Determination of Effectiveness of Exclusive Breastfeeding Preparing Program on Knowledge of Primipara Mothers in Kirkuk City Hospitals

Muntaha Hameed Hussein¹, Suhad H. Khairi², Mahasin T. AL-Harbawe³
¹Ph.D., ²Assist. prof. Dr., Department of Maternal and Newborn Nursing - College of Nursing / University of Baghdad.; ³Assist. Prof. Dr., Community Health Nursing / Al-Maarih University College

Abstract

Objective: To determine of effectiveness of exclusive breastfeeding preparing program on knowledge of primipara mothers in kirkuk city hospitals

Methodology: A quasi-experimental design of thirty Primipara women in three hospitals in kirkuk city for the period from March 1st to October 1st 2020. The data collected through stages which include pretest, posttest.

Results: The finding indicate that among thirty study sample the MS and SD were higher in posttest in compare with pretest, and significant differences were found within study sample before and after program at (P=0.05) which indicated that educational program positively effect on the study sample regarding exclusive breastfeeding.

Conclusions: The study concludes that after assessing the knowledge of the study sample, it found that their knowledge was poor and exclusive breastfeeding educational program was effectively improved their knowledge.

Keywords: Effectiveness , Exclusive breastfeeding , Preparing program, Knowledge, Primipara mothers.

Introduction

Breastfeeding is an important origin of food for infant at firstly six months of lifetime, according to the World Health Organization ¹, which confirmed maternal to use it as their primary source of nutrition. Mothers should feed their babies complementary foods in addition to breastfeeding between the ages of 6 months and 2 years.

Exclusive breastfeeding” is interpreted as Only breast milk is given to the newborn; no fluids or hard are given – not even water – except for oral rehydration liquid or vitamin, mineral, or medication droplets / syrups.” It is advised to use it during the first six months of a child’s lifetime, after which supplement feeding should be introduced. on the other hand, Breastfeeding should be continued for at least 2 years age or beyond ²³.

Performance for Natural Growing and progression for neonate and child feed , these practices involve starting breastfeeding during first hour of childbirth, exclusive breastfeeding during first six months of lifetime , adding suitable and sufficient goal of 21.9 million exclusively breastfed infants during the first six months of lifetime in 49 nations by 2015 (United Nations Secretary General, 2013).

As a result of the multiple predictor cluster survey (MICS) in Iraqi (2018), 32.4 % of babies were breastfed during the first hour of delivery,
and (26 percent) of infant were received exclusive breastfeeding within aged (0-5), (85 %) of infant were getting firm nourishment or semi-solid diet in aged (6-8) months while (45 %) of infant aged (6-23) months received the lowest nutritional variety. Five types of described developmental food groups, In the first year of life (12-15 months), 45 % of children continue to breastfeeding whereas in the second year of life (20-23 months), 27 % of infant continue to breastfeeding

The provision (or lack thereof) of adequate information and support to the mother during both the antenatal and postnatal periods is one of the most important factors that influences the initiation and continuity of breastfeeding. Several studies have found that mothers who receive professional breastfeeding support and advice have more optimistic attitudes about breastfeeding and tend to breastfeed longer 6,7. Breastfeeding initiation rates have been shown to improve with interventions aimed at increasing healthcare providers’ breastfeeding awareness, and additional professional support from healthcare providers continues to enhance the duration of exclusive breastfeeding for mothers 8,9. On the other hand, breastfeeding results are negative when the upholding and advice given by healthcare providers is insufficient and suitable (Montalto et al., 2010). Knowledge of breastfeeding information has a direct and indirect influence on breastfeeding practice. Directly, a more enlightened individual on breastfeeding may practice it but the less enlightened, may doubt its potency and its benefit and therefore may not find it attractive to practice. Society may not accept the practice of breastfeeding due to cultural, religious and economic reasons, coupled with poor health staff attitude 11.

**Objective of The Study**

To determine of effectiveness of exclusive breastfeeding preparing program on knowledge of primipara mothers in kirkuk city hospitals

**Methodology**

A quasi-experimental design of thirty Primipara women in three hospitals in kirkuk city for the period from March 1st to October 1st 2020. The study instrument consist of three parts, it include demographic characteristics, reproductive history, and mothers Knowledge. The data collected through three stages ; pretest stage to assess mothers knowledge, second stage, the educational program design to provide primipara woman with exclusive breastfeeding knowledge, it consisted from 27 items. The program intervention covered through lectures, videos, films, role play and pictures. The third stage was posttest, this done after two weeks from intervention the educational program. Pre and posttest fill questionnaire form by themselves. A descriptive and inferential statistic used to analyzed the data.

**Results**

![Figure 1. Wives’ Age (Years)](image)
The mean age of participants is 24.33 ± 4.54; Most of them age 18-24-years (n = 18; 60.0%), followed by those who age 25-31-years (n = 10; 33.3%), and those who age 32-40-years (n = 2; 6.7%).

![Figure 2. Wives’ Educational level](image)

Concerning wife’s level of education, less than a third are primary school graduates (n = 9; 30.0%), followed by those who each of preparatory school graduates, institute graduates, and college graduates and above (n = 5; 16.7%) for each of them, those who intermediate school graduates (n = 3; 10.0%), those who are unable to read and write (n = 2; 6.7%), and one who reads and writes (n = 1; 3.3%).

![Figure 3. Husbands’ Educational level](image)
Regarding husband’s level of education, a third are college graduates and above (n = 10; 33.3%), followed by those who are primary school graduates (n = 6; 20.0%), those who are preparatory school graduates (n = 5; 16.7%), those who are institute graduates (n = 4; 13.3%), those who are intermediate school graduates (n = 3; 10.0%), and those who read and write (n = 2; 6.7%).

Table (1): Socio-Demographical Characteristics Variables of Study Sample (N=30)

<table>
<thead>
<tr>
<th>Items</th>
<th>Variables</th>
<th>F</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Wife- occupation</td>
<td>Employed</td>
<td>9</td>
<td>30</td>
</tr>
<tr>
<td></td>
<td>House wife</td>
<td>21</td>
<td>70</td>
</tr>
<tr>
<td>Husband -occupation</td>
<td>Employed</td>
<td>7</td>
<td>23.3</td>
</tr>
<tr>
<td></td>
<td>Unemployed</td>
<td>2</td>
<td>6.7</td>
</tr>
<tr>
<td></td>
<td>Student</td>
<td>5</td>
<td>16.7</td>
</tr>
<tr>
<td></td>
<td>Freelancers</td>
<td>16</td>
<td>53.3</td>
</tr>
<tr>
<td>Family income (monthly)</td>
<td>Sufficient</td>
<td>7</td>
<td>23.3</td>
</tr>
<tr>
<td></td>
<td>barely sufficient</td>
<td>19</td>
<td>63.3</td>
</tr>
<tr>
<td></td>
<td>Insufficient</td>
<td>4</td>
<td>13.3</td>
</tr>
<tr>
<td>Place of residence</td>
<td>Urban</td>
<td>29</td>
<td>96.7</td>
</tr>
<tr>
<td></td>
<td>Rural</td>
<td>1</td>
<td>3.3</td>
</tr>
<tr>
<td>Type of family</td>
<td>Nuclear</td>
<td>14</td>
<td>46.7</td>
</tr>
<tr>
<td></td>
<td>Extended</td>
<td>5</td>
<td>16.7</td>
</tr>
<tr>
<td></td>
<td>Shared</td>
<td>11</td>
<td>36.6</td>
</tr>
</tbody>
</table>

With respect to wife’s occupation, most are housewives (n = 21; 70.0%) compared to those who are employees (n = 9; 30.0%). For husbands, more than a half are freelancers (n = 16; 53.3%), followed by those who are employees (n = 7; 23.3%), those who are students (n = 5; 16.7%), and those who are out of work (n = 2; 6.7%). Concerning family’s monthly income from family point of view, most reported that they have barely sufficient income (n = 19; 63.3%), followed by those who have a sufficient income (n = 7; 23.3%), and those who have an insufficient income (n = 4; 13.3%). Regarding the residence, the vast majority live in urban areas (n = 29; 96.7%) compared to those one who live in rural area (n = 1;
3.3%). Lastly, with respect to “Family type, less than a half reported that they have been living in nuclear families (n = 14; 46.7%), followed by those who have been living in shared families (n = 11; 36.6%), and those who have been living in extended families (n = 5; 16.7%).

Table 2: Study Sample Reproductive Variables (N = 30)

<table>
<thead>
<tr>
<th>Items</th>
<th>Variables</th>
<th>F</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Previous abortion</td>
<td>Yes</td>
<td>9</td>
<td>30</td>
</tr>
<tr>
<td></td>
<td>No</td>
<td>21</td>
<td>70</td>
</tr>
<tr>
<td>2. Any disorders during pregnancy</td>
<td>Yes</td>
<td>6</td>
<td>20</td>
</tr>
<tr>
<td></td>
<td>No</td>
<td>24</td>
<td>80</td>
</tr>
<tr>
<td>3. Breast care during pregnancy</td>
<td>Yes</td>
<td>30</td>
<td>100</td>
</tr>
<tr>
<td>4. Intend to breastfeeding</td>
<td>Yes</td>
<td>30</td>
<td>100</td>
</tr>
<tr>
<td>5. Delivery type</td>
<td>Normal Vaginal Delivery</td>
<td>15</td>
<td>50</td>
</tr>
<tr>
<td></td>
<td>Cesarean Section</td>
<td>15</td>
<td>50</td>
</tr>
<tr>
<td>6. Delivery place</td>
<td>Public Hospital</td>
<td>30</td>
<td>100</td>
</tr>
</tbody>
</table>

Concerning abortion, most study sample reported that they did not experience abortion (n = 21; 70.0%) compared to those who have experienced it (n = 9; 30.0%). Regarding pregnancy-related problems, the majority reported that they do not experience such problems (n = 24; 80.0%) compared to those who experienced them (n = 6; 20.0%). With respect to breast care, all study sample reported that they are caring for their breast (n = 30; 100.0%). All study sample have intend to breastfeed their babies (n = 30; 100.0%). Study sample gave birth through normal vaginal delivery (n = 15; 50.0%) compared to those who delivered cesarean section (n = 15; 50.0%). All study sample gave birth in the public hospitals (n = 30; 100.0%).
Table(3). Overall Difference in Study Sample Knowledge between the Pretest and Posttest Times

<table>
<thead>
<tr>
<th>Paired Samples Test</th>
</tr>
</thead>
<tbody>
<tr>
<td>Paired Differences</td>
</tr>
<tr>
<td>Mean</td>
</tr>
<tr>
<td>-------</td>
</tr>
</tbody>
</table>

There is a statistically significant difference in study sample knowledge between the pretest and posttest times at (p = 0.05).

**Discussion**

**Socio-Demographical Characteristics Variables**

Among thirty study sample who completed the questionnaire, the main age of the study sample ranged from (18-24) years was ( SD 24.33 ±4.54years), the majority (30%) of the study sample are primary school graduate and (33.3%) of their husband graduate from college and above.

Occupationally (70%) of the study sample are housewife, while more than half (53.3%) of their husband are freelancer, (63.3%) of the study sample consider their socio-economic status barely sufficient from their point of view, (96.7%) of them lived in urban area and (46.7%) lived in nuclear families.

The study’s findings concluded that highly percentage of the study sample were young, low socio-educational status, no occupation leads to minimize breastfeeding (Rocci & Fernandes, 2015)

Many studies show that socio demographic factors characteristics such as age, education level, occupation, family income and types of family were coincide with this study results (Usha Rani & Bhattacharjee, (2018) ; Hasan, (2016) ; Najem & Al-Deen , (2011) ; Shommo & Al-Shubrumi, (2014)).

Habibil et al., (2018) concluded that a significant relationship between exclusive breastfeeding and mother education, socio-economic status and length for age, and maternal employment. Breastfeeding was closely associated to all socioeconomic variables, maternal educational level, maternal unemployment benefit, and income (Flacking et al., 2007).

**Reproductive Characteristics**

The reproductive criteria of study sample included (70 %) of study sample with no abortion, the majority (80%) of them do not experience pregnancy-related problems. All (100%) of study sample get care for their breast during pregnancy and have an intention to breastfeed their babies respectively. Half (50%) of
them their delivery type was normal vaginal delivery compared (50%) of Cesarean section respectively. All (100%) of women gave birth in the public hospitals.

Breastfeeding intentions of maternal before conception have an effect on practice of baby feeding (Donath & Amir, 2003). Breastfeeding for 6 months is more likely when mothers have high intention and self-efficacy (Wilhelm et al, 2008). During the antenatal period, all women should be encouraged to plan for breastfeeding their children.

Women’s breastfeeding self-efficacy and intent to breastfeeding were the most significant indicators of breastfeed beginning, continuance, and duration in the first six months following delivery (Brockway et al., 2017).

The type of birth (vaginal vs. caesarean) have no effect on breastfeeding patterns, according to DiGirolamo et al. (2008). While Patel et al., (2003) discovered that the mode of delivery had no influence on breastfeeding.

Mothers who gave delivery naturally had a more favorable attitude toward breastfeeding and had less stress breastfeeding practices than mothers who underwent a caesarean delivery (Imhonde et al., 2012; Carlander et al., 2009).

Bottle-feeding and reduced milk supply are associated to Caesarean deliveries (Zhang et al, 2004).

Concerning of the delivery place, the current study found that all of the mothers gave delivery at hospital. The finding was confirmed by Ravi et al., (2015), who mentions the majority of women’s gave delivery in a hospital.

This finding is confirmed by Pushpa & Chowti (2012), who state that there is no significant association among the site of delivery and women’s information on breastfeeding.

Differences in Study Sample Knowledge between Pretest and Posttest

Thirty mothers who breastfeeding for the first time received sessions about exclusive breastfeeding. Twenty seven questions covered the entire process of exclusive breastfeeding. After statistical assessing, the knowledge of the study sample through pre and posttest.

Before the program only (26.7%), (6.7%) and (20%) of the study sample know the correct definition and the duration and advantages for baby of exclusive breastfeeding respectively.

This results indicate that many study sample have general information about breastfeeding but few of them knew accurate information and how breastfeeding done (Hanafi & El-Ammari, 2014).

The finding indicate that although most of study sample are primary school graduated the results shows that at pretest 10(3,5,6,8,9,13,18,19,21,22) out of 27 items assessment degree record high which mean that study sample had back ground about breastfeeding information regard less of educational level.

The majority of primigravidas in India (78%) did not know that EBF should be continued for six months, according to a survey (Dhandapany et al., 2008). The majority of primigravidas were unaware that EBF reduces the risk of neonatal jaundice (Kumar et al., 2015). In respect to table (3) the overall analysis revealed that there is a positive significant improvement in the study sample knowledge at p: value (0.05). Kumar et al., (2015) several research reinforce the previous findings, stating that insufficient information, a negative attitude, or inappropriate breastfeeding technique lead to negative results for both mother and newborn. Insufficient breastfeeding is one of main reasons of baby deaths and morbidity, because the mother’s lack of awareness of its importance and benefits. During antenatal education in the waiting room, however, education can play a large role in changing mothers’ attitudes and knowledge about breastfeeding. Iraq and neighboring countries have a common culture that is similar to that for countries with Islamic
religious roots which has a positive attitude toward breastfeeding. Finally, the study participants have a positive response, and the sessions have a good impact on their knowledge.

Conclusions

Based on data analysis and critical interpretation of the finding. The study concluded that after assessing the knowledge of the study sample, it found that their knowledge was poor and exclusive breastfeeding educational program was effectively improved their knowledge.

Recommendations:

1. Developing and implementing of educational programs support and counseling routinely during pregnancy (antenatal and postnatal period through primary health care centers and hospitals.

2. Nurse need to motivate and monitoring the promotion of exclusive breastfeeding for six months by home visit or telephone call and provide mothers with pamphlets and guideline to increase knowledge and practices regarding breastfeeding

3. Engage family members and husbands effectively in the educational programs, family have a big role in encouraging pregnant women to breastfed their babies after birth.

4. Further studies about changing the conception of insufficient breast milk for mothers

5. Enhance new mothers understanding rather than education to change their misconception and attitude and behavior through mass media.

Financial Disclosure: There is no financial disclosure.

Conflict of Interest: None to declare.

Ethical Clearance: “All experimental protocols were approved under the College of Nursing and carried out in accordance with approved guidelines”.

References


5. Multiple Indicator Cluster Survey (MICS6) IRAQ. 2018


