Survey of Breastfeeding Awareness

Danielle Petta-Flores

University of California, San Francisco

Primary Care Leadership Program
Abstract

There are many known benefits to breastfeeding. Short-term benefits include improved function of the infant gastrointestinal tract, increased immune protection of the infant from acute infection, and psychological benefits to both infant and mother (Eidelman, et al, 2012). The American Academy of Pediatrics and the World Health Organization recommend that infants are breastfed exclusively for the first 6 months of life and continue to be breastfed until at least one-year of age (AAP, 2012) (WHO, 2003). Tennessee has some of the lowest breastfeeding rates of any state in the country (CDC, 2012a). African-American women from across the country have lower rates of breastfeeding than women of other races (CDC, 2013b). United Neighborhood Health Services (UNHS) is a community health clinic located in Nashville, Tennessee that serves approximately 24,000 clients in Nashville and the surrounding areas. For this study, 40 clients from UNHS answered true/false questions about breastfeeding facts in order to determine their level of awareness about breastfeeding benefits and current recommendations. They also answered two questions relating to whether they had any interest in learning more about breastfeeding. Information collected from these questionnaires was used to make recommendations regarding methods to increase breastfeeding rates among clients at this clinic.

**Keywords:** Breastfeeding, breastfeeding benefits, breastfeeding recommendations, infant feeding,
Introduction

The United States Department of Health and Human Services set a Healthy People 2020 goal to have 81.9% of infants breastfed at least once in their life. In 2012, 76.9% of all babies in the United States were ever breastfed; 47.2% are still breastfed at 6 months, and 16.3% are exclusively breastfed at 6 months (CDC, 2012). Babies born in Tennessee are less likely to be breastfed than babies born in many other states in the country (CDC, 2012). In Tennessee, 64.3% of babies are ever breastfed; 30.8% are still breastfed at 6 months, and only 13.9% are exclusively breastfed at 6 months (CDC, 2012). African-American infants in the United States are also much less likely to be breastfed than infants of other races. In 2008, the percentage of African-American babies ever breastfed was 58.9; the percentage of Caucasian babies ever breastfed was 75.2; the percentage of Hispanic/Latino babies ever breastfed was 80.0 (CDC, 2013b). United Neighborhood Health Services (UNHS) is a health clinic that serves approximately 24,000 clients in Nashville and the surrounding area. Many of their clients are uninsured and live below the poverty level. Approximately 10,000 UNHS clients self identify as African-American. Data on the percentage of women patients at UNHS who breastfeed is not available, but the perception of staff that I spoke with is that rates are low, particularly among the African-American patients. In addition, Tennessee also has one of the highest infant mortality rates in the country, and breastfeeding has been linked to lower rates of infant mortality from acute infections such as diarrhea and respiratory infections (Eidelman at al, 2012). There are many complex reasons that women choose not to breastfeed their babies. This study aims to determine if a knowledge deficit surrounding breastfeeding exists among women of childbearing age who are clients at
UNHS. It also aims to determine breastfeeding rates. Lastly, this study aims to determine if there is any interest among clients at UNHS in learning more about breastfeeding among the patient population.

**Background**

Breastfeeding has been shown to decrease the risks of gastroenteritis, otitis media, respiratory infections, urinary tract infections, and necrotizing enterocolitis (Eidelman, et al, 2012). Additionally, it makes the mother more likely to lose the weight she gained during pregnancy (Eidelman et al, 2012). Breastfeeding also reduces the mother’s chance of developing ovarian or breast cancer (Dyson, McCormick & Renfrew, 2005). Despite these benefits, many women choose not to breastfeed. Women may choose not to breastfeed for a variety of reasons, including lack of awareness of breastfeeding benefits and recommendations. Reasons may also include cultural factors, employment, and personal choice (Renfrew, 2000). Rates of breastfeeding are different depending on country of origin, culture, race, and income level (WHO, 2003). Worldwide, women from lower income levels are less likely to breastfeed than their higher income counterparts (WHO, 2003).

**Methodology**

A descriptive study was conducted in order to learn more about current breastfeeding rates, awareness of the benefits of breastfeeding, awareness of current breastfeeding recommendations, and interest in breastfeeding among clients at UNHS. A 17-question survey was developed (See Appendix A) and given to patients in order to
learn more about their perspective and understanding of breastfeeding. Three of the questions in the survey were gathering demographic data: age, ethnicity, and race. Two of the questions asked if the patient was pregnant or had any children. Two of the questions asked about past breastfeeding experience. Three of the questions were true/false questions about breastfeeding recommendations. One of the questions was a true/false question about a short-term benefit of breastfeeding. Three of the questions asked if habits of the mother affected whether or not she could breastfeed. One of the question asked if the client would like more information about breastfeeding. One of the questions asked if the woman would choose to breastfeed in the future. If she responded that she would not, she was asked to explain her reasoning.

Forty women of childbearing age completed the survey. All of the women were patients at UNHS a Community Health Clinic serving Nashville, Tennessee and the surrounding area. 140 surveys were distributed at three different UNHS clinic locations. The surveys were to be offered to all women of childbearing age (approximately 12 years of age to 55 years of age) during the intake process for any type of medical appointment. Of the 140 distributed, only 14 were completed and returned during a two-week period. Due to this low rate of completion using this process, the surveys were brought to a local health fair. Again, surveys were distributed but not returned. In order to ensure the completion and return of the surveys, staff decided to read the survey to the woman and fill in the answers according to the woman’s response. 26 of the women completed the survey in this manner.
Results

The survey was completed by 40 women of childbearing age. The majority of women, 34, self identified as non-Hispanic, Black or African-American. Two of the women self identified as Latino or Hispanic ethnicity, and both of these participants did not answer the question regarding race. Four of the women identified as non-Hispanic, White or Caucasian. In regard to age, three of the women were between the ages of 14 to 19; eighteen of the women were between the age of 20-30; seven of the women were between the ages of 31-40; 9 of the women were between the ages of 41-45; and three of the women were older than 45. One woman was currently pregnant. 28 of the women had children. Of the 28 women who were mothers, seven (25%) had breastfed at some point with a previous child. Of these women who had breastfed, two rated their satisfaction with their experience breastfeeding as “Very Satisfied;” two rated their satisfaction as “Satisfied;” one as “Dissatisfied;” and one as “Very Dissatisfied.” One woman did not rate her degree of satisfaction.

There were seven questions with correct or incorrect responses. All seven questions were formatted with “true” and “not true” responses. All seven of the questions were written so as to be “true.” The remaining ten questions pertained to demographics, pregnancy status, parenting status, experience breastfeeding, and interest in breastfeeding. The average number of correct answers was three out of seven (Mean: 3.075. Median: 3 Mode: 2 & 3. Range: 0-6). The percentage of clients who answered each question correctly can be seen in Table 1. The two questions that pertained to
current breastfeeding recommendations: “It is recommended that babies be only breastfed for the first 6 months of life,” and “It is recommended that babies continue to be breastfed until at least one year of age” had the lowest percentage of correct responses. Both questions had a correct response rate of 30%. 42.5% of women correctly knew that “Breastfed babies are less likely to get infections such as diarrhea, lung infections, ear infections, and urinary tract infections.” 52.5% of women surveyed correctly knew that “If a mom is not eating a healthy diet, breast milk is still healthy for the baby.” 40% correctly knew that “If a mom is smoking cigarettes, she can still breastfeed.” 65% correctly knew “If a mom is using drugs or drinking a lot of alcohol, she should NOT breastfeed.” Questions left blank for the seven True/False questions were counted as incorrect responses. The distribution of number of correct responses can be seen in Table 2.

Table 1

<table>
<thead>
<tr>
<th>Question</th>
<th>Percentage of clients who answered correctly</th>
</tr>
</thead>
<tbody>
<tr>
<td>For the first 6 months of life, breast milk is the only food a baby needs.</td>
<td>47.5%</td>
</tr>
<tr>
<td>Breastfed babies are less likely to get infections such as diarrhea, lung infections, ear infections, and urinary tract infections.</td>
<td>42.5%</td>
</tr>
<tr>
<td>It is recommended that babies be only breastfed for the first 6 months of life.</td>
<td>30%</td>
</tr>
<tr>
<td>It is recommended that babies continue to be breastfed until at least one year of age.</td>
<td>30%</td>
</tr>
</tbody>
</table>
If a mom is not eating a healthy diet, breast milk is still healthy for the baby.  52.5%

If a mom is smoking cigarettes, she can still breastfeed.  40%

If a mom is using drugs or drinking a lot of alcohol, she should NOT breastfeed.  65%

Table 2

<table>
<thead>
<tr>
<th>Number of Correct Responses (7 possible)</th>
<th>Number of Clients with that number of correct Responses</th>
</tr>
</thead>
<tbody>
<tr>
<td>0</td>
<td>3</td>
</tr>
<tr>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>2</td>
<td>10</td>
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<td>10</td>
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<td>4</td>
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<tr>
<td>6</td>
<td>3</td>
</tr>
<tr>
<td>7</td>
<td>4</td>
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</tbody>
</table>

Mean number of correct responses: 3.075. SD: 1.61 Median: 3 Mode: 2 & 3. Range: 0-6

20% of clients surveyed stated they would like more information about breastfeeding. 27.5% said they would breastfeed in the future. For the 72.5% (29 clients) who responded that they would not breastfeed in the future, they were asked to explain why they wouldn’t breastfeed in the future. This was the only question that was not multiple choice or true/false. Only four of the 30 patients answered this question. The remaining 26 left the question blank. The four responses were: “It’s not wright;” “I tried my daughter didn’t latch on;” “The Pressure of the breast;” and “I’ve heard that breastfeeding hurts.”
For women who said they would breastfeed in future, the average number of correct responses was 3.82 (n= 11, SD:1.60) compared to women who said they would not breastfeed in the future whose average score was 2.75 (n=28, SD:1.55). These sample sizes are small, and the values are not statistically significant (p=0.48).

**Discussion**

Only 25% of the mothers surveyed had ever breastfed. The sample size is small, and not necessarily representative of the whole UNHS population, but 25% is far lower than the Healthy People 2020 goal of 81.9%. It would be interesting to survey a larger and more diverse population to get a more representative sample of the UNHS population. If, as some staff members suspect, there is a low rate of breastfeeding, then breastfeeding is an area where intervention could be focused. The current prenatal program, Strong Start, does not put a large emphasis on breastfeeding education.

The mean number of correct responses among all 40 women surveyed was 3 out of 7 possible correct responses. The questions with the least percentage of correct responses were pertaining to recommendations for breastfeeding. Further studies could inquire if women were more educated on the current recommendations if breastfeeding rates would increase.

27.5% of the women surveyed stated that they would breastfeed in the future. The difference in the average number of correct responses was not significantly different for the group of women who stated intention to breastfeed in the future versus women who
did intend to breastfeed in the future. It would be interesting to see if in larger sample size of both groups, the results would be significant.

This project was a challenge as I am a visiting student in an unfamiliar region. Coming from San Francisco, where breastfeeding is much more common, increasing breastfeeding rates seemed like an accessible way to improve infant and maternal health. There are many different factors that affect whether or not a woman chooses to breastfeed, and these factors vary greatly by individual. When I initially developed this project, I wanted to determine why some clients at UNHS decided not to breastfeed in order to create interventions that would increase breastfeeding rates. I hypothesized that women were unaware of the current breastfeeding recommendations as well as the benefits of breastfeeding. While many of the women surveyed were not aware of the recommendations or benefits, they were also not interested in learning more about breastfeeding. Perhaps their interest would increase, if they were aware of the benefits, but I failed to include that component in my survey.

There were many limitations to the survey. Firstly, it focused much more on recommendations than benefits. The three questions that ask about drug use, alcohol use, and diet could be worded in a more clear manner. Question #8 and #10 both pertain to exclusive breastfeeding for the first six months of life, but 47.5% answered #8 correctly, and only 30% answered #10 correctly. The change in verb tense on question #16 may have also been confusing to readers. If I were to do the survey again, I would add more questions pertaining to specific benefits of breastfeeding that were not covered in this original survey.
There were many limitations to the sample. The sample size was small; only 40 women. I would expand the survey to increase the sample size. I would also want the sample to be more inclusive. These surveys were offered in English only, and the majority of the women who completed the survey identified as African-American, which made it difficult to compare results to other races. Also, the majority of the surveys were completed orally rather completed anonymously, which may have had some effect on the results.

There may be other easier ways to improve infant health that are more in line with the priorities of the community. In hindsight, I wish that I had chosen to assess the needs and wants of the community in regard to infant health and the high infant mortality rate in Tennessee. In doing this project, I have learned to ensure that the work I am doing is in line with the priorities of the population prior to beginning a project.

**Recommendations**

As mentioned in the previous section, this was not a comprehensive study and the sample size was small; therefore, my primary recommendation is to increase the scope of this rudimentary investigation. Initially, I would expand the survey to include more questions about the benefits of breastfeeding. I would also increase the sample size to include a more diverse population. Having this increased information would give me a more thorough look at current breastfeeding rates and awareness. I also recommend further inquiry into the reasons that women are not choosing to breastfeed through a focus group consisting of mothers who did not breastfeed. Members of the focus group could explain their reasoning and beliefs, and future interventions could be tailored to
meet their specific needs. I also recommend educating the staff about the benefits of breastfeeding and increase the emphasis on breastfeeding during prenatal visits. I would conduct a campaign to increase knowledge of breastfeeding and dispel any myths about breastfeeding. This could be done through posters placed in the exam room, brochures, Public Service Announcements, etc. These materials could also promote images of women of color breastfeeding. Working with local community groups to participate in these campaigns could increase buy-in from the community. Once awareness is raised and interest increases, it is important that there is support for newly breastfeeding mothers. At UNHS, women have doctors and midwives outside of the clinic who deliver the baby and provide some of the post-natal care. A partnership with these providers would be key to increasing breastfeeding education and rates. Lactation nurses and hotlines could additional provide support for women at home who were having difficulty breastfeeding.

Conclusion

Breastfeeding is one small component of improving infant and maternal health. Despite the many known health benefits of breastfeeding, breastfeeding rates remain fairly low in the United States. Many of the women surveyed at UNHS were not aware of breastfeeding benefits or recommendations. There are many reasons why women do not choose to breastfeed. In order to increase breastfeeding rates, we must learn more about the reasons why many women are not breastfeeding at all. Once these reasons are better understood, we can better focus our efforts on specific interventions to increase breastfeeding rates.
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Appendix A
Breastfeeding Survey
(Please circle your answers.)
This is an anonymous and confidential survey. Information from this survey will be used to improve services to patients in the future. Approximate time: Less than 5 minutes.

1. What is your age range?
   a. 14-19      b. 20-30      c. 31-40      d. 41-45      e. 46+

2. Do you identify Hispanic or Latino?
   Yes      No

3. Do you identify as:
   a. Black or African American      b. Native American or American Indian
   c. White or Caucasian      d. Asian/Pacific Islander      e. Other____________

4. Are you pregnant right now?
   Yes      No

5. Do you have any children? (If no, skip to Question #8.)
   Yes      No

6. If you have children were any of them breastfed?
   Yes      No

7. If you have breastfed in the past, please rate how satisfied you were with your breastfeeding experience:
   Very Satisfied      Satisfied      Neither Satisfied or Dissatisfied      Dissatisfied      Very Dissatisfied

Please read the following sentences and circle if they are “True” or “Not True.”

8. For the first 6 months of life, breast milk is the only food a baby needs.
   True      Not True
9. Breastfed babies are less likely to get infections such as diarrhea, lung infections, ear infections, and urinary tract infections.
   True         Not True

10. It is recommended that babies be only breastfed for the first 6 months of life.
    True         Not True

11. It is recommended that babies continue to be breastfed until at least one year of age.
    True         Not True

12. If a mom is not eating a healthy diet, breast milk is still healthy for the baby.
    True         Not True

13. If a mom is smoking cigarettes, she can still breastfeed.
    True         Not True

14. If a mom is using drugs or drinking a lot of alcohol, she should NOT breastfeed.
    True         Not True

15. I would like more information about breastfeeding.
    True         Not True

16. When or if I have a baby, I would choose to breastfeed.
    True         Not True

17. If not, can you tell us why you wouldn’t choose to breastfeed?

_____________________________________________________________________

Thank you!