Maternal and Pediatric Nutrition





# Assessing the Nurturing Care Content of UNICEF's Community Infant and Young Child Feeding Counselling Package: Gaps, Best Practices, and Lessons Learned

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#### **ABSTRACT**

**Background:** The United Nations Children's Fund (UNICEF) Community Infant and Young Child Feeding Counselling Package (C-IYCF CP) is used globally for infant and young child feeding (IYCF) counseling. With the C-IYCF CP last updated 8 y ago, mapping existing nurturing care content, identifying gaps, and documenting current country-level changes offers a unique opportunity to guide recommendations to strengthen the nurturing care content of this package.

**Objectives:** The primary study aims were to: 1) identify and map existing nurturing care content within UNICEF's C-IYCF CP, 2) identify gaps related to nurturing care or feeding elements within the C-IYCF CP, 3) identify country-level nurturing care adaptations to the C-IYCF CP, and 4) identify best practices and lessons learned from country adaptations that can be recommended for inclusion in the C-IYCF CP.

**Methods:** The assessment included 4 phases: 1) conduct an iterative process to identify and map nurturing care elements within the C-IYCF CP using a codebook explicitly developed for this assessment; 2) identify gaps in the C-IYCF CP; 3) apply the codebook to IYCF packages from 11 countries, revise, then finalize the codebook; and 4) identify and interview key informants from 4 countries whose IYCF packages had the most comprehensive nurturing care content plus 1 country where health care professionals make routine mother–child home visits.

**Results:** The C-IYCF CP contained limited nurturing care content, especially around safety/security and early learning. All 5 countries interviewed had systematically identified and included priority nurturing care content in each package, yet content level varied. Two countries were also incorporating information technology into the training and delivery of the C-IYCF CP.

**Conclusions:** Existing country-level best practices can address nurturing care elements missing from UNICEF's C-IYCF CP. Sharing these practices can allow countries to make context-driven, evidence-informed decisions on the nurturing care content to prioritize. *Curr Dev Nutr* 2022;6:nzac018.

Keywords: infant and young child feeding, counseling, UNICEF, nurturing care, counseling package

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Manuscript received October 22, 2021. Initial review completed January 21, 2022. Revision accepted January 27, 2022. Published online February 8, 2022. Supported by the United Nations Children's Fund through the New York Headquarters.

Author disclosures: FB and AG are employed by UNICEF through the New York Headquarters, which was the funding agency. AJHF, SSP, and RPE were paid UNICEF consultants for this project. RPE is a Deputy Editor of Current Developments in Nutrition but played no role in the Journal's evaluation of the manuscript and is Co-Editor-In-Chief of Maternal & Child Nutrition (Wiley). He is currently funded by grants from the following institutions: CDC, NIH, USAID, the Bill and Melinda Gates Foundation, and the Family Larsson-Rosenquist Foundation (Switzerland) Foundation. He currently has paid consulting assignments with USAID, WHO, FAO, Duke University, and the Mondelez International Foundation. He serves on the National Advisory Committee of the Healthy Eating Research-Robert Wood Johnson Foundation initiative and on the Board of Directors of Newman's Own Foundation.

Supplemental Codebook 1, Supplementary Country Summaries 2, and Supplementary Interview Guide 3 are available from the "Supplementary data" link in the online posting of the article and from the same link in the online table of contents at https://academic.oup.com/cdn/.

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Abbreviations used: C-IYCF CP, Community Infant and Young Child Feeding Counselling Package; COVID-19, coronavirus disease 2019; IMCI, Integrated Management of Childhood Illnesses; IYCF, Infant and Young Child Feeding.

#### Introduction

Fostering a nurturing environment, one in which parents and other caregivers create a stable, caring environment that protects children from threats, provides early learning opportunities, and ensures optimal health and nutrition in a responsive way (1), is essential for healthy child growth and development. The nurturing care framework

encourages a multisectoral approach to promote a nurturing environment for children (2). It identifies health, nutrition, education, finance, water and sanitation, and social and child protection as key sectors that can provide integrated nurturing care services (2). To do so requires integrating evidence-based nurturing care content into the training, educational and counseling, and behavioral change communication materials within programs.

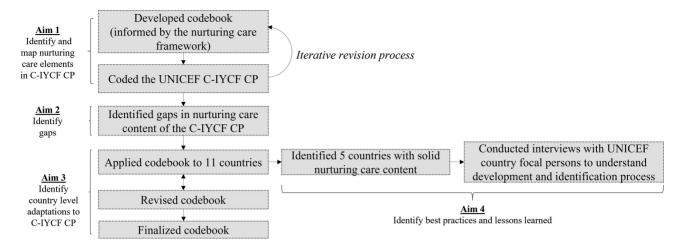


FIGURE 1 Process followed to evaluate the generic UNICEF IYCF Counselling Package, identify gaps, and document best practices/lessons learned. C-IYCF CP, Community Infant and Young Child Feeding Counselling Package; IYCF, Infant and Young Child Feeding.

Infant and young child feeding (IYCF) counseling packages provide a valuable opportunity for integration and delivery of nurturing care services. In general, IYCF packages inform caregivers on what to feed their infants and young children but may not address how to feed them following the nurturing care framework (3). Indeed, incorporating key responsive care and early learning elements, such as responsive parenting strategies, into IYCF counseling has immense potential to improve child growth and development (4-6). Parents can learn from IYCF counseling packages how to be responsive to the cues that infants and young children communicate with regards to feeding, playing, early stimulation, sleep, and psycho-emotionally supportive interactions. However, it must be recognized that structural changes need to be addressed at the policy level to ensure that families have the income, food security, health security, and stability for parents to implement the nurturing care learnings from IYCF counseling packages. Indeed, the WHO strongly recommends this comprehensive, integrative approach, and countries are currently considering how to best address this recommendation (7).

UNICEF's C-IYCF CP is one of the most widely used counseling tools in low-income countries, especially in sub-Saharan Africa and South/Southeast Asia (8). The C-IYCF CP aims to strengthen IYCF practices globally by offering countries a consistent, evidence-informed package to use/adapt plus integrate into their IYCF programs (8). The C-IYCF CP materials were developed in 2010 and last updated in 2013 (9). These materials included the: planning guide; adaptation guide; facilitator guide; training aids; participant materials; counseling cards for community workers; key messages booklet; 3 brochures on how to breastfeed your baby, nutrition during pregnancy and breastfeeding, and how to feed a baby after 6 months; supervision, mentoring and monitoring module. By 2019, 90 countries were already using the C-IYCF CP package in its complete (i.e., generic C-IYCF CP) or adapted form (10).

Since the C-IYCF CP was updated 8 y prior to when this study was conducted, it was likely there were gaps in the inclusion of the essential nurturing care domains in the context of child feeding in its materials (11). Furthermore, it was also possible that countries may have adapted

the C-IYCF CP since 2013 to include more comprehensive nurturing care elements or other key elements related to child feeding. Mapping existing nurturing care content and identifying gaps within the C-IYCF CP plus documenting country-level adaptations to this package offered a unique opportunity to guide recommendations to strengthen the nurturing care content of the generic C-IYCF CP. Therefore, the overall aims of this project were to: 1) identify and map existing nurturing care content within the generic C-IYCF CP, 2) identify nurturing care gaps within the generic C-IYCF CP, 3) identify country-level nurturing care adaptations to the generic C-IYCF CP, and 4) identify best practices and lessons learned from country adaptations that can be recommended for inclusion in the generic C-IYCF CP.

#### Methods

**Figure 1** describes the systematic steps taken to meet the above aims.

#### Identifying and mapping existing nurturing care elements

Using content analysis, 3 of the authors (AJHF, RPE, SSP), who are trained in qualitative research and are experts in maternal/child nutrition and responsive feeding, independently coded the participant material content from the generic C-IYCF CP initially using the 5 nurturing care domains (i.e., heath, nutrition, responsive caregiving, security and safety, early learning). Additional domains, themes, and subthemes were added to the codebook to accurately depict the array of topics in the participant materials. Iterative discussion sessions were held during this coding process and a comprehensive initial codebook was developed. This process was repeated for 8 additional C-IYCF CP materials [facilitator's guide; key messages booklet; supervision, mentoring, and monitoring module; 3 brochures; training aids; counseling cards for community workers (2 materials, the planning guide and adaptation guide, were not further assessed at this stage since they did not contain IYCF educational material)], and the final codebook was completed. Each material was re-examined and content related to a code was identified with an "X" in the final codebook for that specific material (Supplemental Codebook 1).

#### Identifying gaps in the C-IYCF CP

Each expert independently reviewed the final codebook to identify missing content and documented gaps, then met to discuss what nurturing care content was present in the materials, what wasn't, and in which materials it was missing. They reached consensus on the most important content to include in the entire package versus those to include in only some package materials (e.g., information on how to counsel was deemed relevant for facilitators and community health workers, but it was not necessary for caregiver educational materials).

#### Mapping country-level IYCF materials

Initially, 81 of the 90 countries (90%) using the generic C-IYCF CP were identified from the UNICEF internal database (i.e., NutriDash) as having nurturing care components in their IYCF packages (10). Nutrition advisors in the 7 UNICEF regional offices were consulted to identify the countries with the most comprehensive nurturing care content. The 39 that were identified were e-mailed requests by UNICEF headquarter nutrition specialists to share their IYCF materials containing nurturing care elements. Twenty countries responded, sharing relevant IYCF materials. A subsample of IYCF materials from 11 countries were assessed as these were available in English or Spanish: China, Cuba, Ecuador, Kenya, Nepal, Nicaragua, Pakistan, Peru, Philippines, Rwanda, Sierra Leone.

The same 3 experts coded the IYCF content from the 11 countries using the same final codebook generated from the review of the generic C-IYCF CP (Supplemental Codebook 1). Two of the experts (RPE, SSP), who are native Spanish speakers, independently translated and coded the Spanish-language content from Cuba, Ecuador, Nicaragua, and Peru. The third (AJHF) coded English-language materials from China, Kenya, Nepal, Pakistan, Philippines, Rwanda, and Sierra Leone. Country content was summarized to include material description, developers of the adapted or additional materials, titles, structure, topics, strengths, weaknesses, and experts' recommendations (Supplemental Country Summaries 2). The 3 experts met twice—first, to share country materials and codes and, second, to present and discuss summaries of nurturing care content in each country's package.

### Country-level in-depth interviews

To identify the countries in which to conduct in-depth interviews, the 11 countries were first grouped by world regions (Latin America, Sub-Saharan Africa, and Asia). Then, experts reached consensus on the country package within each region that included the most comprehensive nurturing care materials. A consultation was held with UNICEF headquarter nutrition specialists to include additional regions that were not represented. Consensus was reached on including an East Central Europe country given the strong parenting home-visiting programs some countries in that region have. The final set of countries identified for in-depth interviews were Ecuador (Latin America), Rwanda (Sub-Saharan Africa), Armenia (East Central Europe), and the Philippines, as well as Pakistan (Asia).

UNICEF headquarters nutrition specialists contacted UNICEF country focal persons via e-mail to participate in the in-depth interviews. All agreed and an interview guide developed by the experts was shared before the interview took place (Supplemental Interview **Guide 3**). In-depth interviews (n = 5) were conducted with UNICEF country focal persons over a 3-wk period in August 2020. Prior to beginning each interview, the purpose of the interview was described to each participant and verbal consent was received. All interviews were conducted by 2 experts (AJHF, RPE) via Zoom (Zoom Video Communications), lasted about 1 h, and were audio-recorded. Extensive notes were also taken during the interview (AJHF).

Following each interview, the experts (AJHF, RPE) debriefed, reached consensus on the best practices and lessons learned, and developed summaries detailing the development process, best practices, and lessons learned for each country. Summaries were sent to each country focal person to verify content, and 3 countries (Ecuador, Philippines, Pakistan) were asked to share additional IYCF content identified through the interviews. The 2 experts met again to reach consensus on the overall lessons learned and best practices across countries. A consultation was then held with UNICEF headquarters nutrition specialists to present preliminary findings and receive input. Following this meeting, findings were finalized.

This project was exempt from Yale University's Institutional Review Board approval because it was based on anonymous interviews with international agency personnel who expressed their professional views about different aspects of the UNICEF generic C-IYCF CP. No information with personal identifiers was collected.

#### Results

# Gaps in UNICEF generic C-IYCF CP

Overall, the C-IYCF CP contained some nurturing care content, yet only 2 of the 7 C-IYCF CP components that were evaluated (the facilitator's guide and participant materials) contained messages and/or images for all 5 domains of the nurturing care framework (Supplemental Codebook 1). Despite this, not all domains were adequately and fully addressed. For example, while the facilitator's guide included nurturing care content for all 5 domains, only 1 message addressed early learning (e.g., interact with infant while washing hands) and only 3 messages were included to address social protection (e.g., making sure education is provided equally for girls and boys).

Six primary gaps were identified within the UNICEF generic C-IYCF CP, as discussed in the following sections.

# Lack of framing of healthy child growth and development in the context of nurturing care.

While the generic C-IYCF CP included guidance on managing and treating suboptimal infant/child growth (i.e., stunting, underweight), it lacked information on healthy child psycho-emotional, social, and cognitive development, especially in relation to nurturing care elements like responsive care, responsive feeding, and early learning. Indeed, there was not a single counseling card or training aid teaching providers and communities what "normal" child development is nor were there lessons for caregivers on how to provide early learning opportunities. Neither was there any explanation of the relationship between nutrition and child development, which is needed for understanding how the nurturing care elements are interrelated and how, in the absence of 1 or more nurturing care element, a child cannot develop well.

#### Integration of the life course and family perspective is absent.

The generic C-IYCF CP provides specific guidance across different stages of the life course (i.e., pregnancy, infancy, childhood, and adolescence) in a fragmented way without connecting how earlier life experiences affect later stages of the life course. Mapping these details in a simple way can improve the understanding of how health and wellbeing requires a life-course, family approach as recommended by the Global Nurturing Care Framework.

#### Child protection is not addressed.

While a stable, secure environment is essential to providing a nurturing environment, the generic C-IYCF CP lacked guidance on child protection. Indeed, only 2 package components (the facilitator's guide and participant materials) mentioned child protection (Supplemental Codebook 1). However, of the 5 themes (protection of children from danger, prevention of child violence, access to social programs, gender equity, providing a safe place for mothers/children), the facilitator's guide included minimal information on the last 3 themes and the participant manual included only 1 theme. Without a stable environment (i.e., one that is free from violence, harm, insecurity, harsh discipline, etc.), a child's feeding behaviors and development can rapidly falter. Incorporating guidance on how to provide a stable, secure environment (such as soothing a crying child in a responsive, nurturing manner) so that children can be fed in a responsive way is essential. Linking evidencebased parenting-skills programs, such as Care for Child Development, can supplement the generic C-IYCF CP content in this area (2, 12).

# The generic C-IYCF CP does not address the feeding and nurturing care needs of children with disabilities.

While several vulnerable populations (i.e., low birth weight/premature infants, HIV-positive women, and sick mothers and children) were included within some of the generic C-IYCF CP materials, children with disabilities were not included at all, and this is an important omission (13, 14).

#### Prevention of overweight and obesity is not addressed.

Evidence supports responsive parenting/feeding as an important intervention for preventing childhood obesity (15). Ultra-processed foods were addressed superficially in the generic C-IYCF CP as well as in all country packages. For example, the generic C-IYCF CP briefly mentioned the need to avoid giving sugary drinks and sweet biscuits to infants and young children. Properly addressing obesity in the generic C-IYCF CP requires expanding on topics of ultra-processed foods as well as adding information on sugar-sweetened beverages, sedentarism/screen time, proper sleep patterns, and obesity.

#### Limited information on food systems/food security.

The guidance on food insecurity only advised to use locally available and affordable foods. Indeed, there were no messages or visual images to guide households on how dietary variety and diversity as well as meal frequency can be met in the context of a food-insecure household. Including guidance on how to plant home gardens, develop home-based small animal husbandry projects, and prepare healthy recipes while following water, sanitation, and hygiene (WASH) and food safety principles, all while offering nurturing care opportunities to young children, is recommended.

#### **Best practices**

All countries, except for Cuba and Nepal, had adapted and/or included cards/messages/other nurturing care material that could potentially complement the generic C-IYCF CP content. While some images and messages differed between countries, each country adapted the generic C-IYCF CP or developed their own IYCF package to meet their cultural, social, and other contextual needs.

Some country-level adaptations addressed the identified nurturing care gaps in the generic C-IYCF CP. **Table 1** shows the cards from 4 country packages (Rwanda, Philippines, Kenya, and Pakistan) that had best-practices cards that addressed 4 of the 6 identified gaps in the generic C-IYCF CP.

#### Lessons learned

Six lessons emerged from the country interviews revealing factors leading to the successful adaptation of the generic C-IYCF CP and/or development of complementary cards.

#### Political support.

Government leadership was essential for the development/adaptation process to be undertaken and moved forward nationally. Countries described collaborative, intersectoral, iterative processes that were led by their respective governments. This process enabled countries to consider dissemination and implementation strategies at the national level early in the process (e.g., training of trainers' cascades, harmonizing IYCF-nurturing care messages/images across packages).

#### Integration of new content into existing cards vs. adding new cards.

There was a recognized need to integrate nurturing care content within and across IYCF-related packages for consistency in content and delivery of messages. Countries strongly favored a balance between integrating new information into the existing package and adding new content as needed, accounting for financial and human resource limitations. With regard to revisions to the generic C-IYCF CP, countries felt hosting an iterative and highly participatory global consultation where countries could provide inputs based on their national experiences was key

# Standard consultative, multisectoral process for developing nurturing care materials.

The process taken to develop/adapt materials was systematic, participatory, multisectoral, and collaborative. The development process included examining evidence-based materials, developing/adapting them to include nurturing care elements, and pretesting in target communities to ensure cultural appropriateness.

#### Separate package for middle-income contexts.

Country feedback suggested that the generic C-IYCF CP has been geared primarily towards low- and very-low-income countries. Ecuador and other Latin American countries are among several globally that are moving towards middle- to upper-middle-income status. These countries have been developing their own IYCF packages because of the lack of fit of the generic package with their country's cultural, economic, social, and other contextual characteristics. Having a separate but connected package for middle-income countries that considers country

(Continued)

Best-practices examples from country-level IYCF packages to address gaps in the generic UNICEF Community Infant and Young Child Feeding Counselling Best-practices country card example Introduction to complementary feeding Start immunization at birth and continue as baby grows You are your baby's first teacher Best-practices country Kenya (20) Rwanda<sup>2</sup> Rwanda development to nutrition and Visual images linking healthy Recommendation responsive caregiving development in context Lack of framing of healthy child growth and of nurturing care TABLE 1 Package<sup>1</sup> Gap

TABLE 1 (Continued)

Best-practices country card example		Sanibong Araw Para Sa Magandang Kinabukasan  270 araw + 180 araw + 590 araw 1,000 araw  weng grad from the sanish araw 1,000 araw 1,	Practice 19. Protect and respond to abuse of gift, buye and somen 4:
Best-practices country	Rwanda	Philippines <sup>3</sup>	Pakistan <sup>4</sup> addresses social and child protection but doesn't address them in the context of feeding
Recommendation	Mapped in a simple way for community health workers and families to understand how health and well-being requires a life course, family approach as recommended by the Global Nurturing Care Framework		Address social protection in the context of feeding
Gap	Integration of the life course and family perspective is lacking		Child protection is not addressed

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Best-practices country card example	No country-level counseling cards address this gap	No country-level counseling cards address this gap	Grow a kitchen garden and fruit trees	Your baby needs animal source foods  The state of the sta
Best-practices country			Rwanda	Rwanda
Recommendation	Address feeding in the context of children with disabilities	Include more information on ultra-processed foods, add information on sugar-sweetened beverages, sedentarism/screen time, and obesity	Include activities on how to plant home gardens and develop home-based small-animal husbandry (e.g., poultry meat, eggs) projects, as well as provide education using healthy recipes while following WASH and food safety principles	
Gap	The C-IYCF CP does not address the feeding and nurturing care needs of children with disabilities	Obesity is not addressed	Limited information on food systems/food security	

TABLE 1 (Continued)

Best-practices country card example	How to create a kitchen garden  The state of	Small animal breeding
Best-practices country	Kenya (20)	Kenya (20)
Recommendation		
Gap		

<sup>1</sup>C-IVCF CP. Community Infant and Young Child Feeding Counselling Package; IVCF, Infant and Young Child Feeding; WASH, water, sanitation, and hygiene.

<sup>2</sup>Permission to include the selected cards was obtained from UNICEF Rwanda and are from their updated counseling package, Maternal, Infant, and Young Child Nutrition: National Materials for Community Counsellors.

<sup>3</sup>Permission to include the selected cards was obtained from UNICEF Pakistan and are from their counseling package, FCD Counselling Package: Family Care Practices Counselling Cards.

needs within a different economic context can help reach a wider global audience.

## Information technology for training and dissemination.

Two countries have begun using technology in situations where inperson dissemination can be challenging (e.g., during pandemics, when a country lacks a solid training of trainers cascade). The Philippines integrated, harmonized, and shared training materials online to provide health care providers with access to the IYCF training during the coronavirus disease 2019 (COVID-19) pandemic. Ecuador was developing an app for families and professionals that provides evidence-based IYCF and nurturing care information through audio and visual images.

#### Systematic dissemination and evaluation plan.

Most countries (e.g., Philippines, Pakistan, Ecuador, Armenia) were almost or had already finished integration across packages [e.g., Integrated Management of Childhood Illness (IMCI)]; however, they were in various stages of dissemination, with some having conducted trainings more broadly than others. None of the countries had been able to complete systematic evaluations of their revised IYCF packages, although 2 (Rwanda, Armenia) specifically acknowledged the importance of monitoring and evaluating the developed/adapted packages to determine how they are being used and the impact they are having on IYCF outcomes. Countries acknowledged there were strong barriers to the evaluation process (i.e., COVID-19 pandemic, funding limitations, limited government support for large-scale implementation). Having strong systematic dissemination and evaluation plans can ensure that developed/adapted materials are distributed and used nationwide.

#### **Discussion**

The generic C-IYCF CP provides countries with an important tool to help them integrate IYCF into training and program delivery systems within and across sectors, including health, nutrition, education (e.g., birth to 3 initial education initiatives delivered through Early Care and Education Centers), and social and child protection (e.g., conditional cash transfer programs, intimate partner violence prevention programs). Countries were proactive in integrating or adding materials reflecting nurturing care elements into their IYCF materials. Indeed, some nurturing care elements missing from the generic C-IYCF CP can be addressed using existing country-level best-practices examples, including important visual tools. However, it is imperative that the visual tools are made available for countries to use to illustrate how they can integrate nurturing care elements into their packages. While UNICEF does provide examples of IYCF counseling cards adapted by 6 countries, this accounts for only a very small portion of the 81 countries that have adapted the generic C-IYCF CP materials to include nurturing care elements. Providing a clearing house that contains all updated UNICEF country-level IYCF materials could provide countries with numerous options for them to review and use as they develop or adapt their materials, and also to share experiences with each other related to nurturing care education and counseling in the context of IYCF.

Some countries are already following systematic processes to integrate nurturing care content into their IYCF packages and other packages [e.g., IMCI (16)]. These processes, which include reviewing evidence-based materials, conducting an iterative/collaborative development process, pretesting with target communities, making revisions, and disseminating, give countries a clear strategy for adapting their counseling package. However, systematic dissemination and evaluation plans to document and monitor the effects that these adaptations may have on IYCF outcomes (e.g., feeding practices) are lacking despite being considered essential for understanding how the program is working and identifying what, if anything, needs to be changed. Evaluation of the C-IYCF CP in Nigeria is a strong example of the importance of having systematic dissemination and evaluation plans (9).

Having a government-led process is essential to secure the adoption of IYCF package adaptations/modifications and scale-up dissemination. While UNICEF provided key technical support, collaborators across various sectors also contributed their expertise. It is important for countries to understand how and why to involve their government at the beginning of the process.

Adding new content into IYCF packages requires carefully balancing the need for it against the reality that providers are overburdened with many tasks and responsibilities. Deciding which nurturing care aspects to add to IYCF packages and how best to do so should follow a strong community-based participatory process with key stakeholders, including the target communities. This approach is well illustrated by the recent development of responsive feeding cards in Ghana (17). Furthermore, deciding on how best to include them in training and education delivery through the health care system and other sectors requires sound implementation research (18, 19).

There were limitations to this review. First, the sample of country packages reviewed were limited to how many focal persons responded to the e-mail request and the language (English or Spanish). Therefore, this was a self-selected sample and may not represent the other country packages. However, any country using the generic C-IYCF CP could benefit from examples of how nurturing care elements can be integrated. Second, the interviews only captured the perspectives of UNICEF country focal persons. Government and other partners involved in the adaptation/integration of nurturing care content into IYCF materials were not able to be interviewed given the time constraints for this project. While the interviews captured the extensive process taken to adapt/integrate and implement changes, adding the perspective of the government as well as other collaborating partners would have enriched the results. Last, because UNICEF funded this project and that 2 coauthors (AG, FB) are employed by this agency there is a potential for bias. To minimize this potential bias, consultants (AJHF, RPE, SSP) who were unaffiliated with UNICEF systematically implemented the project independently and without oversight from UNICEF.

In conclusion, this is the first attempt at systematically identifying gaps in nurturing care content in a global C-IYCF CP. A consultative process involving countries with different contexts would help guide further discussions on the nurturing care content to be included in the generic C-IYCF CP. Allowing countries to share best practices and contribute to content-based discussions has immense potential for the inclusion of nurturing care content that responds to global needs.

## **Acknowledgments**

The authors responsibilities were as follows-AG, FB, AJHF, and RPE: designed the research; AJHF, RPE, and SSP: conducted the research and analyzed the data; AJHF and RPE: drafted the manuscript; AJHF: created Table 1; and had primary responsibility for final content; AG, FB, and SSP: edited and revised the manuscript; and all authors: provided final manuscript edits and read and approved the final manuscript.

#### **Data Availability**

Data described in the manuscript, code book, and analytic code will be made available upon request pending application and approval.

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