BEHAVIORAL BARRIERS TO FEEDING YOUNG CHILDREN DURING AND AFTER ILLNESS

Insights from qualitative research in the Democratic Republic of the Congo

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Breakthrough ACTION
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SUMMARY

Qualitative research, informed by behavioral science, helps to explain why young children do not receive enough food and breastmilk during and after illness to recover and grow well.

The perspectives, experiences, and challenges shared by caregivers, health workers, and others in South Kivu in the Democratic Republic of the Congo (DRC) describe the behavioral factors that stand in the way of optimal complementary feeding during and after illness.

Insights from this work suggest a path forward for program design that helps families identify concrete actions they can take to put their intentions to feed children well into practice not only in the DRC but also across the globe. The work furthermore suggests how programs can equip community- and facility-based health workers with tools, messages, and other resources that guide and encourage families to feed children well during illness and recovery, when they need this care most.

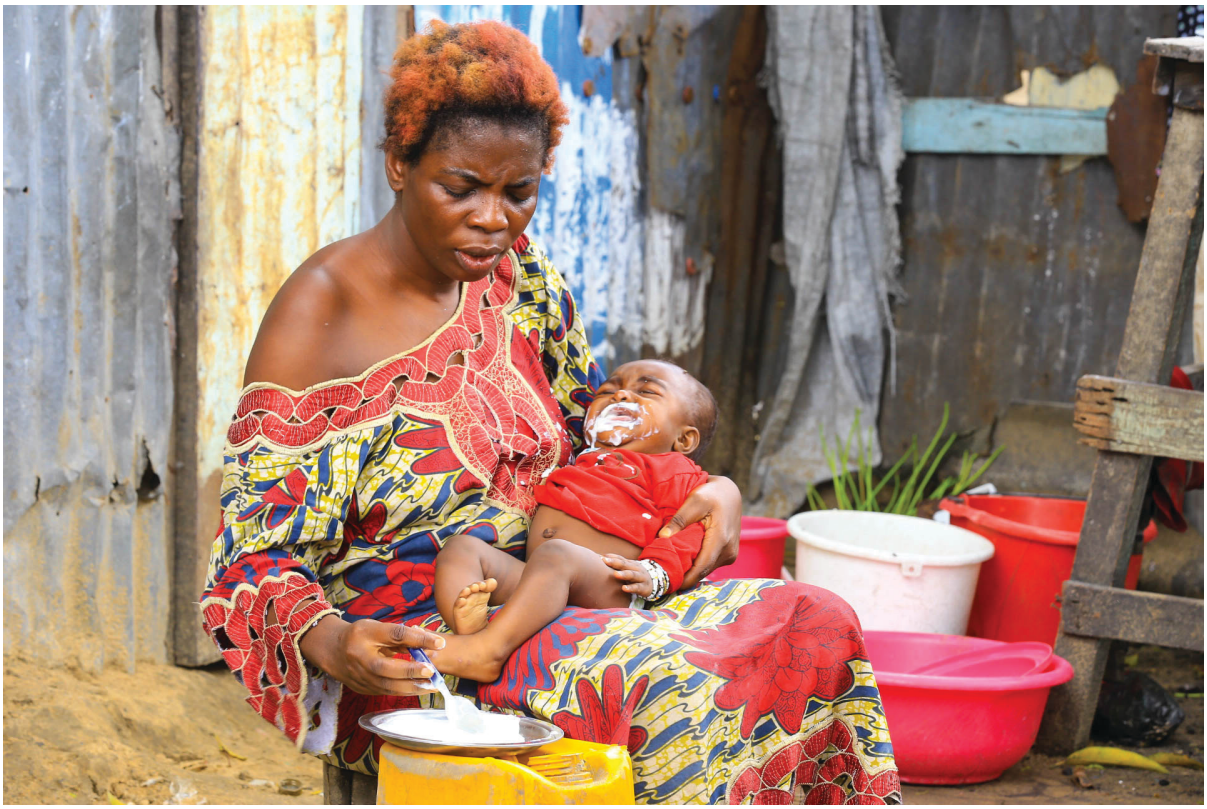
KEY FINDINGS

1. Poverty and scarcity impose practical constraints and a cognitive burden.
2. Health providers are distracted and discouraged from counseling on feeding during sick child visits.
3. A focus on quality over quantity obscures the benefits of feeding greater amounts of available foods.
4. Perceptions of inappropriate foods further limit the choice set.
5. Deference to a child's limited appetite leads to missed opportunities to coax them to eat more.

Background

Young children experiencing an illness require adequate nutrition to recover and to avoid malnutrition. Global evidence shows that children's growth deteriorates rapidly during and after illness if foods and feeding practices do not meet the additional nutrient requirements associated with illness.[1] The global guidance is that children aged six to 23 months need to continue to eat and breastfeed as much as possible during illness, and they need to consume more than usual in the two weeks following illness.[2]

In many settings, however, young children consume far less than the recommended quantities of food during these critical times. In the DRC, 70% of children under age five receive less or no food during instances of diarrhea.[3] Regional studies in the DRC have found that fewer than one in ten young children received more



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food than usual after illness.[4] In the DRC and other settings where childhood illness is common, the consequences of too little food during and after illness are particularly severe. These gaps are not unique to the DRC, yet globally, relatively little research and programming focuses on these behaviors. To prevent malnutrition and improve children's well-being, multi-sectoral nutrition programs must address the reasons why guidelines on feeding sick and recovering children are not followed. A recent review described additional research on barriers and enablers to optimal feeding for sick and recovering children as an important global priority.[6]

Why aren't young children fed enough during and after illness? Breakthrough ACTION and USAID Advancing Nutrition conducted qualitative research, using a behavioral science lens, to better understand the behavioral factors that hold caregivers back from feeding their children according to the guidelines. Qualitative interviews[a] in South Kivu with caregivers, family members, health workers, and other community members, as well as observations of consultations in clinics,[b] revealed how caregivers perceive their children's needs during and after illness; the challenges they face; and the skills, resources, and support they can draw from to address those challenges.

[a] Qualitative interviews were conducted with 24 mothers, 7 fathers, 8 grandmothers, 11 health workers, and 8 local leaders.

[b] Observations were conducted in 8 sick child and postnatal consultations and 2 vaccination visits.

Behavioral Design Process: A Snapshot

Insights into drivers of behavior described in this brief	• Generated hypotheses based in behavioral science and nutrition literature about potential drivers of feeding behaviors • Investigated hypotheses through 58 qualitative interviews and observations of ten consultations in clinics in Katana and Mubumbano, South Kivu, DRC in 2021 • Analyzed and synthesized qualitative data to identify five key behavioral barriers • Translated behavioral barriers into concrete objectives for program design
Solutions for families and health workers described separately	• Through structured individual and group activities, generated 62 design ideas to address the barriers • Filtered ideas through stakeholder input to identify high-impact, feasible, and innovative ideas • Built prototype versions of 12 design ideas to define the details • Tested and refined prototype solutions with over 85 caregivers, health workers, and other community members

The research also shed light on the role of facility- and community-based health workers in guiding families to care for sick and recovering children and the challenges that sometimes impede these workers from supporting families more effectively.

The insights from this research formed the basis for a collaborative design process, through which the projects worked with caregivers, health workers, and other stakeholders to generate social and behavior change solutions for families and health workers. Those solutions are described in a related brief.

This brief offers an overview of five key insights from the formative research on these two critical nutrition behaviors, which have broader applicability for program design. Insights from prior behavioral science research help stakeholders interpret and contextualize what participants shared. Although this research cannot establish conclusively that these behavioral and psychological mechanisms are at play, the qualitative evidence collected in South Kivu is consistent with their presence, suggesting that solutions predicated on them are likely to be relevant.

Each insight is followed by concrete implications for how programs can support caregivers to overcome behavioral challenges that impede feeding during illness and recovery.

1. Poverty and scarcity impose practical constraints and a cognitive burden

> ***"I told her not to give the child the porridge twice a day, because if we get him used to it at this frequency, tomorrow he will miss it."***
>
> *—Father*

Poverty and food insecurity severely and routinely constrain what families can offer their children both during times of illness and of good health. Caregivers noted all family members, including babies, frequently eat smaller quantities, fewer meals per day, and less nutritious food than they think is best. These constraints weigh heavily on caregivers.

When a resource is scarce, a large amount of mental effort is absorbed in attending to and managing that resource.[7] This leaves less cognitive bandwidth for other tasks, including attending to a child's changing needs during and after illness. Families that cannot consistently access or afford nutritious foods for their children face enormous practical constraints that impede feeding behavior; in doing so, these constraints may also generate an emotional and cognitive burden that makes it difficult for them to recognize what they can do.

Implications for programming

- Help families access and recognize locally available, affordable, and nutritious foods to reduce the underlying conditions of scarcity.
- Empower caregivers to focus attention on what they are able to do, to mitigate the cognitive impacts of scarcity.

2. Child feeding needs are not addressed during sick visits due to divided attention and doubts

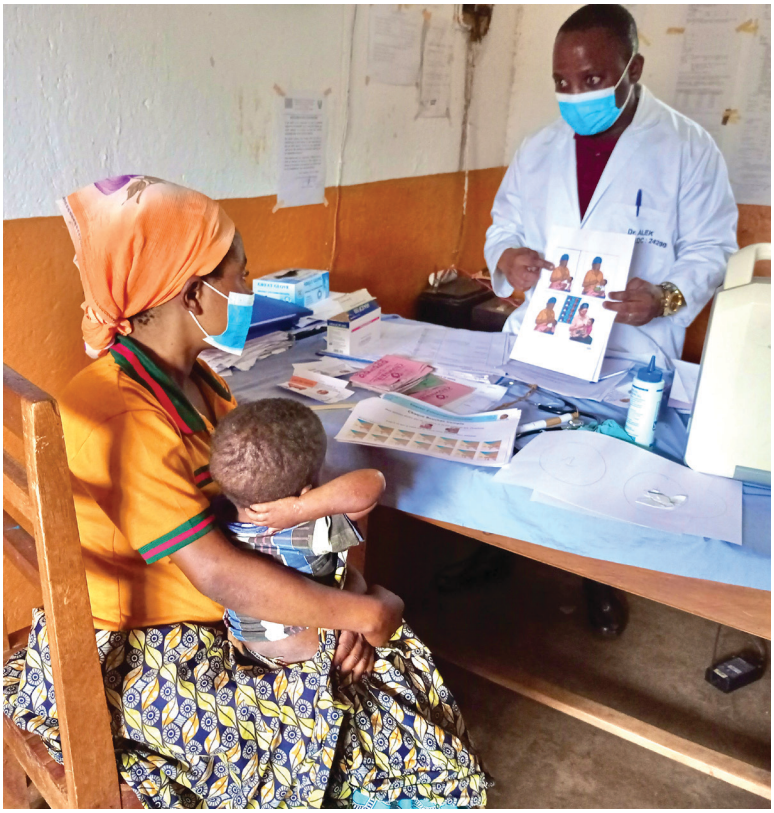
> ***"I don't do anything else, I just go to the clinic and ask for the medicine."***
>
> *—Mother*

"We must be content with giving advice [on feeding] while being aware that they will not apply it because they do not have the means."

—Provider

When young children are sick, caregivers understandably prioritize medical care and medicines. Caregivers recognize the importance of nutrition, but it receives less of their attention and effort than medical care. Sick child consultations offer an opportune moment for providers to counsel caregivers on feeding while they are urgently attuned to ways to help their child recover, and counseling on feeding is a component of the Integrated Management of Childhood Illness protocol.[8] However, health providers often fail to bring up feeding at all during these visits.

Research has shown how one urgent issue can crowd out attention to other issues, even if they are important.[9] Caregivers are intently focused on seeking care, and, once at a clinic, receiving medicine. Health providers are likewise cued by their training, clinical forms, and caregivers' questions and requests to focus on medical care.



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Some providers also expressed hesitation to counsel on feeding and frustration at being expected to give advice which they believe caregivers are unable to put into practice due to limited resources. They described instances of caregivers responding negatively to nutrition counseling, rejecting providers' advice as unfair when it does not come along with the food they need. Several behavioral tendencies may help explain providers' subsequent avoidance of the topic, including the tendency to avoid negative information and feedback even when it could be useful[10] and a tendency to set low expectations to reduce caregivers' anxiety about their ability to follow through.[11]

Implications for programming

- Elevate the importance of feeding during and after illness, alongside medical treatment, for health workers and caregivers.
- Train and motivate health providers to counsel on feeding after illness and overcoming limited appetite.
- Boost providers' confidence that the guidance they give to caregivers can translate to action by equipping them with empowering messages, achievable goals for families, and strategies to help families feed their sick and recovering children well with foods they can access and afford.

3. A focus on quality over quantity obscures the benefits of feeding greater amounts of available foods

> ***"It is necessary to give him the right food. Not a lot of food."***
>
> *—Grandmother*

The global health community has firmly established that a diverse and nutrient-rich diet is important to young children's healthy growth and development,[2] and nutrition training and counseling approaches correctly emphasize these feeding practices. Quality of food remains important during times of illness and recovery, but the quantity of food the child consumes is of paramount importance during this time. World Health Organization guidelines state that during illness, young children should continue to breastfeed and eat complementary foods, and after illness, they should consume more to recover calories and nutrients lost during illness.[2] Caregivers do not need to offer specific foods or a wide variety of foods to follow these guidelines.

Caregivers in South Kivu described a need for the child to regain strength lost during illness by eating specific foods that they associate with strength, including meat and dairy, which families cannot always afford or access. Equally (or even more) nutritious but more affordable options such as small fish are often considered not as good. Caregivers noted that they did not see much value to the child's recovery in feeding more food in general. When health providers counsel on specific, recommended foods, they may inadvertently reinforce these rigid mental models of what the "best" foods are. The job aids used by providers in South Kivu also prominently feature some foods (including chicken, large fish, and rice) that are not commonly available or affordable to many families.

Caregivers also described concerns about feeding children too much and about increasing quantity too rapidly as the child recovers. Some caregivers described extra food as harmful to a recovering child, while others expressed concern that more food would lead to gluttony or make the child accustomed to receiving more than they can provide. Most caregivers expressed that the amount of food a child consumes after illness should only be increased slowly and gradually. Some caregivers described this as a tactic to avoid outpacing the child's appetite. Others described it as necessary to avoid a relapse of the illness, even if appetite was strong.

Implications for programming

- Emphasize the benefits of food quantity and assuage concerns about offering too much.
- Prioritize quantity of food over specific foods (especially those that caregivers cannot consistently obtain) during and after illness.
- Guide health workers and caregivers to recognize and prioritize nutritious foods for young children that are locally available and affordable, such as small fish.

4. Perceptions of inappropriate foods further limit the choice set

> ***Beans and vegetables are bad after the disease except for amaranths…When the child has diarrhea, you cannot give him sombé [cassava leaves] or bean leaves.***
>
> *—Mother*

In addition to the constraints of availability and affordability described above, caregivers were also attentive to the foods they felt they could not offer to sick and recovering children. They described some foods as likely to be refused by the child and other foods as harmful, either for all young children or specifically for those who are sick or recovering. While caregivers did not consistently describe the same foods as harmful, nearly all of the foods most commonly available in South Kivu were incorrectly described by some caregivers as bad for young children.

Caregivers reported that they learned about harmful foods from health workers. However, interviews with community- and facility-based health workers and observations of consultations did not suggest that health workers actively spread messages that certain foods are bad. However, they do mention specific foods that a young child should eat, for

specific illnesses or in times of good health. Confirmation bias—the tendency to notice and remember information that confirms existing beliefs[12] —may explain why caregivers who believe they can feed only certain foods to the child might interpret a health worker's mention of specific foods to mean that only those foods should be offered.

Implications for programming

- Counter misconceptions about which foods are good for young children over six months during illness, recovery, and good health.
- Teach baby-friendly preparations of foods that are not commonly considered for young children.

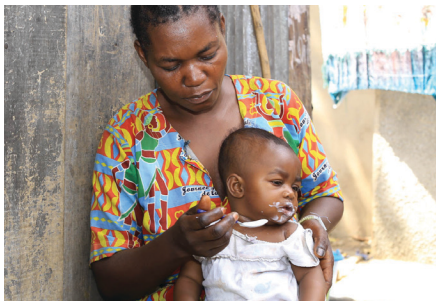
5. Deference to appetite leads to missed opportunities to coax

> ***"In case of illness, he doesn't eat. Even if I force him to swallow something, it is useless."***
>
> *—Grandmother*

Caregivers described changes in a child's appetite as the primary signals of illness and of recovery. They expressed frustration with their child's limited appetite during illness and remarked that what the child can or will consume is largely out of their control.

In times of good health, relying on appetite to guide feeding may be logical, especially in settings such as South Kivu where families routinely do not have access to enough food. During times of illness, however, the child's appetite levels do not result in the optimal amount of food intake, and signals of appetite can become harder to detect. Low appetite makes following the recommendations for feeding challenging.

Caregivers play a central role in encouraging their young children to eat.[13] However, only a small minority of the caregivers interviewed mentioned specific strategies to encourage children to eat. Among those caregivers, "forcing" or offering the child's favorite foods were most commonly cited. Small, frequent meals may encourage children to eat more when appetite is low, but caregivers did not suggest small frequent meals as a strategy; when prompted, some actively objected to it.



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Implications for programming

- Inspire caregivers to view their child's appetite as moveable and within their power to influence.
- Build caregivers' skills and confidence to overcome limited appetite, which often results from illness.

Insights, Implications for Programming, and Likely Generalizability

BEHAVIORAL INSIGHTS	**Poverty and scarcity** impose practical constraints and a cognitive burden	Child feeding needs are not addressed during sick visits due to **divided attention and doubts**	A focus on **quality over quantity** obscures the benefits of feeding greater amounts of available foods	Perceptions of good and bad foods further **limit the choice set**	Deference to limited appetite leads to **missed opportunities to coax**
PROGRAMMING IMPLICATIONS	Identify achievable improvements Refocus attention on what caregivers are able to do	Elevate importance of feeding Train and motivate providers to counsel consistently Boost providers' confidence to help	Emphasize the importance of quantity over specific foods Guide health workers and caregivers to recognize locally available and affordable options	Counter misconceptions about which foods are good for children over six months Teach baby-friendly preparations of foods that are not commonly considered	Inspire caregivers to view their child's appetite as moveable Build skills and confidence to overcome limited appetite
MAY TRANSLATE TO OTHER SETTINGS WHERE...	• Families cannot consistently access or afford the foods they believe are "good" (expensive) foods	• Training and clinical cues emphasize medical care • Providers doubt caregivers' ability to put feeding guidance into practice • Feeding may not be adequately discussed in sick visits	• Nutrition counseling and materials emphasize quality foods that may not be accessible • Specific "good foods" may be perceived as more important to recovery than continued or increased feeding	• Affordable, nutritious, locally available foods are sometimes considered unhealthy, inappropriate, or less beneficial for young children than other foods	• Children are not commonly encouraged to eat when appetite is limited

Path forward

All together, these insights suggest opportunities for programs to support caregivers and health workers to improve the feeding of young children during the critical times of illness and recovery. The research describes how caregivers and health workers respond to (1) the circumstances of poverty and limited access to affordable and nutritious foods, (2) health workers' training and clinical environments, and (3) cues from sick and recovering children themselves. Where circumstances are similar, the insights and programming implications are likely to be generalizable.

Programmers and policymakers should consider the ideas described in this brief and their implications more broadly and identify new approaches to help families and communities overcome the challenges to feeding sick and recovering children well across the globe. Concrete solutions developed in the DRC in response to these insights are described in the **Behavioral solutions for child feeding during and after illness brief**.

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