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Moomoomomma: Creation of a Breastfeeding Community Webpage

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The graduate project of Sydni Y. Harford, "Moomoomomma: Creation of a Breastfeeding Community Webpage," approved by her Committee, has been accepted and approved by the Faculty of the Department of Health Science, in partial fulfillment of the requirements for the degree of Master of Public Health.

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10/2/2017

Acknowledgements

I began my educational journey with California Baptist University's Public Health program in August 2015. These last two years have flown by, and I have learned more than I could ever have imagined.

I am particularly grateful to my professor, Dr. Janet Bonome. For these last two years, Dr. Bonome has encouraged me to always be the best that I can be. Dr. Bonome has always been a strong supporter of mine as I have worked hard to earn my degree, and none of this would have been possible without her leadership, kindness, faith, and expertise.

Thanks are also due to Associate Professor of Public Health Dr. Dominick Sturz, and Assistant Professor of Public Health Dr. Bochi McKinney. Both have provided advice and offered suggestions when needed.

A special thanks to my grandparents, Yvonne and Henny Klassen Van Oorschot, and my mother, Tera Jameson, who raised me into the woman that I am today. They pushed me to do great things for as long as I can remember. Most importantly, they taught me about God's love, and all that He has to give. I would be lost without them.

My greatest appreciation and acknowledgement is to my husband, Joel, and my daughter River, who have been very patient with me as I have spent time working on this project, when it truly should have been time spent with them. I will not forget how Joel always offered to take care of the other household tasks while I studied. And River, although she is too young to understand, she has been such a blessing to me. She was patient while I studied and typed for hours on end. These two are the true meaning of love. They are my whole heart, and my whole world.

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October 2017

Abstract

Background: More women today breastfeed for shorter periods of time or not at all. Lack of education and promotion has lead society to shame breastfeeding mothers. The drop in breastfeeding rates up to the age of one warrants further research on how to better educate the public on its importance. **Purpose:** The purpose is to develop a webpage that will help promote and educate individuals about breastfeeding, its benefits, and a breastfeeding mother's rights. Informal needs assessments suggest that support and education may help to promote further duration of breastfeeding. Secondary data also suggests that further education and support may help to improve a mother's desire to breastfeed. Creation of a webpage that will promote breastfeeding and education may address these needs. **Implementation:** Using an informal needs assessment and secondary data, a webpage focusing on breastfeeding education and support was created. Topics to be covered include: breastfeeding and its benefits, a breastfeeding mother's rights, and exclusively pumping. The site has been promoted on support groups through social media. Conclusion: Further breastfeeding education and promotion is needed. Those who visit the page will become more aware of breastfeeding, its benefits, and a breastfeeding mother's rights. This page is expected to promote a better understanding and acceptance of breastfeeding within public areas and encourage mothers to breastfeed up to at least the first year of life.

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Chapter 1

Introduction

Statement of the Problem

In the United States, breastfeeding has taken an overly sexualized role within society. Although breastfeeding is the most natural way to feed one's child, many mothers who attempt to breastfeed are met with criticism and backlash from society stating that she is abusing her child and is "sick" for doing so. Even though Western society views bikinis, low-cut tops, and skin revealing attire acceptable, a mother breastfeeding discreetly in public can be seen as awkward, disrespectful, and uncomfortable (Sayers, 2014). Unfortunately, this lack of education on breastfeeding practices in the United States is leading to a drastic decline in women breastfeeding their child for a minimum of one year after birth. Many individuals are unaware of the benefits that breastfeeding has for both mother and child. Possibly, if more individuals knew of these benefits, we may see an increase in the number of breastfeeding women and those who support it. At birth, four out of five women choose to breastfeed (Centers for Disease Control and Prevention, 2015). By six months, breastfeeding rates fall to 43%, and by one year, only 34% of infants continue to be breastfed (U.S. Department of Health and Human Services, 2011). Again, this can be attributed to the lack of support that the mother receives from both inside and outside of the home for her decision to breastfeed.

Background and Significance

Breastfeeding and its promotion are important aspects of public health due to short and long-term health benefits that it provides. The World Health Organization (2016) recommends that a child is exclusively breastfed for the first six months of life and then continues to breastfeed along with other foods up to at least the age of one year. Breastmilk is constantly changing to meet a child's needs while also strengthening his or her immunity. Breastmilk is

associated with preventing disease and illness in children such as: childhood leukemia, Sudden Infant Death Syndrome (SIDS), childhood obesity, and type 2 diabetes (Women's Health, 2017). However, the breastfed child is not the sole recipient of benefits from breastfeeding. Mothers who choose to breastfeed also receive both short and long-term physical and mental benefits. Breastfeeding is also a key contributor to the prevention of illness and disease that are common among women. Some of the health benefits for the mother include: a natural (though not failsafe) method of birth control, reduced risk of breast and ovarian cancer, reduced risk of type 2 diabetes, and a reduced risk of post-partum depression (World Health Organization, 2015). Breastfeeding also provides a peace of mind as it is always available, the perfect temperature, and is free of charge, whereas formula can cost an average of \$1700 a year (Hamm, 2013). Unfortunately, many breastfeeding mothers are unaware of such advantages.

Although breastfeeding is more cost-efficient, more American women are formula feeding instead. Sadly, many mothers are given outdated information about breastfeeding, and the formula industry often uses this to portray its product as "natural" and just as healthy as breastfeeding. Formula is pushed onto new moms as formula companies claim that their product is comparable to breastmilk (Urban, 2014). This can be done through advertisements stating that formula offers the same nutrients as breastmilk, or by free samples given to mothers when they sign-up online through baby registries. These claims in turn lead more women to turn to formula due to the convenience of preparing a bottle versus stopping to feed directly from the breast in public. If more women were educated on the benefits of breastfeeding not only to their child but to themselves, they may be more willing to breastfeed for longer time periods.

Breastfeeding rates also decline when a mother returns to work. In 2009, only 25% of employers reported that they provided an on-site lactation room for breastfeeding mothers

(Centers for Disease Control and Prevention, 2016). While many states require places of employment to provide proper lactation rooms, many mothers often pump in unfavorable places such as public restrooms or cars in order to avoid conflict with other employees. On March 23, 2010, President Barack Obama enacted the Patient Protection and Affordable Care Act which included an amendment to Section of the Fair Labor Standards act, requiring employers to provide a reasonable break time to breastfeeding employees to express breastmilk (Raju, 2014). Unfortunately, the act only protects mothers for the child's first year of life. Even with federal laws protecting breastfeeding mothers, many women are still subject to unfavorable time to pump, and small employers continue to make this difficult for such employees as they are often not required to follow such laws (Murtagh & Moulton, 2011). To see a change in the number of American women breastfeeding today, the issues concerning this topic need to be addressed head on.

Description of the Project

A community webpage that covers many breastfeeding related topics that are often overlooked was chosen to be developed. The webpage domain is found at moomoomomma.org. Topics covered throughout the webpage include: breastfeeding practices in the United States, a breastfeeding overview and its benefits to both child and mother, post-partum expectations with breastfeeding, exclusively pumping mothers, storage and handling of breastmilk, and a breastfeeding mother's rights in the workplace. Upon initiation of this project, the goal was to identify breastfeeding topics and focus on key points that many mothers may want more education on. However, before this webpage could be presented to the public, it was important that input from breastfeeding mothers was collected so that their topics of concern regarding

breastfeeding, its challenges, and the changes that they themselves would like to see were addressed.

Assumptions, Scope, and Limitations of the Project

It is assumed that moomoomomma.org will bring a better social understanding and acceptance of breastfeeding to all those who visit the page. Moomoomomma.org offers different topics of discussion and tips, allowing the reader to feel comfortable with their choice to breastfeed, and to encourage them to continue breastfeeding for longer periods of time. By focusing on some of the most common concerns of breastfeeding mothers, moomoomomma.org is providing a page that offers reassurance and valuable information all in one place. However, a limitation to this project is that it does not cover every topic of concern when attempting to breastfeed. Currently, there are six topics of concern that are addressed throughout this page, but there is still potential for further growth.

Definition of the Key Terms

Affordable Care Act(ACA)- A health reform legislation passed by the 111th Congress signed into law by the United States president, Barack Obama, in March 2010.

Areola- dark area around the nipple

Exclusively Breastfeeding- No other food or water given except breastmilk. Breast milk can be given either directly from the breast or by expressing (pumping) the milk from the breast and feeding it to the infant through a bottle, sippy cup, spoon, and tubing.

Exclusively Pumping- Exclusively using a breast pump to induce and maintain lactation as opposed to establishing a direct latch between mother and child to the breast.

Galactosemia- The inability to fully break down the simple sugar galactose. Galactose makes up half of lactose, a sugar found in milk.

Postpartum- Following childbirth or after the birth of a child.

Chapter 2

Review of the Literature

What is Breastfeeding and the Related Recommendations?

Breastfeeding is the most beneficial way to feed one's child, and is the oldest practice of doing so. Breastfeeding involves feeding a mother's breast milk to her infant, either directly from the breast or by expressing (pumping) the milk from the breast and feeding it to the infant through a bottle, sippy cup, spoon, and tubing (U.S. Department of Health and Human Services, 2017).

While there is no set length of time to breastfeed one's child, there have been many studies encouraging breastfeeding for a minimum of one year. The American Academy of Pediatrics (AAP) (CDC, 2015) recommends breastfeeding for at least one year, while the World Health Organization recommends continued breastfeeding up to the age of two or beyond. Unfortunately, many women today are not meeting the minimum length of time recommended for breastfeeding.

The Benefits of Breastfeeding

Although breastfeeding is the oldest practice of feeding one's child, it has unfortunately become less of a norm and increasingly viewed as a burden and inconvenience. However, there are many benefits to breastfeeding that may go overlooked, and if known, may in fact increase the number of women starting and/or continuing to breastfeed. Breastfeeding provides an infant with essential calories, vitamins, minerals, and other nutrients needed for ideal growth, health, and development (U.S. Department of Health and Human Services, 2017), which are essential needs during the early years in a child's life. Breast milk contains antibodies that help protect infants from common childhood illnesses such as diarrhea and pneumonia, the two primary

causes of child mortality globally (World Health Organization, 2015). Breastfed children are also at a lower risk of developing asthma, leukemia, childhood obesity, Sudden Infant Death Syndrome (SIDS), and type 2 diabetes (Women's Health, 2017). Brain development is also an important benefit to breastfeeding. Research has shown improved brain development in breastfed children compared to children who are formula fed (Brown University, 2013). Breastfed children have proven to do better in school and other social events compared to children who were strictly formula fed. Breast milk is easily digestible and helps to prevent upset stomach, diarrhea, and constipation (Why is Breastfeeding Important for Your Baby, 2015). Because the child's body is still developing, this is especially valuable in the first few months of a child's life. Breastfeeding also creates a close bond between both mother and child because of the time spent together while feeding. On average, a single breastfeeding session can last anywhere from five to forty-five minutes (Nursing Mothers Counsel, 2017).

The mother also benefits greatly from breastfeeding. Breastfeeding helps to reduce the risk of certain cancers such as breast and ovarian cancer. Ovarian cancer was found to be 27 percent higher for women who had never breastfed than for those who had breastfed for some period (U.S. Department of Health and Human Services, 2011). Another physical benefit of breastfeeding is that a woman's body burns twenty calories per ounce of breastmilk, which in turn helps with post-partum weight loss (Luciani, n.d.). There are also emotional benefits for the mother. Breastfeeding may help to lower the risk of postpartum depression, a serious condition affecting almost 13 percent of mothers (U.S. Department of Health and Human Services, 2011). Currently, postpartum depression is neither fully understood nor recognized in many cases, but with the help of breastfeeding, its effects can be lowered and help to ensure the health of both

mother and child. If more women knew of these benefits, it is possible that there may be an increase in the number of breastfed infants today.

Breastfeeding also carries economic benefits. Breastmilk is free and easily accessible. One ounce of formula on average costs 19 cents per ounce (Hamm, 2013). On average, an infant drinks 9,125 ounces of milk/formula per year, resulting in more than \$1,700 spent on formula annually (Hamm, 2013). For the first six months of life, breastmilk can sustain a child and meet all of their nutritional needs for proper growth and development (Centers for Disease Control and Prevention, 2015).

Breastfeeding Practices in the United States

What was once a common practice, is now harder to come by. At birth, about 4 out of 5 women breastfeed their children, but by the age of six months that number decreases to 22% of women, and by one year, only 15% of women continue to breastfeed (Centers for Disease Control and Prevention, 2016). This is in part due to lack of education as well as support from family, friends, and society. Many mothers are still not reaching the recommendations for exclusively breastfeeding (Centers for Disease Control and Prevention, 2016). Breastfeeding can prove to be especially difficult for working mothers, as finding proper accommodations to express milk can place a strain on the breastfeeding relationship between both mother and child. Few employers have support programs for workplace lactation (Marcus, 2017). In turn, this leads to many mothers quitting their breastfeeding journey early due to stress and fear of losing their jobs.

What to Expect Postpartum with Breastfeeding

After giving birth, many women are unaware of what to expect, and the changes happening to their body. Some challenges a breastfeeding woman may face include: women

being unaware of the presence of colostrum, reasons causing a delay in milk production, possible troubles they may face while breastfeeding, and when it is not safe to breastfeed. It is important that women are made more aware of these conditions and circumstances before beginning their breastfeeding journey.

Many women experience the presence of colostrum leaking from their breasts as early as their fourth or fifth month of pregnancy. Colostrum is a fluid that is yellow in color and contains millions of protective cells (Johns Hopkins Medicine Health Library, n.d.). Colostrum is the most nutrient packed gift that a mother can feed her child. It is full of antibodies to help the child build up its immunity during its first few days outside of the womb. Colostrum helps babies pass their first bowel movement, which in turn helps to reduce the chances of the baby having jaundice ("Breastfeeding...For My Baby. For Me.", n.d.). By the third to fifth day, most women's will experience steadier milk production.

Unfortunately, there are possible circumstances where a mother's milk may be delayed. Some conditions that may cause a delay in milk production include: severe stress, cesarean (surgical) delivery, bleeding after birth, obesity, infection or illness with fever, diabetes, thyroid conditions, and strict or prolonged bed rest during pregnancy (Johns Hopkins Medicine Health Library, n.d.). It is important to start breastfeeding as soon as possible after birth to assist in milk production and to establish an adequate supply.

Possible physical challenges faced while breastfeeding include: tongue/lip ties, cleft palate, sore nipples, thrush, and plugged milk ducts. Tongue ties affect an infant's ability to breastfeed because they are not able to move their tongues properly due to a tightness in tissue in that area (Ritter, 2017). Luckily, tongue and lip ties can usually be fixed promptly with the help of a minor procedure. A cleft palate is a split or opening in the roof of the mouth. A cleft palate

can be submucosal (not seen by the eye and often missed during postnatal checks), or involve the soft palate, or both hard and soft palates (Farrow, n.d.). Luckily, cleft palates are fixable in multiple staged surgeries. Sore nipples are usually a result of poor positioning or an incorrect latch. Some remedies for sore nipples include: making sure the baby has both the nipple and a large part of the areola in their mouth, holding the baby close, receiving help to check that the child is in the correct position, nursing the baby before they are very hungry by watching for early hunger cues, massaging the breasts before feeding to help the let-down reflex, and changing feeding positions ("Breastfeeding...For My Baby. For Me.", n.d.). Thrush is another common challenge of breastfeeding. Thrush is a yeast infection that can form on the nipple, on the breast and in the baby's mouth from contact with the nipple ("Breastfeeding...For My Baby. For Me.", n.d.). It is easy to spread thrush between mother and child, so it is important to be seen by a health care provider immediately, so that it can be treated with antibiotics. Finally, plugged milk ducts are caused by an area of the breast that is not being completely emptied ("Breastfeeding...For My Baby. For Me.", n.d.). It is important to drain the plugged duct by feeding the child on the affected breast. If not addressed in time, plugged milk ducts can lead to more serious problems, such as mastitis.

Women must also know when it is not recommended to breastfeed. While breastfeeding is beneficial, it can be a dangerous way of spreading illness and disease. It is not advised to breastfeed an infant diagnosed with galactosemia, which is an inability to fully break down the simple sugar galactose. Galactose makes up half of lactose, a sugar found in milk. A woman should not breastfeed if one of the following conditions is experienced: the infant's mother has been infected with the human immunodeficiency virus (HIV); is taking antiretroviral medications; has untreated, active tuberculosis; is infected with human T-cell lymphotropic virus

type I or type II; is using or is dependent upon an illicit drug; is taking prescribed cancer chemotherapy agents, such as antimetabolites that interfere with DNA replication and cell division; or is undergoing radiation therapies (Centers for Disease Control and Prevention, 2016).

Exclusively Pumping Mothers

While many women feed directly from the breast, not all women are able to do so. Due to physical barriers such as flat or inverted nipples, or for personal choice, some women choose to exclusively pump or express her milk for her child. Through recent years, expressing milk and obtaining necessary pump products has become easier for mothers thanks to the Affordable Care Act (ACA). ACA requires health plans to cover breastfeeding support and supplies ("The Affordable Care Act: Breast Pumps, Lactation Services, and Coverage", 2013). It is important that the mother understands her health insurance benefits however, so that she is aware of what services are covered and to what extent.

There are three different types of breast pumps: manual, battery powered, and electronic. Breast pumps are used to extract milk from the breasts by creating a seal around the nipple and applying and releasing suction to the nipple ("Types of Breast Pumps", 2016). These pumps are used to mimic the baby's suckling at the breast in order to initiate the flow of milk from the breast. With the proper pump and practice, many women can pump in as little as ten to fifteen minutes ("Breastfeeding: How to Pump and Store Your Breast Milk", 2017).

A woman choosing to pump or that is unable to breastfeed directly on the breast is still able to maintain a strong bond with her child. The option of skin-to-skin contact has proven to provide benefits for the child. Compared with babies who are swaddled or kept in a crib, skin-to-skin babies have been noted to stay warmer, calmer, and cry less (Cleveland Clinic, 2016).

Other members of the family, such as the father, can also benefit from skin-to-skin contact with the child.

Expressing Breast Milk and Storage

Many mothers are constantly on the go and away from their home. For example, many mothers choose to express their milk when leaving their child in daycare or with another caregiver. When expressing milk however, the mother must keep a pumping schedule in order to maintain her supply. Although pumping brings about its own challenges such as the need to stay at least one feeding ahead of the child and the buildup of dirty dishes and supplies, the mother is able to provide their child with the same nutrients that they would at the breast. Breastmilk can be stored in the refrigerator for up to six days or freezer for up to six months for future use. Many insurances are required to cover the cost of breastfeeding storage supplies in addition to breast pumps as well (Women's Health, 2017). It is important that the proper equipment is always used when expressing milk. Ordinary plastic bags such as sandwich bags should be avoided, as these can easily leak or spill (Centers for Disease Control and Prevention, 2017). This ensures the safety of the child and prevents the spread of illness and disease.

A Breastfeeding Mother's Right in the Workplace and Society

Breastfeeding mothers deserve the same rights as all employees. It is important to know a mother's rights because she must pump while at work as to maintain her milk supply and provide for her child. Regardless of the location, a baby must be fed if hungry, which is why it is important for everyone to know a breastfeeding mother's rights both within the workplace and society. In 2015, it was reported that 54% of all mothers with children younger than 12 months were employed, and 73% of those employed worked full-time (Centers for Disease Control and Prevention, 2016). Women who choose to rejoin the workforce after their birth of their child are

in need of proper accommodations, so that they may express their milk and feed their child. Employers must provide a location in which women can express milk privately (Murtagh & Moulton, 2011). California state law for example, states the requirements for such privacy. California Labor Code, Section 1031 states, "The employer shall make reasonable efforts to provide the employee with the use of a room or other location, other than a toilet stall, in close proximity to the employee's work area, for the employee to express milk in private. The room or location may include the place where the employee normally works if it otherwise meets the requirements of this section," (Marcus, 2017, p. 1). Further employer support is also needed when a breastfeeding mother returns to work. Support for breastfeeding in the workplace can be defined as: written corporate policies supporting breastfeeding women, teaching employees about breastfeeding, providing a private space for breastfeeding mothers, allowing flexible scheduling to support milk expression during work hours, providing on-site or near-site child care, providing high-quality breast pumps, and offering professional lactation management services and support (Shealy, Li, Benton-Davis & Grummer-Strawn, n.d.).

In most states, women are entitled to breastfeed their child in public areas. Forty-nine American states, the District of Columbia and the U.S.Virgin Islands have laws that allow women to breastfeed in any public or private location (National Conference of State Legislatures, 2017). It is important that women familiarize themselves with her state's laws, so that she is aware of her rights if ever faced with public shaming or discrimination in the workplace.

Gaps in Knowledge/Overall Understanding

Although there has been much research on breastfeeding, there are still gaps in literature. More recent data on the number of women who breastfeed their children between the ages of six months to a year would be beneficial. While there are many resources on breastfeeding and its

benefits, further education and promotion of breastfeeding is needed in society as to encourage women to breastfeed for a minimum of one year after birth. For those who are considering breastfeeding, it is important that they can gain enough information beforehand as to make the decision that is right for both them and their child.

Increased support through literature is especially needed for exclusively pumping mothers. Many times, these mothers are not given the proper recognition that they deserve. There are many negative views of exclusively pumping mothers that need to be corrected. Further studies of any negative effects or missed benefits from exclusively pumping rather than feeding directly from the breast may also prove to be beneficial. Additionally, more resources need to be provided to new mothers informing them of their rights both in the workplace and society. It may be beneficial to provide more literature to these mothers, along with a wallet sized card that they can carry with them that contains their state's breastfeeding laws. This in turn may help to spread more awareness and acceptance of breastfeeding within society.

Chapter 3

Design and Methodology

Project Design

Using an informal needs assessment, breastfeeding mothers on social media were asked questions to see where gaps in knowledge about breastfeeding may be and how to better educate others on this topic. Secondary data such as academic resources and journals were used to collect information on the benefits of breastfeeding, as well as to see where more support is needed. Once enough data was obtained, moomoomomma.org was created using weebly.com. The webpage addresses breastfeeding topics that were proven to be areas of concern by both breastfeeding mothers and through secondary data. Moomoomomma.org was created to be a simple to read webpage that presents the readers with detailed information and graphics addressing the different areas of concern addressed on each page.

Project Participants

For this project, participation of breastfeeding mothers who have breastfed one or more child was needed. An informal needs assessment was designed. Participants of the informal needs assessment were invited from the mother support groups within social networking sites. Selection criteria included any mother who has breastfed, either past or present, and aged fifteen years or older. If these mothers met the selection criteria, they were then asked to answer the needs assessment questionnaire (see Appendix A for the needs assessment questionnaire questions). Next, using the information gathered from the needs assessment, the webpage titled "Www.moomoomomma.org," was created using www.weebly.com. The main topics of concerns that breastfeeding mothers had mentioned in the needs assessment included: breastfeeding and its benefits, breastfeeding practices in the United States, what to expect postpartum, exclusively pumping mothers, handling and storage of breast milk, and breastfeeding

mothers and their rights in the workplace and society. The homepage of the site is dedicated to explaining the overall purpose of the site, and to introduce the author. It was important to bring a sense of comfort and connection to the reader, providing a source of support and companion in their breastfeeding journey. Each page consists of different graphics relating to the topic being presented to the reader. It was important to show the beauty of breastfeeding, as well as the hardships that may be faced while breastfeeding through these images. They also help to provide a visual to the reader so that they may understand the topics being presented to them.

Instruments

Two different methods were used to gain information from the breastfeeding community. For the first method, an informal needs assessment was conducted online through social media. A questionnaire was developed that asked questions regarding the woman's choice to breastfeed and when that was made, how long she chose to breastfeed, the woman's experience breastfeeding both inside and outside of the home, and the types of education she had received versus the education she wished she had received before starting her breastfeeding journey. The informal needs assessment helped to gain input from breastfeeding mothers and hear about what they felt society should know more about breastfeeding, and where society still struggles when concerned with this topic.

Secondary data such as academic resources and journals were used to better understand the benefits of breastfeeding, current practices of breastfeeding mothers in the United States, and other important aspects of the breastfeeding journey. The secondary data was also used to identify where gaps in knowledge exist. Data was collected by using Google Scholar and informational handouts obtained from various medical settings. Terms to find these sources included: breastfeeding, benefits of breastfeeding, breastfeeding practices, laws, and workplace

discrimination. Resources were then narrowed down based on what was most recently published, as to ensure better accuracy. After sorting through more than seventy resources, thirty-seven academic resources were cited.

Using the information collected from the needs assessment, the six topics of discussion for the page were chosen. Moomoomomma.com was designed by using Weebly.com.

Weebly.com was the service chosen to build and host moomoomomma.org due to the analytics capabilities, as well as the ease of building and designing of the webpage. Each topic was chosen to be displayed in an order that would be simple enough for each visitor of the page to understand and follow.

When selecting the graphics for moomoomomma.org, it was essential to choose an image that directly related to the topic being discussed on each page. Each graphic holds a powerful message to the reader and shows both the joys and hardships that may be experienced while breastfeeding. Readability of each page was important to address, so it was ensured that font size and color did not blend into the page's background images.

Each page is broken up into different sections that the reader can easily locate. For example, for the "What is Breastfeeding and Its Benefits?" section of moomoomomma.org, the reader can easily locate the section discussing the benefits that breastfeeding has on a child versus locating the section discussing how long it is recommended that a child is breastfed for. It was also important to add an introductory paragraph to each section page to not only give the reader a brief overview of what to expect from this page, but also to gain a feeling of understanding and relatability when facing this type of situation in their own breastfeeding journey.

Measurement

One hundred needs assessments were administered to participants, as this was the maximum number of respondents allowed through surverymonkey.com. Forty-two percent of mothers who responded to the informal needs assessment began breastfeeding/pumping around the ages of twenty-three to twenty-six, with twenty-seven years old or more being the second highest response (32%). An overwhelmingly 96% of women claimed that they had chosen to breastfeed/pump before the birth of their child. The majority of women (55%) received education on breastfeeding/pumping from a healthcare provider only after the birth of their child while only 5% had received education beforehand. And while many women claimed that they received support to breastfeed/pump from a healthcare provider (88%) and their family (83%), there were still women who claimed that no support was received (17%). Unfortunately, it was also noted that 39% of respondents feared breastfeeding/pumping in public, 14% were shamed for breastfeeding/pumping in public, and 35% chose to never breastfeed/pump in public. The mothers who responded to the survey were also given the opportunity to identify five breastfeeding/pumping common questions and concerns that they had during their breastfeeding journey (see Appendix B for the top five topics of interest from the needs assessment). These top five topics included: the effects of certain foods and drinks on breastmilk (66%), what to expect post-partum with breastfeeding (65%), drying up breastmilk once baby is weaned (55%), breastfeeding mothers' rights in the workplace and society (45%), and breastfeeding and its benefits (43%). The informal needs assessment suggests that further breastfeeding support and education may help to promote further duration of breastfeeding. Secondary data also suggests that further education and support may help to improve a mother's desire to breastfeed for a longer period of time.

Within the first twenty-four hours of its implementation, moomoomomma.org received over four hundred and fifty visitors, referred by social media and word of mouth. Within two weeks of its implementation, moomoomomma.org managed to receive over one thousand views. Since then, moomoomomma.org is averaging fifteen views per day, with its biggest referrer being Facebook.com. Each view of the page is tracked with the help of weebly.com. To continue the growth of page views, it is important to advertise moomoomomma.org to different health care facilities, such as a neighboring health clinics, in order to gain a larger following.

Chapter 4

Results

After the site's implementation, moomoomomma.org reached 450 visitors within the first twenty-four hours (see Appendix C for images from www.moomoomomma.org). In less than three weeks, the site had reached over a thousand views, thanks to its promotion through social media and word of mouth. Visitors were given the opportunity to provide feedback. Both mothers who have breastfed and individuals who have not breastfed replied with positive responses and words of encouragement. Mothers wrote about how content she was by speaking about her rights to feed her child whenever and wherever she pleased, how it was nice to be recognized for her dedication towards breastfeeding, and how feelings of empowerment were increased. Many mothers who visited the site shared their experiences with how little information they were provided when they first began to breastfeed and how they had hoped for something like this that was encouraging and easy to understand. Upon viewing these results, it was certain that this site was already bringing further education and support for breastfeeding to others.

Moomoomomma.org was built to be easily navigable for the page visitor. The homepage consists of seven tabs on the top, one for each topic covered within the site. There are also links to each tab at the bottom of the homepage. Each link provides a brief overview to the reader, so that they may decide if this topic may be of interest without having to scroll through pages. The seven tabs include: home, practices, benefits of breastfeeding, postpartum, exclusively pumping, storage, and your rights. This page was created using up-to-date literature, and is easy to update so that new information can be provided at any time. This proves to be beneficial to as the webpage expands and can offer other resources in the future such as bogs and forums.

As expected, many of the women who responded to the needs assessment stated that they were given minimal support throughout their breastfeeding journey, and that they wished more education and promotion could be provided to the public. It is obvious that lack of support has put a toll on many breastfeeding mothers and that more needs to be done to better educate the public on this topic. The needs assessment also revealed that social embarrassment plays a role in why women choose not to breastfeed. It is obvious that many women today feel embarrassed or afraid to breastfeed in public if they must deal with a society that holds negative views towards this subject.

However, it was not expected to observe that nearly all the women who answered the informal needs assessment would state that they chose to breastfeed before the birth of their child, even though they received little to no education prior. This raises a red flag however, as this shows that many times women enter the breastfeeding journey with lack of knowledge on the expectations of breastfeeding. In turn, this can lead to many women becoming frustrated and quitting the journey before their child even reaches the first year of age and continue to hold a negative view towards breastfeeding as time goes on. If a woman is faced with the challenges of breastfeeding and receives little to no education, it can become discouraging. Currently, there is a low supply of trained providers regarding breastfeeding and breastfeeding education (Davis, 2013). Therefore, this enforces the idea that more education and promotion is needed.

This site will help to imply the need for further education and promotion of breastfeeding in society. Moomoomomma.org focuses on the importance of breastfeeding and the current lack of education and support provided not only by family and friends, but by many health care providers as well. It is hoped that this site will be a stepping stone for others to come up with

other ways to educate others on the topic of breastfeeding and promote its acceptance within society.

Chapter 5

Discussion

Moomoomomma.org addresses many concerns and questions that breastfeeding mothers have when beginning their breastfeeding journey, but are often denied or given too little information on by their family, friends, and health care providers. This webpage possesses much strength. It is easy to understand, easy to navigate through the pages, captures the reader's attention, and uses current and reliable information. The font and layout used for his site was also kept in mind when creating this site, as to make it easier to read for some viewers.

Unfortunately, there are also limitations to moomoomomma.org. There are many more topics that could be covered in the site's tabs that are provided, such as the "What to Expect Postpartum" section. Unfortunately, there are many topics of concern that are not able to be covered within just a few tabs. However, if a monthly blog is designed in the future, this may be a way that more topics can be addressed without having to add multiple tabs to the site.

When conducting the needs assessment for this project, it was interesting to note that many of the results obtained mirrored the information that was provided through secondary data. Many of the women who had answered the needs assessment stressed the fact that they did not receive the proper support or encouragement to breastfeed. They also mentioned that their health care providers did not educate them on breastfeeding before giving birth. Major obstacles that mothers face when they intend to breastfeed often include lack of support from family and lack of up-to-date information and instruction provided by health care providers (U.S. Department of Health and Human Services, 2011). If more support and education were to be provided to these mothers however, we may see an increase in the number of breastfed children up to the age of one or longer.

Conclusion

This webpage was created to provide further resources on breastfeeding to its visitors.

Those who visit the webpage will become more aware of breastfeeding and its benefits, as well as the rights of a breastfeeding mother not only in her home, but within her surrounding community. It is expected that this page will promote a better understanding and acceptance of breastfeeding within public areas and encourage mothers to breastfeed their children to at least the first year of life.

By creating a page that is easy to understand and inviting to the reader, individuals become more open to the idea of learning more about breastfeeding. Rather than negatively referring to formula fed infants, this site recognizes that while breastfeeding may not be for all, it is a beneficial option that deserves more recognition and understanding. This site also welcomes feedback and suggestions from its viewers so that it may continue to grow over time and become a better educational tool. Therefore, this site has already began to achieve its goal in promoting further education and support for breastfeeding within society.

Significance to the Field of Public Health

This webpage will help to bring better awareness and support towards breastfeeding.

This site will work to encourage longer breastfeeding practices among breastfeeding women, and help to gain a better acceptance of it within society. The overall goal of this project is to provide society with a reliable resource where the reader will feel comfortable learning about breastfeeding and understanding its importance to public health. Rather than focusing on one topic, this site provides the reader with the answer to many common questions and concerns.

Unfortunately, more women are breastfeeding for shorter periods of time or not at all. As such, this site works to encourage breastfeeding mothers to continue breastfeeding for at least the

first year of the child's life. Without this type of nutrition provided to the child, the prevalence of childhood illnesses may increase. Breastfeeding is so beneficial that it has the potential to save the lives of 800,000 children under the age of five worldwide each year (Infant and Young Child Feeding, 2016). By promoting further education and support for breastfeeding through this site, we can help to prevent these disease and illnesses from occurring and help better the health of society.

In conclusion, it is the hope that this webpage will bring continued education and promotion to not only breastfeeding mothers, but American society as well. Mothers should not be shamed for providing the best nutrients to her child. Rather, she should be commended for her efforts and encouraged to continue her dedication to promoting the health of her child. If we wish to see a happier and healthier society, what better time to start than at the beginning of life?

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Appendix A

Needs Assessment Questionnaire

Please answer the following questions to the best of your ability.

Br	eastfeeding Education and Promotion
	How old were you when you first began to breastfeed either directly from the breast or nping?
0	15-18 years old
0	19-22 years old
0	23-26years old
0	27 or more years old
2. 1	Did you decide to breastfeed before the birth of your child?
0	Yes
0	No
<i>3</i> . <i>1</i>	Did you receive educational classes and/or lactation support and advice from a professional
0	Yes, before the birth of my child
0	Yes, after the birth of my child
0	Yes, both before and after the birth of my child
0	No, not at all.
	Do/did you receive support and encouragement to breastfeed/pump from your health care ovider, i.e. doctor, nurse, midwife, etc.?
0	Yes
0	No
5. <i>I</i>	Do/did you receive support and encouragement to breastfeed/pump from your family?
0	Yes
0	No

6. Do/did you fear breastfeeding/pumping in public?
° Yes
° No
7. Have you ever been shamed for breastfeeding/pumping in public?
° Yes
° No
8. Do/did you breastfeed/pump in public?
° Yes
° No
9. How would you rate your breastfeeding/pumping experience?
© Excellent
© Good
° Fair
° Poor
10. Please choose the top 5 breastfeeding/pumping topics would you be interested in learning more about:
more about.
Breastfeeding and Its Benefits
Breastfeeding Statistics in the United States
•
What to Expect Post-Partum With Breastfeeding
Exclusively Pumping Mothers

How to Store/Handle Breastmilk

•
Breastfeeding Mothers' Rights in the Workplace and Society
Breastfeeding After Surgery
High Lipase Concerns
The Effects of Certain Foods and Drinks on Breast Milk
•

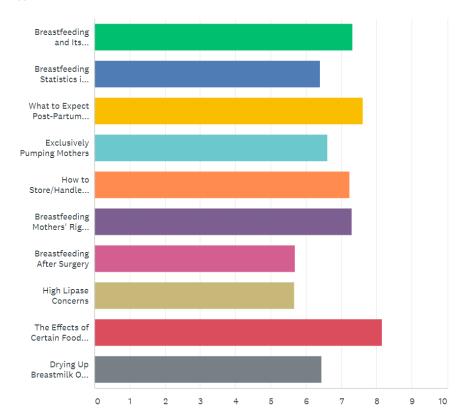
Drying Up Breastmilk Once Baby is Weaned

Appendix B

The Top Five Topics of Interest from the Needs Assessment

Please choose the top 5 breastfeeding/pumping topics would you be interested in learning more about:





Appendix C

Www.moomoomomma.org Webpage

www.moomoomomma.org Homepage



Breastfeeding Practices in the U.S.



What is Breastfeeding and its Benefits?



What to Expect Postpartum With Breastfeeding



Exclusively Pumping Mothers



How to Store/Handle Breast Milk





Some mothers are blessed with an excess milk supply. Luckily, it is possible to store your excess milk for future feedings. However, there are some very important guidelines to follow when handling and storing milk, as to not waste this precious

A Breastfeeding Mother's Rights in the Workplace and Society

