

**The Relationship Between Breastfeeding and Postpartum Depression**

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A Signature Honors Project Presented to the Honors College

East Carolina University

In Partial Fulfillment of the

Requirements for

Graduation with Honors

by

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Greenville, NC

May, 2023

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### **Background**

Breastfeeding is the perfect food source for human infants to promote health and wellbeing in infancy and beyond. According to the World Health Organization (2023), Center for Disease Control and Prevention (2021), and the American Academy of Pediatrics (Eidelman et al., 2012), infants should be exclusively breastfed for the first six months of life and continue breastfeeding until a minimum of one year of life. However, some obstacles inhibit the continuation of breastfeeding, such as mastitis, latch-on issues, demographics, mental illness, and many more. The topic of breastfeeding has been analyzed for many years and still continues to bring new findings to the medical world. Though this form of feeding has many benefits for both mother and baby, it may not always be an option.

Postpartum depression (PPD) is a psychological complication that can occur after childbirth and ranges in severity. Many mothers have unknowingly suffered from postpartum depression, and the number of people it affects continues to increase each day. Various findings support the claim that breastfeeding and PPD may be correlated, but they each vary in the factors that contribute to the findings. The purpose of this integrative review study will examine the factors that can account for the relationship between breastfeeding and postpartum depression.

### **Aim**

This study aims to examine the evidence gathered by researchers to further explain the effects that breastfeeding has on a mother's mental health. This information focuses specifically on the relationship between breastfeeding and postpartum depression. The negative and positive outcomes that accompany mothers who suffer from PPD and choose to breastfeed will be explained in further detail.

## **Significance**

Postpartum depression is a psychological complication experienced by some mothers post-childbirth, and the time it lasts varies from woman to woman. This mental health disorder is diagnosed by a healthcare provider and can be treated through various means (depending upon severity) such as medication, counseling, or hormone therapy. It is important to note that postpartum depression can occur in mothers regardless of being previously diagnosed with depression before conception (Wouk et al., 2016). Postpartum depression typically presents as anxiety, sadness, feelings of loneliness, extreme fatigue and more (Toledo et al., 2021, p.15). For mothers who have never previously experienced depression, it can be a very intimidating thing to face, especially after giving birth, and this is why educating women on this issue is crucial. The main issue with this topic is that postpartum depression does not have efficient advocates to discuss what it entails. Researchers have begun to study this psychological complication due to its specific nature (postpartum) and the way that it affects each woman differently.

## **Awareness of Postpartum Depression**

The psychological complication, postpartum depression, is a concept that has been assessed through years of research, but it still leaves researchers pondering the efficacy that breastfeeding has on mothers while they experience this mental health disorder. Within this integrative review of various articles that discuss the outcomes of breastfeeding, investigators have conducted similar live-studies with a wide variety of mothers. Upon completion of the studies, the common theme found was that this issue is more prevalent than previously thought and needs to be further studied in more specific ways to find solutions to lower the rate of postpartum depression.

## Literature Synthesis

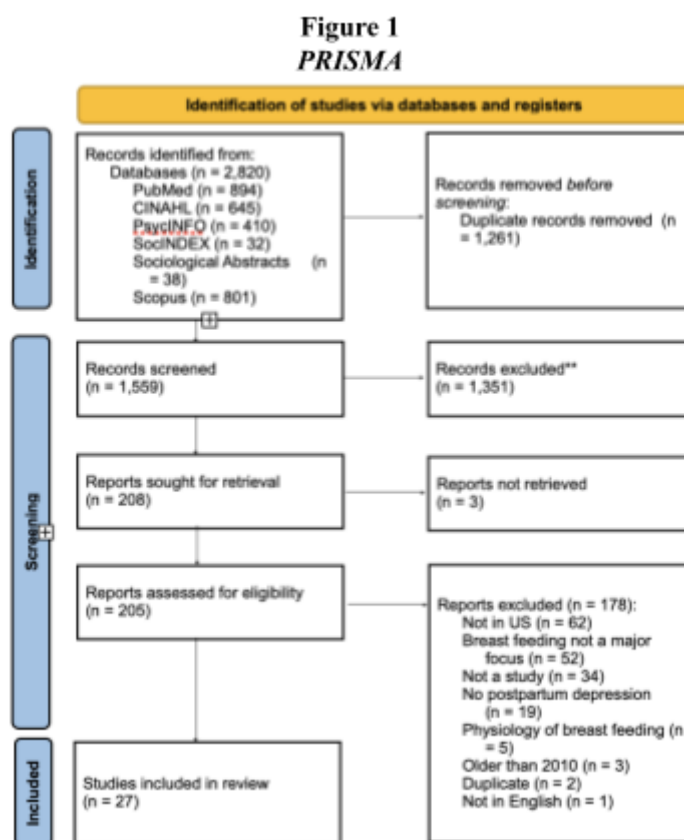
### Research Question

Mental health is a topic that entails various forms of illness and is unique to each individual. Postpartum depression is often correlated to “postpartum blues” and/or “baby blues”, but this complication is far from similar. One source discusses the topic of postpartum depression and breastfeeding, stating,

While postpartum depression can be brief and remit unexpectedly, approximately 30% of women in community samples who experience postpartum depression continue to be depressed up to two years postpartum [9], and 50% of women from clinical samples continue to have major depression throughout, and in some cases beyond, the first year postpartum [10]. Furthermore, the illness course can vary and chronic depression for these women may consist of stable mild depression, stable major depression, or recurrent episodes of major depression without full remission between episodes [10] (Pope & Mazmanian, 2016, par. 4).

This finding helps to support why this topic is important and expresses how different each woman’s experience can be if they suffer from postpartum depression. When this complication is experienced for extended periods of time, negative consequences can begin to arise for mother, baby, or both. For example, “Children of mothers with a history of postpartum depression may also be at increased risk of developing psychosocial and emotional or behavioural disturbances [21], as well as intellectual disabilities [22]” (Pope & Mazmanian, 2016, par. 6). Consequences that arise can affect those around the mother, such as their spouse or children. This can ultimately worsen the depression and leave lasting effects on those who have been exposed to it.

An integrative review was conducted from Summer 2022-March 2023 to synthesize the evidence of the relationship between breastfeeding and postpartum depression, and any significant factors that contributed to the phenomenon. The search included utilizing the following databases: PubMed, CINAHL, Scopus, SocINDEX, Sociological Abstracts, and PsycINFO. The results were uploaded into Covidence and all of the articles found were screened and extracted so that the information could be synthesized in an organized manner. The articles utilized exclusively focus on breastfeeding and postpartum depression. The following Prisma was created to show the databases utilized and how the articles were categorized.



The articles and studies utilized to help write this integrative review have provided sufficient information and statistics to further divulge into the current issue. This evidence helps to explain why this issue is important to discuss and the commonalities between mothers who

breastfeed and experience postpartum depression can be provided. Many of the studies follow similar themes, but some are stronger than others. There have been some studies that do not contribute to solving this psychological complication, but they give a good insight into the variations that can be experienced.

### **Data Collection**

Constructing this project in the form of an integrative review has allowed other researchers' findings to be analyzed and present on that topic, while also including what has been discussed in this paper. Though data was not collected from participants, other studies that have already been completed were able to be used in order to support the synthesis of the findings. Each of the articles that provide participants in a live-study perform distinct ways to present their information. Some of the articles utilize the following: directly-after-birth methods for better breastfeeding results, postpartum care/lack thereof, nonadherence to feeding guidelines, and specific encounters with postpartum depression.

### **Design**

An integrative review has been conducted to include experimental and non-experimental research to answer the proposed research question. An exhaustive review of the literature has been conducted with the assistance of HSL Liaison Librarian Amanda Haberstroh, and the Covidence systematic review software package has been employed to assist in the analysis.

### **Sample/Setting**

There were certain characteristics that were specific when choosing the inclusion criteria due to the fact that there are women who do not have the same access to healthcare like we do in America. It is known that not all women have equal access to healthcare across America, but there are more advantages compared to those in third-world/other countries. Another exclusion

that was necessary to add is a time frame of being no older than 12 years; women did not have the same access to different forms of feeding, medical advances have occurred, and depression medication has significantly changed.

The following criteria had to be met in order for a study/article to qualify for this integrative review: conducted in the United States, article no older than the year 2010, directly focuses on breastfeeding and postpartum depression, uses human subjects, and provides the complete article or study. These specifications allowed for more articles to be found that are broad enough to discuss many demographics, have more modern methods for mental health treatments and infant feedings, and study human mothers and babies rather than animals since the information would be skewed.

### **Data Analysis**

One study in particular followed young adult pregnant females and their partners from pregnancy to one year postpartum in order to assess whether breastfeeding difficulty moderates this association. Sipsma et al. (2021) further explored this topic and found that there is a correlation between the difficulties experienced with feeding practices, stating,

Early breastfeeding difficulty appears to moderate the relationship between breastfeeding and postpartum depressive symptoms, such that among young mothers who report no difficulty, breastfeeding appears to lower postpartum depressive symptoms, and among young mothers who report much difficulty, breastfeeding appears to increase depressive symptoms. This potential negative effect of early breastfeeding difficulty on depressive symptoms is consistent with a small amount of previous research conducted among adult mothers (Sipsma et al., 2021, p. 5).

This particular study emphasizes the importance of addressing and minimizing breastfeeding difficulties early on in order for mothers to experience less symptoms of PPD, such as frustration, irritation, and underperformance (as compared to other mothers).

Understanding the common barriers that prevent mothers from breastfeeding is crucial for proposing strategies that would help to better explain the relationship between this form of feeding and psychological complication. Many potential risks deter mothers from breastfeeding, including the following: demographic risk (low income, not having a partner, low education, young age), childhood trauma, maternal depression pre or postpartum, and social support (Johnson et al., 2021). Each mother experiences different feelings/emotions before, during and after pregnancy, and it is important to assess these women so that negative outcomes can be avoided. It is also crucial to understand why a mother chooses their preferred feeding method and to educate them about the differences and similarities between the options.

Both mothers and babies benefit greatly from the effects of breastfeeding, but often the mothers can suffer from negative aspects that form during this intimate period. Researchers have gathered abundant evidence that supports the fact that mothers can have both positive and negative experiences with breastfeeding and that it is not uncommon for this to occur. Toledo et al. (2021) highlights the importance of breastfeeding practices on PPD and notes the following regarding the mental condition:

In clinical practice and in clinical research, PPD is variably defined as depression that occurs within 4 weeks and up to 12 months after childbirth (Stewart & Simone, 2016). Women suffering from PPD endure feelings of sadness, anxiety, extreme fatigue that makes it difficult to care for oneself or for others, feeling worthless, and even thoughts of harming oneself or child (APA, 2013). Women with PPD who are not treated may have



negative health outcomes, including difficulty bonding with and caring for their children, chronic anxiety, and are at an increased risk of substance abuse (Bernstein et al., 2008; NIMH, 2021). PPD is the greatest risk factor for maternal suicide and infanticide (Lindahl et al., 2005; Mauri et al., 2012). (Toledo et al., 2021, p. 15)

Historically, people have had their main focus on the benefits that babies experience during this feeding period and neglect the mother's needs and mental health. Breastfeeding is a sacrifice that the mother is willing to make to care for and provide for the baby, despite the negative outcomes that may accompany it. "Studies show that women are generally aware that breastfeeding carries potential advantages for their infant's intelligence and immune functioning, but unaware that it dampens the maternal stress response and doubles the amount of slow wave sleep that mothers enjoy" (Hahn-Holbrook, 2020, p.1). This information aids in showing that mothers are typically aware of the benefits for their baby when breastfeeding rather than the drawbacks that they may personally face related to their overall physical, and specifically, mental health.

Mothers naturally become tired and worn down during the breastfeeding period, but it is important to continue monitoring their mental/physical health and providing resources that can be beneficial for them and their baby presently, as well as in the future. One research article found that "women's mental health status before pregnancy should be considered in reproductive and prenatal care models" (Wallenborn et al., 2018, p. 6). This finding is indicative that maternal mental health should be prioritized and examined before conception due to the effects that can be experienced during and after pregnancy. Implementing this finding into medical practice allows an opportunity for depression screening to take place in all mothers-to-be in order to determine

risk factors they may be exposed to. This form of practice would utilize the upstream thinking model and attack the problem before it has the chance to become one.

Childbirth can create many different outcomes in the mother, but the most common psychiatric complication is Postpartum Depression (PPD). This complication affects a vast number of women and “in the United States, 10-19% of women in the general population experience PPD” (Lara-Cinisomo et al., 2017, p. 436). This statistic seems to represent a small number from an outsider's perspective, but it is quite large considering that the majority of cases go under-recognized and undertreated. This issue that mothers face tends to be ignored because people have normalized behaviors that fall under the classification of depression. In order to be diagnosed with PPD, the healthcare provider must first use the Edinburgh Postnatal Depression Scale as an additional resource to screen for depressive symptoms. The purpose of this tool is to identify women who may need further evaluation for PPD (Gregory et al., 2014, p. 321). Screening does not always occur if there is no evidence that suggests the presence of depression or another mental health condition. By utilizing this screening tool at each prenatal and postpartum visit, more mothers may be diagnosed sooner and problems could be prevented from occurring, such as the severity of postpartum depression mood swings.

Due to the significant impact that this psychological complication can have on a mother, studies have been conducted to help explore the connection between these two factors. Two key items that correlate with the phenomenon of whether or not breastfeeding can help lessen postpartum depression symptoms in mothers are the lactogenic hormones, oxytocin and prolactin. When the nipple is stimulated during breastfeeding, oxytocin is released and this hormone has “undeniable effects on decreasing maternal anxiety and the establishment of an emotional relationship between mother and infant” (Alimi et al., 2022). Similarly, Whitley et al.,

(2020) notes that oxytocin release is a natural response by the body to “suckling during breastfeeding” and “may play a physiologic role in multiple systems that affect HPA reactivity, physical responses to breastfeeding, and maternal- infant attachment and bonding. Similarly, maternal mood symptoms may also affect these systems by reducing oxytocin release” (Whitley et al., 2020, p. 2). This hormone has the potential to help regulate emotions and assist in bonding, so it is a vital factor when considering whether or not to breastfeed. Just as each mother has their own unique experience with breastfeeding, they also have their own specific amount of hormones that get released during this process. Due to there being a varying amount of hormones in each woman, it makes it more difficult to find one specific way to help them as a whole and solve the issue of PPD and the symptoms that accompany it.

### **Data Evaluation**

#### **Summary**

It is important to think of all aspects that accompany the field of maternal health and so the internal issues/conflicts that mothers face must be brought to the forefront and be analyzed to have better outcomes. This review could give good insight to those who are interested in this topic (breastfeeding and postpartum depression) or the field of Mother-Baby as a whole. Continuing to perform research so that better mental health outcomes for mothers can be achieved would greatly add value to this specific area of healthcare. Further implementation of research to study the effects of breastfeeding and its impact on mental health, specifically postpartum depression, will help mothers of all demographics.

Further studies regarding the relationship between breastfeeding and postpartum depression need to be conducted considering each mother’s experience is unique and not all outcomes are the same. One source states that “minimizing breastfeeding difficulties is critical

for improving postpartum depressive symptoms among adolescent and young adult mothers. Future research should explore this concept of early breastfeeding experiences and difficulties to better understand its effects on postpartum mental health.” (Sipsma et al., 2021, p. 6). Also, there are other factors that may contribute to the rate at which women experience PPD, such as breastfeeding cessation, but this is a topic that would need to be individually studied in order to have more definitive findings.

In closing, there is a general lack of awareness among mothers, and women as a whole, about the risks that accompany postpartum depression and why this topic is so important. This issue continues to exist and affects numerous women due to the different experiences that each mother goes through. There is no linear answer on how to fix this prevalent issue, but certain strategies can be implemented to help lower the rate at which mothers experience postpartum depression.

### **SHP Presentation**

These findings were presented at the Research and Creative Achievement Week, as well as for two Community Health clinical groups at the College of Nursing in April 2023. These presentations have allowed this information to be presented publicly in a way that displayed leadership and communication skills. Presenting this information has allowed a conversation to be sparked about this prevalent topic, and collaborating with various professionals was a great experience.

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