

Gardner-Webb University

## Digital Commons @ Gardner-Webb University

---

Master of Science in Nursing Theses and  
Projects

Hunt School of Nursing

---

Summer 2020

### Postpartum Depression in Military Mothers:Active Duty and Partners of Active Duty Service Members

Amanda Willis  
aphillips11@gardner-webb.edu

Follow this and additional works at: <https://digitalcommons.gardner-webb.edu/nursing-msn>



Part of the [Nursing Commons](#)

---

#### Recommended Citation

Willis, Amanda, "Postpartum Depression in Military Mothers:Active Duty and Partners of Active Duty Service Members" (2020). *Master of Science in Nursing Theses and Projects*. 1.  
<https://digitalcommons.gardner-webb.edu/nursing-msn/1>

This Project is brought to you for free and open access by the Hunt School of Nursing at Digital Commons @ Gardner-Webb University. It has been accepted for inclusion in Master of Science in Nursing Theses and Projects by an authorized administrator of Digital Commons @ Gardner-Webb University. For more information, please see [Copyright and Publishing Info](#).

Postpartum Depression in Military Mothers: Active Duty and Partners of Active Duty  
Service Members

Amanda Willis

A thesis submitted to the faculty of  
Gardner-Webb University Hunt School of Nursing  
In partial fulfillment of the requirements for the  
Master of Science Degree

Boiling Springs, North Carolina

2020

Submitted by:

Approved by:

---

Amanda Willis

---

Dr. Sharon Creed-Hall, DNP, RN,  
CHSE

---

July 19, 2020

---

July 19, 2020

Date

Date

## **Abstract**

Postpartum depression (PPD) is the most common complication of pregnancy. Active duty mothers and mothers with active duty spouses have a unique risk factor, deployment. Military mothers may receive PPD education prenatally and during postpartum visits if necessary. This project created a postpartum depression video that was mandatory for mothers to watch before they were discharged from the postpartum unit after the delivery of their baby. Early education and treatment are the key to managing PPD in all mothers. The mothers were surveyed at their postpartum office visits to evaluate effectiveness of video.

## **Acknowledgments**

I want to thank Dr. Creed-Hall for guiding me through this process. Our phone conversations were always a joy. I want to thank Randall, my husband, for all the help he gave me along the way. He was my computer guru during the semesters. Thanks to my daughter, Riley, for taking care of Bryce so Mom could do her homework. I also want to thank my mom and my oldest child, Ryan, for always cheering me on.

© Amanda Willis 2020

All Rights Reserved

## Table of Contents

### CHAPTER I: INTRODUCTION

Introduction.....	1
Problem Statement .....	1
Significance.....	1
Purpose.....	2
Theory.....	2
Definition of Terms.....	3

### CHAPTER II: PROJECT LITERATURE REVIEW

Project Literature Review .....	4
Resources .....	4
Literature Related to Postpartum Depression .....	4
Problem.....	4
Risk Factors .....	5
Military Mothers .....	6
Symptoms .....	7
Screening.....	7
Education .....	8
Treatments.....	9
Theory.....	10
Theory Application .....	11
Limitations and Strengths .....	12

### CHAPTER III: NEEDS ASSESSMENT

Needs Assessment.....	13
-----------------------	----

Target Population.....	13
Target Setting.....	13
Sponsors and Stakeholders .....	13
SWOT Analysis .....	14
Available Resources.....	14
Desired and Expected Outcomes .....	14
Team Members .....	15
Cost/Benefit Analysis .....	15

#### CHAPTER IV: PROJECT DESIGN

Project Design.....	17
Goal.....	17
Objectives .....	17
Material Development and Plan.....	17
Timeline .....	20
Budget.....	20
Evaluation Plan .....	20

#### CHAPTER V: DISSEMINATION

Dissemination .....	22
Activity .....	22
Limitations .....	22
Nursing Implications.....	22
Recommendations.....	23
Conclusion .....	23

REFERENCES .....24

## **CHAPTER I**

### **Introduction**

Postpartum depression can be described as feelings of sadness and difficulty doing daily activities that can last up to a year after having a baby (Logsdon et al., 2013). There are many risk factors for postpartum depression and the strongest one is a stressful life event and poor partner support (Levine et al., 2015). Military mothers experience this with deployment of themselves or their partners. It is important for care providers to recognize deployment as a risk factor in this population of women to ensure immediate treatment and well-being of mother and infant.

### **Problem Statement**

Postpartum depression (PPD) is a common complication of pregnancy. Women with military partners and active duty women have a unique risk factor, deployments. With postpartum education before discharge, these women can seek early interventions and appropriate care.

### **Significance**

PPD is the most common complication of childbirth and in the postpartum period. PPD causes personal anguish, poor mother-infant interaction, and poor infant outcomes (Rychnovsky & Beck, 2006). Early education and screening, identification of symptoms, and early interventions are vital for mothers and their infants. Almost 60% of women with symptoms go undiagnosed and 50% are untreated (Ko et al., 2017). The baby-blues refer to the changes in mood during the first 2-postpartum weeks, recurring symptoms after this period is considered PPD. PPD occurs in approximately 13% of mothers and half of those go undiagnosed nationally (Zauderer, 2009). Eighty-five percent of mothers

experience some mood disturbance (Sivapragasam et al., 2019). In 2019 Sivapragasam et al. studied 200 military spouses that delivered at a military hospital and 25% of the mothers experienced PPD. PPD has many different risk factors; in this population of mothers with active duty partners partner deployment was a significant factor (Sivapragasam et al., 2019).

### **Purpose**

At a military hospital, pregnant women receive PPD education at optional prenatal classes only. The postpartum unit reports that it screens mothers at discharge, but no universal teaching occurs at discharge. Mothers are screened using the Edinburgh Postnatal Depression Scale at first prenatal clinic visit, during other visits as needed, and at postpartum appointments with their physician, 4-6 weeks after they deliver. PPD symptoms begin at 2 weeks postpartum and mothers are not screened or educated for another 2-4 weeks. Parents need to receive PPD education at discharge to reinforce any education they were given in prenatal classes. Also, family members may be the first to notice any changes in the mother (Assessment Technologies Institute, LLC, 2020).

### **Theory**

Postpartum nurses are typically focused on maternal bleeding, pain, infant nutrition, and wellbeing. However, discharge nurses should be holistic nurses as in Barbara Dossey's theory of integral nursing. In Dossey's theory nurses are to embrace the mother as a multidimensional person, mind and body, and use the complexities of nursing practice to care for mothers (Dossey, 2015). When attention is given to all of these dimensions equally, healing occurs. Dossey defines health as "The process of the whole system bringing together aspects of one's self and the components of body-mind-spirit-

culture-environment at deeper levels of knowing” (Gustafson, 2015, p.73). Like Florence Nightingale, Dossey believes all domains of self are equally important. As a discharge nurse for a mother and infant, she must be in the moment while teaching. Nurses should be guiding the mother to reach her deepest place of inner wisdom, where healing occurs (Dossey, 1998). For example, a mother’s anxiety from being a new mother can be reduced by teaching deep breathing, imagery, and other techniques to promote relaxation. Nurses at all hospitals should be provided the time and the resources to provide mothers with PPD and inner-self healing education. In military care centers nurses should recognize that partner and self-deployment is a significant risk factor regardless of the absence of other risk factors for PPD and should be given education.

#### **Definition of Terms**

Edinburgh Postnatal Depression Scale is a self-reported 10 question instrument. It is used to report any depression symptoms, but it does not make a diagnosis (Dennis et al., 2004).

## **CHAPTER II**

### **Project Literature Review**

This review of literature was completed to show that postpartum depression is a serious and the most common complication of pregnancy. Evidenced based literature shows military wives and active duty mothers are susceptible to PPD when their partner or themselves are deployed or plan to deploy at any stage of pregnancy. Literature shows PPD education should be given at appropriate times for any mother to recognize symptoms and seek care. Evidence based practice indicates there are different treatments depending on the symptoms presented.

### **Resources**

Evidence based practice for this project was found in Bulldog One advanced searches, Google Scholar, and ProQuest. The Gardner-Webb University library was a source of information. The key words used to research this topic were: postpartum depression, depression, military, Dossey, education

### **Literature Related to Postpartum Depression**

The evidence-based literature discusses PPD statistics, risk factors, and the population of military mothers, symptoms, screening, education, and treatments. Barbara Dossey's theory of integral nursing is applied to the educational evidence.

### **Problem**

PPD is the most common complication of pregnancy and it can last for a year or longer. The National Institute of Mental Health (2020) reports that many of postpartum women have some type of baby blues or mild depression symptoms. Fifteen percent of women develop postpartum depression, which has more severe symptoms and is

considered a major depression and symptoms can peak as early as 2 days postpartum (Stewart & Simone, 2016). Sivapragasam et al. 2019 researched 200 women and declared 85% of women experienced a postpartum mood disorder and 25% of the women had PPD. The Centers for Disease Control and Prevention's (2019) research concluded that the number of women diagnosed with postpartum depression increased by seven times between 2000 and 2015. One of Healthy People 2020's goals were to reduce the number of women with PPD (Ko et al., 2017).

### **Risk Factors**

PPD is thought to be partially caused by the sudden drop in pregnancy supporting hormones, estrogen and progesterone, accompanied with other risk factors (U.S. Department of Health and Human Services [USDHHS], 2020). However, there has not been any definitive findings that serum levels of estrogen and progesterone are related to PPD (USDHHS, 2020). Sleep deprivation, which is unavoidable with a new infant, can also contribute to PPD (National Institute of Mental Health [NIMH], 2019). A history of a mood disorder, anxiety, and uncontrolled depression are major risk factors for PPD (Stewart & Simone, 2016). There are many risk factors for PPD and women will not have the same risk factors and/or symptoms. Other risk factors include: a stressful life event during pregnancy or shortly after delivery, medical complications during delivery, unplanned pregnancy, a lack of partner support, and drugs and alcohol use during pregnancy (NIMH, 2019). The most concerning of these are a stressful life event and lack of partner support (Levine et al., 2015). Both of these risk factors can be experienced by United States military mothers with a deployment of their partner during pregnancy and

delivery and/or during the postpartum period. Active duty mothers can also have these risk factors, or they may be deployed during their postpartum period.

### **Military Mothers**

Military mothers commonly deal with partner deployment, to a combat zone or not. A study by Saldhana et al. 2014 included the availability of the spouse at delivery as a risk factor. Sixty percent of women with PPD in the study had absent husbands, mostly due to deployment (Saldanha et al., 2014). A stressful life event is listed as a risk factor universally, deployment of the partner is a stressful life event and can isolate new mothers. Active duty mothers are also at risk for PPD. The first study on deployment being a risk factor for PPD was completed by Robrecht et al. 2008. The study did find an association between spousal deployment and a positive depression screen (Robrecht et al., 2008). Levine et al. (2015) conducted a study on different times of deployment related to the pregnancy and PPD among civilian wives. When spouses were deployed at any time during pregnancy there was a 17.6% of PPD and 15.7% with women whose spouse did not deploy. If the spouse was deployed before delivery there was 16.5% incidence of PPD, as well as a 17.3% with a postpartum deployment. The highest occurrence of PPD was in women whose spouse was deployed during delivery, 18.4% (Levine et al., 2015). Prolonged deployment of the spouse also has a relationship with the mother's mental health (Spooner et al., 2012). In a study by Rychnovsky and Beck of active duty mothers, half of them had PPD symptoms or a positive Edinburgh screen at discharge and 2 weeks after delivery (2006). It should be pointed out that all of these numbers are lower than the national averages. Wives of active duty spouses and active

duty mothers are more likely to comply with all prenatal visits and care and receive supportive care from military programs (Appolonio & Fingerhut, 2008).

### **Symptoms**

PPD has many symptoms that all healthcare providers should be aware of and are identified in multiple studies (Appolonio & Fingerhut, 2008; Cagliostro, 2020; Ko et al., 2017; USDHHS, 2020; & Levine et al., 2015). They include:

- Feeling restless or moody, having trouble focusing, memory problems;
- Feeling sad, hopeless, overwhelmed, worthless, poor energy levels and no interest in things;
- Persistent crying, withdrawing, or self-isolation;
- Thoughts of suicide and/or infanticide (these are rare);
- Eating and/or sleeping habit changes;
- Anxiety, worry, anger.

Women can display different symptoms and in different combinations. If these symptoms go untreated there could be harmful effects to the infant and family. PPD is not curable, however early screening, diagnosing, and treatment of symptoms can make a profound difference in the life of mother, infant, and family.

### **Screening**

Mothers are routinely screened with the Edinburgh Postnatal Depression Screen (EPDS), a form created for primary care providers to use and is specific for PPD (Appolonio & Fingerhut, 2008). The EPDS is recommended by the American College of Obstetricians and Gynecologists (ACOG) and the American Academy of Pediatrics (AAP) (Stewart & Simone, 2016). It has 10 questions related to PPD symptoms they had

experienced in the last week. The assessment of the mother's symptoms should be part of the screening. A score of 12 or over requires immediate action, such as a referral to mental health and educating the mother on signs and symptoms she and her family should look for. Levine et al. identified the need for primary care providers of military wives to identify spouse's deployment status early in pregnancy (2015). ACOG recommends screening at least once during pregnancy for depression and anxiety, a comprehensive exam at the first postpartum visit, and women with high risk factors should be monitored closely (American College of Obstetricians and Gynecologists [ACOG] Committee Opinion No. 757, 2018). At military hospitals mothers are screened during pregnancy, after delivery, and at postpartum visits. PPD education is only provided prenatally and as needed. Studies have shown that prenatal education is not effective (Ho et al., 2009). However, education may be provided prenatally if reinforcement of knowledge is done with postpartum education (McCarter-Spaulding & Shea, 2016).

### **Education**

Early education for pregnant women is paramount for diagnosis of depression (mild to severe) and treatment options. Early diagnosis can prevent poor outcomes for the entire family and can occur during pregnancy as well as postpartum (Sivapragasam et al., 2019). Nearly 60% of women with symptoms are not given a diagnosis and 50% of women with a diagnosis do not receive treatment (Ko et al., 2017). Forty percent do not keep their postpartum visits (American College of Obstetricians and Gynecologist [ACOG] Committee Opinion No. 736, 2018). Nurses may be the first to notice any symptoms the patient displays at discharge, as well as the family. It is important for mothers and their family members to know what signs and symptoms to look for and

nurses can educate them on what to look for (Assessment Technologies Institute, LLC, 2020) at discharge and days to weeks in the future (Logsdon et al., 2013). Mothers are sometimes unaware that they are showing signs of PPD and/or may be too stoic to report symptoms. This is common in the military community (Sivapragasam et al., 2019). The lack of knowledge and fear of mental health treatment may prevent her from seeking help (Limandri, 2019), as well as embarrassment and fear of losing her baby (Zauderer, 2009).

Commonly discharge teaching happens the morning of discharge when a mother is sleep deprived, has sensory overload, and a poor attention span. In a study by Davis et al. (2010) discharge teaching that included video technology in addition to written information was as effective as traditional discharge education, with the added benefit of conserving nurses' time. The combination method of teaching has shown to increase retention of the information, as well. Davis et al. (2010) also suggested that this could increase patient satisfaction by letting the mother choose when she wants to watch the video. As stated earlier, prenatal education is not effective. However, women that receive teaching during hospitalization are more receptive to the education and suffer from fewer depressive symptoms (Ho et al., 2009). The timing of this teaching may help mothers get the resources and referrals they need before discharge, considering symptoms can start between prenatally and up to 1 year. This education should include the different treatment options that are designed patient specific.

## **Treatments**

When a woman has one or more risk factors, a positive prenatal EPDS, or thoughts of harming herself, she will automatically be referred to a mental health specialist. Common types of treatment include: counseling to change behaviors that make

a woman depressed, antidepressants, and electroconvulsive therapy (Cagliostro, 2020). The Massachusetts General Hospital [MGH] Center for Women's Mental Health (2020) research on non-pharmacological therapies in a group or individually has been shown to reduce symptoms in women with mild to moderate PPD. Women with more severe PPD may need to add antidepressants to their treatment plan. The earlier treatments are offered and women staying educated on PPD, the more effective the treatments work (NIMH, 2019). When a mother's PPD symptoms have not responded to treatment or patient preference, antidepressants may be added. Selective serotonin reuptake inhibitors (SSRI) are commonly used and they are approved for breastfeeding (Stewart & Simone, 2016). The FDA has recently approved brexanolone for the specific treatment of PPD (Gordon, 2019). This is the first medication developed for PPD. Brexanolone works quicker than SSRIs, which may take weeks to be effective. Unfortunately, administration is a 60-hour infusion in a medical facility (Brexanolone [Zulresso] for Postpartum Depression, 2019). The study reports improved PPD symptoms after the 60-hour infusion for women with moderate to severe PPD. After 30 days, women with severe PPD had reduced symptoms, but the women with moderate PPD did not. The biggest side effect is sedation and a single dose costs \$34,000.00. The study also concludes that there needs to be more research on its long-term effectiveness.

### **Theory**

PPD symptoms are treated in many different ways and in different aspects of a woman's life. Her medical history, family support, stressful life events (deployment of a partner or oneself), emotional stressors, complications with the pregnancy and/or

delivery, and perinatal depression are some of the risk factors. Considering the array of areas to evaluate, treating PPD must come from a holistic perspective.

### **Theory Application**

Dossey's theory of integral nursing reflects the type of care women with depression, mild or PPD, need. Dossey's theory and her foundation of nursing promotes healing by "attending to the delicate interaction of body, mind, and spirit and how centuries-old concepts" can be applied to patients and life (Dossey, 2015, p. 72). Mothers with PPD need time to let their body heal after having a baby, their emotional needs should be explored and they should be provided a space for her to connect with her spirit. Patients are independent beings interdependent with each other, and their environment; they are a whole system (Rosa et al., 2019). Mothers are connected to their spouse and/or family unit, as well as the environment they live. Holistic nurses are needed to practice in the present moment with the patient and her family, show compassion, and understand the patient has a significant psychosocial and spirituality that needs to be recognized as important (Rosa et al., 2019). When these are brought together, healing occurs and improves the quality of patient care; nurses guide the patients to this place (Dossey, 1998). Dossey believes nurses must be open to self-discovery, improve their inner healing, and increase awareness of their own healing; all of which leads nurses to being effective holistic guides (1998). Paying attention to a mother's environment could be as simple as arranging the room for her to get around easily and assist family members to see the baby. Letting her explore her senses while guiding the patient through relaxation and imagery are ways to reduce anxiety in the mother (Gustafson, 2015). Authentic listening is also a skill for helping the mother heal, as well as giving factual answers and

showing you care (Dossey, 1996). A relaxed patient is more receptive to learning than an anxious one. Dossey applies Florence Nightingale's approaches to patient care and education. Nightingale's holistic definition of health was "Health is not only to be well, but to use well every power we have." She recognized the importance of education and health, and lifelong learning (Rosa et al., 2019, p.4).

### **Limitations and Strengths**

There has been quite a bit of research on PPD symptoms and risk factors. There is limited research on educating the mother and family on symptoms, encouraging the mother to seek help as needed, active duty mothers, and when the most effective time and technique of that teaching is. It is accepted that every mom receives postpartum education prenatally and at their first postpartum appointment. The appropriateness of postpartum appointments and their timing lacks research. Military mothers have a unique risk factor and there is limited research on that population. They have great prenatal teaching, but not postpartum teaching. There is a lack of research on assessing postpartum women in the first 2-4 weeks after delivery when PPD can manifest. Medications that are effective and compatible for breastfeeding are rarely discussed in the literature. Limitations in research include most effective time of PPD education being given, military mothers, medications, and mom's following up on PPD referral.

## **CHAPTER III**

### **Needs Assessment**

Active duty mothers and wives of active duty partners have an immediate risk for PPD due to the possibility of deployment. PPD education is important for symptom recognition and early treatment. A PPD discharge video would reinforce all PPD education the mother received prenatally.

### **Target Population**

Women with active duty spouses who experience postpartum depression in relationship to spousal deployment and the peripartum period. Also, active duty mothers, who have to return to work at 6 weeks postpartum and may be deployed after 4 months (Rychnovsky & Beck, 2006).

### **Target Setting**

The setting was a military hospital's mother-baby unit and the obstetric clinic.

### **Sponsors and Stakeholders**

Stakeholders included obstetricians, primary care physicians, pediatricians, military families, the military, and hospitals. Sponsors were Pacific Post-Partum Support Society and Postpartum Health Alliance

## SWOT Analysis



## Available Resources

- Pacific Post-Partum Support Society funding ([www.postpartum.org](http://www.postpartum.org)).
- March of Dimes fund raisers ([www.marchofdimes.org](http://www.marchofdimes.org)).
- YouTube videos.
- 2020 Save the Children Federation, INC funding.

## Desired and Expected Outcomes

This video would be mandatory before discharge, just as the shaken baby video they show at the military hospital and discharge videos have been effective (Davis et al., 2010). Mother's stay in the hospital is shorter; a video lessens nurse time teaching and mother's knowledge retention increases (Davis et al., 2010). A discharge video would allow families to learn the signs and symptoms to be aware of. Spousal deployment is a

risk factor in this population and parent's lack of knowledge could lead to undiagnosed PPD and untreated PPD (Limandri, 2019). Realizing the deployment status of a spouse is a risk factor could help improve early diagnosis and treatment (Appolonio & Fingerhut, 2008). Some mothers also experience symptoms in the first postpartum week (Dennis et al., 2004), therefore early education and screening is essential. Postpartum depression is not preventable however, it can be treated with counseling and medications, therefore early treatment is desired.

### **Team Members**

Team members included:

- Master student, Project team leader;
- Obstetrician, Family Practice physician, Nurse Midwife or Practitioner, and a Pediatrician;
- Nurse Executive for Women's Health, Postpartum Unit Manager, RN representatives from all shifts, a NICU representative and the nurse educator for postpartum care;
- Hospital's Education Department;
- Video Designer;
- Production Crew Leader.

### **Cost/Benefit Analysis**

Costs: The average cost of a mental health stay in California is \$13,300.00 for each stay and 50% of a hospital's budget is for mental health (Piper, 2011). The cost of a video is up to \$16,000.00, with a one-time fee (Demo Duck, 2020).

Benefit: Postpartum depression can last for a year or longer and may require more than one hospital stay, \$26,600.00. The one-time video is less costly and does not require continuous added costs.

Military mothers, active duty or partners with an active duty service member, have a unique risk factor for PPD. They typically get prenatal education that includes PPD and that education needs to be reinforced at discharge. A discharge video would reinforce PPD education to mothers and their partners.

## **CHAPTER IV**

### **Project Design**

Postpartum education is vital to mothers before discharge due to PPD being the most common complication of pregnancy. The education would reinforce any previous education the mother and partner received and promote learning objectives (Di Paolo et al., 2017). A video on PPD would be a time-saving and economical way to impact a family's understanding of the mental disorder (Canter et al., 2015).

#### **Goal**

The goal of a video was to provide the important information about PPD for the family to be able to recognize symptoms early, get the appropriate treatment, and ensure the mother and infant's quality of life and bonding. Proper education has the potential to decrease medical costs as well. A video would save nurse's time and allow the patient to choose when they watch it.

#### **Objectives**

- Parents will understand how common PPD is in pregnancy,
- Parents will know risk factors and symptoms,
- Nurses and parents will know that spousal or self-deployment is an independent risk factor,
- Parents will know when to inform their provider of any symptoms or questions.

#### **Material Development and Plan**

The PPD educational video was no more than 6 minutes of didactic teaching with the Postpartum Depression PowerPoint on the screen. Three to six minutes is the optimal amount of time for an educational video (Di Paolo et al., 2017). Demoduck, a

professional educational video company, made the video with a narrator that reviewed the written information in the PowerPoint. The didactic and PowerPoint presentation was parallel.

The PowerPoint included statistics of PPD, risk factors, signs and symptoms of PPD, and possible treatments. The following risk factors were included:

- History of a mood disorder such as depression and anxiety, or a family history;
- History of PPD with previous pregnancies;
- Stressful life events, such as deployment in the military population;
- Lack of partner support, poor partner relationship, or absence of partner;
- Isolation and poor social support;
- Medical complications of pregnancy or infant;
- Drug, alcohol, or tobacco use during pregnancy (Sivapragasam et al., 2019).

The following signs and symptoms were presented in the video:

- Feeling sad, hopeless, worthless, or overwhelmed;
- Trouble with focus, memory, or sleep (too much or too little);
- Poor energy and/or lack of interest in things;
- Crying frequently;
- Self-isolation;
- Eating too much or not enough;
- Thoughts of harming self or infant.

The video also stated that the listed risk factors, signs, and symptoms were not exclusive or independent. Every mother with PPD will have a unique experience and these were only classical guides for the family to look for.

Treatment information that was included were some types of group support, therapy, and medication. Different symptoms require different treatments and mothers will have different priorities of the type of treatment they want. Mothers have to discuss treatments with their care provider to make a plan unique to herself and her needs.

In the process of implementing the use of the PPD video, the team lead did the initial training for all of the team members in a meeting to allow for questions. The video designer was included in the event that changes needed to be made. The nurse educator was responsible for ensuring all staff on the pertinent units were trained, including all shifts. Some of the training was delegated to staff nurses that had received training and felt comfortable doing so. The team lead provided training to an educator in the care providers' offices and the educators were responsible to educate the staff. The training had no additional cost for implementation of the PPD video, it was done during regular staff hours.

A survey to be given to mothers at their first postpartum visit was developed. The survey included the following questions and answer choices:

- How old is your baby?
- Was your partner deployed at any time during your pregnancy?

No, Before, During, and After Delivery

OR

- Were you or will you be deployed within the first year after your baby's birth?  
Yes/No
- Did you watch the Postpartum Depression video before you were discharged from the hospital? Yes/No

- Was it helpful? Agree, Neutral, and Disagree
- Have you experienced any postpartum depression symptoms? Yes/No
- Did you seek support, individual or group? Yes/No
- Did you receive treatment of any kind? Yes/No

### **Timeline**

- June 10, 2020: Video content and form approved by stakeholders. Approval of the postpartum survey.
- June 11-19, 2020: Production of the video.
- June 22-26, 2020: Final approval of completed video by stakeholders and scheduled team meeting. Final approval of the postpartum survey.
- June 30-July 13, 2020: Installation of video into hospital system.
- June 30-July 13, 2020: Educate nurse educators in a meeting during regular work hours. Educators train staff on the video with 20-minute in-services during regular hours.
- July 14, 2020: Begin including the video in discharge instructions and screenings.
- July 21, 2020: Begin using surveys.

### **Budget**

The total budget for the project was \$18,000.00. This covered the cost of the video and any necessary payments to other participants.

### **Evaluation Plan**

The population of mothers with partners that were active duty and active duty mothers received their care at the same clinic in the military hospital, as well as pediatric

care in the hospital. At the mother's first postpartum appointments the postpartum survey was given to each of these patients.

The surveys were given out at each postpartum visit at primary care, obstetric, and pediatric appointments for 2 years. The information remained anonymous and was separated by postpartum stages, such as 1 month, 2-6 months, and 6 months-1 year. Statistical data was then be obtained from the results. PPD can manifest at any time up to a year postpartum; the surveys would capture mothers that may not have developed symptoms until after their first postpartum appointment. A correlation could then be made between spousal deployment, self-deployment, viewing the PPD video, and seeking support or treatment if they experienced symptoms. In this evaluation Edinburgh scores were not included; those scores were not used by mothers.

Most of PPD risk factors and symptoms are universal but not exclusive, and they can come in any combination. However, many mothers are not aware of them including deployment status and may be unaware that they need some type of treatment. The design of this video would reflect risk factors and the signs and symptoms mothers and their family members could recognize. The information was easy to understand and retain. The short length of the video kept the audience captured.

## **CHAPTER V**

### **Dissemination**

Dissemination involved letting the stakeholders know that the project included the need for postpartum depression (PPD) education in the military mothers' population and how it influenced the video content. The goal was to make hospital staff, nurse managers, Obstetricians, Pediatricians, and nurse educators aware of the video and the necessary training for using it.

#### **Activity**

An email was sent to the stakeholders inviting them to a small conference to educate them on the video content, the need in the targeted population, and how training was executed. There were four scheduled meetings to allow for more opportunities for stakeholders to attend. Each meeting was held at different locations: the naval hospital (day and night shift), the Obstetric clinic, and the Pediatric clinic.

#### **Limitations**

A limitation was the difficulty in scheduling meetings at a military facility due to strict policies on outside educators. Another limitation was that staff may be reluctant to attend an in-service during a busy shift. To combat staff's reluctance, the nurse educators were then responsible for getting the information to all staff members. A similar process was used in the clinics.

#### **Nursing Implications**

Nursing will benefit from the video in time spent with discharge education. Nurses will only have to review information with mothers that have questions on PPD.

There was also an opportunity for nurses to capture mothers with signs and/or symptoms that may have been missed with traditional discharge instructions.

The video has the potential to decrease readmission of mothers for PPD and its complications. This can also help keep medical costs down.

### **Recommendations**

The PPD video should be shown to every postpartum mother and their supporters before discharge. Any woman that has delivered a baby, regardless of the infant's status, is at risk for developing PPD. The video provides consistent information that didactic education may not. The PPD discharge video would be helpful at all hospitals with the same postpartum population that is used in this study.

### **Conclusion**

Active duty and partners of active duty Marines have a unique risk factor related to deployment of mother or partner. Active duty mothers have the potential of being deployed in the first year of their baby's life. Partners of Marines may have their partner deployed anytime between conception and the postpartum period. Nurses need to recognize this as a risk factor even when there are no others. Deployment is a stressful life event, which is one of the highest risk factors for PPD.

Military mothers receive PPD education in optional prenatal classes. A required discharge video would reinforce that education, save nurses' time, and potentially recognize signs and/or symptoms in a new mother that may have been missed with didactic discharge education. It is important to educate mothers and their support partner on PPD because it is the most common complication of pregnancy and can have devastating effects on the mother's quality of life and the infant's development.

## References

- American College of Obstetricians and Gynecologist [ACOG] Committee Opinion No. 736. (2018) Optimizing postpartum care. *American College of Obstetrics and Gynecology*, 131(3),140-150. <https://doi.org/10.1097/AOG.0000000000002849>
- American College of Obstetricians and Gynecologists [ACOG] Committee Opinion No. 757. (2018). Screening for perinatal depression. *American College of Obstetrics and Gynecology*, 132(5), 208-212. <https://doi.org/10.1097/AOG.0000000000002927>
- Appolonio, K., & Fingerhut, R. (2008). Postpartum depression in a military sample. *Military Medicine*, 173(11), 1085-1091. <https://doi.org/10.7205/MILMED.173.11.1085>
- Assessment Technologies Institute, LLC (2020). Postpartum depression nursing ce course. <https://www.nursingce.com/ceu-courses/postpartum-depression>
- Brexanolone (Zulresso) for Postpartum Depression. (2019, July 2). *JAMA*, 322(1), 73-74. <https://doi.org/10.1001/jama.2019.6622>
- Cagliostro, D. (2020) *Postpartum depression (PPD): A guide to common depression after childbirth*. Psycom. <https://www.psycom.net/depression.central.post-partum.html>
- Canter, J., Rao, V., Patrick, P., Alpan, G., & Altman, R. (2015). The impact of a hospital-based educational video on maternal precautions and planned practices of infant safe sleep. *Journal for Specialists in Pediatric Nursing*, 20(3), 187-192. <https://doi-org/10.1111/jspn.12114>

Centers for Disease Control and Prevention, Reproductive Health (2019). *Depression during and after pregnancy.*

<https://www.cdc.gov/reproductivehealth/features/maternal-depression/index.html>

Massachusetts General Hospital [MGH] Center for Women's Mental Health (2020, June 3). *Postpartum Psychiatric Disorders.* <https://womensmentalhealth.org/specialty-clinics/postpartum-psychiatric-disorders/>

Davis, A., Burns, S., Swanberg, M., Lambert, D., Collins, C., Bagby, E., & Conaway, M. (2010). Comparison of didactic and video discharge teaching in the postpartum patient population. *HCPPro's Advisor to the ANCC Magnet Recognition Program; Marblehead* 6(10), S1-S9. <http://ezproxy.gardner-webb.edu/login?url=https://search.proquest.com/docview/756742668?accountid=1104>

Demo Duck (2020). [www.demoduck.com/startup-video-production/](http://www.demoduck.com/startup-video-production/)

Dennis, P., Janssen, P., & Singer, J. (2004). Identifying women at-risk for postpartum depression in the immediate postpartum period. *Acta Psychiatrica Scaandinavica* 110(5), 338-346. <https://doi.org/10.1111/j.1600-0447.2004.00337.x>

Di Paolo, T., Wakefield, J., Mills, L., & Baker, L. (2017). Lights, camera, action: Facilitating the design and production of effective instructional videos. *Tech Trends*, 61(5), 452-460. <https://doi.org/10.1007/s11528-017-0206-0>

Dossey, B.M. (1996). These interventions can help your patient relax and make his hospitalization more pleasant. *Nursing*, 26(10), 52-54.

Dossey, B.M. (1998). Holistic modalities & healing moments. *American Journal of Nursing*, 98(6), 44-47.

- Dossey, B. (2015). Barbara Dossey's theory of integral nursing. In M. Smith & M. Parker (Eds.), *Barbara Dossey's theory of integral nursing* (pp. 207-233). Philadelphia, PA: F. A. Davis Company.
- Gordon, J. (2019, March 20). *A bench to bedside story: The development of a treatment for postpartum depression*. National Institute of Mental Health.  
<https://www.nimh.nih.gov/about/director/messages/2019/a-bench-to-bedside-story-the-development-of-a-treatment-for-postpartum-depression.shtml>
- Gustafson, C. (2015). Barbara Dossey: Developing a healing approach in nursing. *Integrative Medicine: A Clinician's Journal*, 14(5), 72-77.  
<https://www.ncbi.nlm.nih.gov/pmc/articles/PMC4712872/>
- Ho, S., Hey, S., Jevitt, C., Huang, L., Fu, Y., & Wang, L. (2009). Effectiveness of a discharge education program in reducing the severity of postpartum depression: A randomized controlled evaluation study. *Patient Education and Counseling*, 77(1), 68-71. <https://doi.org/10.1016/j.pec.2009.01.009>
- Ko, J., Rockhill, K., Tong, V., Morrow, B., & Farr, S. (2017). Trends in postpartum depressive symptoms- 27 states, 2004, 2008, and 2012. *Centers for Disease Control and Prevention Morbidity and Mortality Weekly Report*, 66(6), 153-158.  
<http://dx.doi.org/10.15585/mmwr.mm6606a1>
- Levine, J., Bukowinski, A., Sevick, C., Mehlhaff, K., & Conlin, A. (2015). Postpartum depression and timing of spousal military deployment relative to pregnancy and delivery. *Archives of Gynecology and Obstetrics*, 292(3), 549-558.  
<https://doi.org/10.1007/s00404-015-3672-7>

- Limandri, B. (2019). Postpartum depression: When the stakes are the highest. *Journal of Psychosocial Nursing & Mental Health Services*, 57(11), 9-14.  
<https://doi.org/10.3928/02793695-20191016-03>
- Logsdon, M., Eckert, D., Tomasulo, R., & Myers, J. (2013). Self-efficacy and postpartum teaching: A replication study. *The Journal of Perinatal Education*, 22(3), 166-170. <https://doi.org/10.1891/1058-1243.22.3.166>
- McCarter-Spaulding, D., & Shea, S. (2016). Effectiveness of discharge education on postpartum depression. *MCN: The American Journal of Maternal/Child Nursing*, 41(3), 168-172. <https://doi.org/10.1097/NMC.0000000000000236>
- National Institute of Mental Health [NIMH] (2019). *Perinatal Depression*.  
[https://www.nimh.nih.gov/health/publications/perinatal-depression/20-mh-8116-perinataldepression\\_159799.pdf](https://www.nimh.nih.gov/health/publications/perinatal-depression/20-mh-8116-perinataldepression_159799.pdf)
- Piper, K. (2011, June 25). *Hospitalizations for mental health and substance abuse disorders: Costs, length of stay, patient mix, and payor mix*. Piper Report.  
<https://piperreport.com/blog/2011/06/25/hospitalizations-for-mental-health-and-substance-abuse-disorders-costs-length-of-stay-patient-mix-and-payor-mix/>
- Robrecht, D., Millegan, J., Leventis, L., Crescitelli, J., & McLay, R. (2008). Spousal military deployment as a risk factor for postpartum depression. *Journal of Reproductive Medicine*, 53(11), 860-864.
- Rosa, W., Dossey, B., Watson, J., Beck, D., & Upvall, M. (2019). The United Nations sustainable developmental goals: The ethic and ethos of holistic nursing. *Journal of Holistic Nursing*, 37(4), 381-393. <https://doi.org/10.1177/0898010119841723>

- Rychnovsky, J., & Beck, C. (2006). Screening for postpartum depression in military women with the postpartum depression screening scale. *Military Medicine*, 171(11), 1100-1104. <https://doi.org/10.7205/MILMED.171.11.1100>
- Saldanha, D., Rathi, N., Bal, H., & Chaudhari, B. (2014). Incidence and evaluation of factors contributing towards postpartum depression. *Medical Journal of Dr. D.Y. Patil Vidyapeeth*, 7(3), 309-316.  
[www.mjdrdypu.org/text.asp?2014/7/3/309/128972](http://www.mjdrdypu.org/text.asp?2014/7/3/309/128972)
- Sivapragasam, V., Manjappa, A., Patil, A., & Kalaimani, M. (2019). Prevalence and risk factors of postpartum depression at a tertiary care institute. *International Journal of Reproduction, Contraception, Obstetrics and Gynecology*, 8(7), 2773-2780.  
<https://doi.org/10.18203/2320-1770.ijrcog20193041>
- Spooner, S., Rastle, M., & Elmore, K. (2012). Maternal depression screening during prenatal and postpartum care at a navy and marine corps military treatment facility. *Military Medicine*, 177(10), 1208-1212. doi.org/10.7205/MILMED-D-12-00159
- Stewart, D. & Simone, V. (2016). Postpartum depression. *The New England Journal of Medicine; Boston*, 375(22), 2177-2186. <https://doi.org/10.1056/NEJMcp1607649>
- U.S. Department of Health and Human Services, Office of Women's Health (USDHHS) (2020). *Postpartum depression*. <https://www.womenshealth.gov/mental-health/mental-health-conditions/postpartum-depression>
- Zauderer, C. (2009). Postpartum depression: How childbirth educators can help break the silence. *The Journal of Perinatal Education*, 18(2), 23-31.  
<https://www.doi.org/10.1624/105812409X426305>