# Scaling Up Breastfeeding Programs in Mexico: Lessons Learned from the Becoming Breastfeeding Friendly Initiative

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#### Abstract

**Background:** Given the magnitude of the health and economic burden of inadequate breastfeeding practices in Mexico, there is an urgency to improve breastfeeding practices to increase the health and well-being of children and mothers. The Becoming Breastfeeding Friendly (BBF) Toolbox was recently developed to guide countries in assessing their readiness to and progress with scale-up of breastfeeding protection, promotion, and support and to develop policy recommendations to high-level decision makers.

**Objective:** The aim of this study was to document the BBF process in Mexico, which led to evidence-based recommendations for policymakers to improve breastfeeding protection, promotion, and support in the country.

**Methods:** We followed the BBF methodology. First, a group of experts, with the use of scientific and gray literature, face-to-face interviews, and their own experience, analyzed and assigned a score to each of the 8 gears from the BBF index and identified scaling-up gaps on the basis of the Breastfeeding Gear Model. Then, we developed and presented evidence-based recommendations to improve breastfeeding protection, promotion, and support.

**Results:** Mexico's BBF score was 1.4 out of a maximum total of 3 points, which indicates that there is a low to moderate scaling-up environment to protect, promote, and support breastfeeding. None of the gears were rated as "outstanding," and the legislation and policies gear was the only one rated as strong.

**Conclusions:** The BBF initiative is a useful tool for assessing the environment for breastfeeding. The Mexican environment for breastfeeding is weak. On the basis of these results, it is strongly recommended to raise national awareness on breastfeeding, incorporate the Code of Marketing of Breastmilk Substitutes in the Mexican legislations, extend maternity leave to 6 mo, and strengthen evidence-based advocacy and hence the political will that is needed to secure stable funding and resources for a successful national strategy for the protection, promotion, and support of breastfeeding in Mexico. *Curr Dev Nutr* 2018;2:nzy018.

#### Introduction

Breastfeeding promotes infant health, growth, and development through its unique nutritional and bioactive properties, by reducing the incidence and severity of gastrointestinal and respiratory infections, and by improving feeding during illness (1). In addition, breastfeeding is associated with reduced incidence of chronic diseases later in life in both children and mothers (1). However, in Mexico, breastfeeding practices are alarmingly suboptimal with respect to the WHO's recommendations in terms of exclusivity (6 mo) and total duration ( $\geq 2$  y). Between 2006 and 2012, the rate of exclusive breastfeeding in infants aged <6 mo decreased by almost 8 percentage points, from 22.3% to 14.4%. This decrease was especially pronounced in rural areas (from 36.9%



**Keywords:** breastfeeding protection, breastfeeding programs, breastfeeding friendly, nutrition policy, lactation, breastfeeding gear model

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Abbreviations used: BBF, Becoming Breastfeeding Friendly; BBF-TS, Becoming Breastfeeding Friendly Total Score; EsIAN, Integrated Strategy for Nutritional Care; GTS, Gear Total Score; IYCF, Infant and Young Child Feeding.

to 18.5%) and other socioeconomically vulnerable groups. The median duration of breastfeeding has remained at 10 mo since 2006 (2). In addition, the costs of inadequate breastfeeding in Mexico in terms of infectious diseases during the first year of the infant's life have been estimated to range from US\$745.6 million to US\$2.4 billion/y, with the price of formula accounting from 11% to 38% of this cost (3). Furthermore, between 1.1 and 3.8 million reported cases of infectious disease, and between 933 and 5796 infant deaths/y, are attributed to inadequate breastfeeding practices. Together, these represent nearly 27% of the absolute number of infectious disease episodes in the country. The costs of suboptimal breastfeeding for maternal health are being estimated, and are expected to be high as well, based on findings from other countries (4, 5). Thus, given the magnitude of this health and economic burden of inadequate breastfeeding practices in Mexico there is an urgency to improve breastfeeding practices to increase the health and well-being of children and women. The National Academy of Medicine of Mexico recently issued a position statement calling for strong government commitment to develop an effective national program that enables the protection, promotion, and support for optimal breastfeeding practices in the country (6, 7). The National Academy of Medicine of Mexico based its recommendations on the Breastfeeding Gear Model (8), which identifies the key elements that national breastfeeding programs need to have in place for effectively scaling up breastfeeding programs. This model is based on 8 major components or "gears" that should work in synchrony and coordination for the national breastfeeding "engine" to function properly. Evidence-based advocacy (gear 1) is needed to generate the political will to enact legislation and policies (gears 2 and 3) to protect, promote, and support breastfeeding at the hospital and community levels. This political-policy axis, in turn, drives the resources needed to support workforce development, program delivery (gears 4 and 5), and promotion (gear 6). Research and evaluation (gear 7) are needed to inform the decentralized coordination "gear" required for goal setting, tracking, and system(s) timely feedback (gear 8) (8).

When developing effective national breastfeeding policies, it is necessary to support policymakers to make adequate evidence-based decisions (9). Indicators to assess if the environment is supportive of breastfeeding programs have been previously developed. For example, the WHO's Infant and Young Child Feeding (IYCF) tool and the International Baby Food Action Network's World Breastfeeding Trends Initiative have sought to empower countries to assess IYCF outcomes, activities, and processes through these indicators, so that they can identify IYCF gaps that need to be addressed (9).

More recently, Pérez-Escamilla et al. (10, 11) developed the Becoming Breastfeeding Friendly (BBF) Toolbox to guide countries in assessing their readiness to scale up breastfeeding protection, promotion, and support on the basis of the Breastfeeding Gear Model. The Toolbox consists of 1) BBF benchmarks to assess the strength of each of the gears enabling countries to scale up breastfeeding efforts (11) and 2) a highly participatory and iterative multisectoral process through which the BBF country's committee uses the BBF Total Index Score (BBF-TS) to make policy recommendations. The overall objectives of this project were as follows: 1) to apply the BBF-TS, 2) to identify scaling-up gaps on the basis of the Breastfeeding Gear Model, and 3) to develop and present evidence-based recommendations to policymakers and the media to improve breastfeeding protection, promotion, and support in Mexico. The specific objective of this article is to document the BBF process in Mexico that led to the recommendations issued to high-level decision makers in 2017.

#### Methods

#### Development of the BBF score by gear and for all gears combined

The BBF benchmarks and scoring methods were developed by the BBF Steering Committee at Yale University on the basis of the advice of the International Technical Advisory Group (11). The Mexico BBF committee was composed of 11 experts in the breastfeeding and lactation field from government, academia, and civil society organizations. The Mexico BBF committee was responsible for computing the BBF-TS, following a highly transparent and iterative evidence-based process that used gray and scientific literature research plus face-to-face interviews. Three steps are needed to calculate the BBF-TS (10). The first step involves scoring each of the 54 BBF benchmarks (**Table 1**) on the basis of the following scoring guidelines: 0 if not present, 1 if minimally present, 2 if partially present, or 3 if strongly present.

The second step involves calculating the Gear Total Score (GTS). The GTS is calculated from each of the gears by using the benchmarks scores for each gear. Each gear is measured through the following benchmarks: Advocacy Gear (n = 4 benchmarks), Political Will Gear (n = 3 benchmarks), Legislation and Policies Gear (n = 10benchmarks), Funding and Resources Gear (n = 4 benchmarks), Training and Program Delivery Gear (n = 17 benchmarks), Promotion Gear (n = 3 benchmarks), Research and Evaluation Gear (n = 10 benchmarks), and Coordination, Goals, and Monitoring Gear (n = 3 benchmarks). To account for the different number of benchmarks for each gear, the average score for each gear is computed by dividing the sum of each benchmark within each gear by the total number of benchmarks in each gear. Once a GTS is calculated, the score should be interpreted as follows: 0 (gear not present), 0.1-1.0 (gear with weak strength), 1.1-2.0 (gear with moderate strength), and 2.1-3.0 (gear with strong strength) (10).

The third step involves calculating the BBF-TS by multiplying each GTS by the weight allocated to that gear by the BBF Technical Advisory Group (11). The formulas used are as follows: Weighted GTS Advocacy = GTS Advocacy  $\times$  1.6; Weighted GTS Political Will = GTS Political Will  $\times$  1.5; Weighted GTS Legislation and Policies = GTS Legislation and Policies × 1.6; Weighted GTS Funding and Resources = GTS Funding and Resources  $\times$  1.6; Weighted GTS Training and Program Delivery = GTS Training and Program Delivery × 1.6; Weighted GTS Promotion = GTS Promotion  $\times$  1.5; Weighted GTS Research and Evaluation = GTS Research and Evaluation  $\times$ 1.5; Weighted GTS Coordination, Goals, and Monitoring = GTS Coordination, Goals and Monitoring  $\times$  1.4. Finally, the 8 Weighted GTSs are added up and then divided by 12.3 (determined by adding the weights of all 8 gears) to calculate the final BBF-TS (10). This score is interpreted as follows: 0-1.0 (weak scaling-up environment), 1.1-2.0 (moderate scaling-up environment), 2.1-2.9 (strong scaling-up environment), and 3.0 (outstanding scaling-up environment) (10).

## TABLE 1 Mexico's BBF-TS1

Benchmark reference	Benchmarks	Benchmark score <sup>2</sup>	GTS <sup>3</sup>	BBF Index (BBF-TS) <sup>4</sup>
Advocacy Gear			1.2 (moderate	2.0
AG1	There have been major events that have drawn attention to breastfeeding issues.	3	gear strength)	
AG2	There are high-level advocates or influential individuals who have taken on breastfeeding as a cause that they are promoting.	2	5 5 .	
AG3	There is a national advocacy strategy based on sound formative research.	0		
AG4	A national cohesive network of advocates exists to increase political and financial commitments to breastfeeding.	0		
Political Will Gear			2.0 (moderate	3.0
PWG1	High-level political officials have publicly expressed their commitment to breastfeeding action.	2	gear strength)	
PWG2	Government initiatives have been implemented to create an enabling environment that promotes breastfeeding.	2		
PWG3	An individual within the government has been especially influential in promoting, developing, or designing breastfeeding policy.	2		
_egislation and Po	nlicies Gear		2.1 (strong gear	3.4
LPG1	A national policy on breastfeeding has been officially adopted/approved by the government.	3	strength)	0.4
LPG2	There is a national breastfeeding plan of action.	3		
LPG3	The national BFHI/10 Steps has been adopted and incorporated within the health care system strategies/policies.	2		
LPG4	The International Code of Marketing of Breastmilk Substitutes has been adopted into legislation.	1		
LPG5	The International Code of Marketing of Breastmilk Substitutes has been enforced.	1		
LPG6	The International Labor Organization Maternity Protection Convention has been ratified.	1		
LPG7	There is paid maternity leave legislation for women.	1		
LPG8	There is legislation that protects and supports breastfeeding/expressing breaks for lactating women at work.	3		
LPG9	There is legislation supporting worksite accommodations for breastfeeding women.	3		
LPG10	There is legislation providing employment protection and prohibiting employment discrimination against pregnant and breastfeeding women.	3		
Funding and Reso	nurces Gear		0.5 (weak gear	0.8
FRG1	There is a national budget line(s) for breastfeeding protection, promotion and support activities.	0	strength)	0.0
FRG2	The budget is adequate for breastfeeding protection, promotion and support activities.	0		
FRG3	There is $\geq 1$ fully funded government position to primarily work on breastfeeding protection, promotion, and support at the national level.	0		
FRG4	There is a formal mechanism through which maternity entitlements are funded using public sector funds.	2		
Training and Prog	ram Delivery Gear		1.2 (moderate	1.9
TPD1	A review of health provider schools and pre-service education programs for health care professionals that will care for mothers, infants, and young children indicates	1	gear strength)	
TPD2	that there are curricula that cover essential topics of breastfeeding. Facility-based health care professionals who care for mothers, infants, and young children are trained on essential breastfeeding topics as well as on their	1		
	responsibilities under the Code implementation.	1		
TPD3	Facility-based health care professionals who care for mothers, infants, and young children receive hands-on training in essential topics for counseling and support chills for broastfooding.	1		
TPD4	skills for breastfeeding.	1		
11 04	Community-based care professionals who care for mothers, infants and young children are trained on essential breastfeeding topics as well as on their responsibilities under the Code implementation.	I		
TPD5	Community-based health care professionals who care for mothers, infants, and young children receive hands-on training in essential topics for counseling and support skills for breastfeeding.	1		

(Continued)

### TABLE 1 (Continued)

Benchmark reference	Benchmarks	Benchmark score <sup>2</sup>	GTS <sup>3</sup>	BBF Index (BBF-TS) <sup>4</sup>
TPD6	Community health workers and volunteers that work with mothers, infants, and young children are trained on essential breastfeeding topics as well as on their responsibilities under the Code implementation.	1		
TPD7	Community health workers and volunteers that work with mothers, infants, and young children receive hands-on training in essential topics for counseling and support skills for breastfeeding.	0		
TPD8	There exist national/subnational master trainers in breastfeeding who give support and training to facility-based and community-based health care professionals as well as community health workers.	2		
TPD9	Breastfeeding training programs that are delivered by different entities through different modalities are coordinated.	0		
TPD10	Breastfeeding information and guidelines to develop skills are integrated into related training programs.	0		
TPD11	National standards and guidelines for breastfeeding promotion and support have been developed and disseminated to all facilities and personnel providing maternity and newborn care.	1		
TPD12	Assessment systems are in place for designating BFHI/10 Steps facilities.	3		
TPD13	Reassessment systems are in place to reevaluate designated Baby-Friendly/10 Steps criteria.	3		
TPD14	More than 66.6% of hospitals and clinics offering maternity services have been designated or reassessed as "Baby-Friendly" in the last 5 y.	1		
TPD15	Health care facility-based community outreach and support activities related to breastfeeding are being implemented.	1		
TPD16	Community-based breastfeeding outreach and support activities have national coverage.	3		
TPD17	There are trained and certified lactation management specialists available to provide supportive supervision for breastfeeding program delivery.	1		
Promotion Gea			1.6 (moderate	2.5
PG1	There is a national breastfeeding promotion strategy that is grounded in the country's context.	2	gear strength)	2.5
PG2	The national breastfeeding promotion strategy is implemented.	1		
PG3	Government or civic organizations have raised awareness about breastfeeding.	2		
Research and E	valuation Gear		1.0 (weak gear	1.5
REG1	Indicators of key breastfeeding practices are routinely included in periodic national	3	strength)	
	surveys.		<u>g</u> ,	
REG2	Key breastfeeding practices are monitored in routine health information systems.	1		
REG3	Data on key breastfeeding practices are available at national and subnational levels, including the local/municipal level.	2		
REG4	Data on key breastfeeding practices are representative of vulnerable groups.	1		
REG5	Indicators of key breastfeeding practices are placed in the public domain on a regular basis.	1		
REG6	A monitoring system is in place to track implementation of the Code.	1		
REG7	A monitoring system is in place to track enforcement of maternity protection legislation.	0		
REG8	A monitoring system is in place to track provision of lactation counseling/management and support.	0		
REG9	A monitoring system is in place to track implementation of the BFHI/10 Steps.	1		
REG10	A monitoring system is in place to track behavior change communication activities.	0		
	ioals, and Monitoring Gear There is a National Proastfooding Committee (IVCE Committee	2	2.0 (moderate	2.8
CGMG1	There is a National Breastfeeding Committee/IYCF Committee.	2	gear strength)	
CGMG2	National Breastfeeding Committee/IYCF Committee work plan is reviewed and monitored regularly.	3		
CGMG3	Data related to breastfeeding program progress are used for decision-making and advocacy.	1		
	BBF Index Total Score <sup>4</sup> = $1.4$ = moderate scaling-up environment			

<sup>1</sup>AG, Advocacy Gear; BBF, Becoming Breastfeeding Friendly; BBF-TS, Becoming Breastfeeding Friendly Total Score; BFHI, Baby-friendly Hospital Initiative; CGMG, Coordination, Goals, and Monitoring Gear; FRG, Funding and Resources Gear; GTS, Gear Total Score; IYCF, Infant and Young Child Feeding; LPG, Legislation and Policies Gear; PG, Promotion Gear; PWG, Political Will Gear; REG, Research and Evaluation Gear; TPD, Training and Program Delivery.
<sup>2</sup>Benchmarks score: 0 (no progress), 1 (minimal progress), 2 (partial progress), 3 (major progress).

<sup>3</sup>GTS (individual gear total score): 0 (gear not present), 0.1–1.0 (weak gear strength), 1.1–2.0 (moderate gear strength), and 2.1–3.0 (strong gear strength).

<sup>4</sup>BBF-TS (average score for all 8 gears in the BBF-TS): 0–1.0 (weak scaling-up environment), 1.1–2.0 (moderate scaling-up environment), 2.1–2.9 (strong scaling-up environment), and 3.0 (outstanding scaling-up environment).

# Process of BBF Index scoring and identification of policy recommendations by the Mexico BBF Committee

The BBF scoring process in Mexico City was conducted between May 2016 and March 2017 by 11 experts who collectively had experience with each of the gears: policy, advocacy, training, research, government, academia, and civil society organizations. There were 6 BBF full committee meetings, with extensive work done between meetings by the committee members, and with full support from the project's research assistant. The first meeting involved introducing the BBF Committee members to the project background, to the Becoming Breastfeeding Friendly Index, and to the scoring methodology. Participants were then divided into gear subcommittees according to their expertise and immediately began to identify different strategies to gather information. These strategies included face-to-face interviews with key informants and online surveys, traditional and social media analyses, literature review of government bulletins and laws, and analyses of National Health and Nutrition Surveys and WHO reports. All of the data were collected between May and October of 2016. The second and third meetings involved presenting to the whole committee data sources and data collection needed to score the benchmarks. The fourth meeting involved reaching final committee consensus in benchmark scores for each indicator, identifying key gaps for scaling up, and drafting the initial set of policy recommendations. These were presented at the fifth meeting where key decision makers were invited to respond. The BBF committee wrote a technical report and a policy brief that included the BBF Index Scores, the process followed, the identified gaps to achieve the highest scores, and policy recommendations. Working in coordination with the BBF's Yale Steering Committee, Mexico's BBF Committee organized the final high-level meeting in March 2017 to present the BBF report to key decision makers.

#### Results

#### BBF scores by gear and total BBF score

Advocacy Gear. This gear explores if there is evidence-informed, community-driven advocacy to protect, promote, and support breast-feeding. The GTS obtained was 1.25, which means that this gear had weak to moderate strength (Table 1). Specifically, the data suggest that there is no cohesive network at the national level of organizations focusing on advocating for more political and financial commitment to breastfeeding, nor the existence of a national strategy of advocacy based on formative research that contemplates permanent media activities supported by high-level public figures. In addition, civil society organizations working to support breastfeeding do so individually or in small groups due to the lack of strategic coordination. Their activities focus primarily on World Breastfeeding Week, but this is not enough to keep breastfeeding on the public agenda.

**Political Will Gear.** This gear documents whether policymakers have expressed commitment to scale up breastfeeding in the country. The GTS obtained was 2.0, that is, moderate gear strength (Table 1).

Data obtained from key informants and the review of government documents showed that there are government officials who have publicly expressed their commitment to breastfeeding, but none have done so often enough to affect other sectors and keep breastfeeding as a priority in the national agenda. The score also reflected that the country has only had isolated breastfeeding public policy activities. The Committee documented some political will; however, it identified major gaps in the translation of political will into actions. For example, even though the government has developed a National Breastfeeding Strategy, results from the document reviewers, evidence, and face-to-face interviews show that the enforcement of the Code of Marketing of Breastmilk Substitutes is very weak (12).

Legislation and Policy Gear. This gear represents the quality and coverage of national policies and legislation that protect, promote, and support breastfeeding, including the conditions that employed mothers face in their working environment. The GTS was 2.1, that is, moderate gear strength (Table 1). The National Breastfeeding Strategy adopted by the government includes lines of action and specific goals; however, they lack funding for implementation. The provisions of the Code of Marketing of Breastmilk Substitutes included in the national legislation are not accompanied by effective mechanisms for monitoring, reporting, and sanctioning against noncompliance. In addition, the current legal framework only includes regulation of the marketing of formulas for children aged <6 mo, whereas the scope of the Code of Marketing of Breast-Milk Substitutes addresses formulas and products for children aged <36 mo (13). With regard to the duration of maternity leave, the national legislation provides 12 wk of 100% paid leave by tripartite distribution (employer, worker, and government), instead of the 14 wk recommended by the International Labor Organization (14). Women employed in the informal sector do not receive any kind of protection, even though the International Labor Organization considers the establishment of cash benefits charged to social assistance. This is particularly relevant for Mexico, where 60% of the population works in the informal sector. In summary, data obtained by the Committee from key informants and literature reviews suggest that, although some but not all provisions of the Code of Marketing of Breastmilk Substitutes are contemplated in the Mexican legislation, it is necessary to establish mechanisms for monitoring and enforcing sanctions. In addition, it is important to highlight that the current maternity-leave period is insufficient to support exclusive breastfeeding for 6 mo.

*Funding and Resources Gear.* This gear represents adequate funding and other resources to scale up breastfeeding programs and interventions. The GTS was 0.5, that is, weak gear strength (Table 1). The Committee found that there is no national budget assigned to the promotion, protection, and support of breastfeeding at the federal level in Mexico, which represents a major gap because actions to protect, promote, and support breastfeeding are centrally linked to health and social development sector financing.

*Training and Program Delivery Gear.* This gear calls for assessing pre-service (students) and in-service (providers) breastfeeding training and skill development opportunities. In addition, it calls for assessing if there are facility- and community-based programs established to provide breastfeeding support. The GTS was 1.23, that is, moderate gear strength (Table 1). Currently, only in pediatric and gynecology medical school training is the topic of breastfeeding covered, although to a limited extent, as part of a mandatory course. In general, health professionals do not receive theoretical training nor the 3 h minimum of

supervised practice that the WHO recommends for building the needed breastfeeding support skills. A worrisome finding was that most health professionals are not aware of the Code of Marketing of Breastmilk Substitutes and its importance. In Mexico, the breastfeeding/lactation consultant professional is not recognized by the government, and at the time of the assessment there were only 30 International Board of Lactation Consultants in the whole country, which has >120 million inhabitants and 2.3 million annual births. With regard to program delivery, a national plan for breastfeeding promotion and support had already been developed and currently is under review. Its dissemination to all facilities and personnel providing maternity and newborn care is expected shortly. In addition, there is a system for designating and reassessing Baby-Friendly Hospitals; however, at the national level, <11% of maternity hospitals have been certified in the past 5 y. In Mexico, currently there are only 121 hospitals designated as "babyfriendly," which represents 11% of hospitals offering maternity services. Of these 121 hospitals, 85 are currently certified and 5 have been recertified as they continue adhering to the Baby-Friendly criteria. Finally, community-based breastfeeding outreach and support activities have national coverage.

Promotion Gear. This gear focuses on social marketing activities designed to support the scaling up of breastfeeding initiatives and the quality of those promotional activities. The GTS was 1.7, that is, moderate gear strength (Table 1). In Mexico, there is no research-based national strategy for the promotion of breastfeeding. However, the Integrated Strategy for Nutritional Care (EsIAN for its Spanish name), which is the breastfeeding promotion program of the conditional cash transfer program Prospera, a government social inclusion program, was designed based on social marketing and behavioral change communication principles. In EsIAN, breastfeeding promotion was designed to address barriers faced by health professionals who support breastfeeding mothers with their breastfeeding needs. Benefits for Prospera's target population include only interpersonal communication and have not yet been evaluated. Current strategies to promote breastfeeding such as EsIAN and "Da leche materna" (Feed Human Milk) from the Ministry of Health do not have national coverage because EsIAN focuses on the population living in poverty and "Da leche materna" is delivered via the Internet.

Research and Evaluation Gear. This gear explores the monitoring and evaluation systems guiding and assessing the quality and impact of the National Breastfeeding Strategy. The GTS was 1.0, that is, weak gear strength (Table 1). Because the National Health and Nutrition Surveys that assess breastfeeding rates at a national level are carried out every 6 y, the Committee found that this period is too long to be helpful for timely evidence-based decision making. In addition, the Committee also found that most key breastfeeding benchmarks are representative only at the national level and not have disaggregated data at the state and municipal levels, which means there is a need to oversample vulnerable subgroups, including indigenous communities, low-income groups, and obese women, so that actions may be taken, and inferences drawn, from these groups. These survey and future monitoring efforts in Mexico need to include diverse key breastfeeding benchmarks, including timing of breastfeeding initiation, exclusive breastfeeding for infants aged <6 mo, and any breastfeeding, to understand the impact of specific policies and programs on relevant breastfeeding practices. The Committee also found that there are no mechanisms in place to systematically share breastfeeding data with the public or with policymakers. The Committee identified a lack of monitoring systems to support evidence-based decision making with regard to quality improvement of facility- and community-based programs.

**Coordination, Goals, and Monitoring Gear.** This gear analyzes whether there is a government system in place, empowered to adequately coordinate the National Breastfeeding Strategy, and whether coordination covers the national, state, and municipal levels. This coordinating system is expected to be decentralized so that effective decision making from the national to the local level is based on adequate management-information systems. The GTS was 2.0, that is, weak to moderate gear strength (Table 1). Although, in theory, the government has in place a Permanent Interinstitutional Breastfeeding Support Group, it has 3 major limitations that preclude it from serving as an effective coordinating entity. First, not all members have a voice and vote and representation of key sectors, including labor and social development, is lacking. Second, the group lacks adequate representation from civil society and academia. Third, the actions of the group are not publicly disseminated.

#### **BBF-TS**

Mexico has a BBF-TS of 1.4 of a maximum total of 3 points, that is, a moderate scaling-up environment to protect, promote, and support breastfeeding.

#### Recommendations

The Committee reached consensus on 10 key recommendations to improve the quality of the country's national breastfeeding program and its ability to successfully scale up a well-designed national breastfeeding programs. The recommended actions listed below were presented to the key decision makers at the end of the initial phase of BBF in Mexico. The 10 key recommendation are as follows:

- Raise national awareness on breastfeeding, based on an evidencebased national strategy.
- 2) Incorporate the Code of Marketing of Breast-Milk Substitutes in its entirety in Mexican legislations, regulations, and standards to ensure accountability for Code violators, and that meaningful sanctions are issued.
- 3) Extend paid maternity leave to 6 mo to facilitate compliance with the recommendation to exclusively breastfeed infants for 6 mo. This increase may start gradually by first extending current maternity leave from 12 to 18 wk. In addition, design and implement a protection mechanism of motherhood and breastfeeding for women working in the informal sector.
- 4) Establish a budget line for training, promotion, research, monitoring, and evaluation of activities related to the protection, promotion, and support of breastfeeding.
- 5) Include breastfeeding indicators in the federal budget, so that the diverse maternal-child health programs may be officially evaluated.
- 6) Include a mandatory breastfeeding course in all undergraduate health profession programs that include both theoretical and

practical hours to develop the skills needed for adequate breastfeeding counseling.

- 7) Design communication campaigns on the basis of formative research adapted to the different contexts using innovative communication strategies.
- 8) Implement a unique information system for the health sector, aimed at routinely collecting key breastfeeding indicators and leading to the generation of information. It is important that the information collected is made publicly available in a timely manner for decision making and advocacy.
- 9) Disseminate the Permanent Interinstitutional Group for Breastfeeding Support's sessions to follow up on the group's agreements and communicate the progress to all actors.
- 10) Among the Permanent Interinstitutional Group for Breastfeeding Support, it is urgent to give voice and vote to civil society organizations, the academic sector, and other institutions that do not belong to the health sector.

#### Decision makers' event and media coverage

The BBF-TS was released to the public in March 2017 at the Franz Mayer Museum in Mexico City, with the attendance of >200 members from the academic, civil society, international agency, and government sectors. This event was attended by decision makers from the Federal Ministries of Health, Labor, and Social Development; the Maternal and Perinatal Health National Center; the National Commission for Social Protection in Health; and the National Science and Technology Council.

The event launch was preceded by a press release, a policy brief, and infographics to facilitate effective dissemination. The event was moderated by Karla Iberia Sánchez, a top Mexican journalist, and covered by mainstream national Mexican media (e.g., Reforma, Excelsior, La Prensa, El Vigía, and 20 Minutos, among others). In addition, the BBF's principal investigator, Rafael Pérez-Escamilla, gave a prime-time interview in the most popular national news cast. Therefore, the BBF findings were extensively disseminated through newspaper articles, television programs, and academic and civil organizations' websites, leading to calls for action by diverse sectors, including civil society.

#### **Commitments from decision makers**

There were 2 major government commitments made at the public event where the Mexico BBF report was officially released. First, the Sub-Secretary of Social Protection of the Federal Government encouraged setting up lactation rooms in work settings. In their remarks at the event, the business and labor sectors recommended that breastfeedingfriendly spaces be established in worksites with >50 employees. They indicated that such areas should provide comfortable and hygienic spaces where mothers can extract their milk or feed their infants with the privacy and dignity that they need. In addition, the Sub-Secretary of Social Protection of the Federal Government encouraged the incorporation of a clause in women's labor contracts to guarantee paid maternity leave.

The second major commitment was made by the General Director of the Prospera Program Health Component. In his remarks, he recommended an increase in the budget for the Health Component of EsIAN to strengthen breastfeeding training for health providers, as well as dissemination, promotion, and printing of breastfeeding educational

materials. In addition, he announced the continuing support of breastfeeding e-training for the EsIAN's health service providers, as well as face-to-face breastfeeding training for community personnel working for Prospera's health services.

#### Discussion

Mexico received a BBF-TS of 1.4 out of a maximum of 3 points, which indicates that there is a low to moderate scaling-up environment to protect, promote, and support breastfeeding in Mexico. None of the gears were rated as "outstanding," and the Legislation and Policies Gear is the only one rated as strong, although it is very close to the moderate score. Therefore, it is strongly recommended that civil society strengthen its evidence-based advocacy efforts to increase the political will that is needed to secure stable funding and resources for a successful national strategy for the protection, promotion, and support of breastfeeding. The BBF findings also highlight the need for the development of a multilevel monitoring and evaluation system that can help reduce the fragmentation of the Mexican health system subsectors dealing with breastfeeding, because this has prevented sharing information from the local to the national level and hence the possibility of effective decision making.

Mexico learned some important lessons from the BBF process that may be helpful for the country when reassessing the BBF Index and for other countries that are just starting to engage with BBF.

#### Lessons learned

Many of the BBF benchmarks help assess the availability of policies or regulations, but often the benchmarks do not fully assess their level of implementation, monitoring, and supervision. In addition, the benchmarks do not include the informal labor sector, which, in many countries such as Mexico, represents a very high percentage of the employed population. The Baby-friendly Hospital Initiative benchmarks should specify if they refer to public and private hospitals, or if they only include public facilities.

With regard to the Advocacy Gear, it is important to consider the frequency of breastfeeding activities through the year and not only if there have been major events that have drawn media attention to breastfeeding issues. It is also important to identify the characteristics that a breastfeeding champion (high-level advocate) must have to be considered as such. For the Political Will Gear, it would be helpful to consider how many political officials have expressed their commitment to consider it, and the way in which they have done so, as progress. With regard to the Legislation and Policy Gear, it is important to find out the extent to which policies are being implemented. It is also important to find out if such policies are evidence-based and suitable for the target population. The Funding and Resources Gear addresses, among other things, if there is a formal mechanism through which maternity entitlements are funded with the use of public sector funds. However, as indicated, it is important to include a benchmark representing women employed in the informal sector as part of this gear. The Training and Program Delivery Gear score process could be stengthened if current breastfeeding knowledge and skills of health professions students and providers are assessed. For the Promotion Gear, it will be important to clarify the coverage of the national breastfeeding promotion strategy. With regard to the Research and Evaluation Gear, it will be important

to consider the structure of the health care system because it is quite fragmented. The Coordination, Goals, and Monitoring Gear needs to separate the benchmarks related to the National Breastfeeding Committee from those related to the IYCF Committee.

#### Areas of improvement

We identified several areas of improvement in the BBF process. First, for the selection of the expert committee it will be helpful to systematically map a priori the stakeholders who are working on breastfeeding in the country because they can help identify experts. Second, the BBF process needs to ensure the participation of the Secretary of Health representative from the beginning. Third, it would be helpful to conduct a thorough BBF training of all committee members before the process gets underway. In the case of Mexico, in the future it may be better to plan on having >5 meetings but of shorter duration each (e.g., 8 meetings of 2 h each). We recommend carrying out a first meeting to explain the project and a second one to review each benchmark and assign members to each gear. The next 2 meetings should focus on reaching consensus on benchmark scores and related recommendations. A fifth meeting should be conducted to develop the outline of the policy brief that includes the final recommendations, and 3 additional meetings conducted to plan the final event. Finally, for the preparation of the "final" policy brief, it will be important to assign a representative person of each gear to review it.

#### Next steps

The BBF process led to identifying key next steps to improve the scaling up of breastfeeding programs in Mexico. First, identify strategies to achieve strong government commitment, especially from the health, social development, and economic sectors dealing with breastfeeding issues. Second, it is urgent to involve the academic sector and social organizations to increase commitments and support breastfeeding and to further enable the breastfeeding environment at the national level. Third, continue engaging Mexico from 2017 to 2019 with the BBF process. During this period, the utility of the BBF-Mexico process will be assessed by conducting in-depth interviews with the BBF-Mexico Committee members and key stakeholders. The BBF-Mexico team will also document if and how the recommendations resulting from the BBF-Mexico process led to the implementation of changes to improve the national breastfeeding program in Mexico by conducting in-depth interviews with key policymakers in Mexico. The team will also replicate and document the BBF scoring process between 1 March and 30 November 2018. Last, the team will develop a BBF costing methodology to assess the incremental cost for the government of Mexico to address the BBF-Mexico Committee recommendations. Specifically, the team will assess the incremental cost to improve Babyfriendly Hospital Initiative coverage, extension of paid maternity leave legislation, monitoring of the WHO code, pre-service and in-service training for allied health professionals and paraprofessionals, and social marketing campaigns. These studies will be carried out in collaboration with the BBF core team at Yale University.

In conclusion, the BBF initiative is a useful tool for assessing the enabling environment for breastfeeding protection, promotion, and support through a multisectoral approach considering the national context in which the programs operate. BBF has a strong potential to improve evidence-based policymaking and to facilitate the scaling up of the national breastfeeding program in Mexico and beyond.

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