Investigation of the Effect of Training on Promoting Breast-feeding at Baby-Friendly Hospital Case Study; Tohid Hospital in Jam, Bushehr

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ABSTRACT

Background: The Baby-Friendly Hospital Initiative was launched in 1989 by World Health Organization and the United Nations Children's Fund for the promotion of breastfeeding. This program was implemented in many departments of gynecology and obstetrics and resulted in reduced malnutrition, infection, morbidity and mortality in children. This program has introduced 10 specific steps to support successful breastfeeding. For instance, in the fourth step, skin-to-skin contact and breastfeeding are promoted since the time of birth, and in the fifth step, mothers are instructed on how to breastfeed or persist in breastfeeding. In these ten steps, mothers are trained in various fields.

Methods: In this cross-sectional study, a standardized questionnaire was used to collect data at baby-friendly hospitals. To assess the difference between multiple nominal variables, variance analysis was performed, using SPSS version 17.

Results: Based on the analysis, mothers’ awareness of the benefits of breast milk and breastfeeding was 83% in a baby-friendly hospital. Also, their awareness of proper breastfeeding was estimated at 78.5%. In addition, mothers’ knowledge about the frequency of breastfeeding was 70%.

Conclusion: Given the role of Baby-Friendly Hospital Initiative in training mothers on the importance of breastfeeding and its persistence in future, careful monitoring of these hospitals, breastfeeding support services and breastfeeding training by midwives at healthcare centers are of great importance.

Keywords: Baby-Friendly Hospital, Breastfeeding, Infant

Introduction

According to a recent survey by World Health Organization (WHO), 60% of deaths in children under five years of age might be due to malnutrition in developing countries (1). Overall, breastfeeding has been regarded as the exclusive source of nutrition for all infants, worldwide (2).

The Baby-Friendly Hospital Initiative was launched in 1989 by World Health Organization and the United Nations Children's Fund (UNICEF) for the promotion of breastfeeding. This program was implemented in many departments of gynecology and obstetrics and resulted in reduced malnutrition, infection, morbidity and mortality in children. Overall, this campaign aims at promoting breastfeeding at maternity wards.

Breastfeeding is the best source of nutrition for infants under two years of age. In fact, the role of breastfeeding in the prevention of neonatal morbidity and mortality and health promotion has been well established. Factors which contribute to an effective breastfeeding include the onset of breastfeeding after childbirth, the frequency of breastfeeding during the day, mother-infant relationship during breastfeeding and the presence of mother and newborn in one room (3). The immediate onset of breastfeeding after childbirth has several advantages for both the mother and infant. Some of these advantages include infant health, maternal health and socio-economic benefits for the society. Studies have shown a significant reduction in malnutrition, infection and eventually neonatal mortality as a result of launching this global campaign. Therefore, we aimed to assess a baby-friendly hospital to evaluate its role in promoting the breastfeeding.

The Baby-Friendly Hospital Initiative has introduced 10 specific steps to support successful breastfeeding. For instance, in the fourth step, skin-to-skin contact and breastfeeding are
promoted from the moment of birth. Also, in the fifth step, mothers are instructed on how to breastfeed or maintain the stability of breastfeeding. Overall, in these ten steps, mothers are trained in various fields.

In this regard, Baradaran et al. performed a study on the role of baby-friendly hospitals, affiliated to Tabriz University of Medical Sciences in successful breastfeeding in 2010. As the results indicated, mothers’ knowledge about the benefits of breastfeeding was 77.5% in all counties of Tabriz province (except Tabriz city) and 46.7% at other hospitals (4).

In the mentioned study, 70% of the staff helped mothers regarding breastfeeding at baby-friendly hospitals, whereas at other hospitals, this rate was estimated at 30%. Also, mothers’ knowledge about breastfeeding positions was 74.2% at baby-friendly hospitals and 16.7% at other hospitals. In addition, mothers’ knowledge on how to breastfeed and store breast milk was 39.2% at baby-friendly hospitals and 60.8% at other hospitals (4).

Moreover, a study by Bayati showed the effect of breastfeeding on the growth of infants under the age of six months. Out of 352 participants, 198(56.3%) were male and 154(43.7%) were female; also, 41.5% had continued exclusive breastfeeding for six months. In the mentioned study, the average weight and nutrition at birth in male and female subjects were not significantly different; however, at two, four and six months, a significant difference was reported. Also, the average height of male and female infants and nutrition within six months showed significant differences. As the results indicated, exclusive breastfeeding up to six months improved the pattern of growth and infants’ weight and height. However, there are some misunderstandings in the society which prevent suitable nutritional behaviors. Therefore, medical support and promotion of various factors in this area are required (5).

Moreover, a study by Mohammad Beigi about breastfeeding in infants, admitted to Arak healthcare centers, showed that the rate of exclusive breastfeeding was 41.5% up to six months. The most important factors for non-use of sugar water and pacifiers were breastfeeding on infant's demand, wanted pregnancy, vaginal delivery and multiparity. However, no meaningful association was observed between maternal age, maternal education, occupation, family income and use of colostrums in breast milk during pregnancy.

Overall, the immediate onset of breastfeeding after childbirth, paying attention to mothers with unintended pregnancy and cesarean section, effective training during pregnancy and before hospital discharge and informing mothers about the disadvantages of sugar water and pacifiers can play important roles in exclusive breastfeeding (6).

Method

In this cross-sectional study, a standardized questionnaire was used to collect data at baby-friendly hospitals. The study sample in this study included mothers of infants admitted to Bushehr Naft Hospital. To select subjects, we utilized stratified random sampling. To assess the differences between multiple nominal variables, variance analysis was performed, using SPSS. There are several methods for determining the sample size including Cochran’s formula. By applying this formula, 150 subjects were introduced to the study.

Results

According to Table 1, 52% (n=64) and 46.3% (n=57) of mothers had undergone vaginal delivery and C-section, respectively.

According to Table 2, about 86.2% of infants (n=106) were breastfed immediately after birth at the pediatric ward, while 8.6% (n=10) were not.

According to Table 3, 79.7% (n=98) of mothers with vaginal delivery had breastfed their infants in less than an hour after giving birth and 16.3% (n=20) had breastfed their infants after an hour since childbirth.

As presented in Table 4-1, 65.2% (n=80) of mothers undergoing cesarean section recovered in less than an hour and breastfed their infants. However, 34.8% (n=42) of mothers breastfed their infants after an hour since giving birth.

<table>
<thead>
<tr>
<th>Table 1. The evaluation of modes of delivery</th>
<th>Mode of delivery</th>
<th>Frequency</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Vaginal delivery</td>
<td>64</td>
<td>52</td>
<td></td>
</tr>
<tr>
<td>Caesarean section</td>
<td>57</td>
<td>46.3</td>
<td></td>
</tr>
<tr>
<td>Missing</td>
<td>2</td>
<td>1.6</td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>123</td>
<td>100</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Table 2. The evaluation of infants’ admission to the pediatric ward since birth until present or before breastfeeding</th>
<th>Were infants admitted to the pediatric ward since birth until present or before breastfeeding?</th>
<th>Frequency</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Yes</td>
<td>106</td>
<td>86.2</td>
<td></td>
</tr>
<tr>
<td>No</td>
<td>10</td>
<td>8.1</td>
<td></td>
</tr>
<tr>
<td>Missing</td>
<td>7</td>
<td>5.7</td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>123</td>
<td>100</td>
<td></td>
</tr>
</tbody>
</table>
As presented in Table 4-2, 86% (n=106) of mothers were persistent in breastfeeding, whereas 13.6% (n=17) of mothers were not persistent.

According to Table 5, 5.7% (n=7) of mothers mentioned that the staff had given pacifiers to their newborns, whereas 88.6% (n=109) of mothers stated otherwise.

Overall, 5.7% (n=7) of mothers noted that the staff had bottle-fed their infants, whereas 87.8% (n=108) stated otherwise.

According to Table 7-1, 63.6% (n=78) of mothers said that the infants under six months of age were given plain water, whereas 36.5% (n=45) stated otherwise.

According to Table 7-2, 21% (n=26) of mothers expressed that the staff had given their infants sugar water, while 79% (n=97) stated otherwise. According to Table 7-3, 7.2% (n=9) of mothers expressed that the staff had given milk powder to infants under six months, whereas 92.8% (n=114) stated otherwise. According to Table 7-4, 55.3% (n=68) of mothers expressed that their infants had not been given fresh milk, whereas 44.7% (n=55) stated otherwise. According to Table 7-5, 55.3% (n=68) of mothers expressed that the staff had not given minerals, vitamins or medications to their infants, whereas 44.7% (n=55) stated otherwise.

According to Table 7-6, 25% (n=31) of mothers claimed that the staff had given their infants (under six months) something other than breast milk, whereas 92% (75 cases) stated no such observation. According to Table 7-7, 8% (n=10) of mothers stated that the advice given by the staff was necessary (except for vitamins, minerals and pharmaceutical/medical recommendations), whereas 92% (n=113) stated otherwise.
Table 7-4. The evaluation of feeding infants by fresh milk (e.g., cow’s milk and goat’s milk)

<table>
<thead>
<tr>
<th>Was the infant given fresh milk (e.g., cow’s milk and goat’s milk)?</th>
<th>Frequency</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Yes</td>
<td>68</td>
<td>55.3</td>
</tr>
<tr>
<td>No</td>
<td>55</td>
<td>44.7</td>
</tr>
<tr>
<td>Total</td>
<td>123</td>
<td>100</td>
</tr>
</tbody>
</table>

Table 7-5. The assessment of receiving vitamins, minerals and medications by the infants

<table>
<thead>
<tr>
<th>Did the infant receive vitamins, minerals and medications?</th>
<th>Frequency</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Yes</td>
<td>68</td>
<td>55.3</td>
</tr>
<tr>
<td>No</td>
<td>55</td>
<td>44.7</td>
</tr>
<tr>
<td>Total</td>
<td>123</td>
<td>100</td>
</tr>
</tbody>
</table>

According to Table 8, 1.6% (n=2) of mothers claimed that the staff had given their infants (under two years of age) milk powder, whereas 96.7% (n=119) stated otherwise.

According to Table 9, 47.2% (n=58) of women expressed that breastfeeding techniques had been taught to them by the staff, while 51.2% (n=63) stated that they had received no training.

According to Table 10-1, 60.2% (n=74) of mothers stated that they had received training on the persistence of breastfeeding (8 times or more), whereas 34.1% (n=42) stated otherwise.

Table 7-6. The evaluation of nutrition other than breast milk in infants

<table>
<thead>
<tr>
<th>Did the staff give the infant nutrients other than breast milk?</th>
<th>Frequency</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Yes</td>
<td>31</td>
<td>25</td>
</tr>
<tr>
<td>No</td>
<td>92</td>
<td>75</td>
</tr>
<tr>
<td>Total</td>
<td>123</td>
<td>100</td>
</tr>
</tbody>
</table>

Table 7-7. Evaluation of the necessity of recommendations provided by the staff (except pharmaceutical/medical recommendations)

<table>
<thead>
<tr>
<th>Were the recommendations (except pharmaceutical/medical advice) necessary for the mothers?</th>
<th>Frequency</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Yes</td>
<td>10</td>
<td>8</td>
</tr>
<tr>
<td>No</td>
<td>113</td>
<td>92</td>
</tr>
<tr>
<td>Total</td>
<td>123</td>
<td>100</td>
</tr>
</tbody>
</table>

Table 8. The evaluation of receiving milk powder by infants (under two years of age)

<table>
<thead>
<tr>
<th>Did the staff provide the infant with milk powder?</th>
<th>Frequency</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Yes</td>
<td>2</td>
<td>1.6</td>
</tr>
<tr>
<td>No</td>
<td>119</td>
<td>96.7</td>
</tr>
<tr>
<td>Missing</td>
<td>2</td>
<td>1.6</td>
</tr>
<tr>
<td>Total</td>
<td>123</td>
<td>100</td>
</tr>
</tbody>
</table>

Table 9. The evaluation of mothers’ training on breastfeeding by the staff

<table>
<thead>
<tr>
<th>Were the mothers trained on breastfeeding?</th>
<th>Frequency</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Yes</td>
<td>58</td>
<td>47.2</td>
</tr>
<tr>
<td>No</td>
<td>63</td>
<td>51.2</td>
</tr>
<tr>
<td>Missing</td>
<td>2</td>
<td>1.6</td>
</tr>
<tr>
<td>Total</td>
<td>123</td>
<td>100</td>
</tr>
</tbody>
</table>

Table 10-2. The assessment of mothers’ training on breastfeeding techniques by the staff

<table>
<thead>
<tr>
<th>Did the staff train mothers on breastfeeding techniques?</th>
<th>Frequency</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Yes</td>
<td>97</td>
<td>79.6</td>
</tr>
<tr>
<td>No</td>
<td>25</td>
<td>20.5</td>
</tr>
<tr>
<td>Total</td>
<td>123</td>
<td>100</td>
</tr>
</tbody>
</table>

Table 11. The distribution of pamphlets about breastfeeding techniques among mothers

<table>
<thead>
<tr>
<th>Were pamphlets about breastfeeding techniques distributed among mothers?</th>
<th>Frequency</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Yes</td>
<td>36</td>
<td>29.3</td>
</tr>
<tr>
<td>No</td>
<td>85</td>
<td>69.1</td>
</tr>
<tr>
<td>Missing</td>
<td>2</td>
<td>1.6</td>
</tr>
<tr>
<td>Total</td>
<td>123</td>
<td>100</td>
</tr>
</tbody>
</table>

According to Table 10-2, 79.6% of mothers (n=97) claimed that the staff had trained them on breastfeeding (8 times or more), while 20.5% (n=25) stated the opposite.

According to Table 11, 29.3% of mothers (n=36) stated that they had received pamphlets about breastfeeding techniques, whereas 69.1% (n=85) stated the opposite.

As demonstrated in Table 12, 61% of mothers (n=75) expressed that the staff had helped them on breastfeeding, whereas 37.4% (n=46) stated otherwise.

As presented in Table 13, 50.4% (n=62) of mothers said that the staff had helped them with hugging and breastfeeding their infants, while 32.5% (n=40) stated otherwise.
Table 12. The evaluation of staff support and help for mothers about breastfeeding

<table>
<thead>
<tr>
<th>Did the staff help mothers about breastfeeding?</th>
<th>Frequency</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Yes</td>
<td>75</td>
<td>61</td>
</tr>
<tr>
<td>No</td>
<td>46</td>
<td>37.4</td>
</tr>
<tr>
<td>Missing</td>
<td>2</td>
<td>1.6</td>
</tr>
<tr>
<td>Total</td>
<td>123</td>
<td>100</td>
</tr>
</tbody>
</table>

Table 13. The evaluation of staff support and help for breastfeeding and mothers’ physical contact with the newborns (i.e., hugging)

<table>
<thead>
<tr>
<th>Did the staff help mothers on breastfeeding and physical contact with the infant (i.e., hugging)?</th>
<th>Frequency</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Yes</td>
<td>62</td>
<td>50.4</td>
</tr>
<tr>
<td>No</td>
<td>40</td>
<td>32.5</td>
</tr>
<tr>
<td>Missing</td>
<td>21</td>
<td>17.1</td>
</tr>
<tr>
<td>Total</td>
<td>123</td>
<td>100</td>
</tr>
</tbody>
</table>

According to Table 14, 78.5% (n=97) of women were accurately trained on hugging and breastfeeding, while 13.4% (n=16) did not perform properly; also, 8.1% of mothers (n=10) did not know how to breastfeed or hug their infants.

According to Table 15, 67.5% (n=83) of mothers had accurate knowledge about the benefits of breastfeeding, whereas 5.7% (n=7) did not; also, 21.1% (n=26) of mothers did not have any information.

According to Table 16, 13.8% of mothers (n=17) stated that the staff had assigned limits about the frequency and length of breastfeeding, whereas 74% (n=91) stated otherwise.

According to Table 17-1, 65.9% (n=81) stated that the staff had recommended the time of child’s hunger or need for milk as the best time for breastfeeding, while 2.4% (n=3) stated that the staff had recommended breastfeeding every hour. Also, 22% (n=27) of mothers expressed that they had received no advice on the frequency of breastfeeding. In addition, 1.6% (n=2) of mothers stated that the staff had recommended that they should breastfeed the newborns every two hours. Finally, 0.8% (n=1) of mothers mentioned that the staff had recommended every three hours for breastfeeding. According to Table 17-2, 70% of mothers (n=102) expressed that the staff had recommended infant’s need for milk as a proper measure for breastfeeding; however, 30% of mothers (n=21) were not recommended on that.

According to Table 18, 93.5% (n=115) of mothers mentioned that their newborns were in the same room/bed during hospitalization, whereas 4.1% (n=5) stated otherwise.

According to Table 19, 79.7% (n=98) of mothers with vaginal delivery stated that they were with their newborns in less than an hour after delivery, whereas 2.4% (n=3) mentioned that they were with their infants after an hour since delivery.

According to Table 20, 99.2% (n=122) of mothers stated that they made contact with their infants an hour after delivery due to their problems.

Table 14. Mothers’ demonstration of their skills regarding breastfeeding and hugging their newborns

<table>
<thead>
<tr>
<th>Mothers’ demonstration of their skills regarding breastfeeding and hugging their infants</th>
<th>Frequency</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Correct</td>
<td>97</td>
<td>78.5</td>
</tr>
<tr>
<td>Incorrect</td>
<td>16</td>
<td>13.4</td>
</tr>
<tr>
<td>Do not know</td>
<td>10</td>
<td>8.1</td>
</tr>
<tr>
<td>Total</td>
<td>123</td>
<td>100</td>
</tr>
</tbody>
</table>

Table 15. The evaluation of mothers’ knowledge about the benefits of breast milk

<table>
<thead>
<tr>
<th>Mothers’ knowledge about the benefits of breast milk</th>
<th>Frequency</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Accurate</td>
<td>83</td>
<td>67.5</td>
</tr>
<tr>
<td>Inaccurate</td>
<td>7</td>
<td>5.7</td>
</tr>
<tr>
<td>Do not know</td>
<td>26</td>
<td>21.1</td>
</tr>
<tr>
<td>Missing</td>
<td>7</td>
<td>5.7</td>
</tr>
<tr>
<td>Total</td>
<td>123</td>
<td>100</td>
</tr>
</tbody>
</table>

Table 16. Evaluation of the assigned frequency for breastfeeding by the staff

<table>
<thead>
<tr>
<th>Did the staff set limits for the frequency of breastfeeding?</th>
<th>Frequency</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Yes</td>
<td>17</td>
<td>13.8</td>
</tr>
<tr>
<td>No</td>
<td>91</td>
<td>74</td>
</tr>
<tr>
<td>Missing</td>
<td>15</td>
<td>12.2</td>
</tr>
<tr>
<td>Total</td>
<td>123</td>
<td>100</td>
</tr>
</tbody>
</table>

Table 17-1. The evaluation of recommendations given by the staff on the frequency of breastfeeding

<table>
<thead>
<tr>
<th>The advice given by the staff about the frequency of breastfeeding</th>
<th>Frequency</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Whenever the baby seems hungry</td>
<td>81</td>
<td>65.9</td>
</tr>
<tr>
<td>Every one hour</td>
<td>3</td>
<td>2.4</td>
</tr>
<tr>
<td>No recommendations</td>
<td>27</td>
<td>22</td>
</tr>
<tr>
<td>Every two hours</td>
<td>2</td>
<td>1.6</td>
</tr>
<tr>
<td>Every three hours</td>
<td>1</td>
<td>.8</td>
</tr>
<tr>
<td>Missing</td>
<td>9</td>
<td>7.3</td>
</tr>
<tr>
<td>Total</td>
<td>123</td>
<td>100</td>
</tr>
</tbody>
</table>
According to Table 21, 17.5% of mothers (n=22) stated that the reason for separation (more than an hour) was convincing, whereas 82.4% (n=103) stated no convincing reason.

According to Table 22, 91.9% (n=113) of mothers expressed that they had contact with their newborns at any time within 24 hours, whereas 0.8% (n=1) had no such contact.

According to Table 23-1, 3.3% (n=4) of mothers stated that they had been separated from their infants for more than an hour due to a convincing reason or expert opinion, whereas 88.6% (n=109) expressed that they had not been separated for more than an hour. According to Table 23-2, 97.6% of mothers (n=120) mentioned anesthesia as the main reason for separation, while 0.8% (n=1) noted foot problems as the main factor for mother-infant separation; also, 0.8% (n=1) of mothers mentioned lung problems.

As shown in Table 24-1, 38.2% of mothers (n=47) stated that the staff had recommended places which provided counseling on breastfeeding problems after hospital discharge, whereas 54.5% (n=67) had received no such recommendations. According to Table 24-2, 4.9% of mothers (n=6) stated that the staff had recommended them to refer to a hospital if they had breastfeeding problems after discharge. Also, 3.3% (n=4) expressed that they were recommended to join support groups. Also, 76% (n=93) of mothers stated that they had been advised to go to a healthcare center, while 15.9% (n=19) said that they had been advised to go to a health home.
Table 24-1. The evaluation of staff’s recommendations about places providing counseling for breastfeeding problems

<table>
<thead>
<tr>
<th>Did the staff give recommendations about places providing counseling on breastfeeding problems?</th>
<th>Frequency</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Yes</td>
<td>47</td>
<td>38.2</td>
</tr>
<tr>
<td>No</td>
<td>67</td>
<td>54.5</td>
</tr>
<tr>
<td>Missing</td>
<td>9</td>
<td>7.3</td>
</tr>
<tr>
<td>Total</td>
<td>123</td>
<td>100</td>
</tr>
</tbody>
</table>

Table 24-2. The personnel’s recommendations about places providing counseling for breastfeeding problems after discharge from the hospital

<table>
<thead>
<tr>
<th>Staff’s recommendations about places providing counseling for breastfeeding problems after discharge from the hospital</th>
<th>Frequency</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Refer to a hospital</td>
<td>6</td>
<td>4.9</td>
</tr>
<tr>
<td>Ask support groups for help</td>
<td>4</td>
<td>3.3</td>
</tr>
<tr>
<td>Refer to a healthcare center</td>
<td>93</td>
<td>76</td>
</tr>
<tr>
<td>Refer to a health home</td>
<td>19</td>
<td>15.9</td>
</tr>
<tr>
<td>Total</td>
<td>123</td>
<td>100</td>
</tr>
</tbody>
</table>

According to Table 25, 76.3% of mothers (n=94) expressed that the recommendations were appropriate, while 24% (n=29) stated otherwise. According to Table 26, 21% of mothers (n=26) expressed that the staff had given them recommendations about breastfeeding counseling locations, whereas 71.5% (n=88) had not received any suggestions.

According to Table 27, 5.7% of mothers (n=7) expressed that the staff had made them worried about breastfeeding, whereas 88.6% (n=109) stated no such matter.

Table 25. The evaluation of personnel’s suggestions according to mothers’ or infants’ situation

<table>
<thead>
<tr>
<th>Was the advice given to mothers appropriate for their situation?</th>
<th>Frequency</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Yes</td>
<td>94</td>
<td>76.3</td>
</tr>
<tr>
<td>No</td>
<td>29</td>
<td>24</td>
</tr>
<tr>
<td>Total</td>
<td>123</td>
<td>100</td>
</tr>
</tbody>
</table>

Table 26. The evaluation of recommendations given by the staff about breastfeeding counseling locations

<table>
<thead>
<tr>
<th>Did the staff give recommendations about breastfeeding counseling locations?</th>
<th>Frequency</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Yes</td>
<td>26</td>
<td>21.1</td>
</tr>
<tr>
<td>No</td>
<td>88</td>
<td>71.5</td>
</tr>
<tr>
<td>Missing</td>
<td>9</td>
<td>7.3</td>
</tr>
<tr>
<td>Total</td>
<td>123</td>
<td>100</td>
</tr>
</tbody>
</table>

Table 27. The evaluation of staff’s recommendations which made mothers anxious about breastfeeding

<table>
<thead>
<tr>
<th>Did the recommendations make mothers anxious about breastfeeding?</th>
<th>Frequency</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Yes</td>
<td>7</td>
<td>5.7</td>
</tr>
<tr>
<td>No</td>
<td>109</td>
<td>88.6</td>
</tr>
<tr>
<td>Missing</td>
<td>7</td>
<td>5.7</td>
</tr>
<tr>
<td>Total</td>
<td>123</td>
<td>100</td>
</tr>
</tbody>
</table>

Table 28. The evaluation of staff’s equipments for breastfeeding (e.g., milk containers)

<table>
<thead>
<tr>
<th>Did the staff have equipments for breastfeeding (e.g., milk containers)?</th>
<th>Frequency</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Yes</td>
<td>22</td>
<td>17.9</td>
</tr>
<tr>
<td>No</td>
<td>25</td>
<td>20.3</td>
</tr>
<tr>
<td>Not needed</td>
<td>69</td>
<td>56.1</td>
</tr>
<tr>
<td>Missing</td>
<td>7</td>
<td>5.7</td>
</tr>
<tr>
<td>Total</td>
<td>123</td>
<td>100</td>
</tr>
</tbody>
</table>

As reported in Table 28, 17.9% of mothers (n=22) expressed that they had equipments for breastfeeding, whereas 20.3% (n=25) stated otherwise. Also, 56% of mothers (n=69) were not in need of any equipments.

Conclusion

All the findings showed that about 86.2% of infants (n=106) were breastfed immediately after delivery and 86% showed persistence in breastfeeding at the pediatric ward. Overall, 60.2% of mothers (n=74) stated that the staff had trained them on the persistence of breastfeeding (8 times a day). Also, 67.5% of mothers (n=83) were aware of the benefits of breastfeeding, which shows the role of hospital staff in training pregnant mothers about the benefits of breastfeeding and its persistence, breastfeeding methods and the side-effects of milk powder, bottles and pacifiers.

About 80% of mothers with vaginal delivery and 65.2% (n=80) with cesarean section breastfed their infants within less than an hour after delivery, which shows the important role of hospital staff in training mothers about breastfeeding their infants within an hour after vaginal delivery or recovery from cesarean section. Also, 47.2% of mothers (n=58) stated that they had been trained on how to breastfeed their infants, whereas 51.2% (n=63) noted that the staff had not trained them on breastfeeding; moreover, 50.4% of mothers (n=62) stated that the staff had trained and helped them about the techniques of breastfeeding and the way they should hug their...
newborns; however, 32.5% of mothers (n=40) stated that they had not been trained in this regard.

Also, 78.5% of mothers (n=97) were already familiar with the correct way of hugging and breastfeeding their infants. According to the findings, the staff's role in training mothers about hugging and breastfeeding was not effective. Also, 88.6% of mothers (n=109) stated that the staff had not given them pacifiers, which shows that the role of hospital staff in training mothers about not using milk bottles and pacifiers has been effective.

Moreover, according to the findings, 63.6% of mothers (n=78) stated that plain water had been given to the infants under six months of age. Also, 79% of mothers (n=97) stated that their infants had not been given sugar water, and 92.8% of mothers (n=114) claimed that their infants had not been given milk powder by the hospital staff.

Overall, 55.3% (n=68) of mothers stated that the staff had not given their infants any minerals, medications or vitamins within six months, whereas 44.7% (n=55) stated otherwise. In addition, 8% of mothers (n=10) had been recommended on nutrients other than medicines, vitamins and minerals, according to mothers' medical records. However, 92% of mothers (n=113) stated no medical necessity.

In total, 92% of mothers (n=75) stated that nothing had been given to their infants except mother's milk, which demonstrates the role of hospital staff in giving exclusive priority to breastfeeding; in fact, in these cases, nothing but breast milk had been given to the newborns. In addition, 70% of mothers (n=102) expressed that the staff had recommended the time of infant's hunger as the appropriate time for breastfeeding. This illustrates the significant role of staff in encouraging, helping and supporting mothers about breastfeeding their infants.

Approximately 93.5% of mothers (n=115) stated that the staff had put their infants in the same room/bed during hospitalization. Also, 79.7% of mothers with vaginal delivery (n=98) mentioned that they had their infants beside them in less than an hour after delivery. On the other hand, 2.4% of mothers (n=3) expressed that their infants were beside them after an hour since delivery; this shows the important role of staff in this regard.

Additionally 29.3% of mothers (n=36) stated that the staff had given them instructions on how to breastfeed their infants. Also, 69.1% of mothers (n=85) stated that they had not been given instructions or recommendations on this issue. According to the results, 61% of mothers (n=75) stated that the staff had helped them on breastfeeding. According to the results, it seems that the role of hospital staff in forming support groups for lactating mothers, pursuing mothers' problems and providing information about counseling centers was not effective.

**Suggestions**

Given the role of Baby-Friendly Hospital Initiative in training mothers on the importance of breastfeeding and its persistence in future, careful monitoring of these hospitals, breastfeeding support services and breastfeeding training by midwives at healthcare centers are of great importance. According to the results, the lowest rate (50.4) was related to training on breastfeeding positions, whereas the highest rate (93.5) was related to placing mothers and infants in one room within an hour after childbirth.

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**References**