimal product usage.

Most mothers introduce complementary feeding between 6 – 8 months of age and discontinue breastfeeding around age 2.



Complementary feeding is nominal until a critical developmental event occurs in a child's life. Before that, mothers perceive a significant advantage to nearly exclusive breastfeeding.

Why do you still breastfeed?

- "Breastfeeding is more convenient."
- "It is hard to get him to stop breastfeeding."
- "If he does not ask for a food, it will cause 'impaction.'"
- "Breast milk is the best food."
- "Breastfeeding is more economical."

Mothers prefer to breastfeed for several reasons

Why did you stop breastfeeding your child?

- "I got pregnant. It makes my milk change taste and color, so he doesn't like it anymore."
- "I got pregnant. It makes my milk change taste and color, and it will make him get sick because of it."
- "I got sick which made my milk unhealthy for the child. I had to stop."
- "One time I accidentally scared my child as I was about to breastfeed him. Ever since then, he no longer wanted to breastfeed."
- "He started to bite. It hurt."
- "He lost interest." (Speaking about her older child.)

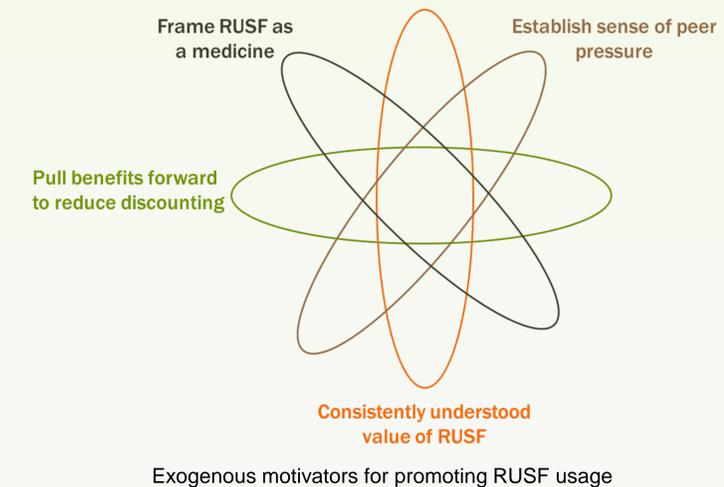
Children continue to breastfeed until a key event occurs

Conclusions

Health education programs have fiercely promoted exclusive breastfeeding. While successful, this focus may have compromised a second WHO goal—complementary feeding.

This message coupled with culturally perceived benefits and norms of breastfeeding created a high activation energy preventing successful usage of RUSF.

Observations resulting from the study have created an awareness of exogenous motivators that constitutes the basis of a conceptual framework. This framework was used to design a complementary learning plan for optimizing RUSF intervention.



References

1. Infant and young child feeding: model chapter for textbooks for medical students and allied health professionals. (2009) World Health Organization.
2. Ministerio de Salud Pública y Asistencia Social. (2009) Encuesta Nacional de Salud Materno Infantil. Accessed from http://www.ine.gob.gt/np/ensmi/Informe_ENSMI2008_2009.pdf on 31 January 2012.
3. Rohloff P et al. Paquib Baseline Data. (2011) Wuqu' Kawoq. Internal data.

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