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IMPACT OF COVID-19 HEALTHCARE POLICIES ON POSTPARTUM  
DEPRESSION

A Major Paper Presented

by

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IMPACT OF COVID-19 HEALTHCARE POLICIES ON POSTPARTUM  
DEPRESSION

by

Hannah S. Browning

A Major Paper Submitted in Partial Fulfillment

of the Requirements for the Degree of

Master of Science in Nursing

in

The Onanian School of Nursing

Rhode Island College

2022

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## **Abstract**

This paper reviewed changes and effects of postpartum mental health during the COVID-19 pandemic. A comprehensive literature review presents topics related to postpartum depression and mental health during the COVID-19 pandemic. Policies established during the COVID-19 pandemic affecting postpartum women were analyzed using Russell and Fawcett's *Conceptual Model of Nursing and Health Policy* (2005). During this analysis, potential policy impacts on postpartum mental health are discussed. The primary aim of this paper is to review care delivery changes that impacted postpartum mental health, changes to care that can potentially be made in the future to lessen that impact, and factors that need to be considered when making policy changes during a time of health crisis.

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# IMPACT OF COVID-19 HEALTHCARE POLICIES ON POSTPARTUM DEPRESSION

## **Background and Problem Statement**

Pregnancy, childbirth, and postpartum form a life altering period in a woman's life. One in eight women report symptoms associated with depression after giving birth (CDC, 2020). Postpartum depression can last months or years after childbirth and can affect the way a woman cares for herself and the way she cares for and interacts with her newborn (CDC, 2020). Women must deal with many changes during the postpartum period; physical changes such as hormonal fluctuations and pain in recovery as well as psychosocial changes such as experiencing changing roles in their personal relationships and having feelings of isolation and loneliness.

The COVID-19 pandemic changed the way of life for most people all over the globe. Potential and actual negative impacts on physical health, required and suggested use of social distancing techniques, and constantly changing and developing information could lead to feelings of isolation, loneliness, stress, and anxiety related to the novel virus (CDC, 2021). A significant increase in the number of adults in the U.S. reporting symptoms of stress, anxiety, and depression during the COVID-19 global pandemic was observed compared to data from before the pandemic (Mayo Clinic, 2020). Women who delivered infants during the COVID-19 pandemic were an especially vulnerable population because they were at risk for both postpartum depression after childbirth and

increased symptoms of stress, anxiety, and depression related to the presence of the COVID-19 pandemic.

Examining the effects of the COVID-19 pandemic on factors potentially impacting postpartum depression is important for a variety of reasons. Data can help to further identify the most significant factors attributing to postpartum depression impacting both the health of mothers, their newborns, and their families. Examination of policies affecting pregnant and postpartum women and their families that were put in place during the COVID-19 pandemic can show areas for improvement in care of the pregnant and postpartum woman and expose existing health disparities in this patient population. The information can also shed light on who may be most at risk for postpartum depression and if the risk changes during a global health crisis. Examination of policies and data during the COVID-19 pandemic relating to these issues can be used to help increase efficacy and change methods used for treatment of postpartum depression as well as highlight where resources should be focused to help support mothers and their expanding families. The purpose of this project was to analyze policies put in place during the COVID-19 pandemic and assess how the resulting healthcare delivery changes could have affected postpartum depression and the factors that influence postpartum depression development.



## **Literature Review**

A literature review was conducted using the following databases, Elsevier, ProQuest, EBSCOhost, CINAHL, Wiley Online Library, and PubMed. The key terms searched were as follows: “postpartum depression”, “postpartum depression + COVID-19”, “mental health + COVID-19”, “postpartum depression + risk factors”, “postpartum depression + prevention”, “factors that decrease postpartum depression”, and “postpartum depression + preventive factors”. The literature searched included only peer reviewed, full text journal articles, published in English within a ten-year period, 2002 to 2022. For literature specifically regarding postpartum depression and COVID-19, only articles identifying groups of participants within the United States were reviewed as studies involving COVID-19 are new and the policies put in place during COVID-19 that were discussed in this paper were ones put in place in the United States.

### **Postpartum Depression**

Postpartum depression can have lasting effects on both mother and child. Furthering research, educating patients and providers, efficient diagnosis, and effective treatment are all important variables in reducing the impacts of postpartum depression. An article by Logsdon, et al. (2006), examined adverse effects of postpartum depression in relation to their impact on the maternal role and how depression affects both mother and child. Logsdon, et al., (2006) named the possible symptoms of postpartum depression as depressed mood, severe anxiety, diminished pleasure or interest in activities, loss of appetite with weight

loss, insomnia and fragmented sleep even when baby is sleeping, fatigue, decreased energy, feelings of worthlessness or inappropriate guilt, decreased concentration or ability to make decisions, and recurrent thoughts of death or suicidal ideation. These symptoms could lead to a decline in functional ability for the mother and impairments both physically and mentally. Postpartum depression could result in disorganized activity in mothers, impaired cognitive processes, and difficulty adhering to recommended preventative health service schedules (Logsdon, et al., 2006). The impact of these symptoms on postpartum woman could then affect the interactions she has with her newborn which can lead to an impact on healthy development of the newborn. A synchrony between mother and infant exists in the interaction they have with each other, the infant signals its needs through cues, the mother responds to the infant's cues, and the infant learns that future needs will be met (Logsdon et al., 2006). Postpartum depression could interfere with this process. Research showed that infants of depressed mothers tended to be fussier, vocalize less, and make fewer positive facial expressions (Logsdon, et al., 2006). The authors of this article stressed the importance of educating postpartum individuals on the topic of postpartum depression as well as availability of screening opportunities so postpartum depression could be properly diagnosed (Logsdon, et al., 2006).

Many conclusions and recommendations regarding postpartum depression were similar. In an article on postpartum depression by Stewart and Vigod (2016), postpartum depression research findings and gaps in knowledge were discussed. Stewart and Vigod (2016) defined postpartum depression as depression that

occurs within four weeks to twelve months after childbirth. Like the previously discussed article by Logdon, et al. (2006), Stewart and Vigod (2016) discussed symptoms of postpartum depression, included in these symptoms were sleep disturbances other than those associated with care of a baby, anxiety, irritability, being overwhelmed, suicidal ideation, and worries about causing harm to the baby. Women who experienced postpartum depression could undergo maternal suffering and impaired infant-caregiver attachment. Postpartum depression could lead to increased risks of impaired emotional, social, and cognitive development in children and has even led to suicide or infanticide (Stewart & Vigod, 2016). Research has shown that approximately 20% of women with postpartum depression still had depression beyond the first year after delivery and approximately 40% of women will have a relapse during subsequent pregnancies or on other occasions outside of pregnancy (Stewart & Vigod, 2016). Screening and diagnosis are important in the postpartum period. Screening performed by healthcare providers could help determine if a patient was experiencing “baby blues”, which usually lasts about two weeks and does not impair functioning, or if they were experiencing postpartum depression (Stewart & Vigod, 2016). Stewart and Vigod (2016), recommended that education of patients on postpartum depression start in pregnancy and that mood and anxiety were assessed at every visit in addition to utilization of screening tools.

The research and recommendations on adequate diagnosis and treatment of postpartum depression have remained the same for some time. Using this established knowledge is helpful in recognizing and assessing the impact of

postpartum depression under new circumstances such as those experienced during the COVID-19 pandemic. Another area of knowledge regarding postpartum depression that helps to enhance understanding and recognition of postpartum depression are predictive factors of postpartum depression.

### **Postpartum Depression Predictive Factors**

There have been multiple studies that aimed to identify predictive factors of postpartum depression. Some of these studies examined factors specific to certain populations while others used a more universal approach. One study involving psychosocial factors and their role in postpartum depression used a prospective cohort design to examine the frequency of risk factors found in the Postpartum Depression Predictors Inventory – Revised (PDPI-R) among pregnant and postpartum women in Italy (Oppo, et al., 2009). The participants were screened using the PDPI-R twice during pregnancy and once after delivery. They were also screened using the Edinburgh Postnatal Depression Scale (EPDS) in the first, third, and sixth month after childbirth (Oppo, et al., 2009). The PDPI-R has both a prenatal and postnatal version so it can be used to predict the risk of development of postpartum depression. The risk factors assessed using this tool include marital status, socioeconomic status, low self-esteem, prenatal depression, prenatal anxiety, pregnancy intendedness, prior depression, lack of social support, marital dissatisfaction, life stress, child-care stress, infant temperament, and maternity blues (Oppo, et al., 2009). During the study, it was found that a history of depression and depression during pregnancy increased the likelihood of having postpartum depression by three to four times, but that having anxiety in the first

trimester of pregnancy did not predict onset of postpartum depression (Oppo, et al., 2009). A few false positives were found in the study. These false positives should be further explored to determine any changes needed in the PDPI-R as a screening tool. Using the PDPI-R as a screening tool as it stands would serve to provide more support to postpartum mothers as it would prompt follow up on postpartum depression based off the screening. The authors identified depression during pregnancy and history of depression as risk factors for postpartum depression. Other studies have had similar findings in different populations.

One such study focused on postpartum depression and anxiety in Jewish women. Bina and Harrington (2017) performed a study that examined the validity of subscales of the EPDS using the Hebrew version. This study used data from postpartum women who delivered at a large hospital in Jerusalem, Israel, were over 18, identified as Jewish, could complete the survey in Hebrew, and gave birth to a live baby without major medical illness (Bina & Harrington, 2017). The women filled out the survey at six weeks postpartum. Along with completion of the survey socio-demographic data was collected, this data was comprised of the age of the woman, number of children, number of previous pregnancies, marital status, level of income, religious affiliation, history of depression, and family history of depression (Bina & Harrington, 2017). The results of the study showed that history of depression was the only significant predictor of postpartum depression in the sample while significant predictors for postpartum anxiety included history of depression, income, and number of past pregnancies (Bina & Harrington, 2017). Limitations of this study pertaining to postpartum depression

included only socio-demographic factors were used and psycho-social factors should also be examined in future studies and this study assessed only one culture and other cultures should be examined for generalizability (Bina & Harrington, 2017).

The results of these two studies are very similar, showing that history of depression may be the biggest risk factor for development of postpartum depression while other perceived risk factors did not have as much of an impact. These studies demonstrated the importance of a complete patient history to determine if a postpartum patient had a history of depression and is more at risk for development of postpartum depression.

### **Postpartum Depression Preventative and Reductive Factors**

Just as there have been studies on the predicted causative factors of postpartum depression there have also been studies done on predicted preventative and reductive factors. One of these studies examined nurse home visits as an intervention to help improve the relationship between mothers who were experiencing postpartum depression and their infants. The study was a repeated-measures randomized clinical trial where eligible participants were placed in a treatment of control group (Horowitz et al., 2013). The women were prescreened in phase I and eligible for participation if their prescreening Edinburgh Postnatal Depression Scale score was greater than or equal to 10, and the women were further deemed eligible for participation if they delivered healthy, singleton, term infants, had adequate proficiency in the English language,

had not been diagnosed with major psychiatric disorders, and did not have any severe medical conditions (Horowitz et al., 2013). In phase II, depression status was confirmed by an APRN and participants were put in either the control or treatment group, the treatment group participants were taught by nurses how to interpret their infant's communication cues and coached in how to alternate behaviors to try and promote new maternal responses and skills, this was the intervention in the study (Horowitz et al., 2013). All participants had four home visits, no intervention was provided for the control group and intervention was provided for the treatment group, furthermore the treatment group had an additional two visits where the intervention was administered (Horowitz et al., 2013). Phase III consisted of individual interviews and focus groups to get descriptions of the participants experiences in the study (Horowitz et al., 2013). Results showed no significant differences in the outcomes between the control and treatment group. However, both groups had significant improvements of all measures over time (Horowitz et al., 2013). This was thought to have been a result of unintentional treatment of the control group through the interactions with nurses in the home visits. One of the major limitations of the study was the same nurses were used to perform home visits in both the control and treatment group, this was thought to have provided some level of cross-contamination between groups (Horowitz et al., 2013). Although this study did not prove the specific intervention for the treatment made a significant improvement in postpartum depression and maternal infant relations, it did inadvertently show that home

visiting by nurses could help improve factors of postpartum depression as both groups had significant improvements over time.

Another study focused on breastfeeding status and length as a factor for decreased incidence of postpartum depression. In this cross-sectional study, data was taken from a national dataset from completed Pregnancy Risk Assessment Monitoring (PRAM) questionnaires collected by the CDC and state health departments in 26 states in 2016 (Toledo et al., 2021). Some of the data collected and used consisted of postpartum depression risk (assessed with the Patient Health Questionnaire 2, PHQ-2), current breastfeeding status, breastfeeding length, breastfeeding intent, depression during pregnancy, maternal age, maternal race, Hispanic ethnicity, marital status, education, household income, medical risk factors, length of infant hospital stay, type of delivery, and infant gestational age (Toledo et al., 2021). The data analysis in this study showed significantly lower postpartum depression risk if a woman was currently breastfeeding and that a woman's postpartum depression risk decreased the more weeks they breastfed for, breastfeeding intent had no significance with postpartum depression risk (Toledo et al., 2021). One of the major limitations of this study was with measurement and data collection. A lot of the relationships found between breastfeeding and postpartum depression risk required more information to be collected to further infer significance in certain areas (Toledo et al., 2021). Although more data needed to be collected on breastfeeding specifics such as frequency of feeding, quality of feeding, and education regarding breastfeeding, this study showed a correlation between breastfeeding and decreased postpartum depression risk.



## **Mental Health and COVID-19**

Due to the novelty of COVID-19, published research combining mental health status during the COVID-19 pandemic and mental health status before the pandemic is an area of research that will no doubt expand over time. One study that focused on pre- and post-pandemic mental health occurrence was performed in Fars Province, Iran (Mani, et al., 2020). In the cross-sectional study, participants with internet access were sent a survey to be completed online. An Iranian version of the General Health Questionnaire was used to survey participants (Mani, et al., 2020). Nine hundred twenty-two valid responses to the survey were used in the study (Mani, et al., 2020). The results of the survey were broken down and examined and were also compared to a previous survey in the same area using the same tool in 2015 (Mani, et al., 2020). The study showed that mental health symptoms were present during the COVID-19 pandemic at almost double the rate they had been found in 2015. Women were also shown to have higher poor mental health rates than men at both survey times (Mani, et al., 2020). Not only did the study show an increase in poor mental health during the COVID-19 pandemic, but women were also shown to have higher poor mental health rates when compared to men. The study demonstrated the vulnerability of women during the COVID-19 pandemic for poor mental health status.

Another study performed in Spain showed similar results. A cross-sectional study surveying 3480 people online was performed by Gonzalez-Sanguino, et al. (2020) to look at the presence of depression, anxiety, and PTSD during an alarm state in Spain due to COVID-19. The survey assessed

sociodemographic variables, variables related to COVID-19, psychological impact, discrimination, loneliness, social support, spiritual well-being, self-compassion scale, and sense of belonging (Gonzalez-Sanguino, et al., 2020). The results showed females were associated with greater depressive symptoms, anxiety, and PTSD (Gonzalez-Sanguino, et al., 2020). The results also showed that discrimination and loneliness had greater psychological impact and that loneliness was one of the biggest predictors of depression, anxiety, and PTSD (Gonzalez-Sanguino, et al., 2020). Limitations of the study included using a snowball sample which may not have led to accurate representation of the Spanish population, using an online tool which limited access to those who did not utilize technology as much such as the elderly, lower participation of men and the elderly, and collection of data over a short two-week time period (Gonzalez-Sanguino, et al., 2020). The impact of COVID-19 on mental health needs to be further examined. However, the data from this study again suggested that women are a vulnerable population regarding depression and events that increase depression risk.

### **Postpartum Mental Health and COVID-19**

While women have been shown to be a vulnerable population for increased risk of depression during COVID-19, pregnant and postpartum women are a vulnerable subgroup within the female population. Because of this it is especially important to examine the impact that COVID-19 has had on maternal mental health.

Janevic et al. (2021) conducted a study examining both the impact of COVID-19 on birth satisfaction and healthcare discrimination during childbirth and the influence birth experience had on postpartum health. The purpose of examining these factors was to connect any change in birth experience during the COVID-19 pandemic to changes in postpartum health. This study was a cross-sectional, bilingual, web survey taken by a group of women who gave birth at one of two hospitals in New York City between January 1, 2020 and May 11, 2020 (Janevic et al., 2021). The women who participated were split into two groups based on the date that hospital visitor restriction began, March 15, 2020. The group that delivered before March 15, 2020 was considered the pre-pandemic group and the group that delivered on or after March 15, 2020 was considered the peak pandemic group. The authors of the article also identified other pandemic-related practice changes that could have had influence during this time period. The identified practice changes were discontinued use of nitrous oxide, early epidural placement, mandatory infant rooming in, early postpartum discharge, and no visitors allowed other than a support person (Janevic et al., 2021). In general, women who tested positive for SARS-CoV-2 had lower birth satisfaction and higher perceived healthcare discrimination. In the peak pandemic group 43.1% reported high birth satisfaction while 58.6% of the pre-pandemic group reported high birth satisfaction and in the peak pandemic group perceived discrimination was higher at 42.5% versus 15% in the pre-pandemic group (Janevic et al., 2021). Higher birth satisfaction was associated with lower postpartum anxiety and birth related PTSD as well as lower risk of anxiety, perceived stress, depressive

symptoms, and higher rates of exclusive breastfeeding at both discharge and follow-up (Jenvic et al., 2021). Higher perceived health care discrimination was associated with greater postpartum stress and birth-related PTSD (Jenvic et al., 2021). The reported reasons for perceived discrimination during childbirth mostly related to the pandemic including stressed or overworked staff, COVID-19 positive staff, or staff fear of the patient having COVID-19 (Jenvic et al., 2021). These results suggested a link between better postpartum health with higher birth satisfaction and lower reports of healthcare discrimination. During the pandemic, changes in the care of pregnant and postpartum women due to the presence of COVID-19 was shown to impact the perception of healthcare discrimination. High satisfaction was reported less in underweight and obese women while perceived discrimination was highest among women who identified as other, Black, or Latina (Jenvic et al., 2021) These results conveyed the presence of bias and healthcare disparities in treatment of the maternal population.

Another study examining the impact of COVID-19 on mental health was conducted from a patient population in Massachusetts. This cross-sectional study interviewed participants who were pregnant and up to three months postpartum. Participants were from a subset of individuals from a study concerning obstetric and mental healthcare who had screened positive for depression at initial interview using the Edinburgh Postnatal Depression Scale (Masters et al., 2021). Participants included were English speaking and completed at least one interview where they were screened with the Edinburgh Postnatal Depression Scale (EPDS), Generalized Anxiety Disorder 7-item scale (GAD-7), civilian version of

the post-traumatic stress disorder (PTSD) checklist, and the Barriers to Access Care Evaluation (BACE). They were also asked a list of pandemic-related questions (Masters et al., 2021). The aim of this study was to identify factors associated with increased symptoms of perinatal depression and anxiety as well as disparities in healthcare access during the COVID-19 pandemic (Masters, 2021). Of the participants interviewed 50.9% screened positive for depression, 41.1% screened positive for anxiety, and 19% screened positive for PTSD (Masters et al., 2021). The majority of participants interviewed reported perceived increased symptoms of depression at 80.4%, increased symptoms of anxiety at 88.8%, and an affected ability to access healthcare at 58.4% (Master et al., 2021). Those participants with a bachelor's degree or higher as well as those with higher income were associated with increased symptoms of depression and anxiety due to the pandemic. Positive depression, anxiety, and PTSD screenings as well as higher BACE scores were associated with perceived changes in accessing mental healthcare (Masters et al., 2021). In participants who had a perceived change in their access to general, obstetric, or mental healthcare, BACE scores were significantly higher in participants of color than in participants who were non-Hispanic whites (Masters et al., 2021). Not only did the results of this study highlight increased symptoms of depression, anxiety and PTSD in perinatal women due to the pandemic, but in the use of the BACE screening an increase in health disparities due to the pandemic with participants of color having more barriers to access care during the pandemic was shown.

The studies published after the height of the COVID-19 pandemic showed increases in mental health symptoms of postpartum women during COVID-19, increases in healthcare bias and healthcare disparities, and the influence and impact these factors had on the care and health of postpartum women. These outcomes suggested that further research needs to be conducted on these topics, and special care and planning needs be prioritized during a public health crisis especially regarding anything impacting vulnerable populations.

## Theoretical Framework

The theoretical framework used in this project was Russell and Fawcett's (2005) *Conceptual Model for Nursing and Health Policy*. Russell and Fawcett's original conceptual model was introduced in 2001, and the revised model was introduced in 2005. The revised theoretical model identified four levels that became increasingly broad and interactive as they moved from level one to level four. These levels serve as a frame of reference for evaluation and analysis of policies that influence the quality, cost, and access to nursing and other healthcare services. Analysis of policy was performed with focus on specific types of health policy and specific health policy outcomes for each level as seen in Appendix A.

In examining healthcare policies at different levels, it was important to also define the types of policies that were being examined. Russell and Fawcett separated policies into three different categories, public policy, organizational policy, and professional policy. In the conceptual model the three categories of policy were defined by those who developed the policy. Public policies were defined as those developed by nations, states, cities, and towns (Russell & Fawcett, 2005). Organizational policies were defined as those developed by healthcare institutions to guide practice at that institution (Russell & Fawcett, 2005). Professional policies were the standards and guidelines developed by multidisciplinary and discipline-specific associations (Russell & Fawcett, 2005). Once the type of policy was established it could be analyzed based on the four levels in the framework.

Level one of Russell and Fawcett's conceptual model focused on nursing practice processes and the efficacy of those processes. This level examined the impact nursing practice processes had on the health outcomes of individuals, families, groups and communities (Russell & Fawcett, 2005). The outcomes focused on in level one of the conceptual model were those of efficacy and quality. Moving on from level one the health care policies and analysis of those policies became progressively more encompassing.

In level two of Russell and Fawcett's (2005) conceptual model, nursing practice delivery subsystems, administrative practices, or healthcare delivery subsystems and their effectiveness were the focus. In this level of the conceptual model the outcomes emphasis was effectiveness, quality, and cost. While level one analyzed policy in more controlled, ideal conditions, level two analyzed policy with a similar focus but in a larger environment.

Level three of Russell and Fawcett's (2005) conceptual model focused on healthcare system administrative practices and the equity of access to effective and efficient delivery systems as well as the equity of the distributions of the costs and burdens of care delivery. The emphasis of outcomes in this level were on equity and more specifically on access. In level two, policies concerning specific healthcare delivery subsystems within a community were analyzed whereas in level three a broader view is taken and policies from entire healthcare systems of states, nations, and geopolitical communities were analyzed. Level four gets broader still and moves from a national to a global scale.



Level four of Russell and Fawcett's (2005) conceptual model focuses on world health administrative processes and the justice, social changes, and market interventions of those policies that address equity. The outcomes emphasis at this level is on justice and more specifically, quality cost, and access. The community focused on in this level was the global community. This level was the broadest and most encompassing of the four levels.

## **Health Policy Analysis Stages**

### **Purpose**

The purpose of this policy analysis was to examine healthcare policies related to COVID-19 that impacted the postpartum patient population and assess if any of them could have had an impact on postpartum depression as well as to recommend changes to policy in the future that would lessen these impacts. Policies from state legislature, hospitals, and national and international professional organizations were reviewed and analyzed using the theoretical framework of Russell and Fawcett as well as information gained during the literature review.

### **Literature Analysis**

A literature review was conducted to gather information on postpartum depression and COVID-19 from articles published within the last ten years. After conducting a search for literature, the results were divided into categories depending on which components of postpartum depression and/or COVID-19 the article addressed. The categories of the literature review were postpartum depression, postpartum depression predictive factors, postpartum depression preventative and reductive factors, mental health and COVID-19, and postpartum mental health and COVID-19.

## **Examination of Process**

After the literature review information was gathered on policies and practices that occurred during the COVID-19 pandemic impacting pregnant and postpartum women. This information was gathered in various ways. Some information was gathered by searching archives and informational pages on hospital, government, and professional organization websites. Additional information was gathered by interview with key community informant, Melissa Maher, MSN, RN, who is the Associate Chief Nursing Officer (ACNO) of Ambulatory Care at Women and Infant's Hospital in Providence, RI. Melissa served in this position throughout the COVID-19 pandemic as well and assisted in creating many policies during this time in her advanced practice nursing role. Personal reflection on the gathered data and policies by this writer as an RN who practiced during the COVID-19 pandemic, providing postpartum care to patients. Lastly, informal discussion with colleagues also practicing during the pandemic provided rich information and perspective leading to policy analysis.

## **Data Analysis and Evaluation of Policies**

Next, the information gathered was reviewed along with the literature from the literature review and was analyzed using the four levels in the conceptual framework of Russell and Fawcett. This information was organized into a chart as seen in Appendix B. Any gaps in information were examined at this point and further research into policies and procedures were performed as necessary.

## **Recommendations**

Finally, recommendations were made based on the information gathered in the literature review and data analysis. Recommendations were provided based on any gaps or areas of improvements for the previously reviewed policies based on the information gathered in the literature review. Recommendations were also formed for any implications found for advanced nursing practice. In this step, limitations of the study were also assessed.

## **Application of the Theory**

This policy analysis used the levels established in Russell and Fawcett's framework to analyze policies that were developed to help guide healthcare delivery for pregnant and postpartum women during the COVID-19 pandemic and examined the potential impact these policies may have had on postpartum depression. For this project, public policies that were examined were developed in the United States and set in place either nationally or locally in Rhode Island. In this policy analysis the organizational policies discussed were those in place previously or presently at Women and Infant's Hospital in Providence, RI as well as some of the ambulatory care centers associated with Women and Infant's Hospital. The professional policies analyzed in this paper were from the Association of Women's Health, Obstetric, and Neonatal Nurses (AWHONN), the American College of Obstetricians and Gynecologists (ACOG), and the World Health Organization (WHO).

Level one of Russell and Fawcett's conceptual model focused on nursing practice processes and the efficacy of those processes with an emphasis on quality. Data has shown that during the COVID-19 pandemic length of stay for postpartum patients was significantly shortened. One study showed the length of stay shortened by about 30% (Bornstein et al., 2020). In this study, the average length of stay for a vaginal delivery was a fourteen-hour difference compared to before COVID-19. For a cesarean section a twenty-three-hour difference in stay was present compared to before COVID-19 (Bornstein, 2020). These shortened lengths of stay were established during COVID-19 for multiple reasons to

promote the health of the postpartum person and newborn as well as lessen the burden on the healthcare systems and staff during a public health emergency (Bornstein, 2020).

In level two of Russell and Fawcett's conceptual model, nursing practice delivery subsystems, administrative practices, or healthcare delivery subsystems and their effectiveness was the focus with emphasis on quality and cost. Especially during the beginning of the COVID-19 pandemic, decisions had to be made regarding services that could be offered and who could visit and accompany patients for outpatient appointments and inpatient admissions. Although policies on mask wearing and visitor and support person restrictions are commonly still in place in healthcare settings, they were the strictest during the first couple months of the pandemic when statewide shutdowns were affecting the logistics of everyday life. AWHONN's practice guideline from March 25, 2020 on nursing support in labor during COVID-19 acknowledged that some perinatal units may be limiting or excluding perinatal support persons for labor and birth for health and safety of personnel and patients. AWHONN recommended that hospital administrators and nurse leaders attempt to provide one-to-one nursing care if support persons were not being allowed as continuous support in labor had been shown to improve birth outcomes for mothers and newborns (AWHONN, 2020). Having a desired partner or support person be present for the birth of a child or having a support person attend ultrasounds during pregnancy had not previously been regarded as a public health issue so for many pregnant people the possibility

of limited support during pregnancy and at birth was not a factor when they had become pregnant if they delivered at the beginning of the COVID-19 pandemic.

At Women and Infant's Hospital, the visitor policy allowed obstetric patients both with and without COVID-19 to have one support person who was over the age of 18 and who remained the same through the entire hospitalization. A pre-designated doula while in labor was also allowed for patient support (Women and Infant's Hospital, 2020). In the outpatient setting, support persons were generally not allowed at this time. However, they were allowed for persons with mobility issues or disabilities if a support person was deemed essential for medical care, and exceptions were allowed to be made in limited circumstances at the discretion of medical and/or nursing leadership (WIH, 2020). An earlier policy on support people for inpatient postpartum patients notes that one support person is allowed to be with the postpartum patient. However, they could not leave the patient's room at any point and if they did, they would not be allowed to re-enter (Quinn, et al., postpartum patient communication, April, 4 2020). This policy acknowledged the inconvenience these restrictions could create. However, it did state that this policy was for the safety of anyone in the care of Women and Infants.

Level three of Russell and Fawcett's conceptual model focused on healthcare system administrative practices. The outcomes focus for this level was on equity with an emphasis on access, access to effective nursing practice processes, efficient nursing practice delivery systems, and equity of the cost and burdens of care delivery (Russell & Fawcett, 2005). One strategy that was widely

used in re-opening medical services during COVID was the use of telemedicine. Before this point telemedicine was not something that was largely focused on, and it grew rapidly within a short time because of the COVID-19 pandemic. Telemedicine expansion allowed for increased access to care during the COVID-19 pandemic. In the ACOG position statement on “Resumption of Comprehensive Women’s Health Care Policies and Processes” (2020), telehealth is discussed. ACOG states that changes in telehealth policies to enhance implementation and guide continuation strategies can be used in the resumption of care process. However, planning of these visits must consider what types of visits are needed and if they require an in-person visit (ACOG, 2020). Data from the Census Bureau reviewing the use of telehealth since COVID-19 shows that telehealth use had greatly increased. However, uninsured adults had very low telehealth visit rates overall. Additionally, video enabled telehealth services varied significantly with low rates in underserved populations including those with low incomes; without a high school degree; Black, Latino and Asian participants; and adults without health insurance (Karimi et al., 2022).

In Rhode Island specifically, legislation regarding telehealth was put in place first as an executive order and then as permanent legislation. On March 18, 2020 an executive order was put in place that required insurance companies to cover telemedicine visits to expand access to healthcare during the COVID-19 pandemic (Whitty, 2020). This expanded access was then made a bill and signed into law in 2021. The bill expands telemedicine coverage requirements for insurance companies and requires that all Rhode Island Medicare programs cover



telemedicine visits, which are visits conducted either by telephone or audio-visual device (Whitty, 2021). This law both requires that costs to the patient are no more than the same visit in-person would be, and that the reimbursement for these services is not any lower than an in-person visit would be (Whitty, 2021).

Level four of Russell and Fawcett's conceptual model focused on world health administrative processes and justice with specific outcomes emphasis on quality, cost, and access (Russell & Fawcett, 2005). The World Health Organization's (WHO) clinical guidelines for caring for individuals with COVID-19 included guidelines in feeding and caring for infants of mothers with COVID-19. The recommendations for mother and infant contact at birth included that mothers should not be separated from their infants unless they are too sick to care for the infant, skin-to-skin should be initiated, rooming in should be allowed, and breastfeeding should be accommodated and initiated (World Health Organization, 2021). In performing infant care, the WHO (2021) guides COVID-19 positive mothers to perform hand hygiene before contact with the infant, clean and disinfect surfaces that the mother had been in contact with, and wear a medical mask until symptom resolution. Breastfeeding mothers should wash their chest before feeding if they have been coughing and sneezing, and any coughing or sneezing should be done into a tissue that is immediately disposed of and hands should immediately be washed. It is also stated in the guidelines that breastfeeding be supported by appropriately trained healthcare professionals even if the mother is COVID-19 positive (WHO, 2021). These guidelines focused

majorly on quality of care and access to care for COVID-19 positive mothers and their children.

## Summary and Conclusions

### Summary

Many policies were put in place during the COVID-19 pandemic. Some of these policies remain in place, some have evolved, and some are no longer used, but they all impacted patient care at some point during the pandemic. This policy analysis focused on policies that were put in place during the COVID-19 pandemic and impacted pregnant and postpartum individuals. These policies were either public policy, organizational policy, or professional policy. Shortened length of stay for postpartum patients were categorized as level one of Russell and Fawcett's conceptual model because it impacted the nursing practice processes efficacy and quality. Visitor and support person policies were categorized as being in level two of the conceptual model as they involved nursing practice delivery subsystems, administrative practices, and healthcare delivery subsystem effectiveness and quality. Telemedicine policies were categorized as being in level three of Russell and Fawcett's conceptual model because they affected healthcare system administrative processes, especially concerning equity and access. Global recommendations on caring for pregnant and postpartum women with COVID-19 were categorized as being in level four of the conceptual model as they affected world health administrative processes and involve justice, quality, and access.

## Conclusions

With shortened lengths of postpartum stay during COVID-19, patients did not have as much time to access in-patient care and services postpartum, including nursing care. One critical part of nursing care during postpartum admissions is patient education. Postpartum nurses educate about so many important topics such as how the mother should care for herself, how the mother should care for their infant, important safety education regarding care for newborns, signs and symptoms of postpartum depression, breastfeeding education and support, and formula-feeding education and support. From the literature review, both Logsdon et al. (2006) and Stewart & Vigod (2016) discussed the importance of early education of mothers on the topic of postpartum depression. If patient length of stay was shortened and patients did not get complete postpartum education, then their health and experience once discharged could be affected negatively by their lack of awareness especially on the topic of postpartum depression. This lack of education could impact the way a postpartum person takes care of themselves and their newborn.

Visitor and support person policies are another factor that could have impacted the experience of the pregnant and postpartum person during the COVID-19 pandemic. The policies discussed within this analysis were those established at Women & Infants Hospital for in-patient hospital patients as well as outpatient ambulatory patients. According to Melissa Maher, ACNO of Ambulatory Care at Women and Infants during the pandemic, these specific policies were intended to be inclusive and understanding of special circumstances

while still considering infection and exposure risk for staff, patients, and family members in an unprecedented time. The policies at Women and Infants seemed to be designed to still allow effective care while also trying to give patients access to the emotional support needed during such a life altering time. However, any policy limiting the number of support people or visitors a person can have could have had an impact on the pregnant, birthing, or postpartum person. If a person was not able to have a support person due to the policies in place, they may have been more susceptible to loneliness and decreased birth satisfaction. With decrease in number of support persons AWHONN suggested that if a woman had decreased support an attempt should have been made to give one-to-one nursing care however during COVID-19 especially most hospitals experienced nursing shortages so many times one-to-one care was not possible. As discussed by Gonzalez-Santiago (2020), loneliness was one of the biggest predictors of depression, anxiety, and PTSD. As discussed previously, the length of hospital stay for a healthy postpartum patient and newborn was usually relatively short at this time, so the impact of the loneliness would most likely be diminished. However, once out of the hospital many infection prevention policies were in place that may have continued and contributed to isolation.

Birth satisfaction was another factor that could be negatively impacted by limitation of support people during childbirth and postpartum admission. As Janevic et al. (2021) found, decreased birth satisfaction was associated with increased perceived discrimination which in turn was associated with increased postpartum mental health symptoms. In needing to make policies which

prioritized the health of all patients, administrative policies were changed in a way that may have impacted the mental health of specific patient populations over time. This would be dependent on the limits of the policy as well as the patient population affected.

An area that saw expansion instead of limitation during the COVID-19 pandemic was telehealth services. Healthcare providers using telehealth to provide care to patients needed to be aware of not only the type of visit and if telemedicine was appropriate, but also the population that they served and potential barriers they may face in trying to utilize telehealth. As discussed previously, Masters et al. (2021) showed how barriers to care can impact postpartum mental health, especially in patients of color. Therefore, switching appointments to telehealth appointments to increase access to care especially for underserved populations could have led to a decrease in access to care and therefore an increase in postpartum depression. In their position statement ACOG specifically stated that physical examination, radiology, or laboratory testing would require an in-person visit (2020), but does not mention postpartum depression screening appointments or other postpartum appointments that may impact a person's care or health outcomes especially if they have limited access to the technological set up and support required for telehealth appointments whether by telephone or audio-visual device as well as limitation of affordability for the appointments.

Similarly, the legislation put in place by the state of Rhode Island regarding reimbursement for telehealth services benefited insured patients, but

access to care could still negatively impact uninsured patients due to cost.

Telehealth services should continue to develop and expand to allow for improved access to care. However, in doing so, those involved in healthcare policy need to also consider that they may increase disparities unintentionally for those who may not gain improved access to care through telehealth due to barriers. It is essential that solutions be offered to improve access to care for everyone.

On a global scale, the World Health Organization's guidelines on caring for individuals with COVID-19 set standards for care of a newborn with a COVID-19 positive mother. The guidelines encouraged support and promotion of contact between mother and infant as well as breastfeeding of the infant. Toledo et al. (2021) showed decreased risk of postpartum depression with breastfeeding. The guidelines for breastfeeding infants when the mother was COVID-19 positive introduced infection prevention measures that allowed and supported breastfeeding while still trying to minimize risk of adverse health outcomes to the newborn. In the study performed by Janevic et al. (2021), a correlation between decreased mental health symptoms and exclusive breastfeeding was also present. Janevic et al. (2021) also reported that COVID-19 positive patients had decreased birth satisfaction and increased perceived discrimination. Increased perceived discrimination was linked to negative postpartum mental health symptoms. Furthermore, reported reasons for perceived discrimination were largely pandemic related and included overworked staff and staff afraid of the patients COVID-19 positive status (Janevic et al., 2021). In providing guidance for the care of COVID-19 positive patients and their newborns postpartum, the WHO

could have potentially diminished negative postpartum mental health symptoms in patients. Guidelines could have provided assurance to staff for safe and proper care which could have minimized perception of discrimination by patients. These guidelines could also have improved the birth experience of patients by allowing postpartum patients to care for and stay with their newborns in a safe way with support of nursing and other staff caring for them.

The COVID-19 pandemic presented a unique situation for creation of healthcare delivery policies in the United States. Especially in the beginning of the pandemic, information was constantly changing and healthcare facilities and providers needed to many times change and adapt their practices daily. In a public health crisis such as the COVID-19 pandemic, a particularly challenging issue arose in that addressing the personal and public safety aspect of COVID-19 needed to be balanced with supporting the mental and emotional health of the patient population. A way to evenly balance these components was not always present and safety usually became a priority. Going forward, the experience of providing care during the COVID-19 pandemic should serve as a guide for how to improve practices both in general and during a public health crisis.

### **Limitations**

The most significant limitation in this policy analysis was the limited amount of data available. COVID-19 was a novel virus and the first confirmed positive case in the United States was in January of 2020, which was less than three years ago. Due to the newness of the virus and the recentness of the



pandemic impact, data is still being gathered, especially in specialty areas. The full reach of the impact of COVID-19 on patients, providers, and healthcare systems may not be able to be assessed for some time. Another limitation of this policy analysis was the small sample size from which local policy data was taken. The local public policy data and information was taken from one state, Rhode Island, and the organizational data was obtained from one healthcare institution, Women & Infants Hospital. Policies from other healthcare systems and institutions as well as other states may have been different and had different potential impact to postpartum individuals. Further research is needed in this area to gather more data and analyze more policies to assess the full impact COVID-19 may have had related to postpartum depression.

## **Recommendations and Implications for Advanced Nursing Practice**

Advanced practice nurses have an important role in improving and maintaining the health of the communities and populations with which they work. Advanced practice nurses significantly impact the health of the communities they serve through policy, practice, and education. The implications of this policy analysis related to advanced nursing practice can help guide nursing practice and patient/population care.

### **Policy**

Advanced practice nurses are involved in policy creation and implementation throughout healthcare. Advanced practice nurses are involved in policy creation and implementation within the government, in healthcare systems, and in professional organizations. Using what has been learned this far as well as what has yet to be learned regarding healthcare during the COVID-19 pandemic is important going forward. Those involved in creation of policy should now be more aware of possible future implications of policy during a public health crisis. Although acute safety is always a major concern, long term implications must be considered as well as both the physical and mental health of individual populations.

Not only should advanced practice nurses be involved in the creation and implementation of policy, but they should also be considered as affected healthcare providers when policy is created. Expansion of care and access to care is one area where nurses can be affected by policy. For example, in expanding

telehealth services due to restrictions for in-person visits and appointments, reimbursement for telehealth appointments was modified. In expanding access to care, the services which are billable through telehealth should also be examined as availability of services could impact more patients. Expansion of the ability to bill for nursing services especially using telehealth could lead to a drastic increase in access to care for some populations. Continued improvement in telehealth access and telehealth policies could improve the care of people who may previously have experienced barriers to care as long as access to technology is assured.

### **Practice**

In advanced nursing practice, expansion of services is an area that could significantly impact some practitioners. Advanced nursing practice providers can now have a different form of access to patients. When these expanded services are billable, an opportunity to check in with patients more often when appropriate is made possible. Especially in postpartum, when attending appointments can be difficult, the expansion of telehealth services for services like lactation consults and postpartum mental health care can help address issues more quickly, reducing the stress and impact on both the postpartum person and newborn. The need for in person assessment and diagnostics however, must always be fully considered so that components of care are not missed for the sake of convenience.

### **Education**

The implications for advanced nursing practice regarding education are two-fold. The first involves the responsibility of educating patients. The second

involves the responsibility of educating nurses. For patient education, it is important that advanced practice nurses educate the patients and communities they work with and help them understand the policies affecting them and how they benefit their care. If healthcare providers are always aware of their responsibility of educating patients, then patient experience may be improved in some situations which will improve health outcomes. Also, as seen in the literature review, patients being educated about topics related to their care, such as postpartum depression, can improve their health outcomes as well.

In educating nurses, it is important that we learn from new situations such as the COVID-19 pandemic so that we can improve care if necessary and assure that when another crisis occurs, we are more equipped to handle the situation and learn from any mistakes or oversights that occurred previously. If nurses educate each other, we can assure improvement of nursing practice over time which will improve health outcomes for the populations.

It is important that advanced practice nurses serve as advocates for their colleagues, patients, and communities in which they serve. Advanced Practice Public Health Nurses are specifically called to this role, especially during times of public health crisis such as the COVID-19 pandemic. The Committee on the Future of Nursing stated in their 2021 report that nurses can play a role in advocating for a health equity approach in preparation for future pandemics and that nurses need to work actively to educate their communities (National Academies of Science, Engineering, and Medicine, 2021). In policy, practice, and education Advanced Practice Public Health Nurses seek to promote and positively

impact the health outcomes of the communities they serve and address issues of health equity, especially in vulnerable populations. The pregnant and postpartum population is a vulnerable population and Advanced Practice Public Health Nurses are well equipped to advocate for and meet their needs in order to improve health outcomes, especially in future times of public health crisis.

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## Appendices

### Appendix A

#### Four Levels of Nursing and Health Policy Focus and Outcomes

<i>Level</i>	<i>Human Beings</i>	<i>Environment</i>	<i>Health</i>	<i>Nursing and Health Policy Focus</i>	<i>Nursing and Health Policy Outcomes</i>
Level 1	Individuals, families, groups, communities	Significant others, relevant inanimate surroundings, and the nursing practice delivery system	Wellness and illness conditions of individuals, families, groups, and communities	Nursing practice processes: assessment, labeling, planning, implementation, evaluation	Efficacy of nursing practice processes. Emphasis is on quality
Level 2	A specific nursing practice or health care delivery subsystem	A specific health care delivery system or ALL health care delivery systems in a community	Functional condition of the nursing practice delivery subsystem or of the specific health care delivery system	Nursing practice delivery subsystem administrative practices or health care delivery subsystems, including nursing: their integration and administrative practices	Effectiveness of the nursing practice processes and effectiveness and efficiency of the health care delivery subsystems. Emphasis is on quality and cost
Level 3	Health care systems of geopolitical communities, states, nations	A specific geopolitical community	Functional condition of the health care system	Health care system administrative practices	Equity of access to effective nursing practice processes and efficient nursing practice delivery systems and equity in the distribution of the costs and burdens of care delivery. Emphasis is on access
Level 4	Humankind	The global community	Global health conditions	World health administrative practices	Justice. Social changes and market interventions that address equity. Emphasis is on quality, cost, and access

(Fawcett & Russell, 2005)

## Appendix B

### Stages of Health Policy Analysis

Level of Framework	Policy	Type(s) of Policy	Data	
			Related Article(s) from Literature Review	Source of Information about practice/policy
<b>Level 1</b>	Early discharge during COVID-19	Organizational	<ul style="list-style-type: none"> <li>• Logsdon et al. (2006)</li> <li>• Stewart &amp; Vigod (2016)</li> </ul>	<ul style="list-style-type: none"> <li>• Data from Bornstein et al. (2020) on early discharge during COVID-19.</li> </ul>
<b>Level 2</b>	Limitations put in place with visitor/support person policies.	Organizational and Professional	<ul style="list-style-type: none"> <li>• Gozalez-Santiago (2020)</li> <li>• Janevic et al. (2021)</li> </ul>	<ul style="list-style-type: none"> <li>• AWHONN practice guideline for support in childbirth during COVID-19.</li> <li>• Women and Infant's visitor/support person policy during COVID-19.</li> </ul>
<b>Level 3</b>	Increased use of telehealth and changes in reimbursement.	Professional and Public	<ul style="list-style-type: none"> <li>• Masters et al.</li> </ul>	<ul style="list-style-type: none"> <li>• ACOG position statement for resumption of care during COVID-19.</li> <li>• Telehealth data from the Census Bureau</li> <li>• RI Telemedicine Legislation</li> </ul>
<b>Level 4</b>	Caring for a mother and infant when the mother is COVID-19 positive.	Professional	<ul style="list-style-type: none"> <li>• Toledo et al. (2021)</li> <li>• Janevic et al. (2021)</li> </ul>	<ul style="list-style-type: none"> <li>• WHO guidance on the clinical management of COVID-19</li> </ul>