Postpartum Depression: Implementing an Evidence-Based Social Support Network in North Carolina

By

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Abstract

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Problem Statement: Postpartum depression (PPD) is a significant public health concern and effects between 12-25% of postpartum women in the first year following childbirth. Evidence has shown that social support interventions, including peer support, prevent PPD.

Purpose: This DNP Project provided an evidence-based program development, implementation, and evaluation of a community social support network for postpartum women in Cleveland County, North Carolina (NC).

Methods: Two models from Postpartum Support International (PSI) were replicated to develop a support network inclusive of an anonymous weekly telephone-based peer support group. A Community Advisory Group and an educational offering for health professionals were also developed to increase knowledge of PPD within the community.

Findings: The anonymous telephone-based peer support group met weekly for eight weeks and a total of seven women participated in the group with statements collected. All seven found the group helpful. The educational presentation had a total of 26 participants, and positive statements regarding the presentation were noted in the evaluations. Findings were found to be similar to research literature for women in the postpartum period.

Conclusion: Implementing a sustainable social support network for postpartum women increased the needed support for women who were struggling with the emotional needs of the postpartum period, educated the community regarding the importance of peer support, and increased the collaboration among healthcare professionals interested in maternal mental health.

Dedication

First of all, I want to express my deepest appreciation to my husband and my three children who have supported me wholeheartedly through-out this journey. Without their love, encouragement, patience, and never ending support, I would not have been able to finish this project.

Also, I would like to thank Dr. Elaine Domian who has served as my DNP Academic Advisor and DNP Project Committee Chair while at The University of Kansas School of Nursing. Her dedication to community health and vulnerable populations has been very inspiring, and her positive attitude has been such an encouragement to me. I also want to thank Dr. Karen Wambach who has served as my DNP Project Committee Member. Her patience and support has also been very helpful through-out this process.

Finally I would like to dedicate this project in memory of my Mother who taught me to never give up and to advocate for those who sometimes have a difficult time to stand up for themselves. It is my hope that projects like this one will help women who suffer with depressive symptoms many times in silence, and may they seek the help they need during the postpartum period and beyond.

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Motherhood usually is a positive event for most women. However, some women find the postpartum time frame is full of fatigue, isolation, and feelings of being over-whelmed. Postpartum depression (PPD) is the most common complication of childbirth (Brealey, Hewitt, Green, Morrell, & Gilbody, 2010). It has been described as a "downward spiral" away from mothering (Montgomery, Mossey, Adams, & Bailey, 2012, p. 524). The definition of PPD is a major depression of at least two weeks duration in the first year after delivery with rates of PPD varying from 12% to 25% (Goodman & Tyer-Viola, 2010). Unfortunately, postpartum care is often times neglected, and PPD is under-recognized and undertreated (Amnesty International, 2010). It is estimated that only half of women with perinatal depression receive any type of mental health evaluation or treatment (Tandon, Leis, Mendelson, Perry, & Kemp, 2014). Many women are discharged within 2 days following birth, and not seen by a health-care professional for at least six weeks. The six week postpartum check-up tends to focus on the mothers' physical needs, and many women do not report their mood changes for several reasons (American College of Obstetricians and Gynecologists, 2015). Therefore, emotional and coping needs are not the focus of this visit (Corrigan, Kwasky, & Groh, 2015). Some mothers prefer withdrawal from society over being judged or being misunderstood, and prefer peer support to complement their recovery. Support services need to be fully understood by healthcare providers and community professionals (Beck, 1993).

American women are not the only women prone to PPD. It has been considered a serious public health concern affecting women of all socio-economic status world-wide (Glavin &

Leahy-Warren, 2013). Depression in the postpartum period occurs at a very crucial time in a woman's life, can persist for long periods especially if left untreated or undiagnosed, and can have negative effects on partners and children. Public health nurses are key professionals to serve women in the postpartum period, and need to have the ability to collaborate with other professionals to strengthen families and prevent PPD. The World Health Organization (WHO) identified improving maternal mental health as an important global Millennium Development Goal (MDG) #5 and detection and intervention as important (Miranda & Patel, 2005). In 2015, the United Nations developed the Sustainable Development Goals. Goal #3 focuses on "Ensuring healthy lives and promote well-being for all at all ages," (WHO, 2015). However, many PPD cases are not detected due to the lack of an international agreement on screening for PPD. Healthcare professionals also may not understand PPD, do not agree on when to screen or what screening tool to use (Glavin & Leahy-Warren, 2013).

According to Letourneau et al. (2014), PPD can lead to other significant problems for both women and their families. It can adversely impact the mother-infant relationship and self-care abilities. For instance, it can decrease the mother's ability to interact as a responsive caregiver and can lead to long-term cognitive, emotional, and behavior problems. Other negative consequences include marital problems, divorce, unemployment, increased medical care costs, family dysfunction, child neglect and abuse (Tsivos, Calam, Sanders & Wittkowski, 2015).

Problem Statement

During the fall of 2015, a community needs assessment was completed within the population served by the Nurse Family Partnership (NFP) of Cleveland County, North Carolina (NC). It was determined that more comprehensive mental health services were needed for postpartum women in the community. According to the public health nurses and the obstetric

care managers, many postpartum women were referred for further mental health services, but they do not obtain the services for a variety of reasons. A mental health clinic was in close proximity to the health department, but many did not seek services at this location due to the mental health stigma, lack of transportation and/or childcare, fear of what might happen to their children, and the time involved. The first walk-in intake visit was approximately three to four hours in length, and telemedicine was often used. Women sometimes were unable to speak directly to a mental health professional, but spoke to someone via a computer screen, which had been an unsatisfactory experience for these women (H. Willis, personal communication, June 7, 2016). Other barriers were found during the community needs assessment regarding mental health services and included the following: costs, wait lists for services, lack of a mental health resource list of mental health providers and services, and lack of mental health providers who specialize in maternal mental health in the community.

During the spring of 2016, a need was identified for a comprehensive list of mental health resources that healthcare professionals can use to help serve postpartum women. While attending a health department meeting, one obstetrician commented: “We don’t have a mental health resource list of where we can send these women,” (K. Borders, personal communication, April 10, 2016). It was determined that there were only a few mental health providers in the area that specialize in maternal mental health. Also, there were no support groups in the community that serve postpartum women with depressive symptoms to prevent or treat PPD.

According to the lactation consultant at the community hospital, there was a weekly breastfeeding support group available with minimal attendance. She relayed that many women were calling her with breastfeeding questions and also felt they needed additional emotional support (B. Bryant, personal communication, March 12, 2016). During prenatal classes at the

hospital, PPD is discussed. The providers at the Shelby Women's Clinic, which is the primary obstetric office in the community, perform PPD screening using the Edinburgh Depression Scale or the PHQ-9 scale at 6 weeks postpartum. According to one obstetrician, "I have been using the Edinburgh Depression Scale for the past three years. Some of my partners are opening up to the idea of screening. The PHQ-9 is also being used in our office per the hospital protocol. I would say that there has not been an increased incidence in PPD since we have been performing screenings," (K. Borders, personal communication, Jan. 27, 2017). The screening decision was based on the increased conversations within the healthcare community regarding PPD, ACOG recommendations, and patient situations. The Shelby Children's Clinic, the primary pediatric office, also screens mothers if they note the need using the Edinburgh Depression Scale.

Based on evidence, a positive association has been identified between peer support and PPD recovery (Montgomery et al, 2012). Other evidence suggests that women who are involved in peer support groups feel less isolated and are able to increase their hope by being a part of a supportive community (Beck, 1993). A peer support group also allows postpartum women to share struggles, and creates a safety network of other women who are in similar circumstances (Ralph, 2005). However, in Cleveland County, NC there are no peer support groups for postpartum women. Community professionals need to collaborate with each other and need to be educated regarding the symptoms of PPD, the mental health resources that are located in the area, the importance of peer support in prevention of PPD, and the importance of screening. Without community collaboration, peer support, or mental health awareness for postpartum women, more families will suffer in silence and the community will undergo further public health concerns.

The Purpose of the Doctor of Nursing Practice Project and Objectives

The purpose of this Doctor of Nursing Practice (DNP) Project was to provide a comprehensive social support network for women and their families who may be experiencing emotional struggles following childbirth in Cleveland County, NC. The goal of this social support network was to provide empathy, information, and practical help, including resources and help from other available local supportive professionals who are trained in maternal mental health. Postpartum Support International (PSI), which is a global social support organization supporting women and families with perinatal mood disorders including PPD, provided the models used in setting up the social support network. PSI has been used as a model in the development of other support networks across the country. The "Mom to Mom Support Network" in Cleveland County focused on three main objectives:

1) The development of a Community Advisory Group (CAG). These professionals supported, promoted, sustained, and advertised the "Mom to Mom Support Network."
2) The development and implementation of an anonymous telephone-based weekly peer support group.
3) The development and implementation of an educational presentation for the Cleveland County, NC healthcare community at the Cleveland County Health Department.

Review of the Literature

The primary literature search strategy for the DNP Project included two primary databases: the Cochrane Library and PubMed. The following key words were used: "postpartum depression," "telephone peer support," "peer support programs to prevent

postpartum depression," and "social support." Several quantitative primary research articles were utilized in the literature review process, and were predominantly single randomized controlled trials (RCTs). Inclusion criteria involved articles preferably published within the last five years. United States (U.S.) studies were preferred. However, the research of Canadian researcher Dr. Cindy- Lee Dennis, an expert in PPD was included. Other qualitative studies, reviews and informative articles were also utilized. The review of the literature was organized by important topic areas related to PPD. These included an overview of qualitative research findings of PPD, PPD risk factors, barriers to seeking mental health services, social support, peer support and home visitation, online support, and telephone-based support.

Overview of Qualitative Research Findings of Postpartum Depression

Dr. Cheryl Beck has done research with PPD for over 20 years. Her middle range theory: *Teetering on the Edge* has been used to guide practice and used to understand behaviors. The theory involves four stages. These stages are Stage 1-Encountering Terror, Stage 2-Dying of Self, Stage 3-Struggling to Survive, and Stage 4-Regaining Control (Marsh, 2013). A meta-synthesis of 18 qualitative studies was also conducted by Dr. Beck to understand the common themes with PPD (Beck, 2002). PPD was described as a "dangerous thief that robs mothers of the love and happiness they expected to feel toward their newborns," (Beck, 2002, p.453). The results of the meta-synthesis involved several common perspectives found through-out the studies, including: pervasive loss, incongruity between expectations and reality of motherhood, spiraling downward, feelings of anxiety and being overwhelmed, making gains, surrendering, and making changes. Overall, many of the women with PPD had unrealistic expectations of being a mother and strived to be the "perfect mother" (Beck, 2002, p.458). When the women felt

that they were not “perfect mothers” guilt and anxiety took over which put them at greater risk for PPD. Risk factors and barriers will be addressed prior to a review on social support.

Postpartum Depression Risk Factors

Several risk factors for PPD have been documented. According to the Centers for Disease Control (2016), some experiences put women at higher risk for PPD. For instance, women who have problems getting pregnant, deliver multiples, experience premature labor or experience miscarriages have a greater risk for PPD. Also, teen mothers are four times more likely to develop PPD compared to older mothers (Coriandoli, 2014).

According to Werner, Miller, Osborne, Kuala, and Monk (2015), other social risk factors for PPD included a complicated pregnancy, a difficult relationship with family or a partner, unemployment, and history of sexual abuse. Some biological risk factors in recent research included studies showing an association with oxytocin and inflammatory markers and PPD (Osborne & Monk, 2013). According to a study by Manuel, Martinson, Bledsoe-Manson, and Bellamy (2012), the risk for PPD was higher for women who experienced economic hardship, parenting stress and poor physical health. Some other risk factors for PPD included unintended pregnancy, maternal anxiety, life stress, past history of depression, lack of social support, domestic violence, poverty, and a traumatic birth experience (ACOG, 2015). It has been found that psychosocial factors such as poverty, marital issues, and life stressors were more predictive to PPD than biological or hormonal causes (Tsivos et al, 2015).

Other warning signs that a mother may be at risk for PPD included missed appointments, excessive worrying about her own health or the health of the baby, looking overly tired, significant weight gain or loss, expressing lack of support, and breastfeeding problems (Bennett & Indman,

2015). It is suggested that women who have early breastfeeding difficulties need to be screened for PPD, which may reduce both depressive symptoms and increase breastfeeding goals (Watkins, Meltzer-Brody, Zolnoun, & Stuebe, 2011). According to recent research, mothers who never breastfed their infants had greater than two times higher chance of depressive symptoms than mothers who breastfed at 16 weeks postpartum (Pope & Mazmanian, 2016).

Barriers to Mental Health Services

There are several barriers that prevent postpartum women from seeking needed mental health treatment. Some of these included the illness itself, social stigma, fear, lack of information, lack of or poor social support, poverty, limited access to social resources, teen pregnancy, fear of medications, denial or ignorance, being self-reliant, a poor treatment referral network, child care issues, lack of financial resources, lack of transportation, and fear of losing children (Corrigan et al., 2015). Women who are homeless, dealing with domestic violence and/or drug abuse are dealing with many factors that also prevent them from seeking help (Solchany, 2001).

According to Goodman (2009), the top three perceived barriers to obtaining professional help for PPD and or anxiety were lack of time, stigma, and no child care. Other barriers included lack of understanding about services, lack of family approval, and/or cultural, and language barriers. Many women mistrust mental health providers and may not have the knowledge to understand the reasoning for taking anti-depressants if they are recommended. Some also may not have the understanding that PPD recovery is a process that occurs over time and is not an overnight phenomenon (Montgomery et al, 2012).

Many women do not discuss their anxiety or depression with their healthcare providers (Montgomery et al, 2012). Their silence may be due to several factors including fear of child removal, admission to a psychiatric facility, and being labelled as a "bad mother." Women may also feel that their provider is unresponsive or unsupportive; therefore they do not feel comfortable sharing their emotional concerns. Providers may not have the training or may have misconceptions that PPD does not fall within their provider role. If providers understand the screening and the referral process, more women will be able to access appropriate mental health resources (Byatt, Moore-Simas, Lundquist, Johnson, & Ziedonis, 2012).

Two qualitative studies were reviewed regarding patient perspectives in seeking mental health services (Flynn, Henshaw, O'Mahen, & Forman, 2010; Thomas, Scharp, & Paxman, 2014). In both studies women's stories and interviews were collected and analyzed for not seeking mental health services and/or treatment. It was determined that few postpartum women suffering from depression obtained mental health services. An individualized approach to care was preferred, and they sought care based on the location of the mental health services, if the referral process was convenient and timely, and if there were flexible treatment options (Flynn et al, 2010). They preferred to see someone on the same day of the obstetric visit if possible. Some women also preferred to have home-based treatment versus seeing someone in a clinic (Flynn et al, 2010). In research by Thomas et al (2014), online public stories of participants were analyzed. Many women lacked social support, health insurance, and support groups. Many of the study participants were not aware of the free or affordable treatment options that were available in their communities. Also, many of the women's partners or husbands did not understand the signs of PPD so they did not encourage the women to seek help when needed.

Overall, it was recommended that all postpartum mothers be screened for PPD, and all health care providers diagnose and are prepared to treat PPD (Thomas et al, 2014).

It is important to address the barriers for postpartum women in order for them to receive the care they need. Many women do not understand PPD, feel shameful, do not understand the need to seek services or treatment or doubt the services or treatment effectiveness. They also feel that their children's needs come before their own needs. Other women felt that racial discrimination was an issue with mental health services. In fact, African-American women had a 50% lower probability of using mental health services compared to Caucasian women during the perinatal period according to Song, Sands, and Wong (2004). Overall, those living in poverty have greater barriers to seeking services (Boyd, Marjie-Mogul, Newman, & Coyne, 2011). Based on this evidence, health care professionals must try to increase social support for postpartum women.

Social Support

Several studies have indicated that there is a direct relationship between social support and PPD. According to Dennis (2009), any psychosocial or psychological intervention, compared to usual postpartum care was associated with a 30% reduction of depressive symptoms within the first year following childbirth. The principle of a social support network is essential in the postpartum period. Social support should consist of emotional support, concern, comfort, and encouragement. Also, informational support is important and needs to include advice, education and knowledge (Corrigan et al., 2015). Other key components of a social support network should include acceptance, listening and allowing someone to feel cared for and valued (Hahn-Holbrook, Schetter, & Hobel, 2013).

According to research, women who receive strong social support from their families during pregnancy are less likely to develop PPD (Dennis, 2009). In fact, social support has been found to provide biological protection from a particular stress hormone: Placental Corticotropin-Releasing Hormone (PCRH) especially during the third trimester, which leads to lower depressive symptoms in the postpartum period (Hahn-Holbrook et al., 2013). In general, decreased social support is the "strongest environmental risk factor for a postpartum depressive disorder" (Asselmann, Wittchen, Erier, & Martini, 2016, p. 1), and encouraging peer support and home visitation has been supported in literature to reduce depressive symptoms.

Peer Support and Home Visitation

Based on research evidence, peer support and home visitation has resulted in a reduction in depression scores using the Edinburgh Depression Scale for women at risk for PPD. Peer support groups are described as a therapeutic space for sharing struggles, addressing similar circumstances, for developing camaraderie, and assisting in the recovery process (Mohr, 2003). According to Bennett and Indman (2015), a peer support group provides non-judgmental, empathetic active listening led by trained professionals who often have recovered from PPD. Moreover, peer support focuses on prevention of PPD and building coping skills versus treatment (Tandon et al, 2014).

Overall, research specific to peer support and PPD suggests that peer support interventions engage mothers in safe interactions and focus on compassion and mutuality (Scott, 2008). Beck (1993) summarized peer support by stating it gives women hope and supportive communities. Several research studies determined a positive association between peer support and recovery from PPD. Peer support participation allowed women to expand their options, and

strengthened their self-determination (Montgomery et al, 2012). Through connections with others, the women were empowered and encouraged to manage the stigma of emotional concerns (Ralph, 2005). Two systematic reviews, which are considered the highest level of evidence, supported peer support groups for postpartum women to prevent depressive symptoms (Dennis & Chung-Lee, 2006; Dennis & Kingston, 2008).

According to Dennis (2009), there are many benefits associated with peer support groups. If peers and facilitators were giving emotional and informational support, the benefits included decreased feelings of loneliness, increased confidence, effective coping, increased self-esteem, and increased help-seeking behaviors. Giving mothers the opportunity to talk was found to be helpful in a qualitative study according to Turner, Chew-Graham, Folkes, and Sharpe (2010). Facilitators encouraged mothers to talk, and it was conveyed that active listening does not replace treatment if needed.

A systematic review involving over 22 RCTs documented the effectiveness of postpartum support to improve the knowledge, attitudes and skills, quality of life, and overall health of postpartum women (Shaw, Levitt, Wong, & Zaczorowski, 2006). Two RCTs concentrated on nurse home-visiting programs and prevention of PPD and included the use of cognitive based therapy (CBT) (Goodman, Prager, Goldstein, & Freeman, 2014; & Tandon et al., 2013). In Goodman et al (2014), dyadic psycho-therapy which included CBT with the mothers and their newborns proved effective to decrease PPD. According to Tandon et al. (2013), CBT in a nurse home-visiting program was effective to decrease PPD, but was not considered cost effective and thus may not be feasible for those who lack financial resources.

According to a recent pilot study in the United Kingdom, trained peer support workers (PSW) may assist in reducing PPD in home visitation. The PSWs had suffered and recovered

from PPD, were trained and employed on a six month contract by the National Health Service (NHS) Trust. The workers visited mothers who were at risk for PPD at their homes for six weeks. Depression scores using the Edinburgh Depression Scale were received at 6 weeks and 12 weeks postpartum and when their infant was six months old. Quantitative and qualitative results indicated that the PSWs had a positive effect on the mothers' mental health, and their relationships with their children.

As before mentioned, PPD is a serious maternal mental health issue that negatively impacts both mothers and their children. Various interventions have been done in several studies to prevent and decrease depressive symptomology. Peer support has shown promise, and is rewarding to both women and their peers (Leger & Letourneau, 2013). For women who may have limited access to face to face peer support, online and telephone-based support are also options.

Online Support

Online support for postpartum women with depressive symptoms has been on the rise in recent years with the increase of internet mental health services. Postpartum Support International (PSI) has weekly online support meetings in different time zones and several different languages (PSI, 2016). Several studies have also been done analyzing the effectiveness of online support. For instance, trained online supporters were used in a program entitled: "7 Cups of Tea," to supplement treatment for PPD (Baumel & Schweller, 2016). The results found that patients found it usable and useful to have trained listeners who supported them outside their scheduled therapy appointments. The online emotional support was evaluated to be accessible, available, and a positive supportive resource.

Another study was done to examine the issue of the mental health stigma, and if using online support would encourage women to seek help from providers for their depressive symptoms. According to Moore and Ayers (2016), 15 women participated in an online forum, were interviewed and themes were identified. Many of the postpartum women feared being labeled a "bad" or "failed" mother, and feared telling their providers about their depressive symptoms. However, most women benefitted from visiting the forum, sharing an understanding of PPD, and the online support encouraged women to disclose their symptoms to their providers. According to Evans, Donelle, and Hume-Loveland (2012), online support groups provided women who experienced PPD a safe place to connect with other women and receive information, encouragement and hope.

Telephone-based Support

Telephone-based peer support has been used for other illnesses including cancer care, perinatal loss, diabetes, smoking cessation, and support for Newborn Intensive Care Unit (NICU) parents. According to Reeder, Joyce, Sibley, Arnold, and Altindag (2014), telephone peer support was used with Women, Infants and Children (WIC) participants to improve breastfeeding. Exclusive breastfeeding length was increased after telephone peer support was initiated. For postpartum women, there is significant evidence that telephone peer support reduces and prevents depressive symptoms, and PPD. Telephone-based peer support groups provide active listening in a non-judgmental format. It is also a positive choice for women to obtain resources without obtaining medical advice. According to Dennis (2014), telephone peer support is provided in a confidential format for women to obtain resources when they are not ready for a face-face group format.

Several studies used telephone-based support to decrease PPD (BenDavid, Hunker, & Spadaro, 2016; Dennis, 2009; & Posmontier, Neugebauer, Stuart, Chittams, & Shaughnessy, 2016) in a peer support or counseling format. According to Dennis (2009), telephone-based peer support was provided by a community trained volunteer who had also experienced PPD. Results indicated that those who received telephone-based peer support were at half the risk of developing PPD at 12 weeks compared to the control group. According to Ben David et al. (2016), half of the women in the study scored positive for depression after telephone screening. In both studies the Edinburgh Depression Screening Scale was used. According to Postmontier et al. (2016), telephone based support using interpersonal psychotherapy (IPT) with a certified nurse midwife (CNM) was found effective to decrease PPD.

Telephone-based peer support interventions also offer flexibility, privacy, accessibility and are cost effective. Women prefer talking with others compared to taking medications, and are able to receive postpartum information in a non-threatening environment (Milani, Azargashb, Beyraghi, Defaie, & Asbaghi, 2015). According to Dennis et al. (2009), telephone-based peer support was effective in preventing PPD especially for those women who were at high risk. Over 80% of the women who participated in the RCT were satisfied with the support they received (Dennis et al., 2009). Many traditional face to face support groups are poorly attended by new mothers who are feeling depressed. The telephone remains accessible for most women. The issues with transportation, childcare, mis-trust of mental health providers, stigma or time constraints are not an issue with telephone-based support (Dennis, 2009). In general, RCTs have shown that telephone-based support is effective, acceptable, and has documented lower rates of PPD and maternal depression up to two years following delivery (Letourneau et al., 2014).

Summary of Evidence

Overall, several studies identified lack of or inadequate support to be a strong risk factor for PPD. Women need compassionate listeners who are trustworthy, available, and understanding especially when they are feeling isolated or alone. It is recommended that primary prevention techniques such as education be used to prevent PPD. Screening as a secondary prevention strategy is also recommended, and the most valid and tested tool is the Edinburgh Depression Scale, which has been tested with diverse populations (McQueen, Montgomery, Lappen-Gracon, Evans & Hunter 2008). Also, health care providers must be able to identify the difference between postpartum blues, which usually occurs the first two weeks following delivery, and PPD. Nurses are recommended to provide supportive weekly interactions and ongoing assessment using purposeful listening in a safe space such as a peer support group (McQueen et al, 2008). Therefore, integrating peer support in postpartum health promotion efforts is recommended using telephone-based peer support for those who have significant barriers to mental health services (Dennis, 2014).

Conceptual Frameworks

Postpartum Support International History

Jane Honikman, who recovered from PPD, established Postpartum Support International (PSI) in 1987. She began the first postpartum peer support group in Santa Barbara, California. According to PSI (2016), a social support network enables postpartum women to understand that they are not alone, are not to blame, and they will get better with help. Social support is essential to assure that mental health of women, children and their families is protected with empathy, information, and practical help. Four categories of social support including material or practical, emotional, informational, and comparison of support are important in a PSI support network. Internationally, PSI is made up of individuals, and support networks that are dedicated

to increase the awareness of perinatal mood and anxiety disorders (PMAD) including anxiety and PPD. PSI also supports families through advocacy and collaboration by educating and training the professional community.

Trained PSI Coordinators, who may be nurses or other health-care professionals, serve as support group facilitators. Some of these coordinators are bi-lingual, may provide legal services, provide support for dads and partners, and serve the military. Other resources provided by PSI include newsletters, online education, resources, webinars, trainings, and conferences. The PSI Coordinators are required to undergo national and state-wide trainings. They serve as advocates, and supportive professionals who are knowledgeable about maternal mental health. They also allow participants an opportunity to talk about their pregnancy, birth, and postpartum experience. In general, PSI believes that if mothers feel supported then they will be able to better care for their families (PSI, 2016).

Currently, PSI is collecting data with their national online support groups. The PSI telephone-based peer support groups are based on Dr. Cindy-Lee Dennis's research. Telephone-based peer support groups are free, open-ended, and women can have privacy (PSI, 2016). According to Dennis (2014), telephone support is provided in a non-judgmental and confidential format where women can obtain resources; some women are also not ready for a face-face group format. According to PSI (2016), a comprehensive support network is important in order to provide postpartum women with the comprehensive help they need. A support network may include telephone-based support, online support with mental health resources, a face-face support group, and community seminars.

Postpartum Support International Models

Two specific models are used by PSI in developing a support network. The primary model is the "Steps of Wellness Model," which was originally designed for telephone-based support and developed by the PSI founder (Honikman, 2015). The "Steps of Wellness Model" includes the following steps: 1) Education, 2) Sleep, 3) Nutrition, 4) Exercise and time for oneself, 5) Non-judgmental sharing, 6) Emotional support, 7) Practical Support, and 8) Referrals to Resources. These steps of wellness do not intend to replace medical advice or treatment. PSI supports the comprehensive approach to supporting women that may involve medical treatment, therapy, and emotional support. Coordinators cannot diagnose an illness, but promote "mothering the mother" (Honikman, 2014, p. 1). They are also considered the link in the chain with providing information, resources, and support so that women and their families get the help they need. Honikman's vision was to have "a postpartum parent support network in every community in the world," (Honikman, 2015, p. 17). (See Appendix A: "Steps to Wellness Model.")

"Mothers Helping Mothers Model"

The second evidence-based model used frequently in PSI support networks is the "Mothers Helping Mothers Model" based on research from Dr. Cindy-Lee Dennis. Peers provide emotional, informational, and validation support to each other (Dennis, 2009). Peers also decrease loneliness, prevent or decrease health concerns, provide social companionship, encourage effective coping, promote positive maternal identity, increase self-esteem, and encourage help seeking behaviors. Facilitators or PSI Coordinators can assist the peers with staying connected with each other by encouraging positive relationships while sharing experiences, and help provide validation and positive reinforcement (Dennis, 2009).

The "Mothers Helping Mothers Model" recommends skills and technique to provide effective telephone-based support. Empathetic listening, reflection, open-ended questions, problem solving, and exploring options are important skills used. Empathetic listening involves letting the peers set the pace of the phone conversation, as opposed to the facilitator driving the conversation. Open-ended questions are used to explore feelings while listening attentively (Dennis, 2009). Both the "Steps to Wellness Model" and the "Mothers Helping Mothers Model" were utilized with the "Mom to Mom Support Network" in Cleveland County, NC.

Methods

Design

This project was an evidence-based program development, implementation and evaluation project (Chism, 2006). The foundation and development of the PSI sponsored social support network: "Mom to Mom Support Network" in Cleveland County, NC was based on the replicated models: "Steps to Wellness Model" (Honikman, 2014) and the "Mothers Helping Mothers Model" (Dennis, 2014). Dr. Dennis's extensive research was primarily with telephone-based support, and in some cases she utilized trained peer volunteers. These models were used in the program planning, development, implementation, and evaluation in the "Mom to Mom Support Network." For instance, both models emphasized the need for a strong supportive community network. In the program planning and development process, a thorough mental health resource list was compiled identifying community professionals who specialized and were interested in maternal mental health. A community advisory group was formed to provide input for the project and support advertisement and promotion for the telephone-based anonymous peer support group. During the implementation phase, the steps to wellness, empathetic

listening, and open-ended questions were used incorporating both models in the telephone support group. The models were discussed during the community education presentation. An ongoing evaluation was also emphasized to support the sustainability of the project, and to better understand the most effective way to serve the population of interest.

Population of Interest

It has been documented that teenage mothers and women who live in poverty have higher rates of PPD (Boyd et al., 2011). In Cleveland County, NC, there is a high teen birth rate, high poverty rate, and high rate of births to Medicaid and WIC mothers, which pre-disposes the population of interest to vulnerability. The teen birth rate for 2014, rate per 1,000, 15-19 year old girls, was 43.8%. For African American teens, the rate was 63.8% and for white teens it was 37.9%. The teen birth rate for 15-17 year olds was22.3%; and 18-19 year olds was 75.3%. The birth rate for those women age 30 or higher was 23.5%. In 2016, the percentage of those individuals who were living at or below the poverty level was 21.1%; the state poverty rate was 17.2%. The birth rate for individuals who did not have health insurance in Cleveland County, NC in 2016 was 15%. Births to women with Medicaid and WIC from 2008-2012 were 67.4% and 60.8% respectively (NC Health and Human Services, 2016). The specific population of interest for the DNP Project was postpartum women who live in the Cleveland County, NC area.

Community Setting

Cleveland County, NC is considered a rural area in the southwestern part of the state. It is situated between Asheville, NC and Charlotte, NC, which are two larger cities in NC. Cleveland County is in the foothills of the Blue Ridge Mountains; in 2016 the total population

was 96,879. Shelby, NC, where the Cleveland County Health Department is located, is the county seat. In 2014 the median family income was $49,550, and the unemployment rate was 5.2%. Approximately 82% had completed at least high school in Cleveland County in 2014 while 16.5% completed at least a Bachelor's degree (U.S. Census, 2016).

The healthcare delivery system consists of one community hospital: Cleveland Regional Medical Center is licensed for 260 beds, and has a Level III trauma center. There are two primary obstetrician's offices: Shelby Women's Clinic and Boiling Springs Women's Clinic. The primary mental health clinic that serves the Medicaid population is Monarch Open Access, which is in close proximity to the Cleveland County Health Department. According to the U.S. Census (2016), the racial makeup in Cleveland County is 74% White, 21% Black, 3% Hispanic, 0.69% Asian, 0.15% Native American, and 1.16% other races. There is a public transportation service in Cleveland County: Transportation Administration of Cleveland County (TACC) that can be arranged for doctors' visits at reduced rates by appointment.

Project Development and Intervention

The social support network needed to be flexible to match the resources within the population of interest. The "Mom to Mom Support Network" development involved six stages: 1) Brainstorming, 2) Investigation, 3) Planning, 4) Implementation, 5) Evaluation, and 6) Future Endeavors (Honikman, 2014).

Stage 1: Brainstorming.

In the brainstorming stage, it was imperative to find others who also shared the vision of a social support network and had the commitment to make it viable (PSI, 2013). The first stage

was completed in the spring 2016 while the DNP candidate was meeting with several community professionals who shared an interest in maternal mental health. These community professionals included obstetric and pediatric providers, public health professionals, hospital employees, mental health professionals, and childbirth professionals. All are key like-minded individuals who wanted to participate in the support network in a collaborative fashion and help sustain the social support network. The supportive community helped with referrals, resources, and encouraged women to participate. Making calls, having face to face meetings, and handing out fliers to community members were important in the beginning and through-out the project time frame for the network's success.

A mental health resources list and referral process was developed by the DNP candidate in the spring 2016 for postpartum women living in Cleveland County, NC seeking mental health services or referred by a healthcare professional (See Appendix B: Mental Health Resources List). The list was circulated in summer 2016, and the list provided information regarding PSI, a local crisis phone number, and a national suicide prevention phone number. Several resources were also listed including books and websites. Many visits to local community professionals were made to compile this mental health resources document. A need was identified for collaboration between healthcare professionals and community lay members to address the issues of maternal mental health. During this process, possible members for the Community Advisory Group (CAG) were identified. They expressed interest and commitment to being on in an advisory role for this project, and were continuously updated on the "Mom to Mom Support Network." The NC Teen Pregnancy Prevention Council meets every two months at the Cleveland County Health Department and several individuals from the council were interested in

serving on the CAG (See Appendix C: Letter of Invitation & Listing of Community Advisory Group Members).

Stage 2: Investigation.

In the investigation stage, PSI certification and training were completed by the DNP candidate, and visits to regional PSI support groups were also completed. Initially, a two day PSI National Certificate Training was completed August 2013 in Chicago, Illinois (IL) to become a PSI Volunteer. An application process, which required references, was completed May 2016 to become a North Carolina PSI Coordinator, and a day-long training was completed June 2016. A PSI National Conference was also attended June 2016 in San Diego, CA where networking was done nationally and state-wide. Peer support groups sponsored by PSI in NC and South Carolina (SC) were then researched and personal connections were made.

During the summer of 2016, connections with other North Carolina PSI Coordinators were made by the DNP candidate. Also, several PSI face-to-face support groups in NC and SC were visited. The average rate of participants who participate in the face-face support groups vary depending on geographic location (A. Wimer, personal communication, September 5, 2016). A weekly national PSI telephone-based peer support group entitled "Chat with the Expert" was visited several times during the summer of 2016. "Chat with the Expert" is conducted by TelSpan: Teleconference Services via 1800 #. National PSI Coordinators facilitate this peer support group, where women can come and go. An average of one to three women participates in "Chat with the Expert" on a weekly basis (L. Swanson, personal communication, September 5, 2016).

Stage 3: Planning.

The planning stage is the "meat" of the work process (Honikman, 2014). The network's purpose, philosophy, goals, services, and objectives were determined during the planning stage. Any funding was determined during this stage. Work on this stage was done during the summer of 2016 while writing the DNP Project proposal. The preliminary mission statement for the support network was developed and shared with the NC Teen Pregnancy Prevention Council of Cleveland County during the summer 2016. The development of the mission statement and DNP Project officially began after receiving the Kansas University Medical Center (KUMC) Institutional Review Board (IRB) notification for the project as being determined "Not Human Research." The mission statement for the support network was identified as:

> "**The mission of the "Mom to Mom Support Network" in Cleveland County is to provide support, information, and resources to women and their families coping with their emotional needs, especially during postpartum, and to the professionals who serve them."**

Stage 4: DNP Project Implementation.

The implementation stage involved the three main objectives of the DNP Project for the "Mom to Mom Support Network" following KUMC IRB notification. These three objectives involved the CAG, the eight anonymous telephone-based peer support groups, and the fall educational program to community healthcare professionals on PPD.

The CAG advertised and promoted the telephone-based anonymous peer support group. The CAG was finalized and met one week prior to the phone group. Meeting minutes and field notes were kept for analysis and evaluation of the effectiveness and sustainability of the project. A letter was sent to interested community members to serve on the CAG in the early fall 2016.

Several emails were sent to community healthcare professionals including the NC Teen Pregnancy Prevention Council members within Cleveland County. The first meeting was held on October 10th, 2016. Five members attended the first meeting at the Shelby Wellness and Therapy Center. The Mental Health Resources List for Cleveland County, NC was also distributed at the first meeting.

Following the first CAG meeting, several emails were sent to two pediatricians in the area, the Director of Childcare Connections, who organizes the childcare agencies in the community, the lead school nurse in the community at the Cleveland County Health Department, and to two churches with large day-cares. These emails discussed the anonymous telephone-based peer support group and included the flyer. Two community lay-members were added to the CAG during December 2016. The second CAG meeting was held on January 9th, 2017 at the Shelby Wellness and Therapy Center in Shelby, NC. Four CAG members including the DNP candidate attended the meeting. The attendees included a mental health therapist, director of childcare facilities in Cleveland County, a community lay-member who survived PPD, and the DNP candidate. The next CAG meeting will be held in Shelby, NC in June 2017.

Several emails were sent to community members including the telephone-based peer support group flyer (See Appendix D: Telephone-Based Peer Support Group Flyer). Recruitment for the telephone-based peer support groups included sending emails to key community members or groups, handing out fliers to numerous organizations and giving presentations to professionals who serve mothers. Flyers were also distributed to various places advertising the phone support group including: doctors' offices, pediatric clinics, the library, Cleveland County Health Department, hospital, mental health clinics, school nurses and other areas. Emails were also sent to the CAG members, the educational presentation participants, the NC Teen Pregnancy

Prevention Council members, the Nurse Family Partnership (NFP) of Cleveland County, and local churches and schools. Fliers were also handed out to area businesses including the local library, Monarch Access Mental Health Services Clinic, local churches, and Cleveland Regional Medical Center. On October 27th, 2016, the DNP candidate visited a "Mom's Day Out" event at the NFP at the Cleveland County Health Department, and spoke to several mothers and handed out fliers. Also, a 15 minute presentation was completed with the obstetric nurses regarding the telephone-based peer support group at Cleveland Regional Medical Center on November 14th, 2016. The phone group was discussed, and the nurses stated that the flyer was made available in the discharge packet at the hospital. An email was also sent to one of the childbirth educators at Cleveland Regional who teaches prenatal classes. She discusses PPD as a possible complication of pregnancy, and the phone group flyer was made available to her class participants.

A total of eight anonymous telephone-based peer support groups were conducted for this DNP Project. The conference calls were set up with Vast Conference Services (provided via PSI) at $19.00 month for the "Mom to Mom Support Network" in Cleveland County, NC. The anonymous telephone-based peer support group began Tuesday October 25th, 2016 and continued until Tuesday Dec. 13, 2016. Data were collected throughout the eight sessions.

The weekly anonymous telephone-based support group met Tuesday evenings at 6:30-7:30 PM, and a confidentiality and emergency guidelines script was read weekly to the participants (PSI, 2016). Also, participants were asked at the end of each weekly anonymous telephone peer support group if the session was helpful for them. This served to help evaluate the effectiveness of this intervention. It was stressed to the participants that their participation in the telephone-based support group was voluntary and answering evaluative questions at the end of each session

was optional and remained anonymous (See Appendix E: Telephone-based Support Group Script and Questions).

The educational presentation was held on October 10th, 2016 during a lunchtime session at the Cleveland County Health Department in Shelby, NC. A flyer for the workshop was distributed to several community agencies to inform interested participants regarding the presentation including the Cleveland County Health Department, Shelby Wellness and Therapy Center, Shelby Women's Clinic, and the Cleveland County Regional Medical Center. Following the PowerPoint presentation, adequate time for questions was allowed. An evaluation was distributed to participants following the presentation (See Appendix F: Educational Presentation Evaluation). The telephone-based peer support group was discussed and fliers for the telephone-based peer support group were made available. Follow-up emails were sent to all participants within the week thanking them for their participation.

The following objectives were the focus of the presentation:

1) The participants will understand the definition of postpartum blues, PPD, and postpartum psychosis following the presentation.
2) The participants will understand the risk factors for PPD and the barriers for seeking mental health services following the presentation.
3) The participants will understand the importance of peer support based on evidence following the presentation.
4) The participants will understand the importance of screening based on ACOG recommendations following the presentation.

Stage 5: Evaluation.

During this important stage the evaluation process took place. Data collection and analysis were conducted for each of the three components of the project to support the evaluation process and sustainability of the support network.

Data Collection and Analysis.

Detailed field notes were kept throughout the three components of the DNP Project. The CAG meetings were held at two intervals in October and January. The CAG participants signed in at the beginning of the meetings with their contact information. An agenda was handed out at each meeting, and notes were kept regarding the discussion. Detailed field notes were kept during the telephone-based weekly peer support group, including the number of participants and summary statements. There were a total of seven participants in the telephone-based peer support groups. Results are shared in the DNP Project Findings section.

The educational presentation evaluations were analyzed. Evaluation results and demographic information of the participants are discussed in the DNP Project Findings section. Data collection and analysis went on simultaneously with data collection consisting of in-depth field notes during each phase of the project. The DNP candidate took minutes and recorded field notes of the CAG meetings. Field notes were written along with asking a set of three non-invasive questions at the end of each anonymous telephone-based peer support group. Changes or additions to the non-invasive questions did not occur over the course of the eight week telephone peer support group based on participant responses. Participants were assured that the responses were voluntary, and all data were kept anonymous with only aggregate reporting of findings. Data collection for the fall presentation consisted of a short post-presentation evaluation questionnaire based on presentation objectives. Participants were asked to complete some basic demographics to help describe the audience attending the fall presentation. Field

notes along with the telephone-based peer support group responses were analyzed for participant summary statements. The presentation evaluations were analyzed using descriptive statistics. Data were kept secure with only KUMC secure file transfer used to share data with faculty overseeing project. Findings of each component of the project were to help identify sustainability and future implementation of the support network. A detailed summary done by the DNP candidate was completed based on the overall goals of the project including what worked well and what did not work well.

Stage 6: Future Endeavors and Plans for Project Continuation

In the final stage, continuing the network was the focus. Flexibility of the timeline was important in promoting the social support network (See Appendix G: Timeline of the DNP Project & "The Mom to Mom Support Network"). The DNP candidate spent two semesters at the Cleveland County Health Department, completing a Public Health Nursing Practicum, inclusive of 384 hours, and is committed to both the community and sustainability of the "Mom to Mom Support Network." It will be essential to continue to recruit other community members to be a part of the network, including both mental health providers for referrals and as members of the Community Advisory. Communication will also be essential for the longevity and sustainability of the network. This will include regular meetings of the Community Advisory Group, and presentations. Involvement with the NC-PSI Committee Chapter will be crucial to keep the community stake-holders abreast of any items that are being presented including conferences on the topic of maternal mental health. It is a possibility to try to recruit other nurses in the area to be trained as PSI volunteers to assist in the social support network. A face

to face peer support group may be developed after the completion of the DNP Project for postpartum women who would like to meet regularly in person at a local community site in Cleveland County, NC. The face to face support group would be in conjunction to the telephone-based peer support group.

It is a long-term goal to continue the "Mom to Mom Support Network," and maintain the sustainability of the network. The CAG will continue to meet every four to six months in the Shelby, NC area. The emphasis will continue to focus on the maternal mental health needs of postpartum women in the surrounding community. The anonymous telephone-based peer support group has continued to meet weekly as initiated. Ideally, the CAG members will become more involved with the telephone-based peer support group; it is hopeful that the CAG members will continue to advertise and recruit participants for the phone group. Other future presentations will be made regarding the "Mom to Mom Support Network." These will include the Final Presentation of the DNP Project in April 2017. Also, the DNP candidate has been asked to be one of the main speakers at a National Association of Mental Illness (NAMI) Conference: "Erasing the Stigma of Mental Illness," in Shelby, NC in May 2017 that will focus on the stigma of mental illness and substance abuse prevention. The DNP candidate will present on PPD, and the implications of maternal mental health issues in Cleveland County, NC. The DNP candidate will also continue involvement with the NC-PSI Chapter in the future as the Outreach Committee Chair, hopefully be involved with legislation that may arise with PPD, and possible future community events regarding PPD.

DNP Project Findings

Community Advisory Group

The focus of the first CAG meeting was to discuss maternal mental health issues, and discuss the advertising and recruitment efforts involved with the telephone-based peer support group. The CAG members discussed areas for advertising within the community which included childcare settings, churches, schools, and doctors' offices. Screenings were also discussed as both the PHQ-9 and Edinburgh Depression Tool are used in providers' offices. Due to the long wait times for mental health services in the area, and the lack of insurance coverage for mental health services, the CAG agreed the anonymous telephone-based peer support group was an effective way to reach women with possible depressive symptoms. Also, substance abuse issues were discussed. Several Methadone Clinics are heavily utilized in the area, and the CAG members were concerned with the increasing number of pregnant women with substance abuse issues, who may be at risk for PPD.

The focus of the second CAG meeting was to educate the CAG members regarding the eight weeks of the telephone-based peer support phone group including the number of the participants and the summary of the participant statements. Discussion focused on further recruitment to promote the phone group. One attendee discussed the importance of advertising the group to women who may be using social media sites that discuss PPD. Two of the attendees wanted more information to educate women, spouses, and childcare workers about signs and symptoms of PPD; PSI information was later sent to the CAG members. The next CAG meeting will be in June 2017 (See Appendix H: CAG Meeting Agendas).

Telephone-Based Peer Support Group

The anonymous telephone-based peer support group for this project was conducted for eight weeks from October 25th-December 13th, 2016. A total of seven callers participated in the

total eight weeks, with an average of less than one caller per week (See Appendix I: Phone Results Table). The "Steps to Wellness Model" was utilized each week and the script and questions were read to the participants. All seven of the participants expressed "Yes" that the phone group was helpful. When asked if they plan to participate in the future, all seven expressed "Maybe" or "Possibly" based on their availability around their children's and work schedules. None of the participants had any suggestions. All seven of the participants were referred to PSI's website: www.postpartum.net for further education and resources.

The following participant summary statements were identified during the weekly discussions: not wanting to ask for help, not able to exercise at all, sleeping "sometimes", and "feeling overwhelmed." The "Steps to Wellness Model," which emphasizes basic needs, was utilized during the phone group. The "Mothers Helping Mothers Model," was also utilized stressing empathetic listening and open-ended questions.

During the first two weeks of the telephone-based peer support group, there were no participants. During the third week of the peer support phone group, there was one participant. She stated that she had gone back to work full-time, and revealed that "some nights were better than others" regarding a sleep routine with her 13 month old. She did state that her in-laws lived close by and were very supportive. However, she "did not like to ask for help," and allowed her mother-in-law to help "every now and then." She attended a breastfeeding support group in the earlier postpartum period at a nearby hospital, which she found very helpful especially when she went back to work full-time.

During the fourth week, the one participant expressed concerns with both exercise and sleep. Her son was 14 months old, but with working full-time and balancing her husband's busy work schedule and childcare schedule, she "doesn't exercise at all." She stated that exercise and

cooking meals was “very difficult and hard to do.” However, she revealed that she has “huge support” from her family who live within a couple hours. Her husband “works a lot, and has a somewhat flexible schedule.” Based on her doctor’s recommendations, she was encouraged to try to start in small increments with an exercise routine, with walking on the weekends while her husband was at home.

One woman participated in the fifth week of the phone group. Her child was one month old, she was a single parent, and she lived with her parents. She also expressed concerns with sleep and “feeling overwhelmed.” When asked if she was able to get any sleep or able to nap when her baby naps, she stated “sometimes.” This participant’s tone of voice sounded flat, and she did not seem to want to reveal a lot of information. The “Mothers Helping Mothers Model,” (Dennis, 2009) was used during the discussions with this participant making sure empathetic listening and reflection were used appropriately. She was encouraged to call back in future weeks of the phone group, referred to www.postpartum.net, and encouraged to seek help from the NFP nurses with questions or concerns. She had mentioned on the telephone-based peer support group that she was enrolled in the NFP program.

Two women participated in the sixth week of the phone group. The peer support revealed positive communications between the two participants and they seemed to give encouraging support to one another during the telephone-based peer support group. One participant had a boy who was two months old, and the other participant was pregnant with her second child. The first participant revealed that “sleep is the most stressful” part in her postpartum period. She had a C-Section that was not planned, and experienced mastitis within the first month. She also has had to see a chiropractor since her delivery due to hip and spinal cord pain following the C-Section delivery. She received support from the hospital breastfeeding

consultant where she delivered, which she stated was helpful. When asked about family support, she stated that her husband was her "only support system" since her family lives in Puerto Rico and New York. She did express feeling "overwhelmed" especially at night when her husband was asleep. She was referred to PSI's website for further materials, encouraged to call back in future weeks, encouraged to call the local hospital postpartum nurses 24-7 with questions or concerns, and referred to her hospital's website for breastfeeding support groups.

The second participant during the sixth week, discussed sleep issues when her first baby was first born and revealed that her first baby "slept through the night at four months old." She also stated remembering feeling "overwhelmed" in the first few months postpartum. Practical support such as "having someone to cook for you" was the biggest help. She was supportive to the other participant which seemed very helpful.

Two women participated in the seventh week. The first participant had twins who were four months old. She had some fertility issues and a history of polycystic ovarian syndrome. Her twins were conceived via In-Vitro Fertilization (IVF). One of her twins remained in the special care nursey for a few weeks. She had "positive family support" within one hour away, and stated that she has several friends and neighbors who have been helpful during the postpartum period. The second participant had a three week old baby and two older children. This participant also had a C-Section delivery. She expressed concerns with not being able to exercise for quite a while as she is an avid runner. Some of the stressful aspects of her postpartum period were not being able to keep her house clean, not being able to have time for her own basic needs such as "going to the bathroom," or "taking a shower," and sleeping. She stated that she knows she should sleep when the baby is napping, but there's "too much to do." She stated that she does not have a lot of family nearby to help since they recently moved from

New Jersey. However, she recently hired a housekeeper every other week to help with basic house cleaning, which she stated has really decreased her anxiety. Both of these mothers were encouraged to call back in future weeks, and referred to the hospital where they delivered to talk to the postpartum nurses if necessary.

Educational Presentation

The educational presentation took place on October 10th, 2016. Evaluations were handed out following the presentation, were reviewed and analyzed. The participants' demographic information and the evaluations' questions were analyzed to develop summary of group responses (See Appendix J: Presentation Evaluation Tables).

Most of the 26 (25 evaluations received) participants were between the ages 20-29 (28%), the majority of the participants were White (88%), most of the participants were registered nurses (RN) (72%), with the majority having worked in their profession 10 years or more (56%). Most of the participants revealed that they had a fair grasp of PPD prior to the presentation (56%), and the majority knew someone either personally or professionally who had experienced PPD (68%). All of the questions related to the presentation objectives were answered "Yes" (100%).

The following group summaries were identified following the educational presentation after analyzing the evaluation questions. On Question #2 under the demographics: Do you know someone who has experienced PPD personally or professionally? Several answers revealed clients who had "thoughts of hurting their children" or "thoughts of being a bad mom." One participant revealed that a new mother "left her baby with the nurses at the health department because she felt she was going to hurt herself and the provider walked her over to the

mental health clinic while the nurses watched her baby." When asked how the PPD resolved? Answers were hospitalization, medications, counseling, time, "client moved closer to family for support," and attended group sessions.

In response to Question #1 based on presentation objectives: Do you better understand postpartum blues, PPD, and postpartum psychosis and how will it help you in your practice? Responses included: "will be able to refer to PSI," "great to have this resource in our county," "help awareness," "help me tremendously as a nurse home visitor," "recognize signs of PPD," and "get clients the help they need as soon as possible."

In response to Question #2: Do you better understand the risk factors for PPD, and what risk factors do you see as most likely to occur? Many respondents stated they work with teens living in poverty, and they are at high risk for PPD. Other recurring themes were: "lack of support," "breastfeeding problems," "fast paced and stressful lifestyle and trying to be everything to everyone," "back to work and school quickly and family work a lot so not available very much," "clients who are overwhelmed with many children and poor support at home." Other risk factors included lack of transportation, child-care, and lengthy wait times for mental health services.

In response to Question #3: Do you better understand barriers and what barriers do you think will occur? Many respondents stated that the clients may not seek help due to the stigma with mental health issues, not wanting to get on medications, transportation problems, family or partner not being supportive of mental health services, lack of insurance or childcare, lack of time to seek services, fear of children being taken away, and "some mental health providers do not want to see maternity patients."

In response to Question #4: Do you better understand the importance of peer-support and do you think women will be open to receive peer support? The responses were varied. Some responses were that some clients would be open to receiving peer-support; some responses were "not sure," or "maybe." One response was "Yes and No. Many may not want to be associated with the stigma of a mental health disease."

In response to Question #5: Do you better understand the importance of screening and when do you think screening should occur? Many of the respondents stated that screening for PPD needs to occur early in pregnancy or at "the first prenatal appointment." One respondent stated "as early as possible." Another response revealed that screening for PPD needs to occur at "baby's first appointment."

In response to Question #6: What other information would you like to know? Many respondents stated comments about the upcoming telephone-based support group program. One response was: "Good program. Needed in this community," "A good referral list," "Great asset for our county," and the presentation objectives "were covered very well."

Discussion

The three components of the DNP Project: the CAG, the telephone-based support group and the educational presentation appeared to be a positive addition to Cleveland County. The three components all were effective in supporting a social support network to serve postpartum women in Cleveland County. The PSI Model: "Steps to Wellness" and the "Mothers Helping Mothers" model both were used throughout the project specifically during the telephone-based peer support group, and helped with identifying participant summary statements. The "Mothers Helping Mothers Model" was used to encourage effective coping and helped provide social

companionship which occurred especially during the weeks where there was more than one participant.

Several community members expressed that it was a well-needed project and it would make lasting impact among the families. The nurses at the hospital expressed positive feedback regarding the project. Developing the CAG was instrumental for collaborating with various community professionals as well as community lay-members who are interested in maternal mental health issues. The members seemed to enjoy the meetings and discussions. It will be important to continue the CAG with regular meetings, and continue to try to get the community more involved with the issues of maternal mental health.

The advertising and recruitment part with the telephone-based peer support group required a lot of time and stamina, but there was positive feedback with these efforts. Several professionals followed up and revealed that the phone group flyer is now a part of their education and or discharge packet materials: the obstetric care management postpartum packet at the Cleveland County Health Department, the postpartum discharge packet at the Cleveland County Regional Medical Center, Shelby Women's Clinic education materials, and breastfeeding and prenatal classes at the hospital. According to one obstetric care manager at the Health Department, there were a few ladies who were pregnant and expressed interest in the postpartum phone peer support group. One obstetrician who is also a CAG member commented that she has referred ladies to the telephone-based support group. The educational presentation had a positive turn-out with 26 participants. The evaluations revealed a lot of positive comments following the questions as discussed in the Findings section. It will be essential to continue presentations with different audiences such as at a pediatric office, daycare setting or at a nearby alternative school.

Similar findings were made between the findings of this project and the review of the literature. For instance, the CAG members discussed the importance of screening women and the need for increased education among community workers who take care of women and children on a daily basis. According to Thomas et al (2014), healthcare providers must recognize the importance of screening all postpartum women for PPD, and be educated with the current treatment plans for PPD. One CAG member emphasized the need for focusing more on online support as the women she serves utilize online forums to connect with other women. This is important as women may be encouraged to seek mental health services if they have interacted with other women in an online support group (Moore & Ayers, 2016).

The findings of the telephone-based weekly peer support group identified participant statements that were similar to the research findings in the literature. For example, several of the participants stated that time constraints were one of the biggest factors preventing them to seek support. According to Dennis (2014) and Goodman (2009), time was listed as a major barrier for women to seek help for mental health services. All seven phone group participants stated that participating in the phone peer support group was helpful, and appreciated the resources that were available. However, a few of the phone group statements revealed that they "didn't want to ask for help," for different reasons. It is interesting to note that some women may not make their needs known to others if they feel people cannot offer them the specific help they need (Negron, 2013). Many women may not want to talk about their feelings or may feel that their peers cannot relate. Women may feel embarrassed to ask for help or may not want to seek help if it reflects negatively on their ability to be a good mother. The fear of being labelled a "bad" or "failed" mother was also found in the review of the literature (Beck, 2002 & Montgomery et al, 2012), and may prevent women from seeking help they need.

The educational presentation evaluations revealed several key statements from the participants that were similar to the findings in the review of the literature. For instance, some participants identified several risk factors and barriers with the women they serve. Many of the women they care for are at high risk for PPD, including teens, those living in poverty, and women with poor social support systems. Other statements that were identified by the presentation participants revealed that the women they served fear mental health services or have transportation or childcare issues (Dennis, 2009). Some of the participants also revealed that some of the women they serve may or may not want to participate in a phone group because of the mental health stigma and fear of being labelled as a mental health client. As mentioned earlier, many women may not want to discuss their issues (Montgomery et al, 2012). Overall, the findings that were revealed with the three components of the social support network were supported in the literature.

Limitations

There were limitations to this DNP Project. With any new project or change, an adequate time for adjustment needs to be taken in consideration. The local lactation consultant encouraged the CAG to not be discouraged. She stated "it takes some time to get the word out especially in a smaller rural community." She also stated that several times she has tried to start a breastfeeding support group or class based on clients' needs and requests. However, no one "would show up even after they requested the specific class." She said, "It's just the way life is sometimes. We do all we can to meet their needs and requests, and then no one will show up or participate. Do not give up." Therefore, a limitation of the project was the short timeframe for the promotion, advertising, and data collection for the telephone-based peer support group sessions. Having more than eight weeks for the weekly phone sessions may have enlisted more

participants while also allowing for greater trust to develop overtime with this vulnerable population.

Nursing Implications

Peer support groups, including phone support, are an essential resource for postpartum women. Linking Cleveland County to a PSI sponsored support network was needed and hopefully seen as a valuable resource. Implementing a telephone-based peer support group should be helpful for women who desire free and confidential peer support in their own community without having to travel from their homes or leave their children. However, many women may not want to ask for help. According to Negron (2013), there are also differences among different racial and ethnic groups and how women ask for the help they need. For instance, African-American and Hispanic women felt that support should come naturally and they should not have to ask for it. All ethnic groups believed that basic instrumental support, such as bathing, eating, sleeping, and basic emotional support should come from partners and mothers first, and then close friends and other family members.

Further connections with other community professionals who serve women need to be made. These include other local childbirth educators and those who work with pediatric populations. According to Zauderer (2009), childbirth educators can start the discussion of focusing on a healthy emotional state before delivery. Childbirth educators can discuss PPD during prenatal classes with the partners of the women so PPD signs and symptoms can be recognized by others in the postpartum period. Since the stigma of mental health is a reality, postpartum women may be reluctant to ask for help but their loved ones may encourage them to seek help if they better understand PPD. PPD should be addressed as a possible complication

with labor and delivery. Childbirth educators also need to discuss preventing fatigue, preventing social isolation, and the importance of arranging help for basic needs in the postpartum period (Zauderer, 2009).

Due to the fact that many women may not seek help for depression in the postpartum period, emphasizing screenings in pediatric offices may be a better way to reach postpartum women that may be suffering with PPD (Liberto, 2012). Screenings that are reliable and feasible during well-baby visits are a way to screen women consistently. Providers can recognize signs for PPD and provide needed education; they can also better understand maternal-infant relationships that may be suffering due to PPD. Screenings are being done at the Shelby, NC area pediatric offices at this time. Two primary pediatric offices and the Director of Childcare Connections were contacted regarding the telephone-based peer support group. However, it would be helpful in the future to continue discussing the "Mom to Mom Support Network" with several other area pediatric clinics or other community individuals whom work with pediatric populations. Further presentations could be arranged to make sure the professionals and staff at area daycare settings and the pediatric offices are adequately educated and trained regarding signs and symptoms of PPD.

Legislation that focuses on PPD needs to be a focus in the community. For instance**,** on November 30, 2016, the U.S. House passed PPD legislation entitled: "Bringing Postpartum Depression Out of the Shadows Act." This Act will provide states federal grants to develop and maintain programs for better screening and treatment for PPD, and was introduced in the U.S. Senate. According to Congresswoman Katharine Clark from Massachusetts (MA) "No mom should feel alone while suffering from the pain, isolation, and frustration that come with postpartum depression. The health and success of families include, and begins with the whole

health of our moms. The passage of the 'Bringing Postpartum Depression Out of the Shadows Act' means we are taking active steps to break down the stigma that has kept moms from getting the care they need and deserve."

Connecting community professionals who are interested in serving women and educating the community are positive ways to ultimately improve health outcomes for all families in the community. Hopefully, the results of this project will positively impact the mental health of postpartum women and the community of Cleveland County. Through the program planning, development, evaluation and sustainability of this project, the DNP candidate provided new insight into the community awareness of the mental health resources, filled the need of a social support network for postpartum women, and provided better understanding of PPD among the population of interest. The DNP candidate, in an Advanced Nurse Practice role, was also able to focus on educating the healthcare community of Cleveland County, and the CAG regarding the current evidence that is associated with PPD. The DNP candidate is focused on the sustainability of this important project that provides for a social support network for postpartum women. It will be crucial to reach out to other nurses and healthcare professionals in the community who also have similar interests with maternal mental health, advertise with social media sites and online forums to encourage additional participation for the phone group, and continue involvement with PSI.

Conclusion

Postpartum should be a time when women and their babies are getting to know each other, and should be a positive experience for families. However, for many women, postpartum brings on depressive feelings, which can lead to PPD. Many women feel guilty about their

depression at a time when they know they should be elated, and may not disclose their feelings to others (Honikman, 2014). PPD is the most common complication of pregnancy. However, many postpartum women do not recognize PPD, and fail to seek help for various reasons. Some of these factors may be unknown. These women may fear being labeled as a mental health client or fear their children will be taken (Liberto, 2012). Younger mothers who are living in poverty or on WIC assistance are at higher risk for PPD. The population of interest in this project was associated with these demographics. Nonetheless, according to Beck, Gable, Sakala, and Decleroq (2011), appropriate postpartum services that identify women who may be experiencing challenging emotional issues and effective treatment needs to be a priority for every community regardless of the barriers and risk factors.

Peer support has been supported to be a positive and cost effective option to serve postpartum women and to prevent PPD. Strong evidence from two systematic reviews on psychosocial interventions demonstrated that peer support effectively lowers PPD symptoms and risk (Letourneau et al, 2014). Serving as a PSI Coordinator is a positive way to give back to the community. Implementing a social support network for postpartum women in Cleveland County, NC that involved three components ideally will positively impact the lives of families within the entire community.

References

American College of Obstetricians & Gynecologists (2015). *Committee Opinion: Screening for Perinatal Depression.* Retrieved:http://www.acog.org.

Amnesty International (2010). *Deadly delivery: The maternal health crisis in the U.S.* Retrieved from http://www.amnestyusa.org/research/reports/deadly-delivery-the-maternal-health-care-crisis-in-the-U.S.A.

Asselmann, E., Wittchen, H. U., Erler, L., & Martini, J. (2016). Peripartum changes in social support among women with and without anxiety and depressive disorders prior to pregnancy: A prospective-longitudinal study. *Archives Women's Mental Health, 10,* 1-10.

Baumel, A. & Schweller, S. M. (2016). Adjusting an available on-line peer support platform in a program to supplement the treatment of perinatal depression and anxiety. *JMIR Mental Health, 3,* e11.

Beck, C. T. (1993). Teetering on the edge: A substantive theory of postpartum depression. *Nursing Research, 42,* 42-48.

Beck, C. T. (2002). Postpartum depression: A meta-synthesis. *Qualitative Health Research, 12,* 453-472.

Beck, C. T., Gable, R. K., Sakala, C., & Decleroq, E. R. (2011). Posttraumatic

stress disorder in new mothers: Results from a two-stage U.S. national survey. *Birth, 38,* 216-227.

BenDavid, D. N., Hunker, D. F., & Spadaro, K. C. (2016). Uncovering the golden veil: Applying the evidence for telephone screening to detect early postpartum depression. *The Journal of Perinatal Education, 25,* 37-45.

Bennett, S. S., & Indman, P. (2015). *Beyond the blues: Understanding and treating prenatal and postpartum depression and anxiety*. Untreed Reads Publishing, San Francisco, CA.

Boyd, R. C., Mogul, M., Newman, D., & Coyne, J. C. (2011). Screening and referral for postpartum depression among low-income women: A qualitative perspective from community health workers. *Depression Research and Treatment, 10,* 1-7.

Brealey, S. D., Hewitt, C., Green, J. M., Morrell, J., & Gilbody, S. (2010). Screening for postnatal depression-is it acceptable to women and healthcare professionals? A systematic review and meta-synthesis. *Journal of Reproductive and Infant Psychology, 28,* 328-344.

Brhel, R. (2016). U. S. House passes postpartum depression health care bill. Retrieved:http:// www.mothering.com.

Byatt, N., Moore-Simas, T. A., Lundquist, R. S., Johnson, J. V., & Ziedonis, D. M. (2012).

Strategies for improving perinatal depression treatment in North American outpatient obstetric settings. *Journal of Psychomatic Obstetrics & Gynecology, 33,* 143-161.

Centers for Disease Control and Prevention (2016). Retrieved:http://www.cdc.gov.

Chism, L. A. (2006). *The Doctor of Nursing Practice: A guidebook for role development and professional issues: Third Edition.* Jones & Bartlett Learning: Burlington, MA.

Coriandoli, R. (2014). Barbara Chyzzy: Mobile phone-based peer support for adolescent mothers to prevent postpartum depression. *Evidence Exchange Network for Mental Health and Addictions*. Retrieved: http//www.eenet.ca.

Corrigan, C. P., Kwasky, A. N., & Groh, C. J. (2015). Social support, postpartum depression, and professional assistance: A survey of mothers in the Midwestern United States. *The Journal of Perinatal Education, 24,* 48-60.

Cust, F. (2016). Peer-support for mothers with postnatal depression: A pilot study. *Community Practitioner, 89,* 38-41.

Dennis, C. L. (2009). Postpartum depression peer support: Maternal perceptions from a randomized controlled trial. *International Journal of Nursing Studies, 47,* 560-568.

Dennis, C. L. (2014). The process of developing and implementing a telephone-based peer support program for postpartum depression: Evidence from two randomized controlled trials. *Trials, 15,* 1-8.

Dennis, C. L., & Dowswell, T. (2013). Psychosocial and psychological interventions for preventing postpartum depression (Review). *Cochrane Database of Systematic Review, 2,* 1-211.

Dennis, C. L., Hodnett, E., Reisman, M., Kenton, L., Weston, J., Zupancic, J., Stewart, D. E., Love, L., & Kiss, A. (2009). Effect of peer support on prevention of postnatal depression among high risk women: Multisite randomized controlled trial. *BMJ Journal, 10,* 1-9.

Dennis, C. L., & Chung-Lee, L. (2006). Postpartum depression help-seeking barriers and maternal treatment preferences: A qualitative systematic review. *Birth: Issues in Perinatal Care, 33,* 323-331.

Dennis, C. L., & Kingston, D. (2008). A systematic review of telephone support for women during pregnancy and the early postpartum period. *Journal of Obstetric, Gynecologic, & Neonatal Nursing, 37,* 301-314.

Evans, M., Donelle, L. & Hume-Loveland, L. (2012). Social support and on-line postpartum depression discussion groups: A content analysis. *Patient Education and Counseling, 87,* 405-410.

Flynn, H. A., Henshaw, E., O'Mahen, H., & Forman, J. (2010). Patient perspectives on improving the depression referral processes in obstetrics settings: A qualitative study. *General Hospital Psychiatry, 32,* 9-16.

Glavin, K., & Leahy-Warren, P. (2013). Postnatal depression is a public health nursing issue: Perspectives from Norway and Ireland. *Nursing Research and Practice, 2013*, 1-7.

Goodman, J. H. (2009). Women's attitudes, preferences, and perceived barriers to treatment for perinatal depression. *Birth, 36,* 60-69.

Goodman, J. H., & Tyver-Viola, L. (2010). Detection, treatment, and referral of perinatal depression and anxiety for obstetrical providers. *Journal of Women's Health, 19,* 477-490.

Goodman, J. H., Prager, J., Goldstein, R., & Freeman, M. (2014). Perinatal dyadic psychotherapy for postpartum depression: A randomized controlled pilot trial. *Archives of Women's Mental Health, 18,* 493-506.

Hahn-Holbrook, C., Schetter, D., & Hobel, C. J. (2013). Placental corticotrophin-releasing hormone mediates the association between prenatal social support and postpartum depression. *Clinical Psychological Science, 1,* 253-264.

Honikman, J. L. (2014). *I'm listening: A guide to supporting postpartum families: Revised Edition.* Jane Honikman Publishing: Santa Barbara, CA.

Honikman, J. L. (2015*). Postpartum action manual: How to provide comfort, encouragement, and guidance to new families. A pragmatic approach to reach and teach peer leaders.* Jane Honikman Publishing: Santa Barbara, CA.

Leger, J., & Letourneau, N. (2015). New mothers and postpartum depression: A narrative review of peer support intervention studies. *Health and Social Care in the Community, 23,* 337-348.

Letourneau, N., Secco, L., Colpitts, J., Aldous, S. Stewart, M., & Dennis, C. L. (2014). Quasi-experimental evaluation of a telephone-based peer support intervention for maternal depression. *Journal of Advanced Nursing, 71,* 1587-1599.

Liberto, T. L. (2012). Screening for depression and help-seeking in postpartum women during well-baby pediatric visits: An integrated review. *Journal of Pediatric Health Care, 26,* 109-117.

Manuel, J. I., Martinson, M. L., Bledsoe-Mansori, S. E, & Bellamy, J. L. (2012). The influence of stress and social support on depressive symptoms in mothers with young children. *Social Science & Medicine, 75,* 2013-2020.

Marsh, J. R. (2013). A middle-range theory of postpartum depression: Analysis and application. ` *International Journal of Childbirth Education, 28,* 50-54.

McQueen, K., Montgomery, P., Lappen-Gracon, S., Evans, M., & Hunter, J. (2008). Evidence-based recommendations for depressive symptoms in postpartum women. *JOGNN, 37,* 127-136.

Milani, H. S., Azargashb, E., Beyraghi, N., Defaie, S., & Asbaghi, T. (2015). Effect of

telephone-based support on postpartum depression: A randomized controlled trial. *International Journal of Fertility and Sterility, 9*, 247-253.

Miranda, J. J., & Patel, V. (2005). Achieving the millennium development goals: Does mental health play a role? *PLOS Medicine, 2(10)*, 291

Mohr, W. K. (2003). The substance of a support group. *Western Journal of Nursing Research, 25*, 676-692.

Montgomery, P., Mossey, S., Adams, S., & Bailey, P. H. (2012). Stories of women involved in a postpartum depression peer support group. *International Journal of Mental Health Nursing, 21*, 524-532.

Moore, D. & Ayers, S. (2016). Virtual voices: Social support and stigma in postnatal mental illness internet forums. *Psychology, Health and Medicine, 24*, 1-6.

Negron, R., Martin, A., & Howell, E. A. (2013). Social support during the postpartum period: Mothers' views. *Journal of Maternal Child Health, 17*, 616-623.

North Carolina Health and Human Services (2016). Retreived:http://schs.state.nc.us.

Osborne, L. M., & Monk, C. (2013). Perinatal depression—the fourth inflammatory morbidity of pregnancy. Theory and literature review. *Psychoneuroendocrinology, 38*, 1929-1952.

Pope, C. & Mazmanian, D. (2016). Breastfeeding and postpartum depression: An overview

and methodological recommendations for future research. *Depression Research and Treatment, 10,* 1-9.

Posmontier, B., Neugebauer, R., Stuart, S., Chittams, J., & Shaughnessy, R. (2016). Telephone-administered interpersonal psychotherapy by nurse-midwives for postpartum depression. *Journal of Midwifery and Women's Health, 61,* 456-466.

Postpartum Support International (2016). Retrieved:http://www.postpartum.net.

Postpartum Support International (2013). *Perinatal Mood Disorders: Components of Care. Postpartum Support International's 2 Day Certificate of Completion Program.*

Postpartum Support International (2016). *A guide to developing a sustainable perinatal social support network in your community, Sixth Edition.* Postpartum Support International Publishing: Portland, OR.

Ralph, R. O. (2005). Verbal definitions and visual models of recovery: Focus on the recovery model. In R. O. Ralph & P. W. Corrigan (Eds). *Recovery in mental illness: Broadening our understanding of wellness*. (pp. 131-146). American Psychological Association: Seattle, WA.

Reeder, J., Joyce, T., Sibley, K., Arnold, D., & Altindag, O. (2014). Telephone peer counseling of breastfeeding among WIC participants: A randomized controlled trial. *Pediatrics, 134,* 700-709.

Scott, D. (2008). From clinic to community: The evolution of a group for women

with postpartum mental illness. *Australian Social Work, 61,* 197-206.

Shaw, E, Levitt, C., Wong, S., & Zaczorowski, J. (2006). Systematic review of the literature on postpartum care: Effectiveness of postpartum support to improve maternal parenting, mental health, quality of life and physical health. *Birth, 33,* 210-220.

Solchany, J. E. (2001). *Promoting maternal mental health during pregnancy: Theory, practice and intervention.* NCAST Publications: Seattle, WA.

Song, D., Sands, R. G., & Wong, Y. L. (2004). Utilization of mental health services by low-income pregnant and postpartum women on medical assistance. *Women & Health, 39,* 1-24.

Tandon, S. D., Leis, J. A., Mendelson, T., Perry, D. F., & Kemp, K. (2013). Six-month outcomes from a randomized controlled trial to prevent perinatal depression in low-income home visiting clients. *Journal of Maternal Child Health, 18,* 873-881.

Thomas, L., J, Scharp, K. M., & Paxman, C. G. (2014). Stories of postpartum depression: Exploring health constructs and help-seeking in mothers' talk. *Women and Health, 54,* 373-387.

Tsivos, Z. L., Calam, R., Sanders, M. R., & Wittkowski, A. (2015). Interventions for postnatal depression assessing the mother-infant relationship and child developmental outcomes:

A systematic review. *International Journal of Women's Health, 7,* 429-447.

Turner, K. M., Chew-Graham, C., Folkes, L., & Sharpe, D. (2009). Women's experiences of health visitor delivered listening visits as a treatment for postnatal depression: A qualitative study. *Patient Education and Counseling, 78,* 234-239.

U.S. Census Bureau (2016). Quick facts for NC. Retrieved:http://www.census.gov.

Watkins, S., Meltzer-Brody, S., Zolnoun, D., & Stuebe, A. (2011). Early breastfeeding experiences and postpartum depression. *Obstetrics & Gynecology, 118,* 214-221.

Werner, E., Miller, M., Osborne, L. M., Kuzava, S., & Monk, C. (2015). Preventing postpartum depression: Review and recommendations. *Archives of Women's Mental Health, 18,* 41-60.

World Health Organization (2015). UN Sustainable Development Summit 2015: Sustainable Development Goals. Retreived from:http://www.who.int.

Zauderer, C. (2009). Postpartum depression: How childbirth educators can help break the silence. *The Journal of Perinatal Education, 18,* 23-31.

Appendix A: Postpartum Support International "Steps to Wellness Model."

1) Education: Postpartum women need to make sure they are referred to the PSI website: www.postpartum.net where several pertinent books, education, and resources are listed regarding PPD. Many families do not understand the difference between postpartum blues and PPD and this information is valuable. Also, PPD affects the entire family so education needs to be provided for everyone.

2) Sleep: Many postpartum women who are trying to heal from pregnancy do not obtain adequate or restorative sleep. During the first month postpartum, sleep is especially important as postpartum psychosis occurs especially during this period (Honikman, 2014). Sleep needs to be discussed with postpartum women as sleep deprivation may lead to PPD.

3) Nutrition: Adequate nutrition in the postpartum period is important for women and their infants. Some women may not have an appropriate appetite or may feel they do not have time to eat.

4) Exercise and Time for Oneself: Exercise needs to be discussed, and women need to discuss exercise with their primary healthcare provider.

5) Non-judgmental Sharing: Many women do not have someone who will listen to their feelings. Some women may fear that someone will take their baby away from them if their feelings are shared (Honikman, 2014). Some women claim that their husbands or family members are not supportive or may not understand what they are experiencing. A peer support group is also a

positive environment where non-judgmental sharing can be shared with compassion with those who have a common purpose (Scott, 2008).

6) Emotional Support: Women who are experiencing PPD seek support initially from family and friends. However, some may seek others in their faith communities, co-workers, or professionals who are supportive (Honikman, 2014). A peer support group is an option that healthcare professionals need to recommend to postpartum women to complement other support including mental health services (Montgomery et al, 2012).

7) Practical Support: Many women need help in the postpartum period with household chores, childcare, meals, shopping and other needs. Some women do not feel comfortable asking for help, but if they do not have family members who can help with these needs, there are paid postpartum services that may be available.

8) Referrals to Professionals and other Resources: Many women need referrals to mental health professionals. A PSI Coordinator needs to be able to provide at least three names within the community whom specialize in maternal mental health to maintain objectivity (Honikman, 2014). PSI Coordinators need to make sure they understand what kind of barriers are involved preventing women from seeking services. Social support confronts social isolation, meets needs of under-served populations, helps people cope with stress and adversity, provides positive role models, and educates professionals about gaps and problems in service delivery (Honikman, 2014).

Appendix B: Cleveland County Mental Resources List

Mental Health Resources for Women and Families: Coping with Perinatal Mood & Anxiety Disorders

Cleveland County, NC

Referral Process:

~A postpartum mom is referred by NFP, OB Care Management, or doctors' offices to mental health services based on PHQ-9 or other high-risk factors.

~A postpartum mom in the community can also call Partners Behavioral Health Management (Access to Care/Crisis Line: 1-888-235-4673) for Screening/Triage/Referral (Mental Health/Substance Abuse): 24 hours a day/7 days a week

~Monarch Open Access: 200-3 South Post Road, Shelby, NC (Behind Cleveland County Health Department), Phone: 704-476-4027, (Hours Monday-Friday, 8-5 PM, prefer intake visits by 3 PM) No appointment needed. (First visit: Walk in. May take 2-3 hours for first visit: first come/first served). (Telemedicine Available). (Accepts Medicaid)

- TACC (Transportation Administration of Cleveland County): 704-482-6465. For 1st visit: Free Service. If visits are on-going, a MH Referral from a MH Consultant must be in place for additional services from TACC. Prefer to set up TACC at least 48 hours in advance. If a Medicaid patient: Medicaid Transport can be arranged for MH services.

(Other Monarch locations: Gastonia, NC: 2505 Court Drive, 704-842-6476) (Open Mon-Friday), and Lincolnton, NC: 311 East McBee St, 704-748-6113) (Open Monday, Tuesday and Friday).

~Phoenix Counseling Center: Crisis & Detox Centers: 609 N. Washington St., Shelby, NC, Phone: 704-487-0710, Gastonia: 2505 Court Drive, Gastonia, NC, Phone: 704-861-8014 (Open 24 hours).

~Mobile Crisis Service: Toll-free Phone: 1-855-527-4747. On-call, 24 hour service. A Licensed MH clinician will come to visit the individual at his/her home and determine if an emergency room visit is warranted. (Medicaid accepted).

~In patient MH Services: (Not available at Cleveland Regional Medical Center). However, Carolinas Healthcare System: Kings Mountain, NC (20 minutes from Shelby, NC) 706 W. King Street, Kings Mountain, NC (704-739-3601) has an inpatient MH unit for adults (18 and over) for depression, bi-polar depression, and substance abuse treatment.

~UNC-Chapel Hill Hospital, Perinatal Psychiatry In-patient unit, UNC Center for Women's Mood Disorders, 101 Manning Drive, First Floor Neurosciences Hospital, Chapel Hill, NC. Phone general information: 919-966-9640, Phone: In-patient admissions: 919-966-8721.

Mental/Behavioral Health Resources: Cleveland County

- Dr. Larry Cummins: 1333 Fallston Road, Suite 106, Shelby, NC, 28150, Phone: 704-482-2207
  - Adult Mental Health
  - Medication Management
  - Accepts Medicaid

- Elite Counseling, 201 W. Marion Street, Shelby, NC, 28150, Phone: 704-482-2977, Laura Rudisill, MA.
  - Adults, Children
  - Faith-based therapy
  - Accepts Medicaid

- Foothills Counseling, 618 N. Morgan Street, Shelby, NC, 28150, Phone: 704-480-1882,
  - Dr. Calabria, Psychologist
  - Leslie Carpenter-NP
  - Accepts Medicaid

- Gaston Adolescent Center, 635 Cox Road, #B, Gastonia, NC 28054, Phone: 704-691-7561, Serves Cleveland County residents (Ages 5-18).
  - Outpatient therapy
  - Accepts Medicaid and NC Health Choice

- One on One Care, Inc., 207 Lee Street, Shelby, NC, 28150, Phone: 704-482-5200.
  - Adult and children
  - Accepts Medicaid

- Phoenix Counseling Center, 609 Washington Street, Shelby, NC, 28150, Phone: 704-487-0710.
  - Women Specific Services
  - No medication management
  - Accepts Medicaid

- Preferred Choice Healthcare, 1243 East Dixon Blvd, Ste #4, Shelby, NC, 28152, Phone: 704-487-4000.

  - Individual and family treatment
  - Accepts Medicaid
  - Dr. Jamie Powell, LPC, PHD

- Psychiatric Services of the Carolinas, 839 Majestic Court, Suite 1, Gastonia, NC, 28054. Phone: 704-867-6188
  - Adult, adolescent
  - Medication Management and mental health services
  - Accepts Medicaid
  - Dr. Nilima Shukla, Psychiatrist
  - Obstetric and postpartum mental health services

- Shelby Wellness & Therapy Center, 809 North Lafayette St., Shelby, NC, 28150, Phone: 704-284-0554, info@shelbytherapy.com.
  - Michelle Blackman, LMFT
  - Individual/Group Counseling
  - Call for insurance rates, fees, and insurance information

- The Prenatal and Postpartum Center of the Carolinas Offices (www.postpartumcarolinas.com), Contact: cpeindl@gmail.com

~Concord Office

250 Branchview Drive

Concord, NC 28025

704-947-8115

~Charlotte Office

11330 Vanstory Drive

Huntersville, NC 28078

704-947-8115

~Lake Norman Office

10801 Johnston Road

Ste. 107

Charlotte, NC 28226

704-607-7742

~Please call for fees, rates and insurance information

~Emotional issues during pregnancy, postpartum depression, support groups

- Thompson Psychological, 1455 E. Marion Street, Suite A, Shelby, NC, 28150, Phone: 704-482-6776.
  - Rebekah Thompson, LPA

- Adults and children/Accepts Medicaid

Support Groups/Resources: Cleveland County

- Depression Support Group (Not specific to Postpartum Depression).
  - DBSA of the Foothills (Depression and Bipolar Support Alliance), Episcopal Church, 502 W. Sumter Street, Shelby, NC, 28150, Contact: Laura Lancaster, Phone: 704-232-5147, laura@dbsafoothills.com

- Cleveland County Healthcare System Breastfeeding Support Group, Nursing and expectant moms, Women's Life Center Classroom, Contact person: Betsy Bryant, RNC, MSN, 980-487-3824.

- "Mom to Mom Support Network", Postpartum Support International (PSI) sponsored telephone-based peer-support group, Tuesday evenings beginning October 25th, 2016 (6:30-7:30 PM), Local dial in # provided, Contact person: Susan Ludwick, MSN, RN, sludwick@windstream.net, 785-615-9220.

National Postpartum Support Resources

- Postpartum Support International (PSI): (www.postpartum.net) PSI is a "world-wide non-profit organization dedicated to helping women and families suffering from perinatal mood and anxiety disorders. PSI was founded in 1987 in increase awareness among public and professional communities about the emotional difficulties that women can experience during and after pregnancy. PSI offers support, information, best practice training, and volunteer coordinators in 50 U.S. states and more than 35 countries. PSI is committed to eliminating stigma and ensuring that compassionate and quality care is available to all families," (PSI, 2016).
- The website: www.postpartum.net has important resources including current books on PPD. Also, education regarding the symptoms of PPD, Postpartum Anxiety, Postpartum Stress Disorder, and Postpartum Psychosis are available.
  - Phone Support: Call the PSI Warm-line (1-800-944-4773) for information and resources from licensed national mental health experts. Leave a message at any time, and a warm-line volunteer will call back.
  - National Suicide Prevention Hotline: 1-800-273-8255
  - "Chat with the Expert" phone sessions. Chats for Moms on Wednesdays, and Chat for Dads are on Mondays (Details: www.postpartum.net/resources) Online support groups are also available.

- Postpartum Progress: Online Blog/Resource with online support groups: www.postpartumprogress.com

- PSI: NC (North Carolina) State Coordinator: Anne Wimer, Phone: 919-434-5986
- PSI-NC Peer support groups are in the Huntersville, Raleigh, Durham, Chapel Hill and Asheville areas.
- Mother-Mother Postpartum Depression Network: www.postpartumdepression.net
- Postpartum Depression Online Support Group: www.ppdsupportpage.com

Recommended other websites, books, etc.

- For men who are experiencing symptoms: www.postpartummen.com
- Information on medication taken in pregnancy and while breastfeeding: www.infantrisk.com
- Women's Mental Health: www.womensmentalhealth.org.
- Beyond the Blues: A Guide to Understanding and Treating PPD, Indman, MFT and Bennett, PhD
- The Mother to Mother Postpartum Depression Support Book, Sandra Poulin
- Postpartum Depression for Dummies, Shoshana Bennett, PhD
- This Isn't What I Expected: Overcoming Postpartum Depression, Karen Kleiman, MSW & Valerie Raskin, MD
- The Postpartum Husband: Practical Solutions for Living with Postpartum Depression, Karen Klieman, MSW
- Life Will Never Be The Same: The Real Mom's Postpartum Survival Guide, Ann Dunnewald, PhD & Diane Sanford, PhD
- The Pregnancy and Postpartum Anxiety Workbook, Pamela Weigart

Mothers of Pre-schoolers Groups (MOPS)

- MOPS stands for Mothers of Pre-schoolers. There are MOPS support groups all over the U.S. MOPS: encourages and equips moms of young children to realize their potential as mothers, women and leaders, in a faith-based atmosphere. Many MOPS groups meet in churches, but there are others that meet in various locations. The groups provide for personal mentoring and childcare for the children.
    - Local MOPS groups:
        - Grassy Pond Baptist Church, 254 Grassy Pond Road, Social Hall, Gaffney, SC, http://www.mops.org/groups/grassypond, Phone: 864-489-8275, Meets Sept.-May, 2nd and 4th Tuesday each month, 9:30-11:30 AM
        - Boiling Springs First Baptist Church, 3600 Boiling Springs Road, Boiling Springs, SC, Phone: 864-578-2828, Meets 1st and 3rd Tuesdays, 9-11:10 AM
        - MOPS of Mount Holly, NC, 511 Tuckasegee Road, Mount Holly, NC 28120, Phone: 704-747-0736, Meets every other Monday, 9-11:30 AM

Please contact Susan Ludwick or Betsy Bryant for more information:

~Susan Ludwick, MSN, RN

Postpartum Support International Coordinator

sludwick@windstream.net

785-615-9220

~Betsy Bryant, MS, RN, Lactation Consultant, Cleveland County Regional Medical Center, Betsy.Bryant@carolinashealthcare.org

Appendix C: Letter to the Invitation and listing of Community Advisory Group and Members

A Community Advisory Group (CAG) will be developed to serve postpartum women in Cleveland County, NC in October, 2016. Community health care professionals and community members who are interested in the issue of maternal mental health will serve on the Community Advisory Group. The Group will help support the social support network: "Mom to Mom Support Network," in Cleveland County, NC. The CAG members will help advertise and support the telephone-based peer support group. The CAG will meet every three to four months at a community location for approximately one hour in length.

The mission of the "Mom to Mom Support Network" in Cleveland County is to provide support, information, and resources to women and their families coping with their emotional needs, especially during postpartum, and to the professionals who serve them.

Community Advisory Group Members:

1) Betsy Bryant, RN, MS, Lactation Consultant, Cleveland County Regional Medical Center
2) Sheryn Jenson, RN, Nurse Family Partnership, Cleveland County Health Department
3) Dashe Lawton, RN, MSN, Nurse Family Partnership Supervisor, Cleveland County Health Department
4) Michelle Blackman, MA, Licensed Marriage Family Therapist, Shelby Wellness and Therapy Center

5) Jill Cogdill, RN, Family Planning and Childbirth Educator, Cleveland County Health Department
6) Allyson Gardner, RN, Maternity and Childbirth Educator, Cleveland County Health Department
7) Dr. Katie Borders, Obstetrician-Gynecologist, Shelby, NC, Women's Care, Shelby, NC
8) Johanna Gillespie, Director of Childcare Connections, Shelby, NC (Added in December 2016)
9) Ansley Vaughan, Mother and Community Member, Shelby, NC (Added in December 2016)
10) Susan Ludwick, MSN, RN, DNP Candidate

Appendix D: Telephone-based Peer Support Group Flyer

"Mom to Mom Support Network" in Cleveland County, NC

(Sponsored by Postpartum Support International)

"Mom to Mom Support Network"

The mission of the "Mom to Mom Support Network" in Cleveland County is to provide support, information, and resources to women and their families coping with their

emotional needs, especially during postpartum, and to the professionals who serve them.

FACTS

- **Approximately 1 in 7 postpartum mothers experience depression or anxiety**
- **Symptoms vary and might come on gradually during pregnancy or in the year following childbirth. Symptoms might include:**
  - **Frequent sadness or crying**
  - **Changes in appetite**
  - **Anxiety/panic**
  - **Irritability or anger**
  - **Feeling overwhelmed & disconnected from your baby**
  - **Intense fatigue**
  - **Like no one understands**
  - **Thoughts of suicide**

If you are experiencing immediate thoughts of suicide: Please call: Suicide Prevention Hotline: 1-800-273-8255

"MOM TO MOM SUPPORT" IN CLEVELAND COUNTY, NC:

- **What? A mom to mom peer support group for women who might be experiencing these symptoms. Positive & encouraging support (not medical advice) is offered in a welcoming, non-judgmental and respectful environment. Mental health resources provided.**
- **Where? A weekly anonymous telephone-based peer support group, Tuesday evenings: (6:30-7:30 PM), Beginning October 2016, (1800 # dial in # will be provided)**

For more information please contact: Susan Ludwick, MSN, RN (NC-PSI Coordinator), sludwick@windstream.net, Cell #785-615-9220.

Appendix E: Telephone-based Peer Support Group Script and Questions

Script: "Women who attend this anonymous peer support group receive support from peers; this a peer support group not group therapy. "Mom to Mom" support provides a safe, non-judgmental atmosphere to share stories, problems and seek solutions. It is not to replace medical care. As a PSI Coordinator who also is a Doctor of Nursing Practice graduate student with The University of Kansas, I facilitate peer support, offer information and resources. I do not give medical advice. I am not available 24 hours a day for emergencies. Please refer to your family doctor or call 911 if necessary. (Emergency #1800-SUICIDE and local crisis numbers provided). Please understand that information that is discussed in this peer support group is confidential, voluntary and anonymous. At the end of this anonymous telephone peer support group, I will be asking you three questions to see if you have found this peer support group helpful. Your participation and response to these questions is totally voluntary and anonymous."

Anonymous Telephone-based Peer Support Group Questions:

1) Did you find this telephone-based peer support group helpful?
2) Based on your experience of being part of this telephone peer support group, do you plan to continue to participate in the upcoming weeks?
3) Based on your experience of participating in this telephone peer support group, is there something that you would recommend for future telephone peer support groups?

Appendix F: Fall Presentation Evaluation

Thank you so much for attending today's presentation. The collection of this evaluation data is a part of a Doctor of Nursing Practice Project at The University of Kansas. Your participation in responding to these questions is voluntary and confidential.

Demographic Information: (Please circle your information)

Age: 20-29, 30-39, 40-49, 50-59, 59-over

Race/Ethnicity: White, African-American, Asian, Hispanic, and Other

Profession: RN, Social Worker, Physician, and Mental Health Professional, Other:

Time worked in Profession: 1-5 years, 5-10 years, and 10+ years

1) What was your knowledge of postpartum depression (PPD) prior to the presentation?
   a. None to very little
   b. Some but limited
   c. Fair grasp of the knowledge
   d. Good to expert knowledge

2) Do you know someone who has experienced PPD personally or professionally?
   a. Yes
   b. No

   If so, can you share your experiences of working or knowing this person?

   Do you know if and how the PPD was resolved?

Please respond to the following based on the presentation's objectives:

1) Do you better understand the definition of postpartum blues, PPD, and postpartum psychosis?

a. Yes. b. No

If so, how will this help you in your community or in your professional role?

2) Do you better understand the risk factors for PPD?

a. Yes b. No

If so, what risk factors do you see as most likely to occur for the patients you serve as a professional? Why?

3) Do you better understand the barriers for seeking mental health services?

a. Yes b. No

If so, what barriers do you see as most likely to occur for the patients you serve as a health provider? Why?

4) Do you better understand the importance of peer support based on evidence?

a. Yes b. No

Do you believe the patients you serve would be opened to receive peer support?

5) Do you better understand the importance of screening based on American College of Obstetrics and Gynecology recommendations?

a. Yes b. No

Where do you believe it would be best to begin screening for PPD?

6) What other information about PPD would you like to know?

Appendix G: Timeline for DNP Project and "Mom to Mom Support Network."

1) September 1, 2016: Completed DNP Project Proposal
2) September 23, 2016: DNP Defense Proposal at KUMC
3) October, 2016: KUMC IRB Approval
4) October 10, 2016: Educational Presentation at Cleveland County Health Department
5) October 10, 2016: Community Advisory Group's first meeting
6) October 18, 2016: "Mom to Mom Support Network:" PSI anonymous telephone-based weekly peer support group: (October 25th-Dec. 13, 2016). (Eight groups)
   ~Telephone-based group Tuesdays: 6:30-7:30 PM
7) October -Dec. 13h, 2016: Data Collection ongoing from beginning of project via detailed field notes. Data Analysis done after 8 weeks of telephone-based support group.
8) January 9th, 2017: Community Advisory Group's second meeting
9) Dec. 7th-Jan. 20th, 2017: Write findings of DNP Project
10) Jan. 21st-Feb. 21st, 2017: Edit project/re-writes etc.
11) March 1, 2017: Final DNP Project completed & Degree form in to KUMC/plans for DNP Final Presentation and Oral Exam
12) April 28th, 2017: DNP Project Presentation Deadline
13) May 13-14, 2017: Graduation

Appendix H: Community Advisory Group Meeting Agendas

Maternal Mental Health Community Advisory Group (Cleveland County, NC) Fall Meeting:

Who: Community professionals interested in the issues surrounding Maternal Mental Health

When: October 10th, 2016: 7-8:15 PM

Where: Shelby Wellness & Therapy Center,

809 North Lafayette Street, Suite A, Shelby, NC

Objectives: Discuss Maternal Mental Health issues & upcoming peer support group beginning October 2016

Refreshments provided

Please RSVP by Oct. 7th to Susan Ludwick, MSN, RN: sludwick@windstream.net

Community Advisory Group Meeting: October 10th, 2016

Agenda:

~Introductions
~Discuss Community Advisory Group for Maternal Mental Health in Cleveland County, NC
~Discuss "Mom to Mom Support Network" including Telephone-based peer support group, Advertising
~Other ideas to get involved/Questions
~Next meeting: January 9th, 2017

Community Advisory Group Meeting: January 9th, 2017

Agenda

~Introductions

~Discuss updates of "Mom to Mom Support Network"

~Upcoming presentations, educational needs for Maternal Mental Health

~Other suggestions/Questions?

~Next meeting: TBD June 2017

Appendix I: Telephone-Based Peer Support Group Results Table

Week	**Number of Callers**
Tuesday, October 25th, 2016	**No participants**
Tuesday, November 1st, 2016	**No participants**
Tuesday, November 8th, 2016	**One participant**
Tuesday, November 15th, 2016	**One participant**
Tuesday, November 22nd, 2016	**One participant**
Tuesday, November 29th, 2016	**Two participants**
Tuesday, December 6th, 2016	**Two participants**
Tuesday, December 13th, 2016	**No participants**

Total= 7 participants

Appendix J: Presentation Evaluation Results Table

Participants' Demographic Information: 26 participants (25 Evaluations completed)

Age	20-29	30-39	40-49	50-59	59-over
Number **Total=25**	7 (28%)	6 (24%)	4 (16%)	5 (20%)	3 (12%)

Race	**White**	**African-American**	**Asian**	**Hispanic**	**Other**
Number	22 (88%)	3 (12%)	0	1	0
***Total =26**					

***One participant checked White & Hispanic**

Profession	**RN**	**Social Worker**	**Physician**	**Mental Health Professional**	**Other**

Number ***Total=24**	18 (75%)	1 (4%)	0	0	*5 (21%)

*Other: Two Registered Dieticians, Two Administrative Assistants, 1 other, and 1 participant did not check Profession.

Time in Profession	**1-5 years**	**5-10 years**	**10+ years**
Number **Total=25**	5 (20%)	6 (24%)	14 (56%)

Presentation Evaluation Knowledge-Based Questions:

Question #1: What was your knowledge of PPD prior to the presentation?

None to Very Little	**Some but Limited**	**Fair Grasp**	**Good to Expert**
Number: 0 **Total=25**	**Number: 3 (12%)**	**Number: 14 (56%)**	**Number: 8 (32%)**

Question #2: Do you know someone who has experienced PPD either personally or professionally?

Yes	**No**
Number: 17 (68%) **Total=25**	**Number: 8 (32%)**

Presentation Evaluation Questions Based on Presentation Objectives:

Question #1: Do you better understand the definition of postpartum blues, PPD, and postpartum psychosis?

Yes	**No**
Number: 25 (100%) **Total=25**	**Number: 0**

Question #2: Do you better understand the risk factors for PPD?

Yes	**No**
Number: 25 (100%) **Total=25**	**Number: 0**

Question #3: Do you better understand the barriers for seeking mental health services?

Yes	**No**
Number: 25 (100%) **Total=25**	**Number: 0**

Question #4: Do you better understand the importance of per support based on evidence?

Yes	**No**
Number: 25 (100%) **Total=25**	**Number: 0**

Question #5: Do you better understand the importance of screening based on American College of Obstetrics and Gynecology recommendations?

Yes	**No**
Number: 25 (100%) **Total=25**	**Number: 0**