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Reassessment of Baby-friendly Hospitals in Brazil

María de Fátima Moura de Araújo, MS, and Bethsáida de Abreu Soares Schmitz, PhD

Abstract

The purpose of this descriptive, cross-sectional study was to assess adherence to the Baby-friendly Hospital Initiative “Ten Steps to Successful Breastfeeding” in certified hospitals in Brazil in 2002. The Ministry of Health ordered that all 172 hospitals certified from 1992 to 2000 be reassessed. Of the 167 eligible Baby-friendly Hospitals assessed, 137 (82%) met all of the 10 steps. Steps 2 and 3 presented the lowest adherence rates (91% and 92%, respectively), followed by steps 4, 5, and 10, with 95% each. Steps 7 and 9 reflected the highest adherence rate of 99% among all eligible Baby-friendly Hospitals. These findings suggest the need to intensify regular health training programs for professionals working in Baby-friendly Hospitals on managing and promoting breastfeeding and to implement strategies that favor steps 3 and 10, to further promote and support breastfeeding before and after delivery. J Hum Lact. 23(3):246-252.

Keywords: Baby-friendly Hospital Initiative, breastfeeding support, assessment, Brazil

The best breastfeeding rates are obtained when health professionals educate mothers during prenatal care, immediately after delivery, and during the child’s first months. Inadequate infant-feeding advice and health service routines that are not supportive of breastfeeding are associated with breastfeeding cessation. Actions such as separating the mother from the child immediately after birth, postponing initiation of breastfeeding, adopting a strict breastfeeding schedule, and using dietary supplements contribute to early weaning.

The Baby-friendly Hospital Initiative (BFHI) was initiated in 1989 by the World Health Organization (WHO) and by the United Nations Children’s Fund (UNICEF). The objective of the initiative is to implement the Ten Steps to Successful Breastfeeding and the principles and objectives of all the articles in the International Code of Marketing of Breast Milk Substitutes in all institutions that offer maternity services by modifying hospital routines that are incompatible with breastfeeding practices.

In Brazil, the BFHI has been a governmental priority since its implementation in the country in 1992. Through BFHI, the government has redirected practices and routines of maternity units of the Unified Health System and given special attention to the mother-child dyad in order to promote, protect, and support breastfeeding.

In Brazil, unlike other countries in the world, BFHI-certified hospitals not only have to comply with each of the 10 steps but also must meet other requirements that have been shown to increase quality of care of the mother-child dyad. These additional criteria were first included at the end of 1996 and reviewed in 2001 by the Ministry of Health (MH). During the 8 years between 1997 and 2004, the BFHI certification process consisted of 5 requirements in addition to the 10 steps. In 2004, the requirements were reviewed again, and an additional 5 requirements were added to those that hospitals must meet to become BFHI certified.

In Brazil, the BFHI certification process is coordinated by the MH. The process begins with the hospital completing a self-assessment questionnaire that must...
In this descriptive, cross-sectional study, data were collected by 10 MH-certified individuals, qualified and trained in an 18-hour course for staff education on BHFI practices. The 40-hour course uses BHFI assessment instruments and techniques to interview health professionals and pregnant and puerperal women. These individuals had no ties with the hospital being assessed.

Data were collected from March 2002 to December 2002, using the following instruments developed by UNICEF, PAHO/WHO, and PNIAM/MH: BFH Reassessment Guide, Hospital Reassessment Questionnaire, and the Summary Sheet.

The BFH Reassessment Guide is a handbook that contains instructions for the reassessment process and for completing the data collection instruments. The Hospital Reassessment Questionnaire is the instrument used for the interviews and for recording observations on rooming-in, areas for special care for newborns, delivery rooms, and nurseries. This instrument was developed based on the Hospital Global Assessment Questionnaire, and its aim is to assess compliance with the BFHI 10 Steps to Successful Breastfeeding in certified hospitals. It contains interviews for the health staff and for pregnant and puerperal women to verify their knowledge of breastfeeding. Interview tools are also provided to collect data on the institution’s census and data hospital indicators. The individual carrying out each of the interviews uses the Summary Sheet to summarize the information collected with the reassessment questionnaire.

The MH anticipated that the reassessment questionnaire would be applied to 172 BFHs that had been certified from 1992 to December 2000, that is, 100% of the BFHs that retained the BFH certification in Brazil in the year 2000. The hospitals that were certified in the years 2001 and 2002 would not be reassessed because they had recently undergone a global assessment process. The 172 BFHs to be reassessed were all public hospitals located in urban areas throughout 20 (77%) Brazilian states and the Federal District.

During the BFH reassessment study, 5 hospitals were ineligible, 4 (2.3%) because they had been deactivated and 1 (0.58%) because of obstetric beds being closed for remodeling. Therefore, the reassessment questionnaires collected from 167 certified BFHs in December 2000 were analyzed. The hospitals represented 97% of the BFHs listed by the MH in this period.

Most of the answers obtained by the reassessment questionnaires were quantitative in nature. For example, we asked pregnant women whether they were aware of breastfeeding advantages and management issues and whether they were informed about the use of infant formulas. Puerperal women were asked, among other questions, if they established skin-to-skin
contact with their infants in the first half hour, if they
were supported by the staff to begin breastfeeding in
the delivery room and to room-in with their infants, if
they were counseled about the technique of manually
expressing milk, and if they were informed about the
risks associated with the use of pacifiers and bottles.

The interviewed sample also included a random sam-
ple of health professionals who assisted mothers, infants,
and pregnant and puerperal women. The number of
persons interviewed followed the BFH Reassessment
Guide recommendations: 5 employees of the health team
who assist mothers and infants, 5 pregnant women at 32
or more weeks of gestation, 5 puerperal women (3 with
vaginal deliveries and 2 with cesarean sections), and 5
mothers whose infants required special care.

A descriptive analysis of the Summary Sheet data was
done. The analysis of all the data was done by the coor-
dinator of the MH National Breastfeeding Program, the
first author of this study. The steps were classified as
“met” or “not met.” The hospitals that were compliant
with at least 80% of the criteria established for each of
the BFHI 10 steps were sanctioned in the reassessment.
The rate of adherence to each step was considered low
when the hospitals met less than 50% of its requirements,
moderate when they met 50% to 89%, and high when
they met 90% to 100%. These designations are consist-
ent with the definitions used by other researchers.12,13

The results were distributed by state, region, and
country; presented in the form of figures and tables;
and expressed in percentages and absolute numbers.

Results

The results show that adherence to the BFHI 10
steps was considered high for all steps in the BFHs
assessed in Brazil, varying from 91% to 99% (Figure
1), and that 82% of the BFHs (n = 137) were fully
sanctioned in all 10 steps.

When the 10 steps were analyzed separately, step 3,
which is to inform pregnant women about breastfeeding
advantages and management, and step 2, which is
to train the entire health team, had the lowest adher-
ence rates, followed by steps 4, 5, and 10 (Figure 1).
Steps 7 and 9 had the highest adherence rates, demon-
strating that the practices of rooming-in and not giving
pacifiers to breastfeeding infants were well established
in 99.4% of the BFHs in the country (Figure 1).

When adherence rates to the 10 steps were analyzed
by region, BFH adherence in the central west region
was notable; all BFHs assessed in this region met 8 of
the 10 steps, with a mean adherence rate of 98.6%
(Table 1). The step with the lowest adherence rate in
this region was step 2, but adherence was still consid-
ered high. In the south region, all assessed institutions
met steps 1, 5, 7, 9, and 10, yet some hospitals pre-
sented difficulties, especially in meeting steps 2 and 3,
because the adherence rate to these steps was moder-
ate. All BFHs in the southeast region met steps 6, 7, 8,
and 9 of the BFHI. In this region, the greatest difficul-
ties were related to compliance with steps 2 and 5,
which presented moderate adherence rates. In the
northeast region, steps 7 and 9 were the only steps with
100% adherence by all BFHs. In this region, step 10
had the lowest rate of compliance, yet adherence was
high according to the established criteria.

The north region presented the lowest mean adher-
ence rate to all 10 steps, with only 75%. This region
had only 4 institutions, 1 of which (the only hospital in
the state of Amazonas) lost its certification for not
meeting any of the BFHI 10 steps, thus lowering the average of the region. The other 3 BFHs in the region (all located in the state of Pará) fully met all 10 steps.

Table 1 also shows that steps 2 and 3 were the only BFHI steps that did not present an adherence rate of 100% in any region of the country.

The BFH reassessment analysis illustrated important differences when the Brazilian states were analyzed individually. Although all institutions in some states, such as the Federal District, Pará, Rio Grande do Sul, São Paulo, Pará, Sergipe, and Espírito Santo, met the 10 steps, some institutions in other states, such as Ceará, Minas Gerais, Alagoas, Santa Catarina, Piauí, and Pernambuco, did not comply with 3 or more of the 10 steps (Table 2).

Some BFH institutions in the states of Paraná, Alagoas, and Minas Gerais presented the lowest compliance with step 2. In the states of Santa Catarina, Rio de Janeiro, and Ceará, step 3 had the lowest adherence rates. In the states of Alagoas and Minas Gerais, step 5 had the lowest adherence rate. In the state of Rio Grande do Norte, step 10 had the lowest adherence rate.

Discussion

The results of this study reflect overall good performance among the Baby-friendly Hospitals in Brazil. We detected high adherence rates to the Ten Steps to Successful Breastfeeding in all reassessed hospitals except for 1 in the Amazon region. Such good performance is likely attributable to the requirements to promote, protect, and support breastfeeding developed by the MH, which has given special priority to quality implementation and maintenance in the BFHs of the country.

However, the continuous maintenance of all 10 steps by the BFHs is of fundamental importance to increase breastfeeding rates, one of the objectives of the BFHI. These steps must be practiced in combination. One cannot expect efficacy if they are implemented in an incomplete or isolated fashion. Declaring a hospital BFHI-certified means recognizing the effort and work of the administrators, heads of the wards, and the entire team that assist mothers and infants. Certification results in becoming role models for the community and other hospitals. However, it is necessary to meet all 10 steps consistently year after year to guarantee that the hospital remains BFHI-certified and that the quality of assistance given to the mother-child dyad remains constant.

Thus, despite the results having shown a high adherence rate to all 10 steps, this study also took into account that 18% (n = 30) of these hospitals presented low compliance with individual steps, especially steps 2 and 3, followed by steps 4, 5, and 10.

In 1999, Araújo et al assessed the adherence rate to the 10 steps in 90% of the Brazilian BFHs and found that the hospitals had difficulties meeting steps 2, 5, and 10. However, the data cannot be compared with those reported here because different instruments were used to assess the BFHs in these 2 studies. At the time of the first study, a complete methodology with appropriate forms was not yet available.

In this reassessment study performed in 2002, 4 BFHs had closed their obstetric beds, therefore reducing the number of certified hospitals in Brazil. One BFH in the state of Amazonas lost its certification because it did not meet any of the 10 steps. This hospital did not have its own medical staff. The staff was formed by a medical cooperative without an employment relationship with the hospital. The high turnover rate of gynecologists, obstetricians, anesthetists, and pediatricians made it impossible for these professionals to be trained according to the BFHI breastfeeding norms. The lack of compliance resulted in the discontinuation of the BFHI in this
hospital. However, this institution may request a new global assessment process of the 10 steps and regain certification as a BFH when it meets all the necessary requirements established by the BFHI.

The literature contains only a few studies assessing the adherence to the Ten Steps to Successful Breastfeeding in hospitals already certified by the BFHI. A study conducted in Switzerland in 1999 monitored the 28 BFHs of the country, assessing only the adherence rates to steps 4, 6, 7, and 9. The study found that only 38% of the newborns were exclusively breastfed during their stay at the BFH (step 6) and that continued adherence to the remaining steps was not necessarily guaranteed; therefore, adherence requires continuous monitoring.\textsuperscript{16} The adherence rates to steps 2, 3, 5, and 10, although low in Brazil, were not assessed in Swiss BFHs. On the other hand, steps 6, 7, and 9 presented high adherence rates in Brazil when compared with the results found in Switzerland.\textsuperscript{16}

It is known that there is a decrease in breastfeeding rates, especially exclusive breastfeeding, not only in the hospital but after discharge in the first weeks or months after delivery. The mother’s lack of breastfeeding knowledge has favored the use of bottles and, thus, the introduction of other kinds of milk and liquids into the infant’s diet.\textsuperscript{4,17} This has led to early weaning, especially among disadvantaged groups, and has become an important public health problem in Brazil and elsewhere. A review study showed that advising mothers at particular times in the postpartum period leads to significant changes in breastfeeding rates.\textsuperscript{18}

Studies have also demonstrated the importance of intervening in the prenatal care period, educating and supporting pregnant women, and giving them the necessary tools to make an educated decision on breastfeeding.\textsuperscript{3,19,20} Therefore, both family members and health professionals have an important role in supporting and motivating breastfeeding whenever necessary.

There is an urgent need to qualify health teams, both in hospitals and in basic health care units, because many hospitals do not offer prenatal care. Women need to find basic health care units or health centers for assistance or be seen by Family Health Program teams for prenatal care. In Brazil, a new strategy called Breastfeeding-friendly Basic Unit Initiative (IUBAAM) was developed in 2001 and 2002. The IUBAAM is based on the BFHI 10 steps and adapted to the basic health care units by technical teams from the MH Breastfeeding Division and by MH consultants.\textsuperscript{21,22} It is a fundamental strategy expected to be implemented throughout the country. Its aim is to improve adherence to step 3 (educate pregnant

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Table 2. Number of Baby-friendly Hospitals That Meet the Baby-friendly Hospital Initiative (BFHI) 10 Steps According to State, Including the Federal District: Brazil 2002

<table>
<thead>
<tr>
<th>Brazilian States</th>
<th>Total BFHs Reassessed</th>
<th>BFHI Steps</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>1</td>
</tr>
<tr>
<td>Brazil</td>
<td>167</td>
<td>162</td>
</tr>
<tr>
<td>São Paulo</td>
<td>9</td>
<td>9</td>
</tr>
<tr>
<td>Pernambuco</td>
<td>8</td>
<td>8</td>
</tr>
<tr>
<td>Pará</td>
<td>3</td>
<td>3</td>
</tr>
<tr>
<td>Paraíba</td>
<td>15</td>
<td>15</td>
</tr>
<tr>
<td>Minas Gerais</td>
<td>8</td>
<td>7</td>
</tr>
<tr>
<td>Mato Grosso</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>Bahia</td>
<td>6</td>
<td>6</td>
</tr>
<tr>
<td>Distrito Federal</td>
<td>10</td>
<td>10</td>
</tr>
<tr>
<td>Espírito Santo</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>Goiás</td>
<td>10</td>
<td>10</td>
</tr>
<tr>
<td>Maranhão</td>
<td>13</td>
<td>13</td>
</tr>
<tr>
<td>Ceará</td>
<td>20</td>
<td>18</td>
</tr>
<tr>
<td>Amazonas</td>
<td>1</td>
<td>0</td>
</tr>
<tr>
<td>Alagoas</td>
<td>5</td>
<td>5</td>
</tr>
</tbody>
</table>

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women during prenatal care) and inform professionals about step 10, in areas where the Breastfeeding-friendly Basic Unit would support mothers from the moment they are discharged from the hospital. This initiative had not yet been implemented at the national level at the time of the study. However, the state of Rio de Janeiro implemented the IUBAAM successfully in 1999, and in November 2004, there were 23 Breastfeeding-friendly Basic Units in the state.22

Certain steps, such as step 2, presented significant challenges for hospitals. In step 2, training is required for the entire hospital staff working with mothers and babies, with the maternity ward staff attending a course of at least 18 hours.11 In the analysis by region (Table 1), some BFHs in nearly all Brazilian regions demonstrated low adherence to meeting this step, except for the BFHs in the northeast region, whose mean rate of adherence was 96%. The north (75%) and south (83%) regions presented the lowest adherence rates to step 2. High employee turnover and lack of motivation, lack of material resources, and limited time available for staff training may be some of the reasons that explain the difficulty training all members of the staff who assist mothers and infants.

Adherence to step 2 is fundamental for hospitals to remain BFHI certified because most of the other steps depend on step 2 for the program to be successful.23 If the team is qualified and certified to comply with the breastfeeding policy, the remaining BFHI steps are more likely to be met. Training requires the allocation of financial resources to produce educational materials and on-site training for health professionals or for students and residents in the case of medical school hospitals.

In addition, it seems that BFHs experienced difficulties adhering to steps 4, 5, and 10 (Figure 1). In the study conducted in Switzerland, step 4 had a 73% adherence rate, lower than that found in Brazil (95%).13 A study conducted by Rowe-Murray and Fisher24 found that cesarean sections have been a critical barrier for the implementation of step 4.

Step 5 was the most difficult to meet in the north and southeast regions of the country (Table 1). Mothers may find it difficult to breastfeed successfully if they are not educated and supported. It is also necessary for them to learn to express their own milk, so that they may offer this milk to their children in a cup whenever necessary. Adherence to this step depends on the skill and technical knowledge of the team that assists mothers and has a striking influence on breastfeeding duration.25,26

For step 10 to be met, a follow-up system must be available, inside or outside a hospital, where mothers can be referred after discharge. This breastfeeding support group could consist of trained volunteers, hospital or outpatient clinic teams or basic health care units qualified in breastfeeding, teams of human milk banks, or lactation clinics and centers. Support for mothers and infants could be provided through group meetings, scheduled visits, or home visits. Step 10 is difficult to sustain in BFHs; however, the implementation of IUBAAM throughout Brazil should facilitate adherence to this step.

The BFH assessment done in Brazil in 1999 with the preassessment form found that there was low compliance to steps 2, 5, and 10, with adherence rates of 95%, 92%, and 93%, respectively.10 Even though the BFHs were assessed with a more in-depth instrument in 2002, the difficulties the certified hospitals had in meeting the 10 steps did not appear to be different when the 2 assessment processes were compared.

This study found that in addition to showing low compliance to steps 2, 5, and 10, some BFHs presented lower compliance with steps 3 and 4; this was not observed in the assessment made in 1999. This difference can probably be explained by the fact that the instrument used in 1999 did not include interviews with pregnant women to assess their knowledge of breastfeeding advantages and management and did not include visits to the delivery room to observe delivery and postdelivery practices. In this sense, the current instrument was much more thorough than the initial instrument.

The present study showed that as proposed by Merten and Ackermann-Liebrich,16 a system to continuously monitor the BFHI-certified institutions is needed. A continuous monitoring system will strengthen the initiative and improve the BFH. New assessment tools may be used to assess precisely the difficulties with compliance with requirements and provide a database for future BFH reassessments.

References


Resumen

Este es un estudio descriptivo, seccional cruzado para evaluar el cumplimiento de los “Diez Pasos” de la Iniciativa Hospital Amigo del Niño (BFHI) en hospitales ya certificados en Brasil en el año 2002. El Ministerio de Salud determinó que todos los 172 hospitales certificados desde el año 1992 al 2000 se reevaluaran. De 167 hospitales elegibles de BFHI, 137 (82%) cumplieron con los “Diez Pasos.” Los pasos 2 y 3 presentaron los cumplimientos mas bajos (91 y 92% respectivamente), seguidos por los pasos 4, 5 y 10 con 95% cada uno. Los pasos 7 y 9 sobresalieron con cumplimiento de los requerimientos del 99%. Los resultados muestran la necesidad de intensificar los programas de entrenamiento para los profesionales que trabajan en los hospitales amigos del niño o el manejo y la promoción de la lactancia materna y la implementación de estrategias a favor de los pasos 3 y 10, para promover y apoyar la lactancia materna antes y después del parto.