

# Adapting Reach Up and Learn in Crisis and Conflict Settings: An Exploratory Multiple Case Study

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abstract

**OBJECTIVES:** In 2019, >71 million children aged <5 had spent their entire lives in conflict-affected settings. Compounding adversities including violence, poverty, and displacement have immediate and long-term effects on early childhood development, health, behavior, and well-being. In response, adaptations of Reach Up have been implemented in conflict and crisis settings.

**METHODS:** This article uses exploratory multiple case study methodology, drawing from implementation and qualitative data from 3 interventions: a mobile phone-based intervention promoting nurturing care among Rohingya and crisis-affected host communities in Bangladesh; Reach Up amid acute violence and displacement in Northeast Syria; and Reach Up group sessions and home visits integrated with health services for an indigenous population in Venezuela.

**RESULTS:** In Bangladesh, tailoring interactive voice response messages improved responsiveness to the developmental needs of young children, yet complementary in-person services were identified as a key program enhancement. In Syria, rapid adaptations of Reach Up addressed the needs of families in acute crisis, including social-emotional learning games for school-aged children. In Venezuela, Reach Up, coupled with complementary lactation counseling, yielded high rates of uptake and satisfaction, and children's language development was highlighted as a key area of growth.

**CONCLUSIONS:** Recommendations to promote early childhood development in crisis and conflict settings include: (1) cultural adaptation based on a holistic understanding of children and caregivers' needs; (2) the integration of child and family safety and linkages with complementary services on the basis of community needs and priorities, and (3) the importance of designing for scale through blended models and costing analyses.

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Crisis and conflict, such as experiences of violence, poverty, displacement, and chaos, can have both immediate and long-term effects on child development during the most sensitive first years of life. More than 71 million children aged <5 spent their entire lives in conflict-affected areas in 2019,<sup>1,2</sup> with urgent needs well established through research and practice, and clearly articulated through the demands of parents and caregivers.<sup>3-5</sup> Nonetheless, current investment and implementation of early childhood development (ECD) interventions do not meet this demand.<sup>6,7</sup>

Responding to these needs requires consideration of diverse contextual and cultural factors that influence feasibility, uptake, and impact across 5 interconnected components of nurturing care: good health, adequate nutrition, safety and security, responsive caregiving, and opportunities for early learning. As crisis- and conflict-affected settings present specific and varied challenges, there is a clear need for a range of evidence-based program models with varying levels of intensity that can be quickly adapted and implemented. Such examples are presented in the December 2020 brief, *Nurturing Care for Children Living in Humanitarian Settings* developed by the World Health Organization and partners.<sup>8</sup> This article further advances the brief's recommendations through exploratory multiple case study analysis focusing on issues of feasibility, rapid adaptations, and cost of Reach Up and Learn in 3 distinct crisis- and conflict-affected settings. The first case focuses on Rohingya and crisis-affected host community populations in Cox's Bazar, Bangladesh, and the phone-based remote intervention to promote nurturing care during the coronavirus disease 2019 (COVID-19) pandemic. The second, from Northeast Syria, focuses on Reach Up home visits

combined with social-emotional learning activities for school-aged children to support families with multiple children amid surges in conflict, violence, and displacement. The third case focuses on an indigenous population affected by the Venezuela crisis near the Colombian border, where an adaptation of Reach Up includes home visits, group sessions, and complementary breastfeeding support integrated with holistic health services. Drawing from the framework for *Early Childhood Development Implementation Research in Humanitarian Settings*,<sup>5</sup> this article highlights real-world examples of implementation in complex, crisis-affected settings, and emphasizes the importance of cultural adaptation and flexible delivery modalities, while striving to maintain fidelity, dosage, and quality standards to advance the quality and cost-efficiency of early childhood programming in humanitarian settings.

## METHODS

Using an exploratory multiple case study design,<sup>9</sup> this article draws from implementation data and qualitative findings to present insights across 3 different Reach Up-adapted interventions. Narrative reports of implementation design and processes are drawn from authors' first-hand experiences as program designers and implementors, and are coupled with client feedback and monitoring data. Costing data were collected for 2 of the 3 cases (Bangladesh and Venezuela Crisis Response, because data from Northeast Syria were not available at the time of publication).

Case studies were purposefully selected because they represent 3 recent examples of Reach Up adaptations led by the implementing organization, International Rescue Committee (IRC). IRC is a global humanitarian nonprofit organization that has

been responding to humanitarian crises since 1933 and continues to help people survive, recover, and rebuild their lives in >40 countries worldwide. IRC's geographical presence aligns with continual analyses of crisis conditions, humanitarian needs considering capacities of local organizations and government to respond to needs, and the availability of resources and funding to deliver programs with impact. Since 2015, ECD has been a key focus of IRC's work with the overarching aim of improving young children's cognitive, language, motor, and socioemotional skills. The majority of IRC's ECD portfolio is funded by private foundations, with an emphasis on scaling in partnership with national governments (where possible), as well as local education, health, or child protection actors. IRC's ECD team worked with the creators of the Jamaica Home Visiting program, now known as Reach Up and Learn and adapted to different contexts in 14+ countries,<sup>10</sup> to adapt the program for humanitarian settings starting in Jordan in 2016, expanding to Syria in 2017, Bangladesh in 2020, and Venezuela in 2021. Human subjects ethical review was conducted by IRC's institutional review board, which determined that the study was exempt as a secondary analysis of program monitoring data without direct personal identifiers.

## RESULTS

The 3 case studies described in this section demonstrate early indications of the powerful potential of Reach Up adaptations for young children and their families in crisis and conflict settings. As highlighted in Table 1, they represent variations in population and location types (camp-based, internally displaced peri-urban, and nondisplaced peri-urban crisis-affected), and types of

**TABLE 1** Summary of Each Program Design and Context

	Bangladesh	Syria	Venezuela Crisis Response
Location	Camp-based refugee setting, adjacent rural host community	Peri-urban, internally displaced	Peri-urban
Type of crisis	Protracted	Acute and protracted	Protracted
Modality of intervention	Weekly IVR <sup>a</sup> and SMS, <sup>b</sup> biweekly quizzes delivered via phone calls and supplemental, personal phone calls (need-based)	Weekly home visits	Weekly home visits and weekly group sessions
Length of intervention	4-mo pilot 12 mo scale-up in progress	3 mo	9 mo
Educational background of facilitator/home visitors	Min. eighth grade in Rohingya camps, bachelor's degree in host community	Bachelor's degree	Bachelor's degree; most are former teachers
Additional trainings supplementing the core Reach Up and Learn training	Child health and nutrition, phone-based communication skills, child protection, disaster risk reduction	Psychological first aid, <sup>c</sup> safe referral, safe healing and learning spaces <sup>d</sup>	Child health and nutrition; safe referrals
Background of trainers	Bachelor's degree	Postgraduate or bachelor's degree	Bachelor's degree

Min., minimum; SMS, short messaging system.

<sup>a</sup> The IVR system sends a prerecorded audio message to the mobile phone user, who can answer it as they would a regular phone call.

<sup>b</sup> The short messaging system refers to short, written text messages sent to caregivers' mobile phone.

<sup>c</sup> World Health Organization, War Trauma Foundation, World Vision International. Psychological first aid: guide for field workers. World Health Organization: Geneva; 2011. <https://www.who.int/publications/i/item/9789241548205>.

<sup>d</sup> Safe healing and learning spaces. IRC; 2016. <https://shls.rescue.org/>.

crises, modality, and length of intervention, among other key characteristics. Each case below includes a brief background of the specific context, crisis, and feasibility for the use of Reach Up, the rapid adaptation process, and key lessons learned. A final section focuses on the analysis of costs in Bangladesh and Venezuela.

### Bangladesh: Background and Feasibility

With a history of persecution beginning in the early 1990s, the latest and most severe outbreak of violence in Myanmar has driven an estimated 884 000 Rohingya people into exile and statelessness since 2017.<sup>11</sup> Many of the displaced Rohingya now reside in 34 highly congested camps in Cox's Bazar, Bangladesh. In an area vulnerable to natural disasters and where malnutrition already threatens young children, the COVID-19 pandemic added a third crisis to the country, resulting in compounding adversities. The urgent needs of young children and families in the refugee camps had first been identified through a series of community consultations and focus

group discussions highlighting needs of pregnant and lactating women who were receiving minimal, and often low-quality, support for health, nutrition, and mental health, and no support for responsive caregiving, safety, and protection and early learning. In response to these findings and from the expressed feasibility and acceptability of home visiting, Reach Up emerged as a model to provide critical support for responsive caregiving and early learning, recognizing that adaptations and additions would be required. IRC also assessed the local landscape of ECD actors and identified International Centre for Diarrhoeal Disease Research, Bangladesh (icddr,b) as a strong technical partner to support curriculum development, given their extensive expertise implementing, scaling, and studying Reach Up within Bangladesh.

### Bangladesh: Rapid Adaptation

Before IRC was able to begin the Reach Up adaptation for Cox's Bazar, the COVID-19 pandemic struck, resulting in lockdowns and severe restrictions to camp access. In response, IRC worked with a

Bangladeshi human-centered designer, icddr,b, and local IRC program staff to design a remote intervention that used phone calls and interactive voice response (IVR) messages to promote nurturing care, focusing particularly on health, nutrition, caregiver well-being, and play-based early learning opportunities.

The initial 4-month pilot reached a total of 434 households in 2020. In 2021, the team worked on prototyping, program improvement, and a redesigned platform reaching 2400 households. The content builds on Reach Up activities using household objects and commonly available materials. Play-kits including storybooks from icddr,b were also distributed to reinforce the messages. The team conducted formative research to identify key influencers of maternal behaviors, which highlighted the important role of fathers and mothers-in-law. In response, messages were tailored to these specific audiences and distributed via IVR. Caregivers reported that, after receiving IVR calls, they adjusted their infants' diets, consulted with doctors after

experiencing pregnancy complications, and engaged in more frequent and more diverse types of play with their children, promising indications of improvement in practices that enhance children’s development.

### Bangladesh: Lessons Learned

The pilot phase revealed key lessons about how to tailor an IVR intervention to the rapidly changing developmental needs of infants and toddlers. After the pilot, IRC began prototyping several enhancements to the program with the aim of improving caregiver experience and increasing scalability. Improvements included tailoring IVR messages initially designed for 2 broad categories of users (pregnant women and lactating women with infants aged <6 months) to specific stages of pregnancy and child’s age by month, allowing for integration of more age-appropriate play activities and reducing repetition. The example of

peek-a-boo in Table 2 highlights the additional tailoring. Messages were also updated to include local terms. A sample of the new messages was tested with facilitators over WhatsApp, who consulted caregivers in both camps and host communities for their feedback. The improved content was integrated into the program in October 2021.

Given the longstanding evidence of the effectiveness of home visits,<sup>12,13</sup> IRC incorporated home visits as another enhancement to the program in October 2021 as COVID-19 cases reduced and lockdown restrictions eased. The visit structure is based on Reach Up, with an added emphasis on IVR message follow-up for confirmation of understanding. All 40 caregivers who received the home visits (from both camp and host communities) for 1 month were interviewed and rated the visits as highly valuable, and 98% of caregivers reported that the visits enabled them to practice the activities on their own.

Although the remote delivery model was identified as the most effective way to reach caregivers during the pandemic lockdowns, the in-person connection and modeling of activities during a home visit were seen as highly valuable and more likely to result in caregivers engaging in play activities. This points to the powerful potential of a blended model combining IVR and home visits to provide support to families while balancing considerations of access, feasibility, impact, cost, and scale, and will be the focus of future research.

### Syria: Background and Feasibility

With 4.8 million Syrian children born into war since 2011, multiple complex emergencies continue to drive internal displacement. On the basis of early successes in Jordan, Reach Up had been identified by the Syria child protection team as a modality for community-based violence prevention and identification, while also addressing

**TABLE 2** Message Improvements in Bangladesh IVR Intervention

Message in Pilot Phase	New Messages After Feedback	
Sent Mo 3, 7, and 12	Sent Mo 8	Sent Mo 15
Peek-a-boo: Greetings from IRC. How is your baby? Today, we will share a fun and educational game for you to play with your baby. Call the child’s attention, then cover your face with both hands. Then, slowly move your hands so the child can see your face and say, “Boo!” Let the child hide his/her face and say “Boo!” In this way, you will have warm interactions and develop bonding with your baby. At the same time, your baby will learn to trust you and that you always come back, will learn to smile, look intentionally at you, vocalize, or show a happy expression. Thanks for listening!	Peek-a-boo-1: Dear parents and grandparents, greetings from IRC and Play to Learn. We will discuss a fun and educational game which you can play with your child. First, draw your baby’s attention by calling their name, then cover your face using both of your hands. Then, move the hands from your face. When your child can see your face, say, “Peek-a-boo” (“Luukka” in the local language). After that, ask your baby to do the same thing; cover his/her face and tell them to try saying “peek-a-boo.” This can help you make a good bonding with your baby and help in his/her development. Simultaneously, your baby will develop trust and reliance on you, and come back to you if something happens or is needed, and learn to smile, will intentionally look at you, and will try to make happy sounds or give a joyful expression. So, practice it with your baby regularly. Thanks for listening to us.	Peek-a-boo-2: Dear parents and grandparents, greetings from IRC and Play to Learn. Today, we will discuss a fun and educational game which you can play with your child. Ask your children to hide in a place in your house and you will find them back. While searching for them, you should repeatedly say, “Where is my baby? Where will I find my sugarplum?” When you will find out where your baby is hiding, before letting them know that you found them, please say “Tuki,” and when you will bring them out from their hiding place, say “Peek-a-boo” (“Luukka” in the local language). Do it several times with your baby. You can take turns one after the other so that your baby will also get the chance to find you. This will develop the bond with your child. Children can get a chance of better learning from the blended approach of learning by doing and learning by observing. Simultaneously, their trust in you will grow stronger, they will find you in case of emergencies, and they will express their happiness. Thanks for listening to us.

the unmet developmental needs of children aged <3. In October 2019, the withdrawal of US troops and the subsequent Turkish offensive forced a wave of displacement in the Kurdish communities already hosting internally displaced persons from other parts of Syria. Local schools were converted to collective shelters for families. Six home visitors within IRC's child protection team serving families in internally displaced persons camps reoriented their work to offer an ECD response in this acute emergency facing their own community.

### **Syria: Rapid Adaptation**

The Syrian team's initial adaptation of the Reach Up curriculum drew on the IRC-Jordan adaptation for Syrian refugees, with minor adjustments to printed materials and songs. During the acute emergency, Syrian home visitors and program managers, under intense pressure themselves because of increased security threats in their own neighborhoods, planned a response to support the newly displaced in their community by taking extra shifts to serve the families residing in the collective shelters. Recreational activities, including activities from Reach Up curriculum and social and emotional learning games for older children, were launched immediately at the end of October 2019. In December, the team held sessions with caregivers about the importance of early childhood and how Reach Up supports children's learning. Female-headed households, mothers aged <18, unaccompanied children, young mothers with >4 children, and caregivers with particularly low education levels were prioritized as most in need of home visits. Thus, 144 highly vulnerable families were identified to receive visits, delivered from January to March 2020, when COVID-19 lockdowns began, and families were moved from collective

shelters to camps or rented apartments.

### **Syria: Lessons Learned**

Although pre-post surveys of caregivers were not feasible in the acute crisis setting, interviews with facilitators indicated positive perceptions. As 1 home visitor described:

"We started with activities for children of all ages. Often, we were using language activities; we hid things under some rugs and played with children while they were in their mothers' laps, sometimes using socks to act like dolls and talk to children and tell stories. After that, they started to come and look at us. Some were trying to participate, and now that is going well, and 1 of the mothers said that she feels relieved when we are playing together with her child. But that took time and was challenging, because even we were so much affected emotionally by the emergency, and we were angry, as well, and feeling helpless."

Because entire families were residing together in the communal shelters with all children out of school, home visitors wanted to engage caregivers and children of all ages in the household with a play-based response, introducing calming activities such as glitter jars. Home visitors drew from experiences with Reach Up, facilitating social and emotional learning games for school-aged children and psychological first aid. The latter was seen as particularly important for improving active listening skills and enabling them to make safe referrals to protection and other key services, which are crucial in building trust between home visitors and caregivers.

### **Venezuela Crisis Response: Background and Feasibility**

Venezuela's prolonged socioeconomic crisis has resulted in hyperinflation, scarcity of food and medicine, and deterioration of health, education, and other basic services and infrastructure, including water and sanitation. More than 5.5 million Venezuelans have left the country in search of better conditions in neighboring countries. Those who remained have experienced minimal access to health or protection services, COVID-19 school closures, precarious housing, and insecure living and working environments marked by high levels of violent crime. Through IRC's engagement with the community, caregivers reported high levels of stress in caring for young children with minimal, if any, focus on early learning and responsive caregiving. In 2020, IRC expanded support to the sole health provider in an indigenous Wayuu community to offer a Reach Up program integrated with existing holistic health services near the border.

### **Venezuela Crisis Response: Rapid Adaptation**

Before beginning the adaptation of Reach Up, the ECD team conducted design research to better understand cultural norms and traditions, parenting practices, perceptions of play, specific play activities, and key health and environmental conditions. Mothers, fathers, other caregivers (aunts, sisters, grandmothers), community leaders, and staff from the local partner organization were interviewed and participated in focus group discussions. Through these discussions, IRC confirmed that most women stay home during the day, and play and stimulation to promote early learning for 0- to 3-year-olds was not a common practice. Most play activities

mentioned were for older children (eg, flying kites). Key health, nutrition, and child safety risks were also documented for supplemental messaging.

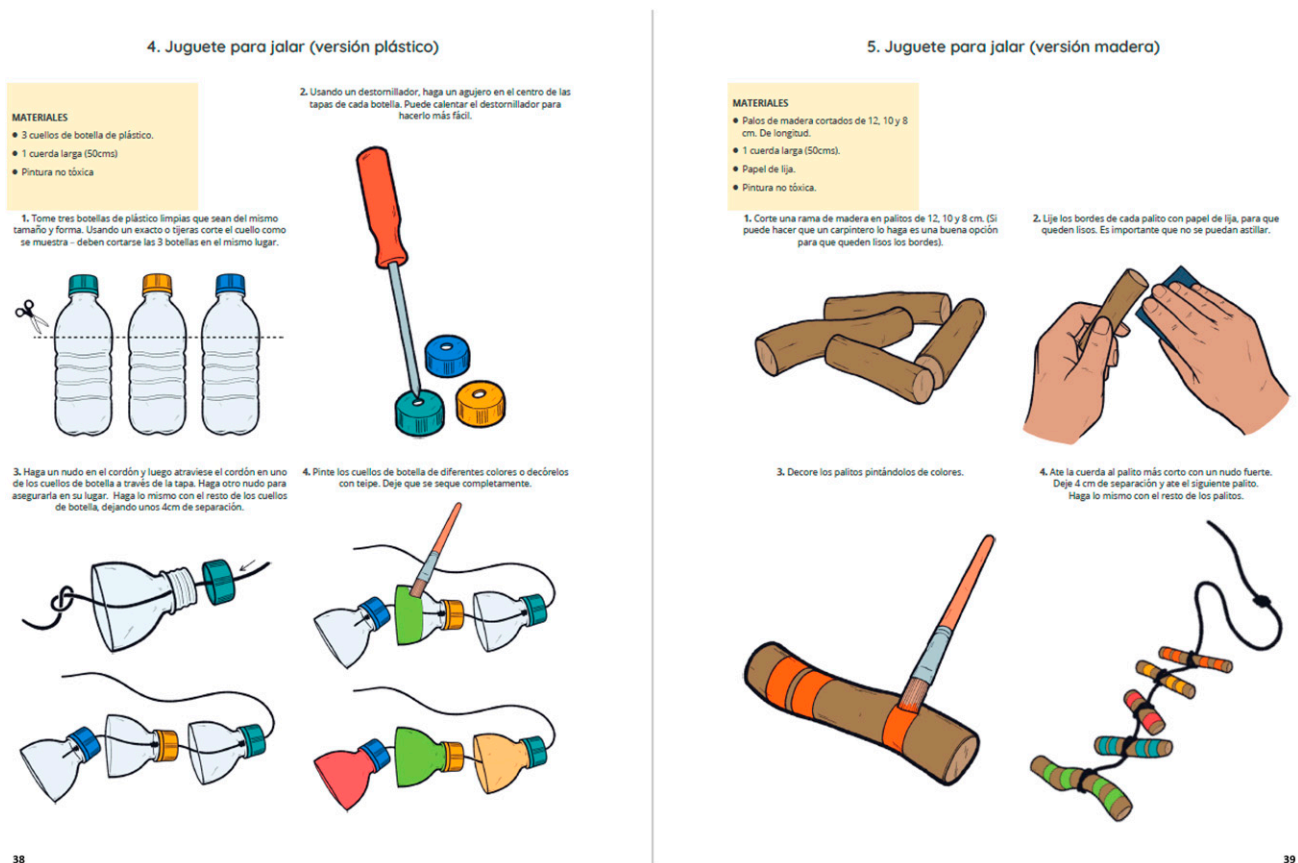
To ensure that the intervention would be feasible and desirable to caregivers, IRC facilitated a codesign process with the local partner, leading to the design of a 9-month program allowing caregivers the choice of participating in home visits or group sessions on a weekly basis. During 2021, each facilitator conducted ~1 group session and 8 home visits per week, working shortened days because of security concerns. Four days each week were dedicated to delivering sessions and 1 day was for making toys, group discussions, and supervision.

Because home visits often included multiple children aged <3 together with older siblings (because of COVID-19 school closures), the team opted for a single curriculum following the structure and layout of a Reach Up group session originally created for the Family, Women, and Infancy Program in Colombia.<sup>14</sup> This made it easier for promoters to deliver multiple age-appropriate activities at 1 time. The final version of the curriculum consists of 24 sessions, each with a song, a play activity, a language activity (designed according to age groups: 0–5 months, 6–11, 12–24, and 25–36), and a key message to discuss with participants. Considering the shortage of recyclable materials for toy making, some of the plastic toys in the

classic Reach Up curriculum were adapted to be made with wooden sticks (Fig 1). A local carpenter was contracted to make wooden toys such as blocks.

Feedback from caregivers in the community informed adaptations. For example, they were asked to select their favorite types of illustrations and colors from sample mood boards and define the color schemes and styles for the storybooks on the basis of their preferences. The team also tested infographics with caregivers on nutrition and positive discipline to check understanding and conducted a rehearsal group session to test the structure and layout of the curriculum.

Because children’s books were not available in the community, IRC



**FIGURE 1**

Sample toy manual page from the Venezuela crisis adaptation which offers options to create a simple pull-along toy from either plastic bottles or wooden sticks, on the basis of what is locally available.

adapted Reach Up's books to reflect Wayuu homes and community settings. The books stimulate language and deliver key messages related to development and health. For example, the book "Baby is Hungry" shows a picture of a mother washing her infant's hands before eating, particularly important during the COVID-19 pandemic, and shows a second caregiver helping keep the infant away from the open cooking fire because design research indicated a high incidence of childhood burns.

Program content was also expanded to include topics raised in community consultations, such as hygiene and hand-washing, nutrition, exclusive breastfeeding, positive discipline, safety in the home, and caregiver well-being. Some of these messages are delivered through an infographic on clarifying appropriate (eg, putting away toys) and inappropriate (eg, cooking on an open fire) household chores and objects for small children.

### Venezuela Crisis Response: Lessons Learned

To monitor the intervention, IRC conducted caregiver pre-post surveys and qualitative interviews. One caregiver participant explained, "In general, because of the daily housework, one says, 'Oh, I don't have time for this,' and [Wapuushii] has helped one to learn that, I mean, there is time for everything; that just as suddenly I have the time for cooking, I have to take the time to dedicate a song to them, read with them, sing to them, play games, etc." Caregivers and facilitators highlighted language development as a key area of growth for children in the program. Feedback from the implementing partner also demonstrated high utilization and satisfaction with Reach Up and

complementary lactation counseling services.

### Analysis of Program Costs Across Bangladesh and Venezuela

The interventions in Bangladesh and Venezuela were costed using an ingredients-based approach to estimate the actual cost of the intervention, including programmatic costs that are closely linked to program activities and all other overheads and shared costs, divided by the number of clients reached (Table 3). Cost data from Bangladesh during the initial pilot in 2020 reaching 430 households, versus the redesigned IVR platform launched in 2021 that now reaches 2400 households with an average of 3 caregivers (mother, father, and mothers-in-law) and 2 children per household, demonstrated that costs decreased with scale, from \$85 to \$21 per household per month. Cost of pilot phases in both countries included design research, curriculum adaptation, and initial training of trainers. In Venezuela, costs include a 9-month pilot Reach Up intervention for 197 caregivers, as well as lactation counseling, folic acid supplementation, and psychological counseling services provided in the community clinic for a total of 743 caregivers, resulting in \$40 per household per month. Costs per caregiver may appear high during pilot phases when adaptation and startup require more human resources; however, as seen in Bangladesh, costs per caregiver can be reduced through iterations on design, as well as using blended modalities to reach more caregivers.

## DISCUSSION

This article highlights implementation experiences from 3 distinct cases that respond to the urgent and unmet need for ECD programming in conflict and crisis settings through the adaptation of Reach Up. Recommendations summarized in Table 4 offer lessons from these cases by extending and expanding the framework offered by Murphy et al (2018).<sup>5</sup> These approaches center around promoting nurturing care through the holistic integration of health, nutrition, and protection activities (in line with the Nurturing Care Framework). The common characteristics found across the interventions in Syria, Bangladesh, and Venezuela that led to their successes are:

1. cultural adaptation based on a holistic understanding of needs of children and caregivers in the targeted community;
2. the integration of child and family safety and linkages to complementary services on the basis of the needs and priorities of the targeted communities; and
3. the importance of designing for scale through the use of blended models and costing analyses.

### Cultural and Programmatic Adaptation

A key commonality across the 3 cases is the important role of locally led adaptation and contextualization that reflect client needs, culture, traditions, and values. This ensures that the Reach

**TABLE 3** Intervention Costs

	Bangladesh		Venezuela Pilot
	Pilot	Scale-Up	
Households reached	434	2400	743
Months of intervention	4	12	9
Total cost per household, full intervention	\$341	\$254	\$358
Total cost per household, monthly	\$85	\$21	\$40

Dollar amounts listed are in US dollar amounts because both program budgets are developed in US dollars.

**TABLE 4** Key Strategies for Adapting Reach Up in Humanitarian settings

Factors	Strategies for Adaptation and Design in Humanitarian Settings
Individual participant level	Employ a feasible modality to understand what essential complementary services are priority for targeted communities: focus group discussions and interviews, phone-based surveys when access is limited, and sharing sample content for caregivers' reactions.
Family and community level	<p>Link families to critical services to improve safety and reduce stressors.</p> <p>Ensure facilitators are trained on psychological first aid, child safeguarding, and handling sensitive topics with caregivers. Target the caregiver who spends the majority of their time with the child, while also engaging the whole family including key family decision-makers, fathers, and siblings and grandparents when appropriate.</p> <p>Include specific messaging about stress management, tools to use in the home for mitigating stress, and the importance of caregiver well-being.</p>
Provider and workforce level	<p>Recruit facilitators from the target community.</p> <p>Empower facilitators who know the community and may be experiencing the effects of crisis and conflict themselves to adapt and draw on multiple skill sets.</p> <p>Focus supervision on provider wellness and coping skills.</p>
Program level	<p>Partner with complementary sectors, both internal and external (eg, health, nutrition, protection, cash), to ensure program participants have access to and receive needed services.</p> <p>Embed Reach Up within existing program sectors within IRC or partner organizations to reduce costs.</p> <p>Offer blended modalities to increase touchpoints with caregivers while reducing costs.</p> <p>Monitor caregiver satisfaction and adapt modalities according to feedback, changing needs of the communities, and context.</p>
Organization level	<p>Partner with local actors who have expertise in Reach Up, or a complementary service such as health, protection, or education.</p> <p>Adapt operations to mitigate security threats and navigate political constraints present in the crisis setting.</p>

Up programs not only address the needs of affected communities, but that the communities themselves are empowered to integrate responsive caregiving into their everyday lives. Across the 3 cases, feasibility of cultural and program adaptation, a key consideration highlighted by Murphy et al (2018), varied. Each country underwent a process of contextualization and adaptation of Reach Up content and materials to respond to the cultural and contextual reality of each setting. Additionally, each team selected a delivery modality specific to the needs of the caregivers in their context. Because of COVID-19 restrictions on physical access to

caregivers in Bangladesh, IRC used an opt-in, phone-based delivery modality, leveraging health partner registries of caregiver phone numbers for initial outreach. In Syria, families could be reached in collective shelters. In Venezuela, facilitators reached caregivers through group sessions in a trusted local health clinic or home visits, on the basis of caregiver choice. In protracted crisis settings such as the Venezuela crisis, there was more time for cultural adaptation of the intervention around the specific safety, health, and nutrition needs of the community, making detailed changes to books and creating unique infographics. Whereas in

acute emergencies like in Syria, skilled home visitors adapted immediately, drawing on their own experiences serving families in conflict. In Bangladesh, cultural adaptation had been previously done by icddr,b for Bangladeshi families, but the IRC team contributed expertise on serving Rohingya refugees and field testing yielded important insights.

### Child and Family Safety and Security

Each case highlighted the critical importance of considering family, and particularly child safety and protection in crisis and humanitarian settings. ECD facilitators and home visitors must be trained in where and how to refer caregivers to existing services to meet their basic needs for safety. In Syria, trained home visitors working within the child protection team make referrals and promote safe and responsive caregiving alongside early learning activities. In Venezuela, infographics and visuals were designed to support facilitators in explaining home safety and positive discipline messages. Other complementary messaging, such as exclusive breastfeeding and complementary feeding, that were included received positive feedback in Venezuela and Bangladesh. The ability to integrate referrals and complementary messaging that addresses basic needs builds trust between clients and ECD service providers, increasing the likelihood that caregivers engage in early learning activities.

### Designing for Scale and Analyzing Cost

Analyzing the cost of Reach Up helps prepare and design for scale. For example, the costing analysis in Bangladesh demonstrated that costs decreased with scale; nonetheless, the analysis also revealed that the largest cost driver is human resources, which is an essential



ingredient for facilitator-based programming and is critical to quality delivery. Thus, careful consideration of cost drivers should identify practical strategies to reduce costs for increased uptake and scale, without threatening fidelity, quality, and impact.

### Limitations

The methodology of exploratory multiple case analysis used in this article is a key limitation in that it does not adhere to more conventional standards of qualitative or mixed-method research, and does not allow for an in-depth analysis of program processes or effects. This methodology was selected because of the highly unstable contexts and relative novelty of these programs, where rigorous qualitative or quantitative research had not yet been implemented. Although this approach entails significant limitations, it offers early insights that may be used to inform future research.

### Recommendations for Future Research

Randomized controlled trials and mixed-methods research are needed to better understand program effects, minimum dosage, and how conflict and crisis affect delivery and outcomes of the intervention. Cost effectiveness studies are critical to bolster the case for ECD programming in resource-constrained crisis settings.

### CONCLUSIONS

Through an exploratory multiple case study analysis, this article provides recommendations for effective cultural adaptation, including integrating child and family safety into programs and

designing for scale through costing analysis. These examples of Reach Up adaptations highlight the need for holistic ECD services in crisis settings and can serve as a starting point for the development of robust ECD responses to improve short- and long-term outcomes of young children and families affected by crisis and conflict.

### ABBREVIATIONS

COVID-19: coronavirus disease 2019

ECD: early childhood development

IRC: International Rescue Committee

IVR: interactive voice response

icddr,b: International Centre for Diarrhoeal Disease Research, Bangladesh

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