THE EARLY POSTPARTUM EXPERIENCE OF PREVIOUSLY INFERTILE MOTHERS

by

SIGRID L. LADORES
BSN, University of Pennsylvania, 1997
MSN, University of Pennsylvania, 2002

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Major Professor: Karen Aroian

ABSTRACT

The lived experiences of previously infertile mothers in the early postpartum period have not been previously studied. The purpose of the research was to explore the experiences of previously infertile mothers during their early postpartum period.

Colaizzi's (1978) approach to descriptive phenomenological inquiry was used to analyze the interview data obtained from twelve first-time, previously infertile mothers. These new mothers, aged 27 to 43 years, were interviewed twice. The first interview focused on eliciting descriptions of new motherhood in the early postpartum period after overcoming infertility. The second interview validated the interpretations from the first interview and provided additional information and reflection.

Two main themes emerged that described the early postpartum experience of first-time, previously infertile mothers: 1) Lingering Identity as Infertile; and 2) Gratitude for the Gift of Motherhood. Participants reported that their lingering identity as infertile and immense gratitude for the gift of motherhood propelled them to establish unrealistic expectations to be the perfect mother. When they were unable to live up to being the perfect mother, they censored their feelings of inadequacy, guilt, and shame. Findings from this study sensitize healthcare providers to the difficulties faced by previously infertile women during their transition to motherhood.

This dissertation is dedicated to

my husband, Andrew, who supported me through each challenge, obstacle, and victory;

my son, Asher, who is my very own miracle and who makes me a better person every day;

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CHAPTER ONE: INTRODUCTION

Medical advances in assisted reproductive technology have allowed 5.6% to 27.3% of the more than seven million infertile women in the United States (Chandra, Martinez, Mosher, Alma, & Jones, 2005) to successfully conceive and become mothers (Centers for Disease Control and Prevention, 2004). Yet, how previously infertile mothers (PIM) experience new motherhood is understood poorly. Quantitative studies on new motherhood in previously infertile women are limited to a few outcome variables, such as maternal depression, anxiety, self-esteem, and parenting competence (Colpin, De Munter, Nys, &Vandemeulebroeke, 1999; Cox, Glazebrook, Sheard, Ndukwe, & Oates, 2006; Gibson, Ungerer, Tennant, & Saunders, 2000). These studies have yielded conflicting findings, suggesting that new motherhood for previously infertile women is not necessarily fraught with difficulties. In contrast, the clinical literature details a plethora of difficulties faced by previously infertile mothers (Braverman, 2008). These reports may be biased because clinicians are more apt to focus on negative cases rather than successes. Nonetheless, there is some support for the position that the demands of undergoing infertility treatment result in problems of new motherhood in previously infertile women (Olshansky, 2003). For example, there is ample documentation that infertility treatment is associated with depression (Gonzalez, 2000; Sandelowski, 1995; Su & Chen, 2006), and a prior history of depression is a risk factor for postpartum depression (Stowe, Hostetter, & Newport, 2005).

The goal of this dissertation research was to contribute to the body of knowledge about previously infertile mothers during their transition to new motherhood. Given the lack of definitive conclusions about new motherhood in previously infertile women, an inductive approach was chosen to explore their perspective. The dissertation followed the University of Central Florida non-traditional dissertation format, and is comprised of the following three

publishable manuscripts: 1) "Postpartum Depression in Previously Infertile Mothers: A Meta-Ethnography"; 2) "The Early Postpartum Experience of Previously Infertile Mothers"; and 3) "The Meaning of Breastfeeding for Previously Infertile Mothers". These three manuscripts were written and appear in this order in the subsequent chapters.

The first manuscript, "Postpartum Depression in Previously Infertile Mothers: A Meta-Ethnography", provides a meta-synthesis of qualitative studies from two separate bodies of literature, the infertility literature and the postpartum depression literature. The meta-synthesis was conducted because there were no published studies on postpartum depression in previously infertile mothers.

The second manuscript, "The Early Postpartum Experience of Previously Infertile Mothers", is the result of a phenomenological study undertaken to describe the experience of previously infertile mothers during their early transition to new motherhood. A phenomenological study was conducted because little is known about new motherhood from the perspective of previously infertile women. Understanding the experience from their perspective avoids imposing a priori conceptualizations about difficulty and allows placing the clinical literature in context.

The third manuscript, "The Meaning of Breastfeeding for Previously Infertile Mothers", is a secondary analysis of the breastfeeding data from the phenomenological study. This manuscript extends findings from the phenomenological study about the special meaning the women attached to breastfeeding as well as their self-imposed pressure to breastfeed.

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CHAPTER TWO: POSTPARTUM DEPRESSION IN PREVIOUSLY INFERTILE MOTHERS: A META-ETHNOGRAPHY

Abstract

Not much is known about preventing and treating postpartum depression (PPD) in previously infertile mothers (PIM) because of lack of research on PIM with PPD. Yet there are two separate bodies of research on each of these topics, namely, the emotional consequences of infertility and the experience of PPD. This meta-ethnography synthesized the qualitative findings from two separate bodies of literature (infertility and PPD) to arrive at evidence-based inferences that inform the overall care delivered to these women. Online databases and truncated keywords were used to identify sources for this meta-ethnography. Inclusion criteria included qualitative, peer-reviewed, data-based articles or dissertations published since the year 2000, and seminal articles published before 2000. A total of seven studies on infertility, 18 studies on PPD, and one study of the lived experience of new motherhood in PIM, were used as sources. Noblit and Hare's (1988) approach to meta-ethnography was used to conduct the meta-synthesis. The overlapping themes for infertility and PPD demonstrated that PIM endured a continual assault to their sense of self. Cumulative attacks to their physical and psychosocial beings led to feelings of inadequacy, isolation, and depression. This meta-ethnography produced a schema that will guide prevention, detection and treatment of PIM with PPD. The importance of formal and informal support systems, as well as vigilant screening for depression throughout the process of fertility treatment and beyond the postpartum period, is underscored.

Introduction

It is well documented that a prior history of depression is a risk factor for postpartum depression (PPD) (Stowe & Hostetter, 2005). It is also well known that previously infertile

mothers (PIM) are likely to have a history of prior depression because of the physical and emotional strain they experience when undergoing the workup for and treatment of infertility (Olshansky & Sereika, 2005). Although there is ample research on the emotional consequence of infertility and the experience of PPD, there is almost no research on PIM with PPD. A recent study of PIM's lived experience of new motherhood (hereafter referred to as the Ladores study), demonstrated that four out of 12 (33%) of the participants spontaneously reported being diagnosed with PPD, and almost all of the remaining participants described thoughts and feelings that manifest and operate similarly as PPD (Ladores, n.d.). This paper augments findings from the Ladores study on the lived experience of new motherhood in PIM by integrating those findings with a meta-synthesis of qualitative research findings from two distinct bodies of literature, the literature on the experience of infertility and the literature on the experience of PPD. The purpose of the meta-synthesis is to more comprehensively articulate the experiences of women with infertility and women with PPD, identify potential linkages between the two phenomena, and make evidence-based inferences to improve the overall care delivered to these women.

Postpartum depression is defined as depressive symptoms that are present every day for at least two weeks within four weeks post-delivery and that significantly affect social, educational, or occupational functioning (American Psychiatric Association, 2013). This condition affects 10% to 20% of women who give birth (Morrow, Smith, Lai, & Jaswal, 2008). Prevention and early detection and treatment are imperative because the ramifications of undiagnosed or untreated PPD are vast for both mother and infant. These include impaired infant development, child behavior problems, poor parenting skills, low maternal self-esteem,

maternal substance abuse, and persistent mental illness beyond the postpartum period (Andreozzi et al., 2002; Beck, 1999; Hipwell, 2000; Oxford et al., 2006).

Infertility, which is defined as the failure to conceive after three years of regular intercourse without using contraception, affects more than 7 million or 12% of women in the United States (Chandra, Martinez, Mosher, Alma, & Jones, 2005). Approximately 5.6% to 27.3% of infertile women who undergo treatment are successful and become mothers via assisted reproductive technology (ART) (Centers for Disease Control and Prevention, 2004). Fertility treatments are physically and emotionally grueling because they require frequent invasive medical procedures (i.e., venipunctures and vaginal ultrasounds) and daily hormonal injections that can affect the woman's mood (McQuillan, Greil, White, & Jacob, 2003). Additionally, the immense financial costs of fertility treatments are rarely covered by health insurance, thus compounding the hardships of these women (Stephen & Chandra, 2000). Infertile women who seek medical interventions are generally described as older with higher levels of education and income, goal-oriented, and committed to conceiving a child (Braverman, 2008; Stephen & Chandra, 2000). This commitment stems from infertility's stigmatizing feelings of inadequacy, failure, shame, and guilt which devalues the individual's sense of self and places them at risk for anxiety and depression (Forrest & Gilbert, 1992; Greil, 1991; Whiteford & Gonzalez, 1995).

Method

Noblit and Hare's (1988) classic meta-ethnographic approach to meta-synthesis was used because the underlying principle of meta-ethnography is to construct inductive and interpretative knowledge rather than to present aggregative data (Beck, 2002; Noblit & Hare, 1988). Noblit and Hare's approach was augmented by the following prescriptive steps recommended by Finfgeld-Connett (2010a, 2010b) to ensure procedural rigor and enhance validity of findings: 1)

Triangulation was completed by including findings from multiple studies that exemplified a variety of theoretical perspectives, methodologies, samples, and researchers; and 2) Higher level abstractions were synthesized based on findings that stayed close to the data by using direct quotes, rich descriptions, and in vivo codes.

Procedure

Online databases Medline, Cumulative Index to Nursing and Allied Health Literature (CINAHL), Health and Psychosocial Instruments, PsycINFO, PsycARTICLES, and Academic Search Premier were accessed to identify sources written in English. A combination of truncated keywords, including "postpartum depression", "infertility", "ART", "reproductive technology", "IVF", "in vitro", "artificial insemination", "qualitative research", "phenomenology", "grounded theory", and "ethnography", were used. Inclusion criteria included qualitative, peer-reviewed, data-based articles and dissertations published since the year 2000. Seminal studies (i.e., those published earlier but cited frequently in publications since 2000) were also included. This systematic sampling procedure was expansive in order to obtain a broad range of perspectives to enhance validity of findings (Finfgeld-Connett, 2010a, 2010b).

Sample

The sample for this meta-ethnography consisted of 25 qualitative studies. Five articles on infertility and 12 articles on PPD were originally extracted. After manual review of the reference lists from these articles, two additional articles on infertility and six additional articles on PPD were included.

For the infertility literature, four studies were conducted in the United States, while the rest were from South Africa, Sweden, and Taiwan. The sample sizes ranged from 4 to 32

participants, and study participant age ranged from 20 to 49 years. The qualitative methods used were phenomenology (n=4), grounded theory (n=2), and thematic analysis (n=1).

For the PPD literature, six studies were conducted in the United States, three in the United Kingdom, two in Hong Kong, and the rest were in one of the following other countries: Indonesia, Democratic Republic of Congo, Taiwan, Sweden, Ireland, Australia, and Finland. The sample sizes ranged from 7 to 80 participants, with one multi-site study not specifying the sample size. Participants were mostly mothers with PPD; however, three studies included additional participants (i.e., fathers, healthcare professionals, and mothers without PPD). Various qualitative research methods were used in the 18 studies: phenomenology (n=6), grounded theory (n=5), thematic analysis (n=3), textual analysis (n=1), content analysis (n=1), metasynthesis (n=1), and a "Free Listing" method (n=1) which produced a list of answers from interview questions.

The Ladores (n.d.) study on new motherhood in PIM was conducted in the United States. It used a phenomenological approach to interview 12 women about their experiences as previously infertile, first-time mothers.

Data Analysis

Noblit and Hare's (1988) approach to analysis includes seven overlapping phases that repeat as the meta-ethnography evolves. The first few phases pertain to selecting the phenomenon and relevant studies. These phases were described above. Phases specific to the synthesis include: 1) Translating the studies into one another; 2) Synthesizing translations; and 3) Expressing the synthesis via the written word or other more artistic avenues. This method, which was developed to synthesize findings across a single body of research literature, was

adapted in the present study to synthesize two separate bodies of literature (on PPD and infertility) as well as the Ladores study on the experience of new motherhood in PIM.

After reading the studies, the author made a list of key metaphors (i.e., themes, concepts, phrases) in each study and their relations to each other. The translation phase began when the extracted metaphors were translated into one another. According to Noblit and Hare (1988), "translations are especially unique syntheses, because they protect the particular, respect holism, and enable comparison" (p. 28). The form of translation used in this meta-ethnography was reciprocal translation which is when studies are about similar things (i.e., PPD and infertility). In an iterative way, each study is translated into the metaphors of the others, and vice-versa. The next phase required synthesizing these translations to arrive at an overarching theme for both phenomena. See Table 1 for an example of the steps taken to analyze the data, code the metaphors, and translate the metaphors to each other.

Findings

Findings from this meta-ethnography are presented by first reviewing the themes obtained from the Ladores study on new motherhood in PIM. Next, findings synthesized across studies on infertility, and findings synthesized across studies on PPD are presented separately. Finally, the synthesis of these three sections (i.e., the Ladores study, infertility, and PPD) is presented.

Themes from the Ladores Study: The Lived Experience of New Motherhood in PIM

The Ladores study on PIM found two major themes that characterized the lived early postpartum experience in these women: 1) Lingering Identity as Infertile; and 2) Gratitude for the Gift of Motherhood (Ladores, n.d.). Study participants reported that their infertility history

was firmly embedded into their self-identity even after infertility was resolved. This lingering identity of self as infertile, a term coined by Olshansky (1987), not only persisted after the study participants conceived but also colored their pregnancy and postpartum experience. They reported suffering from anxiety throughout their pregnancy and needing constant validation that the baby would be brought to term. They did not want to get too attached to their babies in utero in case they miscarried. When these women finally delivered their babies, they perceived new motherhood as surreal. They felt unprepared for their role as mother because they focused much of their efforts into getting pregnant and staying pregnant and did not prepare for what happens after delivery.

Gratitude for the gift of motherhood led these women to establish unrealistic expectations to be perfect mothers. They attributed their desire for perfection to the awareness that they may only have one chance at being a mother. Several participants directly attributed their desire to exclusively breastfeed to their history of infertility. One participant explained that her conception was so "unnatural" due to multiple cycles of IVF and IUI that her self-imposed pressure to breastfeed was because it was the one "natural" experience she should be able to have. Several participants equated breastfeeding with being the perfect mother as their way of repairing the lasting impact infertility had on their self-esteem.

When they were not able to fulfill self-imposed expectations to be the perfect mother, they felt ashamed and guilty that they were not able to embrace new motherhood with grace. A further complication was that their feelings of gratitude for the gift of motherhood prevented them from voicing their distress. Participants felt censored because they perceived that feeling distressed was not consistent with the effort that they put into overcoming infertility. As one participant described, "Because of everything I went through to get him [son] I feel like I can't

complain because I could be in a different place. I could be alone." Another participant stated, "I was unhappy and I thought I should be very happy. This isn't what I thought it was gonna be. I'm sad all the time. Crying. Feeling guilty cause I'm crying."

As previously mentioned, four out of the 12 participants developed PPD, and these women chose to suffer in silence. A participant described her confusion and terror when she had thoughts of harming her son who was conceived after years of fertility treatments, "I was afraid to give him baths, to handle knives. And I kept it all to myself. It was strange; I was confused. I loved my baby. Why am I having these thoughts? I was ashamed." Table 2 provides a summary of findings from this phenomenological study.

Themes from Synthesis of Infertility Studies

Table 3 summarizes the characteristics and findings of the seven infertility studies. Two themes were obtained by translating findings from each of the seven infertility studies: 1) Feeling Dehumanized; and 2) Feeling Isolated. Consistent with the qualitative methodological paradigm, thick descriptions will be provided to illustrate these two themes related to infertility.

Feeling Dehumanized

All seven studies on infertility showed that women endured complex emotional and physical distress due to their inability to conceive. Participants described how they felt dehumanized and treated like an object during their fertility treatments: "It's like I'm a nothing. [I] felt like part of me has either died or given up. There is this hollowness about your life. It's like you thought you were this solid chocolate bunny and you're not. You're the hollow chocolate bunny, which is the less expensive version, not quite as good and not what everybody really wanted at Easter." (McCarthy, 2008, p. 321). Women reported that in addition to the

invasive and painful aspects of fertility treatments, the procedures were humiliating. One woman recalled her husband's words to describe her treatment procedures as "a small platoon of medical personnel being more familiar with his wife's private parts than he was" (Benasutti, 2003, p. 62).

For many women, infertility left a permanent mark in their lives. As stated by one participant, "It doesn't really go away" (McCarthy, 2008, p. 322). In her classic study, Olshansky (1987) revealed that women who lack the ability to conceive adopt a central identity of themselves as infertile. This identity as infertile supersedes all other roles such as that of a friend, partner, family member, or career woman (Olshansky, 1987). Their inability to establish a family legacy was a life crisis and, as one participant bluntly explained, "Every ounce of dignity has been wiped out – even an amoeba can reproduce!" (Gonzalez, 2000, p. 624). The assault on their personhood and the burden of shame from "failing" as a woman led some to contemplate harming themselves or others, "I was going to kill myself. I am a nurse, and I was going to steal some medication" (Gonzalez, 2000, p. 626).

Feeling Isolated

Infertile women felt unsupported and misunderstood. They resented being asked prying questions such as, "How come you're not pregnant yet?" (Benasutti, 2003). They felt that women who were mothers did not understand their plight, and that being with women who were mothers would only exacerbate their emotional pain. A participant summed up her experience as an outcast, "I hated not blending with everybody and being the couple that everyone felt sorry for. It's [motherhood] like a sorority that I'm never going to be a part of" (McCarthy, 2008, p. 322). Another woman stated, "It was a pit in my stomach, and you start thinking that time is going by. It's scary. I was depressed a lot. I felt isolated" (Benasutti, 2003, p. 61). Another

woman described infertility as, “Something died, but nobody else knows it. Only you know it. And so nobody else is mourning” (McCarthy, 2008, p. 322).

Themes from Synthesis of PPD Studies

Table 4 summarizes the characteristics and findings of the 18 PPD studies. Three themes were obtained by translating findings from each of the 18 PPD studies: 1) Feeling Inadequate; 2) Feeling Lost and Hopeless; and 3) Discrepancy Between Expected and Real Motherhood. Thick descriptions will be provided to illustrate these themes related to PPD.

Feeling Inadequate

Mothers with PPD were paralyzed with overwhelming anxiety and doubted their mothering skills. This was true regardless of ethnicity, age, and number of previous births. African-American (Amankwaa, 2003), Chinese (Chan et al., 2002; Leung et al., 2005) and Indonesian (Andajani-Sutjahjo et al., 2007) mothers reported feelings of inadequacy and suffered from low parental self-esteem. Feeling inadequate was evident in one of Hall’s (2006) participants, “I used to put the baby in the pram and walk for miles and miles looking for a house to leave him at because I thought I was such a bad mother. He deserves to be brought up by somebody that can cope and would give him a fantastic life” (p. 257).

Difficulty with breastfeeding was identified as a powerful stressor that contributed to PPD in some women. A participant described the challenges of breastfeeding, “You think you’re a completely useless mother …and you should be able to know how to do this [breastfeeding] instinctively and in fact it’s probably the hardest thing I’ve ever done” (Shakespeare et al., 2004, p. 255).

Feeling Lost and Hopeless

Mothers with PPD felt that they have lost a part of themselves rendering them joyless. Their experience with PPD resulted in feelings of hopelessness (Amankwaa, 2003; Chen et al., 2006; & Edhborg et al., 2005; Lawler & Sinclair, 2003; Leung et al., 2005) that, in some instances, led to contemplating suicide and homicide/infanticide as a solution to their crisis (Amankwaa, 2003; Beck, 1992; Chan et al., 2002; Chen et al., 2006; Hall, 2006; Tammentie et al., 2004). This tragic consequence of PPD was voiced by one of Beck's (1992) participants who recounted PPD as a living hell: "I felt there was absolutely no way out of it. I was very suicidal. I loved my baby but I thought if this is the quality of life that I was going to have, there's no way. No way anybody can endure the kind of pain I was going through" (p. 168).

Reports of overcoming PPD also emphasized loss. Specifically, women felt that they had to reconstruct themselves and be "reborn" (Chen et al., 2006) in order to arrive at a new definition of "normal" motherhood. The women in these studies described the recovery experience as a slow death of a former self followed by an equally slow rebirth of a newly reconstructed self. Recovery involved deep introspection and a grieving period for what has been lost. However, for some women, even those who have recovered, the mark left by PPD on their being was indelible. Their loss continued to be felt long after they recovered.

Discrepancy between Expected and Real Motherhood

Women with PPD also reported a discrepancy between their expectations and the realities of motherhood (Chen et al., 2006; Hall, 2006; Lawler & Sinclair, 2003; Leung et al., 2005; Shakespeare et al., 2004; Tammentie et al., 2004). Most women enter their pregnancy and postpartum period with high expectations (Leung et al., 2005). These included birthing a healthy infant with an easy temperament, forming a quick attachment, having a supportive partner and

family to help care for the infant, and having adequate internal and external resources to manage the unremitting responsibilities of motherhood. Although most mothers find that their experiences did not necessarily match their expectations, women with PPD may have felt a deeper disappointment when they realized that their reality as mothers was not what they fantasized during pregnancy. The disappointment catapulted them into a world of constant worries and apprehension. The insomnia, exhaustion, and anticlimactic feelings stated by several participants in Hall's (2006) study included: "Having a baby is not fantastic like I expected", "I didn't have that gush of feeling like I expected", and "I question if I really love my child" (p. 257).

Overarching Theme from Synthesis across Literature on Infertility and PPD

Findings across studies suggest that PIM may be at high risk for developing PPD. The themes for infertility and PPD clearly overlapped. Figure 1 depicts a schema that synthesizes the themes and subthemes pertaining to the trajectory that these women take from infertility to motherhood. Each stage in the trajectory poses an increased risk for developing depression. The overarching theme that emerged from the synthesis is the "Assault to Sense of Self." This assault to the women's sense of self began when they were diagnosed with infertility. They felt dehumanized as they suffered with each painful diagnostic and treatment procedure and struggled to understand why they were not able to conceive naturally. From that point forward, their identity as infertile became the center of their being, pushing aside other identities as wives, sisters, or career women. This identity as infertile was so firmly embedded in the participants' personhood that it colored their pregnancy and persisted even when they became mothers. Their pregnancy was besieged by anxiety and doubt about whether their babies would be brought to term. As new mothers, they continued to feel inadequate, feeling as if they failed to fulfill self-

imposed expectations to be perfect mothers. Despite feeling overwhelmed and lost, their immense gratitude for having been given the gift of motherhood left them unable to voice their struggles due to fear of being judged by others. This censorship catapulted them to despair. Several women contemplated suicide and suffered from PPD, which further perpetuated their sense of inadequacy and negative self-image.

Discussion

This meta-ethnography on the intersection of two phenomena (infertility and PPD) demonstrated that infertile women and those with PPD endure cumulative attacks to their sense of self. The themes depicted in Figure 1 underscore the importance of formal and informal support systems, as well as vigilant screening for depression throughout the trajectory from fertility treatment to new motherhood.

Although the meta-synthesis approach was informative, a phenomenological study of PPD in PIM would provide more direct information and possibly uncover additional aspects of their lived experience. The Ladores (n.d.) study on new motherhood for PIM only investigated these women's experiences in the early postpartum period (i.e., first three months after delivery). A more longitudinal study of their first year postpartum would provide greater insight into any lingering issues, and identify the recovery process for those with PPD. Qualitative studies are best at exploring areas of research that are understudied like PPD in PIM, and they are well suited for increasing sensitivity in healthcare professionals who serve this group of women.

Previously infertile mothers require targeted interventions to prevent a "downward spiral" to despair during the postpartum period. Prevention strategies include having obstetric, pediatric and general healthcare providers assist PIM in disclosing their thoughts and feelings about motherhood, however confusing or terrifying they may be, and normalizing their experiences to

avoid feelings of isolation or depression. Other prevention strategies include having a transition program within fertility specialty practices to support newly pregnant previously infertile women as they prepare to tackle the realities of motherhood. This transition program can include a mentorship component in which a former patient who successfully conceived and is now a mother is paired with a newly pregnant patient. Prior to matching, mentors must receive training on how to establish and maintain therapeutic relationships with their mentees. Mentors can then help normalize any potential conflicted emotions their mentees may have about motherhood and provide anticipatory guidance regarding their mentees' risk for developing PPD. Conversely, treatment strategies to promote healing include frequent screenings for PPD and referrals to psychiatric health professionals for pharmacological and/or non-pharmacological interventions, as well as referrals to appropriate support groups (i.e., infertility, breastfeeding, PPD). See Table 5 for a list of resources relevant to these recommendations.

Conclusion

Previously infertile mothers have a sense of self that has been under continual attack making them a vulnerable group at risk for PPD. This meta-ethnography suggests that it is critical to conduct frequent screenings for depression in these women across the full trajectory from being infertile to being a new mother, and intervene promptly to avoid depression's costly sequelae.

Tables and Figures

The tables and figures referenced in the text are shown below.

Table 1. Example of Infertility Data, Coding Metaphors, and Translation

Source	Data and coding metaphors	Coding legend	Translation
Benasutti (2003)	Lived experience of being infertile: • Humiliation of infertility treatments ("Sex life is holding a jar of husband's sperm between legs while driving the car so sperm would not get too cold because sperm would slow down.") {D} • Feeling the pressure of being infertile ("Having a child is one way of completing womanhood and without a child, I feel incomplete.") {IP} • Negative emotions during infertility treatment ("It's scary. I was depressed a lot. This affected my relationship with other people. I didn't want to be around as much.") {S}	• Degrading = {D} • Incomplete person = {IP} • Solitude = {S}	• Feeling Dehumanized {D} • Feeling Isolated {IP} {S}
Dyer et al. (2002)	Intense emotions about involuntary childlessness: • Psychological suffering ("I went out with this guy and I couldn't [get] pregnant [so] he went to go have sex with men. It means I'm useless.") {H} • Social pressure ("At the gathering, the moms like to talk about their children. Then you sit there and just listen. You can't talk to them.") {SA} • Secrecy ("I am afraid to speak to people about something like that [being infertile] because they are going to tell the whole world.") {KS}	• Humiliation = {H} • Set apart = {SA} • Keeping secrets = {KS}	• Feeling Dehumanized {H} • Feeling Isolated {SA} {KS}
McCarthy (2008)	Living an existential paradox: • Threat to individual's core sense of self ("There is this hollowness about your life. It's like you thought you were this solid chocolate bunny and you're not. You're the hollow chocolate bunny, which is the less expensive version, not quite as good and not what everybody really wanted at Easter.") {NH} • Social displacement ("Being on the outside looking in. Feeling out of the loop.") {AO}	• Not human = {NH} • An outsider = {AO}	• Feeling Dehumanized {NH} • Feeling Isolated {AO}

Table 2. Qualitative Research Study on the Lived Experience of New Motherhood in Previously Infertile Mothers

Author (Year) [Title]	Country	Sample Size	Age Range	Qualitative Method Used	Findings
Ladores, S. (n.d.) [The Early Postpartum Experience of Previously Infertile Mothers]	USA	n=12 women	27-43	Phenomenology	Two main themes with subthemes: 1. Lingering identity as infertile a. Anxiety over the pregnancy b. Perceiving motherhood as surreal c. Feeling unprepared for the role of mother 2. Gratitude for the gift of motherhood a. Needing to be the perfect mother b. Feeling censored

Table 3. Summary of Qualitative Research Studies on Infertility

Author (Year) [Title]	Country	Sample Size	Age Range	Qualitative Method Used	Findings
Benasutti, R. D. (2003) [Infertility: Experiences and meanings]	USA	n=4 women	37-49	Phenomenology	Six categories of lived experience: 1. Reactions during experience (emotional, sexual, medical, financial, social) 2. Differences during experience (from their husbands' experiences) 3. Support during experience (internal and external) 4. Learnings during experience (infertility as "strengthener") 5. Benefits after experience (personally and relationally) 6. Advice after experience ("respect what the other person is going through", "listen to your intuition")
Dyer, S. J., Abrahams, N., Hoffman, M., & van der Spuy, Z. M. (2002) ["Men leave me as a I cannot have children": Women's experiences with involuntary childlessness]	South Africa	n=30 women	21-41	Grounded theory	Five concerns related to involuntary childlessness: 1. Psychological suffering 2. Marital instability 3. Stigmatization and abuse 4. Social pressure 5. Support and secrecy
Gonzalez, L. O. (2000) [Infertility as a transformational process: A framework for psychotherapeutic support of infertile women]	USA	n=25 women	20-40	Thematic analysis	Five themes of lived experience: 1. Failure to fulfill a prescribed societal norm 2. Assault on personal identity 3. Mourning 4. Transformation 5. Restitution
Johansson, M., & Berg, M. (2005) [Women's experiences of childlessness 2 years after the end of *in vitro* fertilization treatment]	Sweden	n=8 women	34-41	Phenomenology	Central essence: "Life Grief" with five constituents: 1. Childlessness is a central issue in life 2. IVF is a positive and important part of life

Author (Year) [Title]	Country	Sample Size	Age Range	Qualitative Method Used	Findings
					3. Contact with other people is not an important issue 4. The hope of achieving pregnancy still exists 5. Attempts to identify other central issues in life
McCarthy, M. P. (2008) [Women's lived experience of infertility after unsuccessful medical intervention]	USA	n=22 women	39.9 (mean)	Phenomenology	Seven themes of lived experience: 1. Living an existential paradox 2. Revisioning self in life's context 3. Revisioning the world in life's context 4. Experiencing isolation: a sister set apart 5. Permanent presence 6. Choosing to go on 7. Creating a different kind of life
Olshansky, E. (1987) [Identity of self as infertile: An example of theory-generating research]	USA	n=32 (women and their partners)	28-47	Grounded theory	Core concept: "Identity as Infertile" with several stages: 1. Taking on an identity of self as infertile a. Symbolic rehearsals b. Informal identity of self as infertile c. Formal identity of self as infertile d. Expansion of the identity of self as infertile 2. Managing the identity of self as infertile a. Overcoming the identity of self as infertile b. Circumventing the identity of self as infertile c. Reconciling the identity of self as infertile d. Remaining in limbo
Su, T. J., & Chen, Y. C. (2006) [Transforming hope: The lived experience of infertile women who terminated treatment after in vitro	Taiwan	n=24 women	32-47	Phenomenology	Theme of lived experience: "Transforming Hope", with three categories: 1. Accepting the reality of infertility 2. Acknowledging the limitations of

Author (Year) [Title]	Country	Sample Size	Age Range	Qualitative Method Used	Findings
fertilization failure]					treatment involving high technology 3. Re-identifying one's future

Table 4. Summary of Qualitative Research Studies on Postpartum Depression

Author (Year) [Title]	Country	Sample Size	Age Range	Qualitative Method Used	Findings
Amankwaa, L. C. (2003) [Postpartum depression among African-American women]	USA	n=12 women	22-40	Grounded theory	Six major themes of PPD experience: 1. Stressing out 2. Feeling down 3. Losing it 4. Seeking help 5. Feeling better 6. Dealing with it a. Keeping the faith b. Trying to be a strong black woman c. Living with myths d. Keeping secrets
Andajani-Sutjahjo, S., Manderson, L., & Astbury, J. (2007) [Complex emotions, complex problems: Understanding the experiences of perinatal depression among new mothers in Urban Indonesia]	Indonesia	n=41 women	17-37	Thematic analysis	Multiple causes for mood variations: 1. Premarital pregnancy 2. Chronic illness in the family 3. Marital problems 4. Lack of support from partners or family network 5. Husband's unemployment 6. Insufficient income due to giving up their own paid work Common terms to describe their depressive condition: 1. *Cemas* (anxiety) 2. *Banyak mikir* (thinking / worrying too much) 3. *Kuatir* (worried) 4. *Takut* (scared / afraid) 5. *Bingung* (scared and confused) 6. *Nelongso* (self-pity)
Bass, J., Ryder, R. W., Lammers, M. C.,	Democratic Republic of	n=80 women	Not noted	Participants were interviewed using "Free	Answers to the primary question related to "main problems of women with babies < 1

Author (Year) [Title]	Country	Sample Size	Age Range	Qualitative Method Used	Findings
Mukaba, T. N., & Bolton, P. A. (2008) [Post-partum depression in Kinshasa, Democratic Republic of Congo: Validation of a concept using a mixed-methods cross-cultural approach]	Congo			Listing", a method that produces a list of answers to 2 primary questions. The free list data were consolidated and ranked in decreasing order of number of respondents.	year of age": 22 problems identified (including illness, hunger, unemployment, lack of money, caretaking of children, lack of support, worries/torments/lack of peace, difficulties doing household chores, etc.). Answers to the other primary question related to "main problems of women that affect their babies and children": 19 problems identified (including illness, parental disputes/domestic violence, lack of food, worries/lack of peace/torments, lack of money, neglect of the children, miserable life/difficult life, lack of support, lack of employment, etc.) Local syndrome called "Maladi ya Souci" described by key informants are consistent with an episode of DSM-IV defined major depressive disorder.
Beck, C. T. (1992) [The lived experience of postpartum depression: A phenomenological study]	USA	n=7 women	22-38	Phenomenology	Eleven themes: 1. Mothers were enveloped in unbearable loneliness… 2. Contemplating death provided a glimmer of hope… 3. Obsessive thoughts of being a bad mother… 4. … the mothers grieved for their sense of loss. 5. Life was empty of all previous interests and goals. 6. The women carried a suffocating burden of fear and guilt over

Author (Year) [Title]	Country	Sample Size	Age Range	Qualitative Method Used	Findings
					pondering harming their infants. 7. Shrouded in fogginess, the mothers were unable to concentrate. 8. Mothers envisioned themselves as robots … 9. Uncontrollable anxiety attacks led to a feeling of being on the edge of insanity. 10. Loss of control of mothers' emotions was alarming and difficulty to accept. 11. Besieged with insecurities the mothers needed to be mothered themselves.
Beck, C. T. (1993) [Teetering on the edge: A substantive theory of postpartum depression]	USA	n=12 women	20-38	Grounded theory	Theory: "Teetering on the Edge" with four stages: 1. Encountering terror 2. Dying of self 3. Struggling to survive 4. Regaining control
Beck, C. T. (2002). [Postpartum Depression: A Metasynthesis]	USA	n=18 qualitative studies	18-44 (age range in 3 studies not specified)	Metasynthesis	Four overarching themes: 1. Incongruity between expectations and the reality of motherhood 2. Spiraling downward 3. Pervasive loss 4. Making gains
Chan, S., Levy, V., Chung, T. K. H., & Lee, D. (2002) [A qualitative study of the experiences of a group of Hong Kong Chinese women diagnosed with	Hong Kong	n=35 women	20-40	Phenomenology	Four themes that described participants' experiences: 1. Trapped in the situation 2. Ambivalent towards the baby 3. Uncaring husband 4. Controlling and powerful in-laws

Author (Year) [Title]	Country	Sample Size	Age Range	Qualitative Method Used	Findings
postnatal depression]					
Chen, C. H., Wang, S. Y., Chung, U. L., Tseng, Y. F., Chou, F. H. (2006) [Being reborn: The recovery process of postpartum depression in Taiwanese women]	Taiwan	n=23 women	19-38	Grounded theory	Core concept: "Being Reborn" with four stages: 1. Shattered role identity 2. Feeling trapped and breaking down 3. Struggling for self-integrity 4. Regaining vitality
Edhborg, M., Friberg, M., Lundh, W., & Widstrom, A.M. (2005) [Struggling with life: Narratives from women with signs of postpartum depression]	Sweden	n=22 women	20-42	Grounded theory	Core category: "Struggling with Life" with categories and subcategories: 1. Struggling with life related to self a. Redefining identity b. Living up to the image of the "good mother" 2. Struggling with life related to the child a. Feelings of uncertainty and ignorance in practical care b. Feelings of guilt and blamed themselves for not acting like a "good mother" 3. Struggling with life related to the partner a. Negative influences on marital relationship due to less time b. Foster father-child relationship to "train the child to be with the father"
Hall, P. (2006) [Mothers' experiences of postnatal depression: an interpretive	UK	n=10 women	Not noted	Phenomenology	Four general themes (identified by majority of participants): 1. Difficulties in disclosure 2. Expectations 3. Beliefs around being a bad mum

Author (Year) [Title]	Country	Sample Size	Age Range	Qualitative Method Used	Findings
phenomenological analysis]					4. Attachment Seven specific themes (identified by fewer participants): 1. A wish for help 2. Fear of harming their child 3. Feeling unjustified in being depressed 4. Self-doubt 5. Feeling trapped 6. Concerns about looking after their baby 7. Thoughts that someone in their family might die
Holopainen, D. (2001) [The experience of seeking help for postnatal depression]	Australia	n=7 women	24-43	Phenomenology	Four theme clusters of support networks: 1. Interpersonal support 2. Maternal health nurse 3. Medical professionals such as general practitioners and psychologists 4. Postnatal support groups
Lawler, D., & Sinclair, M. (2003) [Grieving for my former self: A phenomenological hermeneutical study of women's lived experience of postnatal depression]	Ireland	n=7 women	21-40	Phenomenology	Major theme, "Loss of Former Self" and other results presented under four existential lifeworlds: 1. Spatiality (lived space): PPD as a spontaneous, insidious process; detachment from infants; isolation; conflicts between expectations and realities of motherhood; loss of control. 2. Corporeality (lived body): PPD as a process of suffering deep psychological, spiritual and physical pain; disturbance in cognitive and behavioral function.

Author (Year) [Title]	Country	Sample Size	Age Range	Qualitative Method Used	Findings
					3. Relationality (lived relations): PPD as a labeled mental illness carries stigma resulting in shame, threatening self-esteem and relationships. 4. Temporality (lived time): PPD as an insidious process with "rock bottom" experienced physically, socially, psychologically and spiritually. Path to recovery was slow, yet women gained a new perspective on life and viewed life in a more positive light.
Leung, S., Arthur, D. G., & Martinson, I. (2005) [Stress in women with postpartum depression: A phenomenological study]	Hong Kong	n=11 women	18-45	Phenomenology	Five themes leading to stress and PPD: 1. Parenting competence 2. Expectation-experience gap 3. Baby-minder (childcare) arrangements 4. Childcare demands 5. Conflict with culture and tradition
Oates, M. R. et al. (2004) [Postnatal depression across countries and cultures: A qualitative study]	11 countries: USA, France, Ireland, Italy, Sweden, Uganda, UK, Portugal, Austria, Switzerland, Japan	n=not noted. Three groups of informants: new mothers, relatives, and health professionals	Not noted	Textual analysis	All sites described morbid unhappiness after childbirth comparable to postnatal depression but not all saw this as an illness treatable by health interventions. Most sites reported a psychosocial etiology in postnatal depression: lack of social support, family conflict, sleeplessness and problems with the baby. Social, practical and emotional support were universally expressed as the remedy for postnatal depression. Only in the USA were antidepressants mentioned.

Author (Year) [Title]	Country	Sample Size	Age Range	Qualitative Method Used	Findings
Shakespeare, J. Blake, F., & Garcia, J. (2004) [Breastfeeding difficulties experienced by women taking part in a qualitative interview study of postnatal depression]	UK	n=39 women	19-42	Thematic analysis	Fifteen out of 39 participants experienced breastfeeding difficulties. One participant noted that her decision to stop breastfeeding after much difficulty may have helped prevent her from developing postnatal depression. Five themes emerged which explore breastfeeding difficulties: 1. Commitment to breastfeeding and high expectations of success 2. Unexpected difficulties 3. Seeking professional support for difficulties 4. Finding a way to cope 5. Guilt
Shakespeare, J. Blake, F., & Garcia, J. (2006) [How do women with postnatal depression experience listening visits in primary care? A qualitative interview study]	UK	n=39 women	19-42	Thematic analysis	Four factors that made listening visits a positive experience: 1. Agreeing with a medical model for postnatal depression 2. A good relationship with the health visitor 3. Being offered choices and options 4. A clear and flexible process for the visits
Tammentie, T., Paavilainen, E., Astedt-Kurki, P., & Tarkka, M. T. (2004) [Family dynamics of postnatally depressed mothers: Discrepancy between expectations and reality]	Finland	n=9 mothers (mom), 5 fathers (dad), and 1 child	22-35 (mom) 27-45 (dad); 9-year-old child	Grounded theory	Core category: "Discrepancy Between Expectations and Reality", with categories: 1. Strive for perfection 2. Being tied down to the infant 3. Expectations of family life
Ugarriza, D. N.,	USA	n=20 women	23-42	Content analysis	Factors that helped prevent postpartum

Author (Year) [Title]	Country	Sample Size	Age Range	Qualitative Method Used	Findings
Douchand Brown, S. E., Chang-Martinez, C. (2007) [Anglo-American mothers and the prevention of postpartum depression]		without postpartum depression			depression: 1. Cultural patterning of a distinct postpartum period 2. Protective measures and rituals reflecting the presumed vulnerability of the new mother 3. Social seclusion 4. Mandated rest 5. Assistance in tasks from relatives or midwives 6. Social recognition of new social status through rituals, gifts, or other means

Table 5. Resources

Organization	Online Website	Telephone Number
RESOLVE (National Infertility Association)	www.resolve.org	703-556-7172
La Leche League	www.lllusa.org	877-4-LALECHE
Postpartum Support International	www.postpartum.net	800-944-4PPD
Suicide Hotlines	www.suicidehotlines.com	800-SUICIDE
Bright Futures with American Academy of Pediatrics	www.brightfutures.aap.org	847-434-4000
National Organization of Mothers of Twins Clubs, Inc. (NOMOTC)	www.nomotc.org	248-231-4480

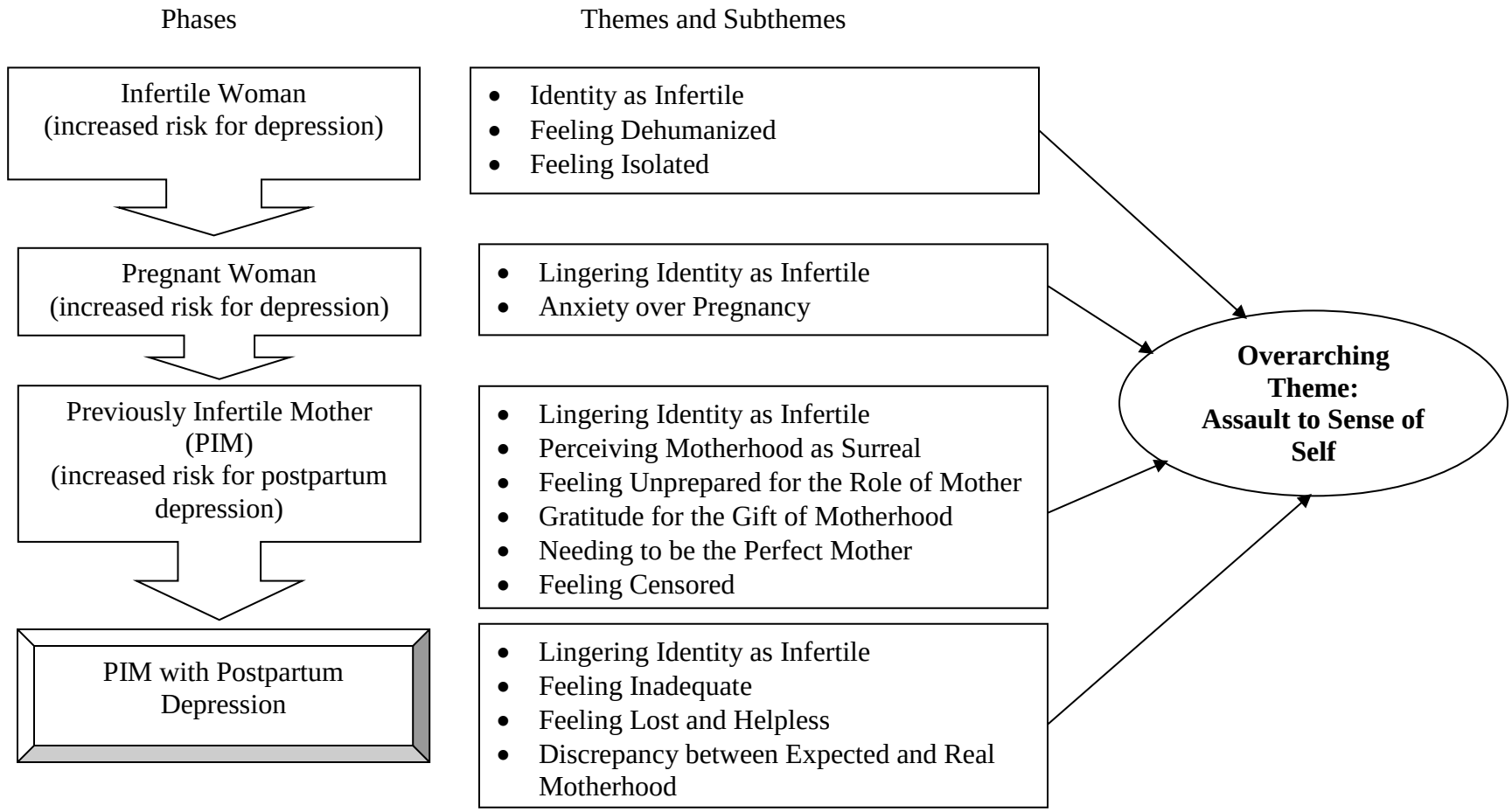

Figure 1. Synthesis of Themes and Subthemes on the Continuum from Infertility to Motherhood

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CHAPTER THREE: THE EARLY POSTPARTUM EXPERIENCE OF PREVIOUSLY INFERTILE MOTHERS

Abstract

The clinical literature suggests that the physical, emotional and financial investment associated with fertility treatment makes it difficult for previously infertile women to transition into new motherhood. Yet no studies have been conducted that explore the lived experience of becoming a new mother from the unique perspectives of previously infertile women. This descriptive phenomenological study fills this gap. Twelve first-time, previously infertile mothers aged 27 to 43 years, were interviewed twice. The first interview focused on eliciting descriptions of motherhood in the early postpartum period after overcoming infertility. The second interview validated the interpretations from the first interview and provided additional information and reflection. The data were analyzed using Colaizzi's approach. Two main themes emerged that described the early postpartum experience of first-time, previously infertile mothers: 1) Lingering Identity as Infertile; and 2) Gratitude for the Gift of Motherhood. Participants reported that their lingering identity as infertile and immense gratitude for the gift of motherhood propelled them to establish unrealistic expectations to be the perfect mother. When they were unable to live up to being the perfect mother, they censored their feelings of inadequacy, guilt and shame. Findings from this study sensitize healthcare providers to the difficulties faced by previously infertile women during their transition to motherhood.

Introduction

Medical advances in assisted reproductive technology have allowed 5.6% to 27.3% of the more than seven million infertile women in the United States (Chandra, Martinez, Mosher, Alma, & Jones, 2005) to successfully conceive and become mothers (Centers for Disease

Control and Prevention, 2004). How previously infertile mothers (PIM) experience new motherhood is understood poorly. Quantitative studies on new motherhood for previously infertile women are limited to a few outcome variables, such as maternal depression, anxiety, self-esteem, and parenting competence (Colpin, De Munter, Nys, &Vandemeulebroeke, 1999; Cox, Glazebrook, Sheard, Ndukwe, & Oates, 2006; Gibson, Ungerer, Tennant, & Saunders, 2000). These studies have yielded conflicting findings, suggesting that new motherhood for previously infertile women is not necessarily fraught with difficulties. In contrast, the clinical literature details a plethora of difficulties faced by previously infertile mothers (Braverman, 2008). These reports may be biased because clinicians are more apt to focus on negative cases rather than successes. Post-hoc explanations from literature about risk for postpartum depression and the demands of undergoing infertility treatment also have been put forth to explain problems of new motherhood in previously infertile women (Olshansky, 2003). A more in-depth qualitative study with PIM is needed to explore the issue whether previously infertile women have unique experiences and needs. The purpose of this study is to describe the lived experience of first-time PIM during their transition to motherhood from their own perspectives. Findings from this study will be used to identify possible difficulties faced by PIM during the early postpartum period and sensitize healthcare providers to these possible difficulties.

Regardless of infertility, transition to motherhood is well-documented as a challenging and important time (Mercer, 1985), particularly for first-time mothers (Nelson, 2003). The transition to motherhood carries with it many biological, developmental, and psychological changes that can either contribute to personal growth or predispose individuals to psychiatric disorders (Cohen & Nonacs, 2005; Nelson, 2003; Repokari et al., 2005). Learning the role of a new mother takes months and often involves physical exhaustion, sleep deprivation, decreased

financial resources, and social isolation (Mercer, 1985). First-time mothers are particularly at high risk for mismanaging these stressors, making their transition to new motherhood difficult (Rutledge et al., 1987; Walker et al., 1985).

The transition to new motherhood for PIM may be even more challenging than it is for spontaneously conceiving mothers because pregnancy and motherhood for PIM follows immediately after the immense physical, emotional, and financial burdens of infertility treatment. It is well known that infertility treatment is stressful. Infertility has been framed as a type of illness trajectory (Sandelowski, 1995) and negative life event (Greil, 1991) that consumes a woman's self-identity (Olshansky, 1996). This trajectory is likely to result in unique experiences of motherhood.

Infertility treatments can cause or exacerbate depression (Gonzalez, 2000; Sandelowski, 1995; Su & Chen, 2006). A prior history of depression is a known risk factor for postpartum depression (PPD) (Stowe, Hostetter, & Newport, 2005). Domar et al. (1992) found that infertile women are twice as likely to experience depressive symptoms compared to fertile women. Olshansky's research on infertility showed that infertile women take on an identity as infertile in which all other identities as wife, sister, career woman, etc. are pushed aside when they undergo fertility diagnostics and treatment (Olshansky, 1987, 1988, 1990, 1996, 2003). Olshansky (2003) theorized that this identity as infertile might impact women's transition to new motherhood and increase their vulnerability to PPD. Although Olshansky's work on infertility is informative, empirical data to validate her speculation on PIM's early postpartum experience is missing.

One study found that women who are ultimately successful after undergoing infertility treatment have unrealistic expectations about the joys of motherhood (Hjelmstedt, Widstrom, Wramsby, & Collins, 2004). PIM are surprised about the difficult transition they experience and

do not feel justified to voice their distress because they are expected to be blissful after the birth of a much-anticipated child (Olshansky, 2003). These women reportedly silence themselves and show a façade of normalcy to the outside world. This silencing can jeopardize their own and their infants' well-being if it leads to delays in getting assistance (Olshansky & Sereika, 2005).

Contrary to clinical reports and theoretical speculation about how the burden of infertility treatments affect the postpartum period, findings from quantitative studies are mixed. Several quantitative studies demonstrate that new motherhood is not different for previously infertile or spontaneously conceiving mothers (Cox et al., 2006; Gibson et al., 2000; Glazebrook, Cox, Oates, & Ndukwe, 2001; Greenfeld & Klock, 2001; McMahon, Ungerer, Tennant, & Saunders, 1997), whereas others demonstrate that new motherhood is more problematic for women who were previously infertile (Colpin et al., 1999; Gibson et al., 2000; McMahon et al., 1997). One study found that previously infertile women adapted to new motherhood better than women who conceived spontaneously (Repokari et al., 2005). This study found that compared to spontaneously conceiving mothers, PIM did not demonstrate the same increased anxiety during pregnancy and postpartum.

There are less conflicting findings from quantitative studies about PIM mothers who have multiple, rather than singleton, births (Glazebrook et al., 2001; Sheard et al., 2007). Clearly, PIM with multiple births have a more demanding transition to motherhood. However, this may be due to caregiver burden rather than how infertility shapes the transition to new motherhood.

Drawing other definitive conclusions from quantitative studies on new motherhood in PIM is complicated by the fact that these studies vary on important sample characteristics (e.g., mother's education, income, marital status), time periods, and maternal indicators of adjustment. More importantly, existing quantitative research about new motherhood for previously infertile

women is limited to only a few outcome variables, namely anxiety, depression, self-esteem, and maternal competence (Cox et al., 2006; Gibson et al., 2000; Glazebrook et al., 2001; Greenfeld & Klock, 2001; Hjelmstedt et al., 2004; McMahon et al., 1997). Thus, these studies do not fully describe the experience of PIM as they transition to new motherhood.

This study fills the gap in knowledge by providing an inductive exploration of previously infertile mothers' early postpartum experience from the perspective of these women themselves. The research question is: What is the lived experience of first-time, previously infertile mothers during the early postpartum period?

Methods

Design

Descriptive phenomenology was used in this study because it is well-suited for portraying PIM's unique perspective on their lived experience. Phenomenology purely seeks the meaning of life's nuances as described by the individual experiencing them. It is purposefully atheoretical to liberate the researcher from prescribed steps or formulas to allow "the thing itself" (phenomenon) to be explored in its possibilities (Munhall, 2007).

Sample

The sample was twelve adult previously infertile, first-time mothers. The sample size was consistent with other studies that used the phenomenological approach to study women with infertility and women with postpartum depression (Beck, 1999; Hall, 2006; Holopainen, 2001; Leung, Arthur & Martinson, 2000). However, sample size resulted from meeting data saturation or when no new information emerged from the interviews. Mothers of both singletons and multiple births were included based on the tenets of phenomenology in which the essential

structure of the new motherhood experience was explored regardless of subgroup differences. Additional study inclusion criteria were that mothers had to: 1) be 18 years old or older; 2) be diagnosed as previously infertile by a fertility specialist; 3) understand, write and speak English; and 4) have the first-born child conceived after infertility treatment not be more than 3 years old. The three-year parameter was to limit memory bias from retrospective reports about the early postpartum period.

Recruitment included posting approved flyers in various OB/GYN, fertility and pediatric clinics in the Central Florida area as well as using Facebook, an online networking site, and snowball sampling. Potential participants were asked to contact the principal investigator (PI) directly. The purpose of the study, data collection methods, and protection of personal information were explained to women interested in participating in the study. Once verbal consent was received, the eligibility checklist was completed and those eligible were invited to participate in the study. At this time, the PI also disclosed her professional background and personal experience as a mother of a child conceived via *in vitro* fertilization. This disclosure assisted in establishing trust and rapport with the participants and helped acknowledge any potential biases during data collection and analysis. The PI arranged a date, time, and location convenient to the participant in order to obtain demographic data and conduct the interview.

Demographics

Demographics are summarized in Table 6. As can be seen the sample was homogenous with regard to race and marital status. It is also noteworthy that the majority of women (67%) lost one or more pregnancies before delivering their first child. Seventy-five percent (n = 9) of the participants delivered singletons, and 67% (n = 8) delivered via Caesarean section.

Data Collection

Full institutional review board (IRB) approval was obtained prior to the start of the study. A demographic form was used to collect sociodemographic data and an interview guide was used to ensure that key experiences were addressed in the study. The main question asked during the interview was: "What is/was it like being a new mother after having undergone infertility treatment?" The interviews were not limited to the questions posed in the interview guide. Rather, prompts were used to elicit more elaboration as needed. Participants were encouraged to fully illuminate their lived experiences using vivid descriptions of their thoughts, feelings and perceptions.

Participants were interviewed twice. The first interview focused on eliciting descriptions of motherhood after infertility. The second interview occurred approximately two to four weeks after the first interview and validated PI interpretations from the first interview and elicited additional reflection from the participant. During the second interview, the PI verbally summarized main themes derived from the first interview and asked the participant for validation or elaboration. The interviews were audio-taped and lasted an average of 35 minutes each. Notes were taken during the interviews to record the PI's perceptions of the interview. A journal was created to help bracket suppositions and biases. At the conclusion of each interview, the participant was given a $10.00 gift card to a local supermarket to compensate for her time.

Data Analysis

To protect the participants' anonymity, pseudonyms (Angie, Betty, Carly, Debbie, Ethel, Frances, Gwen, Hillary, Ilana, Jackie, Kelly, and Luisa) were assigned. The interview audio files were transcribed, and the transcriptions were reviewed and compared against the audio files to

ensure accuracy. HyperTranscribe™ and HyperResearch™ software by ResearchWare, Inc. were used to transcribe and manage the interview data. The latest version of SPSS was used to analyze demographic data.

Colaizzi's (1978) method of data analysis was used to develop themes that emerged from the data. Analysis was an ongoing, iterative process that commenced immediately following each interview and transcription. First, analysis began by reviewing each transcript to gain a feeling for the participant's inherent meanings about motherhood after infertility. Second, significant statements were extracted from each participant, and meanings related to the participant's experience with motherhood after infertility were formulated in the context of the participant's own terms. Third, meanings across participants were organized into clusters of themes in order to reveal common patterns in the data. Detailed, analytic descriptions of each theme were compiled to achieve an exhaustive description of the early postpartum experience of previously infertile mothers. Finally, the fundamental structure of the experience of motherhood after infertility was identified. Subsequently, a summary of findings was returned to each participant during the second interview to ensure accuracy and obtain validation of findings. Refinements to the essential features of each participant's early postpartum experience were made after the second interview.

Further validation of findings was obtained in two ways. First, two women who were eligible for study participation but contacted the researcher after the data collection phase was completed, volunteered to be "objective readers" of the manuscript. Both women validated all of the themes except for the two subthemes on anxiety over the pregnancy and perceiving that motherhood was surreal. Both women were highly-driven, successful career women and fully entrusted their fertility specialist to get them pregnant and carry their babies to term. One of the

two women also described how her spirituality and faith in God helped her cope with any anxiety she may have felt during the pregnancy and postpartum. This same woman was a pediatric nurse who felt equipped with knowledge and experience to handle her twin boys. The second source of validation was a doctoral student in nursing who, as part of her doctoral coursework, was trained in qualitative data analysis. She independently reviewed and analyzed five transcripts. She also had a history of infertility. Her analysis yielded themes similar to those independently developed by the PI.

Findings

The previously infertile first-time mothers who participated in this study found mothering during the early postpartum to be more challenging than they envisioned while pregnant with their much-anticipated child. Even after they gave birth, they described a lingering identity as infertile women. Additionally, they found it difficult to voice complaints commonly associated with new motherhood, such as fatigue, because they felt immense gratitude for overcoming infertility and obtaining the "gift of motherhood". These two major themes: 1) Lingering Identity as Infertile; and 2) Gratitude for the Gift of Motherhood, and their subthemes will be discussed below.

Lingering Identity as Infertile

Nine participants described how being infertile and the work involved to achieve motherhood were embedded firmly as part of their identity even after they delivered their babies. Frances, who delivered her daughter after eight intrauterine inseminations (IUI) and two *in vitro* fertilizations (IVF) acknowledged, "Even now I still feel like an infertility patient. You feel like you have it stamped on your forehead. It's your identity." This persisting identity had several

consequences that were manifested in the following subthemes: 1) Anxiety over the Pregnancy; 2) Perceiving Motherhood as Surreal; and 3) Feeling Unprepared for the Role of Mother.

Anxiety over the Pregnancy

The ordeal of undergoing infertility treatment left nine participants anxious throughout pregnancy. These participants remarked how they did not enjoy their pregnancy experience because of constant worry over their unborn child. Frances described, "You just can't believe it's [being pregnant] happening to you. Something's gonna go wrong. You are terrified if you go outside and you exert yourself a little bit. You're just so terrified." Similarly, Carly, who suffered from five years of infertility before becoming pregnant, stated, "Through that whole pregnancy I was so worried about her [daughter]. It's just constant fear. I had a monitor for her heartbeat that my friend let me borrow. Every day, three times a day. I was insane. It was really sad when I look back. It wasn't until the seventh or eighth month I finally was like, 'Okay, she's fine.'" Gwen also needed constant validation to manage her anxiety about the baby's viability during her pregnancy. As a nurse, she had access to an ultrasound machine and she used it weekly on herself. She stated, "I enjoyed being pregnant as long as it was validated by the fact that everything is fine. As long as I could have a test, I was good with that."

Perceiving Motherhood as Surreal

Nine participants described disbelief when they first saw their babies, finding it hard to believe that they were finally mothers after years of failed infertility treatments. Carly described the first time she met her daughter: "When they first put her in my arms it was surreal. I didn't believe it. It was like someone gave me this baby, and it was shocking."

Betty echoed this disbelief when she finally held her twins for the first time. She questioned, "Are the babies really here? It's not a dream? Do I really have babies and not still going through wondering, 'When am I gonna get pregnant?'" Ethel also described similar astonishment during her first moments with her son: "I couldn't believe that he was mine…that he had been growing inside of me." Debbie also recalled, "I was in shock. Couldn't believe that it was happening. It took me a while to realize that, wow, I'm finally a mom."

Feeling Unprepared for the Role of Mother

All of the participants described that they felt overwhelmed and ill-equipped to handle the physical demands of caring for a new baby. These feelings are not unique to previously infertile women. Carly voiced what most new mothers feel: "I read the books, but I did not prepare for when she was coming home." She added that when she took her daughter home, she thought, "What do I do with her? It's a new baby, and you know nothing."

However, a number of participants explicitly linked their infertility to feeling unprepared. The link to infertility was related both to anxiety about losing the baby during pregnancy as well as the time and effort required by infertility treatments. Frances, who was described above as anxious during her pregnancy, elaborated that she did not want to get too attached or think too far ahead in case her pregnancy did not go to full term. Betty, who delivered twins after six IUIs and two IVF cycles, explained: "During infertility you go through so much, you research everything, how to get pregnant. But you don't research what to do when you actually have the baby. I should've read more books on what to do when the baby gets here." Angie who delivered twins after three IUI procedures added, "There was so much focus and effort put on getting pregnant. I didn't do as much preparation [about becoming a mother] as other moms

might have." If she had, she believed she would have been more informed about the "amount of work" involved with caring for a new baby.

Although a lingering identity as infertile had negative consequences for participants (i.e., feeling anxious during pregnancy and feeling unprepared for the role of mother), nine participants embraced the lingering identity as something positive. Frances, who described infertility as "part of your identity that doesn't go away", also emphasized that she was "proud" of this part of her identity. Similarly, Gwen stated, "I am glad I have infertility. It changed who I am. It made me appreciate my husband, family, and friends more, and obviously my son." As will be described in the next section, however, appreciation and gratitude had some negative effects for the participants' experiences as new mothers.

Gratitude for the Gift of Motherhood

Participants used words like "grateful", "thankful", "joyous", "elated" and "euphoric" to describe how they felt when they delivered their babies. Although most mothers with planned pregnancies likely feel similarly, participants qualified that infertility made them feel even more gratitude. Frances stated, "Probably all mothers are elated, but I think it's a little bit different [for infertile mothers] because it's a miracle. You're so grateful, so thankful." Kelly also explicitly related feeling "very joyous" about her new daughter, attributing this feeling to the trial of overcoming infertility, "We had waited seven years for her to finally get here so I was very excited."

Gratitude for the gift of motherhood, in turn, influenced expectations the participants had of themselves as mothers and made it more difficult for them to voice their struggles during the

early postpartum period. Two subthemes emerged from the interview data: 1) Needing to be the Perfect Mother; and 2) Feeling Censored.

Needing to be the Perfect Mother

Nine participants described how they set unrealistic expectations to be perfect mothers because of their gratitude for overcoming infertility. Carly recalled why she declined help from family members, even though the first few days at home with her new baby were "very scary": "It took five years to get here. I should be well prepared. I was just very hard on myself. I feel like, if people were helping, I was failing." The majority of the participants echoed Carly's need to be the perfect mother.

Five participants attributed the extra pressure they placed on themselves to be perfect to their awareness that this may be their only chance at being a mother. Luisa stated, "This is my only child I'm going to have, so I wanted to do everything right. Cause I don't get a second chance. We don't get a do-over on this." Gwen also described how she was sad because she would "never be pregnant again" and acknowledged that the thought of having only one child influenced how she spent every available moment with her son. When speaking about her husband, she explained, "We don't have date nights. When we go somewhere, we go all together. We've tried so hard to be a family for so long. Why would I want to spend time away from my child? This is one chance. It's the only experience I have." Similarly, Frances described her incessant need to document everything about her new baby because she may never have another.

Ten participants believed that breastfeeding embodied motherhood and equated breastfeeding success with being the perfect mother. Consequently, they placed immense

pressure on themselves to breastfeed exclusively and avoid using formula. When sleep deprivation and breastfeeding difficulties interfered with Frances' self-imposed expectations, she felt as though she had failed as a mother. She recalled, "I really had no idea that those first three months would be almost excruciating. Everybody says, 'Oh you're tired all the time.' But I thought I'd be tired with a smile." She added, "Then guilt sets in because you cannot believe that you wanted this for so long but yet I'm so tired. I hurt. I'm in pain." Gwen stated, "Making the decision to stop pumping [breast milk] was excruciating because I didn't want to give that up. I don't know if I'll be able to produce milk again. [I was] scared to death that I'll never do it again and [was] sad and depressed."

Three participants also linked their infertile identity with self-imposed breastfeeding demands. Luisa proclaimed that she could "not do anything naturally" because she underwent multiple cycles of IVF and IUI before conceiving. She explicitly identified her inability to "do anything naturally" as her main motivation to breastfeed, seeing this as an opportunity to finally do something "natural". She stated, "So it was my one thing, I'm gonna make it happen. I don't care what I have to do. I drank the teas, I did the classes, I did the support groups, I had the lactation consultant, I took the special herbs, and I breastfed every hour to build my supply. I pumped in between. It made me crazy." Likewise, Gwen reported that she wanted to breastfeed because, "It was a normal thing. I should be able to do that. I couldn't get pregnant naturally. Could I at least breastfeed naturally? I was upset that the breastfeeding was not coming as easily as I thought it should."

Feeling Censored

The gratitude that the participants felt about finally having a child and the resulting high expectations they placed on themselves led to feeling guilty and ashamed when they were not able to tackle new motherhood with ease and grace. Consequently, they felt censored and unable to disclose feeling overwhelmed. Angie, a woman who delivered twins after three IUI procedures, explained, "You feel as though you shouldn't complain cause you brought this on yourself. You've gone through lots of effort to have these babies so don't complain now that you have them." Similarly, Gwen stated, "Because of everything I went through to get him [son], I feel like I can't complain because I could be in a different place. I could be alone."

Luisa could not confide in her girlfriends about her daily crying spells because, "I thought they were gonna say, 'How could you? You cried when you couldn't get pregnant. You cried when you had placenta previa. You cried when you had to go to the specialist every two weeks. And now you're gonna cry cause it's too hard.' So I never told them. They had seen everything I went through as far as the *in vitro,* and I felt like they would judge me."

Four participants reported having PPD or PPD symptoms. These participants also questioned their negative feelings. Frances, who reported struggling with PPD after eight IUIs, two IVFs, and two miscarriages before giving birth to her daughter, questioned whether "normal mothers" [i.e., those who do not have infertility] would go through the same guilt if they developed PPD. She stated, "Because I wanted this so bad, I can't believe I feel like this. Why don't I appreciate it more? She's crying, and you're a zombie. And then you feel guilty. You try not to be depressed, and it makes it worse. Every time I hear her cry, I should be praising God and saying, 'Thank you, thank you, thank you.' I remember walking from my room to her room almost in tears going, 'I can't believe I feel this way.'" Carly recalled, "I was unhappy and

I thought I should be very happy. This isn't what I thought it was gonna be. I'm sad all the time. Crying. Feeling guilty cause I'm crying." Likewise, Ethel described her inner turmoil with PPD and stifling her voice even though she wanted to scream for help. After years of infertility and finally delivering a son, she was confused and frightened when she began having thoughts of harming him. She elaborated, "I was afraid to give him baths, to handle knives. And I kept it all to myself. I didn't want my husband to be afraid that I was actually going to do something to him. I'd have panic attacks about that." She felt "guilty and angry" about what she was thinking and feeling, "It was strange; I was confused. I loved my baby. Why am I having these thoughts? I was ashamed."

Censoring oneself was also reinforced by others, such as husbands, co-workers, and obstetricians, who minimized the participants' concerns. Gwen elaborated, "I remember being very tired at work and saying, 'Wow, oh my gosh, I'm so tired. I only slept 90 minutes.' And they're like, 'Well, you asked for this. This is what you wanted.' Those comments make you feel like you can't talk about it." Similarly, Debbie reflected back on the time when she attempted to tell her husband about how overwhelmed she felt as a new mother: "Once I did try to tell him how I was feeling. He didn't understand or know why I wasn't just happy to have baby after everything we went through. So at that point, I was like, 'Well, I'm just gonna keep it to myself.'" Similarly, Carly's mother and obstetrician minimized her struggles when she finally disclosed them. Both stated that she was "fine" and simply needed sleep. Carly's response was to convince herself that she was "fine" and should overcome any problems on her own.

Discussion

In summary, two main themes emerged from this study: 1) Lingering Identity as Infertile; and 2) Gratitude for the Gift of Motherhood. Both affected the participants' early postpartum experience. The lingering identity as infertile made them highly anxious during pregnancy that the baby would not be brought to term successfully. As a result, they did not want to get attached or anticipate motherhood lest they suffer the disappointment that they had grown accustomed to during infertility treatment. Once they delivered their babies, the transition of becoming a mother to a newborn felt surreal. Participants suggested that the work of overcoming infertility and the anxiety about possible disappointment interfered with preparing for new motherhood. Despite negative aspects of infertility, several participants described infertility as valuable experience, giving them strength, perspective, and gratitude for the gift of motherhood. However, this gratitude propelled them to establish unrealistic expectations to be the perfect mother. When they were not able to live up to being the perfect mother, they censored their feelings of inadequacy, guilt and shame.

The first theme that emerged from this study, "Lingering Identity as Infertile", is consistent with Olshansky's (2003) finding that women with infertility assume a central identity of self as infertile, pushing aside other identities such as sister, friend, and career woman. The current study not only validated infertility as an overarching identity during infertility treatment but also revealed that the identity as infertile can persist through pregnancy and into postpartum. One consequence of this lingering identity, feeling anxious during pregnancy, is consistent with a study by McMahon et al. (1999), who found that previously infertile pregnant women avoided making preparations for their baby for fear that they may lose the pregnancy. However, findings

from the present study also suggest that the lingering identity as infertile extends past pregnancy and leads to experiencing the new baby as surreal.

The second theme that emerged from this study, "Gratitude for the Gift of Motherhood", is also consistent with the literature. In a systematic review of the literature, Hammarberg et al. (2008) concluded that women who conceived after assisted reproductive technology (ART) idealized motherhood, which hindered their adjustment to their new role as mothers. Jack and Dill (1992) reported that PIM have a "divided self", wherein they felt compelled to put on a happy façade for the outside world despite their inner struggles, and delayed seeking medical help for possible postpartum depression. This study not only reinforced the existing literature that PIM feel immense gratitude for having a baby but also explicitly linked their feeling of gratitude to their self-imposed pressure to be the perfect mother.

Four out of 12 participants in this study reported having PPD or PPD symptoms. While the sampling method and study design were not meant to provide information about the epidemiology of PPD in PIM, the finding that 33.3% of participants were affected by PPD is consistent with the literature. Approximately 10-20% of all women experience PPD (Adouard, Glangeaud-Freudenthal, & Golse, 2005; Agoub, Moussaoui, & Battas, 2005; Verkerk, Pop, Van Son, & Van Heck, 2003). However, the PPD rate among women who conceived using assisted reproductive technology is higher than those who conceived spontaneously (Fisher et al., 2005). Olshansky and Sereika (2005) concluded that PIM are at high risk for PPD because undergoing infertility treatments and recurrent pregnancy loss increase stress and anxiety in these women.

This study not only confirms Olshansky's speculation that PIM are vulnerable to PPD, but it further extends that knowledge by offering greater depth into the reasons why PIM may have a difficult transition to new motherhood in the early postpartum period. The participants

revealed that their quest to become the perfect mother stemmed from their acute awareness that they may never get pregnant again and that this may be their only chance as a mother. Thus, they felt compelled to "do everything right" and to "do it all" by themselves because they equated asking for help to being a failure as a mother.

Another new contribution from this study is the immense pressure that these women placed on themselves to breastfeed because they deemed breastfeeding as the one "natural" thing that they should be able to do following a very "unnatural" process of conception. According to the participants, breastfeeding difficulty and relinquishing plans to breastfeed were also equated with being a failure as a mother. The literature on breastfeeding identifies that failure to breastfeed can be a source of distress for mothers intent on breastfeeding (Mozingo, Davis, Droppleman, & Meredith, 2000). However, this study revealed that infertility added another dimension to the distress over failure to breastfeed.

Limitations

A limitation of this study was that the participants were all Caucasian, married and highly educated women. However, these sociodemographic characteristics are representative of women who undergo infertility treatments. Women who receive infertility treatments are generally white, older and have stable careers and marriages (Benzies, Tough, Tofflemire, Frick, Faber, & Newburn-Cook, 2006; Gonzalez, 2000; Olshansky, 1987). Additionally, due to the small sample size, this qualitative study is not able to determine the true prevalence of PPD in PIM.

Implications for Practice and Policy

Findings from this study have several implications for practice and policy. First-time PIM require targeted healthcare interventions to help them adjust with transitioning from being

infertile to pregnancy and new motherhood. Fertility specialists should develop a transition program that supports newly pregnant previously infertile women as they prepare to face the realities of motherhood. Part of the transition agenda could be a mentorship program, wherein a former patient who successfully conceived after infertility treatment and is now a mother is paired with a newly pregnant fertility patient. Mentors can help normalize mentees' conflicted feelings about new motherhood and provide reassurance that verbalizing their struggles does not minimize their sense of gratitude for the gift of motherhood.

Obstetric practitioners need to be educated that PIM's infertile identity and corresponding anxiety linger throughout pregnancy so that they can reassure these women about their baby's development to help them best prepare for their baby's arrival. Obstetric, neonatal, pediatric, and general practitioners need to screen PIM for postpartum depression and adjustment difficulties. Practitioners need to ask these new mothers how they are adjusting to having a new baby, and encourage truthful disclosure of potentially conflicted, complicated thoughts and feelings, and accept these women's disclosures with empathy and connect them with resources to assist them in their transition. Practitioners need to normalize these women's feelings by telling them that it is common to feel a rollercoaster of emotions during the transition period, and then provide specific strategies to achieve success in their new role as mother. These strategies include caring for themselves by eating and sleeping adequately, requesting and accepting help with baby care, and resuming activities that they found pleasurable before the birth of their babies.

When screening suggests PPD or anxiety, these women need to be referred to mental health professionals immediately. Left untreated, PPD can cause impaired maternal-infant bonding, poor infant development, attachment insecurity, and child behavioral problems as well

as maternal problems including low self-esteem, substance abuse and persistent mental illness beyond the postpartum period (Andreozzi et al., 2002; Beck, 1999; Brennan et al., 2000; Hipwell, 2000; Oxford et al., 2006). The health care costs associated with these negative outcomes can be staggering (AHRQ, 2005). Policymakers and key stakeholders need to establish and fund programs that routinely screen PIM for PPD and provide mental health services that meet the unique needs of this population.

Lastly, first-time PIM require targeted breastfeeding education and support because of their self-imposed pressure to perform what they perceive as a "natural" act of motherhood, to breastfeed their child, after conceiving "unnaturally". Neonatal practitioners, lactation consultants and breastfeeding support groups need to provide directed interventions to assist in these mothers' breastfeeding success. Additionally, healthcare practitioners need to deliver education on feeding alternatives should these women face difficulties with breastfeeding.

Direction for Future Research

Findings from this study underscore the importance of continuing research into the experience of first-time PIM. An example of future research with this population includes comparing the experiences of those in the aforementioned transition program and those who are not in a transition program. A quantitative study is needed to investigate the true prevalence of postpartum depression in PIM. Additionally, the breastfeeding difficulties faced by PIM warrant deeper examination to fully understand these women's perspectives and how to best help them. Lastly, the experience of first-time fathers of infants delivered after infertility also needs further investigation.

Conclusion

First-time, previously infertile mothers feel immense gratitude for having been given the gift of motherhood. They also have a lingering identity as infertile that propels them to impose high expectations on themselves as mothers. When unable to fulfill these expectations, they have difficulty voicing their distress to others. The experiences described in this study sensitize health care practitioners to the unique struggles faced by previously infertile mothers and improve the overall quality of care provided to this vulnerable group.

Table 6. Demographics (N = 12)

Characteristic	N, %, or M (SD)
Ethnic group	100%
White	34.33 (4.98)
Age in years	
Range	27-43
Education level	
Some college or technical school/training	2
Four-year college degree	6
Master's or doctoral degree	4
Marital status	
Married	100%
Delivery type	
Cesarean	8
Vaginal	4
Feeding type at 3 months postpartum	
Breast feeding only	4
Bottle feeding only	3
Combination bottle and breast feeding	5
Length of time from treatment to pregnancy	
< 6 months	1
6 months to 1 year	1
1 to 2 years	4
2 to 3 years	2
3 to 4 years	2
> 4 years	2
Number of pregnancies lost	
None	4
One	6
Two	2
Number of babies delivered	
Singleton	9
Twins	3

Note. IVF = *in vitro* fertilization; IUI = intrauterine insemination.
[a]Other treatments include combinations of medications, surgery, acupuncture, and herbal use.

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CHAPTER FOUR: THE MEANING OF BREASTFEEDING FOR PREVIOUSLY INFERTILE MOTHERS

Abstract

The meaning of breastfeeding and breastfeeding experiences have been studied extensively in general and specific populations. However, there is very little research about the meaning of breastfeeding and breastfeeding experiences in previously infertile mothers (PIM). This paper reports a secondary analysis of breastfeeding data from interview transcripts from a phenomenological study of new motherhood in PIM. Twelve women who were first-time PIM and part of the larger phenomenological study were interviewed about their early postpartum experiences. Transcripts of the interviews were reviewed and data about breastfeeding were analyzed further using thematic analysis. One main theme emerged from the breastfeeding data, "Self-Imposed Pressure to Breastfeed", with three subthemes: 1) "My Only Chance to Breastfeed"; 2) "The One Natural Thing I Should Be Able to Do"; and 3) "Not Breastfeeding Means Failing at Motherhood". Previously infertile mothers equated breastfeeding with being the perfect mother and attached special meanings to the act of breastfeeding. Study findings sensitize healthcare professionals to the distinct breastfeeding struggles faced by PIM, and provide information to assist them when their self-imposed pressure to breastfeed is compromising their emotional and physical health.

Introduction

The literature is replete with information regarding the advantages of breastfeeding over formula feeding, and no one disputes the health benefits of breastfeeding for both the mother and baby. Yet, breastfeeding can be difficult to implement, especially for first-time mothers. The meaning of breastfeeding and breastfeeding experiences have been studied extensively in general

and specific populations. However, there are no published studies that address the breastfeeding experience of previously infertile mothers (PIM). The purpose of this paper is to report a secondary analysis of breastfeeding data from a phenomenological study of the experience of new motherhood in PIM, hereafter referred to as the Previously Infertile New Motherhood Study. Findings sensitize healthcare professionals to the distinct breastfeeding struggles faced by previously infertile women, and provide information to assist them when their pressure to breastfeed is compromising their emotional and physical health.

Background

The widely documented health benefits of breastfeeding for infants and mothers have been condensed in a slogan, "Breast is Best". This slogan is promoted widely to the public, particularly to expectant mothers, creating an almost-religious fervor that causes many to view breastfeeding as a moral imperative (Lee & Furedi, 2005; Murphy, 1999). Thus, it is not surprising that many mothers view breastfeeding as a sign of being a 'good mother' and central to women's identity as mothers (Marshall, Godfrey, & Renfrew, 2007; Murphy, 1999; Schmied & Barclay, 1999). Women who do not breastfeed often report a sense of inadequacy, marginalization, and guilt (Lee & Furedi, 2005).

Many mothers want to breastfeed their infants, but do not succeed because of the taxing physical and technical aspects of breastfeeding (Renfrew, Fisher, & Arms, 2000). For example, more than 85% of pregnant women prenatally intended to breastfeed exclusively for three months or more, but only 32.4% fulfilled this intention (Perrine, Scanlon, Li, Odom, & Grummer–Strawn, 2012). The expectation to breastfeed, combined with attributions equating breastfeeding to good mothering, set the stage for women who do not meet their intended goals

to perceive themselves as 'failures' or 'bad mothers' when they resort to formula feeding (Knaak, 2010; Schmied & Lupton, 2001; Wall, 2001).

Findings from the Previously Infertile New Motherhood Study suggested that PIM are a unique group of women who place extra burden on themselves to be perfect mothers (Ladores, n.d.a). Part of this burden included self-imposed pressure to endure breastfeeding challenges. The uniqueness of the PIMs' response to breastfeeding led to a secondary analysis of these data, with a special focus on the meaning of breastfeeding for these women. First, the larger study, the Previously Infertile New Motherhood Study, will be described briefly.

Methods

The Previously Infertile New Motherhood Study

The Previously Infertile New Motherhood Study (Ladores, n.d.a) used descriptive phenomenology to elicit the lived experience of 12 first-time PIM who conceived their first-born child within the past three years after undergoing fertility treatment. The three-year time parameter was to limit memory bias from retrospective reports about the early postpartum period. Participants responded to recruitment flyers posted in various obstetrical, fertility, and pediatric clinics. Other recruitment strategies included snowball sampling and using Facebook, an online networking site.

Women who met the inclusion criteria and volunteered to participate in the study were interviewed twice. The first interview elicited descriptions of new motherhood after infertility. The second interview elicited additional reflection from the participant and validated the researcher's interpretations of the first interview. Pseudonyms were assigned to protect the participants' anonymity. The interviews were audiotaped and transcribed verbatim for analysis.

HyperTranscribe™ and HyperResearch™ software by ResearchWare, Inc., were used to transcribe and organize the data. Colaizzi's (1978) approach was used to analyze the data to produce a phenomenological description of the lived experience of new motherhood for PIM.

The themes that described the lived experience of PIM in the early postpartum period were "Lingering Identity as Infertile" and "Gratitude for the Gift of Motherhood". More in-depth findings from the phenomenological study are described elsewhere (Ladores, n.d.a). Data used for this secondary analysis were those associated with the "Gratitude for the Gift of Motherhood" theme. The particular perspective on breastfeeding from this group of women prompted the secondary analysis of the larger study data.

The PIM Breastfeeding Study

Data about breastfeeding were reviewed and analyzed in this secondary analysis using Braun and Clarke's (2006) approach to thematic analysis. The interview transcripts were read repeatedly to search for meanings and patterns, and the extracted data about breastfeeding were coded with descriptive tags. Codes then were sorted and grouped into potential themes. Themes were further reviewed, collapsed, and refined before arriving at the final schema. An experienced qualitative researcher with a Ph.D. in nursing reviewed the data and coding scheme, and validated the study findings.

Findings

The participants in this study were married, Caucasian, and ranged in age from 27 to 43 years. They underwent various fertility treatments over many years to conceive their children. The majority of the participants had miscarriages prior to their first-born child. Demographics are summarized in Table 7.

All of the participants initiated breastfeeding after their babies were born. They emphasized that breastfeeding was an important task of new motherhood. Yet despite their desire to breastfeed, only a few of them met their goal to breastfeed exclusively. Less than half of the participants (n=5 or 42%) reported that they were still breastfeeding exclusively at three months postpartum. Three participants reported that they were bottle-feeding exclusively, and the remaining four participants reported that they were using a combination of breast and bottle feeding at three months postpartum.

The participants reported some degree of difficulty with breastfeeding, which eventually led to early breastfeeding termination. Like most mothers, breastfeeding for the PIM who participated in this study involved physical pain, discomfort, demanding schedules, and time and energy. Debbie reported that, "When the milk comes in, that had to be the most painful part. Your nipples start to bleed and crack. I'll never forget that. That was not enjoyable. It was very painful." Kelly described how she used to cringe whenever her baby would latch on and dreaded each time she had to breastfeed because of the intense pain. Luisa said that breastfeeding was so painful that she would cry every time her baby would latch on. For some of the participants, the initial physical discomfort from breastfeeding as first-time mothers eased to a tolerable degree as they began to master the skill of breastfeeding. However, for other participants, the discomfort and efforts in preparation for breastfeeding never abated. Gwen described her life as a "repeat, rewind button" because it revolved around breastfeeding every 1.5 to 2 hours. The time and energy involved in breastfeeding included eating, drinking, and sleeping properly to produce adequate milk.

The difficulties associated with breastfeeding were not particularly unique to PIM, except perhaps the extra challenges associated with multiple births, which occur more frequently in

women who undergo fertility treatment (Reynolds, Schieve, Martin, Jeng, & Macaluso, 2003). One-fourth of the study participants gave birth to twins. The preparation and effort involved with breastfeeding were particularly apparent for these participants. Betty, one of the participants who had twins, reported that she was, "Just on the couch all day with them. We were on a 2-hour feeding schedule forever." Regardless of the number of infants they delivered, all of the participants described their determination to successfully and exclusively breastfeed their babies.

The participants directly attributed their drive to breastfeed to their history of infertility. The main theme, "Self-Imposed Pressure to Breastfeed" further was reflected in the following three subthemes: "My Only Chance to Breastfeed", "The One Natural Thing I Should Be Able to Do", and "Not Breastfeeding Means Failing at Motherhood". The theme and subthemes are described in more detail below.

Self-Imposed Pressure to Breastfeed

Participants portrayed breastfeeding as 'non-negotiable' and reported that alternative feeding methods were unacceptable. In addition to a participant who introduced the term, 'non-negotiable', this sentiment was reflected by other participant statements such as, "Breastfeeding was something I wanted to do. I was committed to it" and "All I wanted to do was breastfeed."

Several participants reported that their desire to breastfeed exclusively became an obsession. Luisa's description reflected this obsession: "I'm gonna make it happen. I don't care what I have to do. I am breastfeeding this child. I drank the teas, I did the classes, I did the support groups, I had the lactation consultant, I took the special herbs, and I breastfed every hour to build my supply. I pumped in between. It made me crazy."

Although the health benefits of breast milk was a factor in the participants' decision to breastfeed, the participants' determination to breastfeed successfully was attributed to the special meaning they attached to breastfeeding. They felt immensely grateful for having been given the gift of motherhood after overcoming a prolonged period of infertility. This gratitude led them to develop high expectations about motherhood, including breastfeeding. Thus, their self-imposed pressure to breastfeed can be explained further by the three subthemes described below.

"My Only Chance to Breastfeed"

The participants reported that they did not want to miss out on any experience that they viewed as part of mothering. They described how their goal to breastfeed was attributed to their acute awareness that this may be their only chance at breastfeeding because, in all likelihood, they would not be able to conceive again and give birth to another child. Frances, who underwent eight intrauterine inseminations (IUI), two *in vitro* fertilizations (IVF), and two miscarriages before giving birth to her daughter, described her experience: "Breastfeeding was very important. I may not be able to do this again. I'll never have a baby to the breast. It's my only chance." When she had to pump breast milk to supplement her feedings, Frances was brought to tears thinking, "I don't know if I'll be able to produce milk again." Likewise, Gwen attributed the unrealistic breastfeeding expectations she had for herself to the strong possibility that she would not get another chance at motherhood: "I made it harder on myself because I was an infertility patient. This is my only child." Luisa's description also reflected these same reasons for her self-imposed pressure to breastfeed: "This is my only child I'm going to have. I don't get a second chance." Participants who did not achieve their intended goal to breastfeed for a

minimum of at least six months reported feelings of regret and longing. One woman described how she wished she could have breastfed her baby longer than seven weeks.

"The One Natural Thing I Should Be Able to Do"

Several participants described how getting pregnant while undergoing high technology fertility treatments instead of getting pregnant 'naturally' made them determined to breastfeed because breastfeeding signified a natural feeding method. For example, Kelly, who had three IUIs to conceive her daughter, gave the following reason for her desire to breastfeed: "We [she and her husband] conceived our child in such a clinical world and not in the privacy of our home. [We wanted] to do something naturally on our own without clinical help". Likewise, Gwen, who underwent nine IUIs and two IVFs to conceive her son, explained that she was intent on breastfeeding. She elaborated: "Because I thought it was a normal thing, and that I should be able to do that. I couldn't get pregnant naturally. Could I at least breastfeed naturally?" Similarly, Luisa viewed being successful at breastfeeding as compensation for previous failed attempts to do 'naturally'. In addition to her requiring IVF to conceive her son, she reported that needing a Cesarean section instead of having a 'natural' delivery made it even more imperative that she succeed at breastfeeding.

"Not Breastfeeding Means Failing at Motherhood"

Several participants equated breastfeeding with being the perfect mother. Being the perfect mother was their way of repairing the lasting impact that infertility had on their self-esteem. For example, Betty was determined to triumph over her insecurities as a new mother, and resolved to have "everything perfect". This resolve included successfully breastfeeding her twins. She described her insecurity: "You finally have your chosen prize [twins], and you're

afraid that you might do something wrong." She reported that, because she did not have "control over [her] infertility," she was internally driven to dictate her postpartum experience by being the perfect mother by breastfeeding her babies.

The quest to be the perfect mother led the women who participated in this study to persevere even when they encountered breastfeeding difficulties. According to Carly, her five years of fertility treatments made her determined to overcome postpartum obstacles, which in her case was insufficient breast milk production. She described her determination: "I've gotten through all these other things [infertility], so I'll get through this [breastfeeding difficulties]." The perseverance and determination to succeed were necessary traits for these participants who demonstrated tenacity in their pursuit to overcome infertility in order to conceive a child.

When participants were not able to continue breastfeeding despite assistance from lactation specialists and support groups, they reported feeling guilty and depressed. Frances, who referred to infant formula as "poison" described the moment when she finally acknowledged having to resort to formula as the "pinnacle" of her depression. The feeling of shame from breastfeeding failure was also illustrated by Luisa: "I remember sitting there trying to nurse and just sobbing thinking, 'Why can't I do this?'" The participants who had to prematurely terminate their breastfeeding efforts reported feeling like they have failed as mothers.

Discussion

In summary, one main theme emerged from this secondary analysis: Self-Imposed Pressure to Breastfeed. The participants imposed high expectations on themselves to successfully breastfeed their infants because of the special meanings that they attached to the act

of breastfeeding. These special meanings were attributed directly to their history of infertility. These meanings included the notion that breastfeeding was the pinnacle of being a perfect mother and that breastfeeding compensated for not being able to conceive naturally. Given their history of infertility and the effort they put into becoming a mother, PIM viewed breastfeeding as the only chance to actualize the early mothering role and offset the "unnatural" way they conceived. In short, breastfeeding was their "only chance" to be the "perfect" mother. The women who were not successful with enduring the challenge of breastfeeding exclusively reported emotional consequences, such as guilt, shame, and depression. Even the women who were successful reported emotional and physical costs from persevering and taking the "only chance" they may get to "mother naturally" and be the perfect mother.

The subtheme, "Breastfeeding Means Failing at Motherhood", was similar to a subtheme in the Previously Infertile New Motherhood Study about striving to be the perfect mother (Ladores, n.d.a). Although the subtheme from the Previously Infertile New Motherhood Study about being the perfect mother included other aspects of mothering in addition to breastfeeding, the secondary analysis of the breastfeeding data identified breastfeeding as a critical component of being the perfect mother. This finding confirms and extends what is found in the literature about breastfeeding as a measure of being a "good mother" (Lee, 2008). For PIM, being *good* is not enough. Rather, PIM endeavor to be *perfect* because their lingering identity as infertile propels them to create the perfect postpartum experience to compensate for not being able to conceive naturally (Ladores, n.d.a). The concept of compensating for past failures is also found in a study of Chinese mothers who were determined to be perfect mothers to overcome their sense of failure for bearing "imperfect" children with problems that required psychiatric intervention (Pun, Ma, & Lai, 2004).

Like other mothers noted in the literature, PIM who experience breastfeeding failure also view themselves as inadequate (Lee, 2008; Murphy, 1999). The literature also suggests that breastfeeding difficulty is associated with feelings of guilt, shame, and depression (Mozingo et al., 2000; Watkins et al., 2011). However, what may distinguish PIM from other mothers with breastfeeding failure is that PIM's lingering identity as infertile makes them more vulnerable to self-deprecation when they cannot fulfill their desire to be the perfect mother (Ladores, n.d.a; n.d.b). It is notable that three out of the four participants in this study who reported not being able to achieve their breastfeeding goals also reported having postpartum depression (PPD).

While PPD also occurs in women who do not grapple with breastfeeding, the guilt and shame reported in this study as a consequence of breastfeeding failure suggest that PIM who are not successful at breastfeeding are at risk for PPD whereby mothers who had negative experiences with breastfeeding in the early weeks postpartum were more likely to have depressive symptoms at two months postpartum (Watkins et al., 2011). Risk for PPD when breastfeeding is not successful is also consistent with the findings that showed that mothers who stopped breastfeeding within the first two weeks postpartum were more apt to report feelings of guilt, shame, and depression.

In 2010, 77% of women in the United States initiated breastfeeding (CDC, 2013). In comparison, 100% of participants in this study initiated breastfeeding. The high initiation rate observed in this study may be attributed to the demographic characteristics of the participants, which also reflects the demographic characteristics of women who undergo fertility treatment. These women are generally older, possess high levels of income and education, and are in stable marriages and careers (Benzies, Tough, Tofflemire, Frick, Faber, & Newburn-Cook, 2006). According to CDC data, breastfeeding rates among mothers $\geq$ 30 years old were significantly

higher than those of 20 to 29 years old (75% vs. 65%) (McDowell, Wang, & Kennedy-Stephenson, 2008). Breastfeeding rates are also significantly higher among women with higher income (74%) compared with women with lower income (57%) (McDowell, Wang, & Kennedy-Stephenson, 2008). On the other hand, the high breastfeeding initiation rate in this study may be due to PIM's desire to be the perfect mother, a subtheme that was discussed earlier.

Although the initiation rate in this study was higher than the national average, the breastfeeding duration was not. In 2010, 49% of women in the United States were breastfeeding exclusively at six months postpartum (CDC, 2013). In comparison, out of the twelve participants who initiated breastfeeding, only 42% of PIM were breastfeeding exclusively at *three* months postpartum due to the breastfeeding difficulties that they encountered. It is well documented that most mothers encounter numerous breastfeeding challenges that potentially lead to termination of breastfeeding (Cooke, Sheehan, & Schmied, 2003; Purdy, 2010). Breastfeeding difficulties are magnified in mothers of multiple births which are common in families conceived from fertility treatments. In this study, only one of the three mothers who had twins was still breastfeeding at three months postpartum. This finding extends what is found in Damato et al. (2005) whereby out of the 89.4% of mothers of twins who initiated breastfeeding, only 39.1% were still breastfeeding at six months postpartum. Reasons cited in the literature related to early breastfeeding termination in mothers of multiple births include difficulty with coping with the demands on the mother's time, pain from the Cesarean incision during feeding, and poor sucking and latching skills found in low birth weight and premature infants (Flidel-Rimon & Shinwell, 2002).

Limitations

One limitation of this study is that the participants were all married and Caucasian. However, these demographic characteristics are representative of women who utilize fertility treatments. Women who undergo fertility treatments are mostly Caucasian and older with established marriages and careers (Benzies, Tough, Tofflemire, Frick, Faber, & Newburn-Cook, 2006; Gonzalez, 2000; Olshansky, 1987). They are generally described as goal-oriented and task-driven because the nature of fertility treatments requires them to be so (Braverman, 2008). These personality traits may have affected their drive to succeed at breastfeeding and the meaning they attributed to breastfeeding.

Implications for Practice, Education, and Research

Findings from this study have several implications for practice, education, and research. First-time PIM require specific interventions to help ensure their physical and emotional well-being during a vulnerable time in their lives. Healthcare professionals should assist PIM to reflect on their motivations and self-judgments regarding being the perfect mother. Knowing that breastfeeding has special meaning for these women, healthcare professionals should underscore the importance of meeting the infant's nutritional needs through whatever means possible, while balancing the daily demands on these new mothers. If PIM choose to breastfeed, healthcare professionals should impart practical knowledge that includes hands-on troubleshooting when mothers encounter breastfeeding difficulties (e.g., pain, inadequate milk supply, latching improperly). This is particularly crucial for mothers of multiple births. Referrals to breastfeeding support groups led by clinicians trained to navigate the unique struggles of PIM would be beneficial because of PIM's special concerns and circumstances. In

addition, referrals to home health nurses and/or lactation consultants to monitor the mother's and baby's progress after hospital discharge would aid in their transition to new motherhood. If PIM choose to use formula or decide to stop breastfeeding, healthcare professionals should be empathetic and reassure these women that they are not "bad mothers" for doing so. More importantly, healthcare professionals should impart the message that these women are, in fact, "good mothers" for choosing the method that meets the entire family's needs, not just the mother's.

Healthcare professionals should heed the perils of over-promoting the slogan, "Breast is Best" and present infant feeding information in a balanced fashion. This balance includes refraining from inadvertent communication that demonizes the use of formula. Healthcare professionals also need to critically assess when the emotional cost of breastfeeding becomes too overwhelming and counsel PIM to see formula as an appropriate choice. This approach is crucial for PIM because they are prone to self-deprecating if they stop breastfeeding. Additionally, healthcare professionals should screen PIM for postpartum depression and other adjustment disorders when PIM encounter breastfeeding difficulties in the early weeks postpartum.

Since this study was a secondary analysis and is the first to identify the special meaning of breastfeeding in context with a history of infertility, more research is needed to directly investigate PIM's breastfeeding experiences. A qualitative study that directly explores breastfeeding experiences will likely yield more in-depth understanding of the special meaning breastfeeding has for PIM. Additional research is also needed to identify the components of coping successfully with breastfeeding challenges and developing and testing interventions to

prevent guilt, shame, and depression in PIM with breastfeeding difficulties. Lastly, quantitative studies are needed to identify the true prevalence of breastfeeding difficulties faced by PIM.

Conclusion

Breastfeeding for PIM appears to carry special meaning related to an attempt to normalize the birth outcome of an intervention-mediated pregnancy. When PIM were not able to achieve their intended breastfeeding goals, this meaning resulted in feelings of guilt, shame, and depression. Study findings sensitize healthcare professionals to the distinct breastfeeding struggles faced by PIM and provide information to assist PIM when their pressure to breastfeed is compromising their emotional and physical health.

Table 7. Demographics (N = 12)

Characteristic	N, %, or M (SD)
Ethnic group	100%
White	34.33 (4.98)
Age in years	
Range	27-43
Education level	
Some college or technical school/training	2
Four-year college degree	6
Master's or doctoral degree	4
Marital status	
Married	100%
Delivery type	
Cesarean	8
Vaginal	4
Feeding type at 3 months postpartum	
Breast feeding only	4
Bottle feeding only	3
Combination bottle and breast feeding	5
Length of time from treatment to pregnancy	
< 6 months	1
6 months to 1 year	1
1 to 2 years	4
2 to 3 years	2
3 to 4 years	2
> 4 years	2
Number of pregnancies lost	
None	4
One	6
Two	2
Number of babies delivered	
Singleton	9
Twins	3

Note. IVF = *in vitro* fertilization; IUI = intrauterine insemination.
[a]Other treatments include combinations of medications, surgery, acupuncture, and herbal use.

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APPENDIX A: DISSERTATION PROPOSAL

Abstract

Problem

The clinical literature suggests that becoming a new mother is a difficult transition for previously infertile women because of their unrealistic expectations about motherhood after making the physical, emotional and financial investment to conceive. Yet no studies have been conducted that explore the lived experience of becoming a new mother from the unique perspectives of previously infertile women. Thus, the purpose of this study is to explore the lived experience of first-time previously infertile mothers during their transition to motherhood.

Participants

The sample will be first-time, previously infertile mothers age eighteen years and older. The first-borne child conceived after fertility treatment will not be older than three years old. The three-year parameter is to limit recollection bias in obtaining retrospective reports about the early postpartum period.

Method

Descriptive phenomenology will be used to interview participants twice. The first interview will focus on eliciting descriptions of motherhood in the early postpartum period after overcoming infertility. The second interview will occur approximately two weeks after the first interview with the goals of validating the findings obtained from the first interview and provide additional information and reflection. An interview guide will be used to ensure that key experiences are addressed in the study. The main question to be asked is: "What is/was it like being a new mother after having undergone fertility treatment?" Colaizzi's (1978) method will be used to develop themes that emerge from the data. A demographic form will be used to collect sociodemographic data.

Significance

Findings from this study will be used to identify possible difficulties faced by previously infertile mothers during the early postpartum period and sensitize healthcare providers to these possible difficulties.

Purpose of the Study

Transition to motherhood is well-documented as a challenging and important time (Mercer, 1985). It is also well known that this transition may be more difficult for first-time mothers (Nelson, 2003). Nevertheless, how previously infertile mothers experience new motherhood is poorly understood. Quantitative studies on new motherhood for previously infertile women are limited to a few outcome variables (i.e., maternal depression, anxiety, self-esteem and parenting competence) (Colpin, De Munter, Nys, & Vandemeulebroeke, 1999; Cox, Glazebrook, Sheard, Ndukwe, & Oates, 2006; Gibson, Ungerer, Tennant, & Saunders, 2000) and

have yielded conflicting findings. In contrast, the clinical literature details various difficulties faced by previously infertile new mothers. Conclusions from the clinical literature are also consistent with qualitative studies about infertility, which provide presumptive reasons to expect previously infertile mothers (PIM) to have a more difficult transition (Braverman, 2008; Olshansky, 2003). On the other hand, clinical reports may be biased because clinicians are more apt to focus on negative cases rather than successes. A more in-depth qualitative study with PIM is needed to explore the issue whether previously infertile women have unique experiences and needs. The purpose of this study is to describe the lived experience of first-time PIM during their transition to motherhood from their own unique perspectives. Findings from this study will be used to identify possible difficulties faced by PIM during the early postpartum period and sensitize healthcare providers to these possible difficulties.

Significance

Infertility is defined as the failure to conceive after one year of regular intercourse without using contraception (Klock, 2004). Infertility affects more than seven million women in the United States (Chandra, Martinez, Mosher, Alma, & Jones, 2005). Medical advances in assisted reproductive technology have allowed 5.6% to 27.3% of infertile women to successfully conceive via assisted reproductive technology (Centers for Disease Control and Prevention, 2004).

Women who are ultimately successful after enduring the physical, emotional and financial burdens of fertility treatment may have unrealistic expectations about the joys of motherhood (Hjelmstedt, Widstrom, Wramsby, & Collins, 2004). Clinical data suggest that PIM are surprised about the difficult transition they experience and do not feel justified to voice their distress because they are expected to be blissful after the birth of a much-anticipated child (Olshansky, 2003). These women reportedly silence themselves and show a façade of normalcy to the outside world. This silencing can jeopardize their and their infants' well-being if it leads to delays in getting assistance for a difficult transition to new motherhood (Olshansky & Sereika, 2005; Sandelowski, 1995).

The physically, emotionally and financially burdensome nature of fertility treatments can cause or exacerbate depression (Gonzalez, 2000; Sandelowski, 1995; Su & Chen, 2006). A prior history of depression is a known risk factor for postpartum depression (PPD) (Stowe, Hostetter, & Newport, 2005). Left untreated, PPD can cause impaired maternal-infant bonding, poor infant development, attachment insecurity, and child behavioral problems as well as maternal problems including low self-esteem, substance abuse and persistent mental illness beyond the postpartum period (Andreozzi et al., 2002; Beck, 1999; Brennan et al., 2000; Hipwell, 2000; Oxford et al., 2006). The health care costs associated with these negative outcomes can be staggering (AHRQ, 2005).

Literature Review

The transition to motherhood carries with it many biological, developmental and psychological changes that can either contribute to personal growth or can predispose individuals to mental disorders (Cohen & Nonacs, 2005; Nelson, 2003; Repokari et al., 2005). Learning the role of a new mother takes months and involves inherent stressors, including physical

exhaustion, sleep deprivation, decreased financial resources and social isolation (Mercer, 1985). First-time mothers are particularly at high risk for mismanaging these stressors, making their transition to new motherhood difficult (Rutledge et al., 1987; Walker et al., 1985). The transition to new motherhood for previously infertile mothers (PIM) may be even more challenging than it is for spontaneously conceiving mothers (SCM) because pregnancy and motherhood for PIM follows immediately after coping with the immense physical, emotional and financial burdens of fertility treatment.

It is well known that infertility treatment is stressful. Infertility has been framed as a type of illness trajectory (Sandelowski, 1995) and negative life event (Greil, 1991) that consumes a woman's self-identity (Olshansky, 1996). Domar et al. (1992) found that infertile women are twice as likely to experience depressive symptoms compared to fertile women. Using qualitative data from her own research about the lived experience of being infertile, Olshansky (2003) theorized about how the negative consequences of infertility and infertility treatments can affect PIM's transition to new motherhood. Her conclusion that negative aspects of infertility treatment put women at higher risk for depression is consistent with anecdotal and clinical reports (Braverman, 2008). Her conclusion is also consistent with the finding that prior history of depression is a known risk factor for depression in pregnancy and in the postpartum period (Stowe, Hostetter, & Newport, 2005).

Contrary to clinical reports and theoretical speculation about how the burden of infertility treatments affect the postpartum period, findings from quantitative studies are mixed. Cumulatively, these quantitative studies focus on maternal anxiety, depression, self-esteem, and competence. Several of these quantitative studies demonstrate that the transition experience of PIM is not different from the transition experience of SCM (Cox et al., 2006; Gibson et al., 2000; Glazebrook, Cox, Oates, & Ndukwe, 2001; Greenfeld & Klock, 2001; McMahon, Ungerer, Tennant, & Saunders, 1997) whereas others demonstrate that the transition to motherhood is more problematic for PIM than it is for SCM (Colpin et al., 1999; Gibson et al., 2000; McMahon et al., 1997). Findings from a study by Repokari et al. (2005) even suggest that PIM adapt to their new maternal roles better than SCM. They found that while anxiety symptoms increased from pregnancy through postpartum among SCM, PIM did not demonstrate the same increased anxiety across the transition from pregnancy to postpartum.

The only definitive conclusion from these quantitative studies is that transition to new motherhood is more difficult for PIM mothers who have multiple rather than singleton births (Glazebrook et al., 2001; Sheard et al., 2007). However, this finding may have to do with caregiver burden rather than how infertility shapes expectations for new motherhood. Drawing other definitive conclusions from the quantitative studies is complicated by the fact that these studies vary on important sample characteristics, time periods, and maternal indicators of adjustment. More importantly, existing quantitative research about new motherhood for previously infertile women is limited to only a few outcome variables (anxiety, depression, self-esteem, and maternal competence)(Cox et al., 2006; Gibson et al., 2000; Glazebrook et al., 2001; Greenfeld & Klock, 2001; Hjelmstedt et al., 2004; McMahon et al., 1997), and does not fully describe the experience of PIM as they transition to new motherhood.

In summary, while there are rich anecdotal and clinical reports of poor transition to motherhood for PIM, there is no empirical study on their lived experience during the early postpartum period. Clinical reports may be biased because clinicians focus more on problems than successes. The proposed study will fill this gap in knowledge by providing an inductive

exploration of previously infertile mothers' early postpartum experience from the perspective of these women themselves.

Specific Aims

This study will address the question: What is the lived experience of first-time, previously infertile mothers in the early postpartum period? The aim of this study is to describe the early postpartum experience of previously infertile mothers.

Theoretical/Conceptual Framework or Rationale

Phenomenology is a research approach and method that does not test theories or have explicit theories to guide a research study (Mapp, 2008). Phenomenology purely seeks the meaning of life's nuances as described by the person experiencing them. It is purposefully atheoretical to liberate the researcher from prescribed steps or formulas to allow "the thing itself" (phenomenon) to be explored in its possibilities (Munhall, 2007). Therefore, this phenomenological study about the postpartum experience of previously infertile mothers will not be based on a pre-existing theoretical framework. However, it will be guided loosely by transition theory which posits that transitions in general present heightened vulnerability (Meleis, Sawyer, Im, Messias, & Schumacher, 2000). Transition theory is appropriate as a loose guiding framework because previously infertile mothers undergo a critical transition from having an "identity of self as infertile" to being new mothers with complex physical and emotional needs (Olshansky, 2003).

Method

a. Research Design:

A qualitative design using descriptive phenomenology will be used in the study. Phenomenology is particularly useful when little is known about a phenomenon. Phenomenology asserts that knowledge and truth can only emerge from people's experiences (Gallagher & Zahavi, 2008). It is used here to create a foundation of knowledge that could sensitize healthcare providers to the early postpartum experience of PIM, and consequently use that knowledge to guide developing interventions for pregnant and postpartum women with a history of infertility.

b. Study Participants and Setting:

The sample size will be between 8 to 12 adult previously infertile, first-time mothers. Mothers of both singletons and multiple births will be included. This is consistent with the tenets of phenomenology in which the essential structure of the new motherhood experience will be explored regardless of differences in subgroups. The sample size is consistent with other studies that used the phenomenological approach to study the same target population (Beck, 1999; Hall, 2006; Holopainen, 2001; Leung, Arthur & Martinson, 2000). However, sample size will be driven primarily by meeting data saturation or when no new information emerges from

the interviews. Thus, sample size will be adjusted according to the data that is collected. Additional study inclusion criteria are: 1) 18 years old or older; 2) diagnosed as previously infertile by a fertility specialist; 3) understand, write and speak English; and 4) the first-borne child conceived after fertility treatment will not be older than 3 years old. The three-year parameter is to limit memory bias from obtaining retrospective reports about the early postpartum period.

Participants will be recruited by posting approved flyers in various clinics and provider offices in the Central Florida area where providers express an interest in assisting with participant recruitment. One of the largest networks for OB/GYN practice in Central Florida has agreed to provide assistance in recruiting participants (see Part V for Letters of Support). If additional recruitment sites are needed, the following will be accessed: 1) pediatric clinics; 2) fertility clinics; 3) primary care centers; and 4) emergency care centers. Facebook, an online networking site will also be used to recruit participants. (See Appendix B, C and D for Eligibility Checklist, Recruitment Flyer, and Recruitment Script, respectively).

c. Data Collection Materials:

A demographic form will be used to collect sociodemographic data about the participant's age, ethnicity, education, marital status, etiology of infertility, treatment for infertility, number of pregnancies lost, mode of newborn delivery, delivery date, and infant feeding method (see Appendix E for Demographic Form).

An interview guide will be used to ensure that key experiences are addressed in the study (see Appendix F for Interview Guide). The main question to be asked during the interview is: "What is/was it like being a new mother after having undergone infertility treatment?" The interviews will not be limited to the questions posed in the interview guide. Rather, prompts will be used to elicit more elaboration as needed.

d. Procedure:

Potential participants will be asked to contact the principal investigator (PI) directly in response to the flyers posted in various recruitment sites, or the PI will contact potential participants who gave permission to be contacted by leaving their information at one of the recruitment sites. The purpose of the study, data collection methods, and protection of personal information will be explained to women interested in participating in the study. Once verbal consent is received, the eligibility checklist will be completed. If eligible, potential participants will be invited to participate in the study, and all questions will be answered by the PI. The PI will request permission to leave message(s) (i.e., reminder for next interview appointment) on the participant's voicemail. Next, the PI will coordinate a date, time and location convenient to the participant in order to obtain demographic data and conduct the interview.

Participants will be interviewed twice. The first interview will focus on eliciting descriptions of motherhood after infertility. The second interview will occur approximately two weeks after the first interview with the goals of validating the findings obtained from the first interview and eliciting additional reflection. During the second interview, the PI will verbally summarize the main themes of the first interview and ask for validation or elaboration. During both interviews, participants will be encouraged to fully illuminate their lived experiences using

vivid descriptions of their thoughts, feelings and perceptions. The interviews will be audio-taped. Notes will be taken during the interviews to record the PI's perceptions of the interview. A journal will be created to help the PI bracket suppositions and biases. At the conclusion of each interview, the participant will be given or mailed a $10.00 gift card to a local supermarket to compensate for her time.

Prior to formally beginning the study, the PI will conduct a pilot interview. The PI's dissertation chair, an experienced qualitative researcher, will review the interview transcript and provide feedback to ensure that the PI will obtain quality data. If necessary, additional pilot interviews will be conducted.

e. Plan for Data Management/Analysis:

The interview audio files will be transcribed and the transcriptions will be reviewed and compared against the audio files to ensure accuracy. HyperTranscribe™ and HyperResearch™ software by ResearchWare, Inc. will be used to transcribe and manage the interview data. The latest version of SPSS will be used to analyze demographic data.

Principal analysis of interview data will be completed using Colaizzi's (1978) method to develop themes that emerge from the data. Analysis will be an ongoing, iterative process that commences immediately following each interview and transcription. First, analysis will begin by reviewing each transcript to gain a feeling for the participant's inherent meanings about motherhood after infertility. Next, significant statements will be extracted from each participant, and meanings related to the participant's experience with motherhood after infertility will be formulated in the context of the participant's own terms. Third, meanings across participants will be organized into clusters of themes in order to reveal common patterns in the data. Detailed, analytic descriptions of each theme will be compiled to achieve an exhaustive description of the early postpartum experience of previously infertile mothers. Finally, the fundamental structure of the experience of motherhood after infertility will be identified. Subsequently, a summary of findings will be returned to the participants during the second interview in order to ensure accuracy and obtain validation of findings. Refinements to the essential features of these mothers' early postpartum experience will be made after the second interview. The analysis will be closely supervised by the PI's dissertation committee.

f. Limitations:

A small, homogeneous sample is the standard in phenomenological studies to obtain an in-depth understanding of the essential features of the lived experience under consideration. This approach has methodological rigor and yields high internal validity or truth value. These strengths offset one of the study limitations, namely limited external validity. Another potential limitation is selection bias because participants will be volunteering to participate. Previously infertile mothers who are distressed may be more motivated to participate in the study as a means of seeking help and support. On the other hand, mothers who are less burdened may volunteer because they have the time and energy to participate.

The potential for technology malfunction and lost or inaudible data is another limitation. Hence, two digital audiotapes will be used during the interviews, and interviews will be transcribed within one week of their recording. Additionally, the PI's inexperience with using phenomenology as a research approach is a limitation. However, the PI's dissertation committee includes two expert qualitative nurse researchers. Lastly, recruitment and retention of participants may also be a challenge because of the demands of new motherhood and difficulty finding time to complete the interview. Having the participants choose a date, time and location that are convenient to them will address the recruitment and retention issue. Should they choose a home visit, explicit reassurances will be provided to them about not wanting them to "tidy up" prior to the PI's arrival. The goal is to avoid or limit imposing additional demands on these women.

g. Human Subjects or Animal Use:

Prior to the start of the study, full IRB approval will be sought from the PI's university institutional review board. Consent will be obtained from all participants. Participants will be made aware that they have the right to withdraw from the study anytime without repercussions. There is risk of emotional distress during interviews. If significant distress occurs, the PI will stop the interview and allow the participant to resume whenever she is ready. If the mother is highly distressed, the PI will discuss her concern with the woman at the conclusion of the interview and provide a list of appropriate referrals (see Appendix G for Referral Sources). If a participant discloses suicidal or homicidal thoughts during the interview, the PI will contact local law enforcement and/or protective services immediately and discuss the course of action with the participant. The PI will also contact a designated psychiatric nurse practitioner who will serve as a consultant should such crises arise. The participant will be excluded from the study at this point. Participant confidentiality and anonymity will be maintained by assigning each participant with a number in lieu of names. This assigned number will be used in all forms, audiofiles, transcripts, notes and analysis. All study materials will be kept secure in the PI's private office wherein electronic data will be stored in a password-protected computer, and paper files will be locked inside a cabinet.

Time Frame

This study is expected to take place over one year. Appropriate IRB approval will be obtained prior to the start of the study.

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									Write Up Findings and Submit for Publication

Support

Facilities / Resources:

This study will be conducted at the University of Central Florida College of Nursing (UCF-CON). UCF-CON will provide library facilities, office space, telephones and computers for this study. UCF-CON also has an Office of Research which provides assistance with grant management. This study is being conducted as part of the PI's doctoral dissertation at UCF-CON. As such, the PI's dissertation committee members will provide close supervision and support throughout the research process. The committee members have completed Collaborative IRB Training Initiative (CITI).

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Walker, L. O., Crain, H., & Thompson, E. (1986). Maternal role attainment and identity in the postpartum period: Stability and change. *Nursing Research, 35,* 68-71.

APPENDIX B: ELIGIBILITY CHECKLIST

Participant ID #: _____

Check if "YES"	Eligibility Criteria
☐	Age 18 or older? Date of birth: _____
☐	Previously infertile? (eg., difficulty conceiving after 1 year of regular, unprotected intercourse, and sought treatment from a fertility clinic)
☐	First-time mother to a baby born after fertility treatment?
☐	First-borne child conceived after fertility treatment is not older than 3 years old? Baby's date of birth: _____
☐	Understand, write, and speak English, and are willing to participate in a face-to-face or phone interview that will be audio-taped?
☐	Currently psychotic? *** If YES, person is NOT ELIGIBLE for study ***

APPENDIX C: RECRUITMENT FLYER

Now what?

**New mothers who have successfully overcome infertility are unique.
We would like to hear from you.**

1. Women who are at least 18 years old.
2. First time mothers who were previously infertile.
3. Women who understand, write and speak English.
4. The first-borne child conceived after fertility treatment is not older than 3 years old.

If you meet the criteria above, please contact the researcher:

Sigrid Ladores MSN, ARNP, PHD Candidate
University of Central Florida - College of Nursing
Phone: 407.823.3758 **Email:** sladores@mail.ucf.edu

UCF
Stands For Opportunity

A $20 gift card will be given to participants who complete the interview process as a token of appreciation for their time.

You may speak to the researcher directly or have the researcher contact you. Please fill out the form below giving your permission to be contacted.

Name: _____

Home number: _____

Cell number: _____

Email: _____

Please tear this portion off and hand it to the front desk. Retain the top portion to contact the researcher directly with any questions.

APPENDIX D: RECRUITMENT SCRIPT

Hello _____(insert name of potential participant)_____,
My name is Sigrid Ladores, and I am a doctoral student at the University of Central Florida. I am conducting a research study about mothers who were previously infertile to determine what their experiences were after giving birth. I am hoping to conduct a face-to-face interview with you. Please know that participation is completely voluntary and you may choose to withdraw your participation at any time. If you report thoughts of harming yourself or others, I will do what is required by law to protect you or others. Also know that if you agree to participate, your interview will be taped so that I can listen to it again in order to understand the experience of motherhood after experiencing infertility. The tapes and all paperwork will be secured in my office in a locked drawer so your privacy will be protected at all times. Your name will not be directly connected to these tapes or paperwork. Would you be interested in participating in this study? IF YES →
May I ask you a few questions to determine if you are eligible to be in my study?
(Complete Eligibility Checklist here – Appendix A)

ELIGIBLE: I would like to invite you to participate in this study.
As a new mom myself, I know that some days are tougher than others. Please don't worry about tidying up your house or "primping" yourself for the interview. I would just love to come and talk to you about your experience as a new mom.
When and where would you like to meet? Date & Time: _____
Location: _____
Is it ok to leave reminder messages on your voicemail? Yes __ No __.

INELIGIBLE: Thank you so much for contacting me about the study. Unfortunately, it looks like we will not be able to include you in the study. If you would like to talk to someone about what you're feeling and thinking, I have some resources that I can share with you (forward information on Postpartum Support International and local health centers – Appendix G).

APPENDIX E: DEMOGRAPHIC FORM

Participant ID number: _____

How did you hear about this research study?

- OB/GYN office
- Pediatrician's office
- Fertility clinic
- Primary care center
- Emergency care center
- Professional nursing organization newsletter/meeting
- Other ways: (please specify) _____

What is your race / ethnic group?

- White
- Black or African American
- Hispanic or Latino
- Asian
- American Indian or Alaskan Native
- Native Hawaiian or other Pacific Islander
- Other (please specify): _____

What is the highest education you have earned?

- Less than high school graduate
- High school graduate
- GED certificate
- Some college or technical school/training
- Community college degree
- Four-year college degree
- Master's or doctoral degree

What is your marital status?

- Single
- Married
- Living with a partner
- Divorced
- Separated
- Widow
- Other (please specify): _____

Who is your primary care provider?

Name: _____

Telephone number: _____

For your first baby's (or babies') birth:

What was the date of your baby's (or babies') birth? _____

What type of delivery did you have?

- Vaginal
- Cesarean

How are you feeding your baby (or babies)?

- Bottle feeding
- Breast feeding
- Combination bottle and breast feeding

How was your infertility treated? Please check all that apply to you:

- In vitro fertilization (IVF)
- Gamete intrafallopian transfer (GIFT)
- Zygote intrafallopian transfer (ZIFT)
- Intracytoplasmic sperm injection (ICSI)
- Intrauterine insemination (IUI)
- Surgery (please specify): _____
- Medications (please specify): _____
- Other (please specify): _____

How long did it take for you to get pregnant after being diagnosed with infertility and started treatment?

- Less than 6 months
- 6 months to 1 year
- 1 to 2 years
- 2 to 3 years
- 3 to 4 years
- 4 to 5 years
- Longer than 5 years

Before giving birth to your first baby (or babies), how many pregnancies did you lose?

- None
- One
- Two
- Three
- More than three

Do you have a previous history of depression?

- Yes *
- No
- Prefer not to answer

* If "Yes", was the depression before you were diagnosed with infertility, or was the depression during your fertility treatments?

  - Depression BEFORE infertility
  - Depression DURING infertility treatments

Have you ever been treated for depression (psychotherapy or medications)?

- Yes
- No
- Prefer not to answer

If you currently have depression, are you taking anti-depressants or anti-anxiety?

- Yes --- What is the name of the medication? _____
- No
- Prefer not to answer
- Not applicable (N/A) - I do not have depression

If you currently have depression, are you receiving psychotherapy?

- Yes
- No
- Prefer not to answer

- Not applicable (N/A) – I do not have depression

Thank you for completing this questionnaire.

APPENDIX F: INTERVIEW GUIDE

(INTERVIEW #1)

Thank you very much for participating in this research study. I will be asking you to delve deeper into your experience of new motherhood to get a more precise description, and ultimately, the meaning of your experience. Let's begin.

1. What is/was it like being a new mother after experiencing fertility treatment?
2. What was it like after you first brought your baby home?
3. What is/was a typical day like for you when you first brought your baby home?
4. How did being a new mother change over the course of the first few weeks/months?
5. What surprised you about being a mom after going through infertility?
6. What advice about becoming a new mother would you give to women who were previously infertile and are now new mothers?
7. Is there anything else that I should have asked you to paint a detailed picture of your experience after the birth of your baby and after experiencing infertility?

(INTERVIEW #2)

1. Please tell me if you think I've captured your thoughts and feelings from the first interview *(provide verbal summary of themes here).*
2. Is there anything that I need to add, change or delete from this transcript and/or analysis?

APPENDIX G: REFERRAL SOURCES

Dear _____,

If you are feeling hopeless and thinking of harming yourself, your baby or others, **please call 911** immediately. Or you may call the:

National Suicide Prevention Lifeline: **1-800-273-TALK**

If you are not thinking about harming yourself, your baby or others, but feel sad, anxious or overwhelmed, and need professional help to talk to you about your feelings, please call the:

Postpartum Depression Support Network: **1-800-944-4PPD**

If you would like to speak with a postpartum support coordinator who can connect you to community and internet resources while providing you encouragement and information about crisis hotlines, support groups and events in your area, please visit this website:

www.postpartum.net/Get-Help.aspx for Postpartum Support International

Also, below is a list of local resources in Central Florida that can help you get connected with a healthcare provider (if you don't already have one). These offices offer free or discounted healthcare services to those who do not have insurance.

- **Orange County Medical Center**

  101 S. Westmoreland Dr
  Orlando, FL 32805
  407-876-6699

- **Apopka Family Health Center**

  225 E. 7th St.
  Apopka, FL 32703
  407-886-6201

- **Central Florida Family Health Center, Inc.**

  11881-A E. Colonial Dr.
  Orlando, FL 32826
  407-367-0064

- **Eatonville Family Health Center**

  434 W. Kennedy Blvd. Suite D
  Eatonville, FL 32810
  407-645-3989

- **Central Florida Family Health Center, Inc.**

  5449 S. Semoran Blvd., Suite 14
  Orlando, FL 32822
  407-367-0923

- **Orange Blossom Family Health Center**

  234 North Orange Blossom Trail
  Orlando, FL 32805
  407-428-5751

- **Lake Underhill Family Health Center**

  5730 Lake Underhill Rd.
  Orlando, FL 32807
  407-956-4320

- **Pine Hills Family Health Center**

1800 Mercy Drive
Orlando, FL 32808
Medical 407-209-3202
Dental 407-209-3304
Pharmacy 407-209-3303

- **Health Alliance Family Care Center**

1210 E. Plant St.
Winter Garden, FL 34787
407-877-4300

- **Zellwood Family Health Center**

3688 Day Care Center Rd.
Zellwood, FL 32798
352-735-2255

- **O.C. Southside Family Health Center**

6101 Lake Ellenor Drive
Orlando, FL 32809
407-956-4660

(Also include additional referral sources here similar to Orange County Medical Society or Primary Care Access Network (PCAN) that offers free or discounted services – if participant lives outside of Orlando area).

APPENDIX H: LETTER OF SUPPORT

October 14, 2010

Sigrid Ladores, MSN, ARNP
PhD Candidate
University of Central Florida
College of Nursing
P.O. Box 162210
Orlando, FL 32816-2210

Dear Mrs. Ladores,

I am pleased to inform you that on behalf of Women's Care Florida and its network of OB/GYN practices, I would like to extend our organization's support for your research, "The Early Postpartum Experience of Previously Infertile Mothers". As Vice-President of Women's Care Florida and Chief OB/GYN of Winter Park Memorial Hospital, I recognize the importance and timeliness of your study because I see many previously infertile new mothers in our practice whose postpartum experience may not be what they had idealized it to be. Your study will give a voice to this vulnerable group of women who may not otherwise share their unique struggles with motherhood after infertility.

Women's Care of Florida and its associates will assist you in recruiting your study participants from within our practice. We see approximately *10-20* women per month who may meet your inclusion criteria. During our weekly team meetings, I will review your research goals and encourage our physicians and nurses to speak with eligible patients about your study to facilitate their participation.

I am looking forward to working with you. I wish you success in your PhD studies.

Sincerely,

Bruce Breit, MD
Vice-President of Women's Care Florida
Chief OB/GYN of Winter Park Memorial Hospital

APPENDIX I: INFORMED CONSENT

Summary Explanation for Exempt Research

EXPLANATION OF RESEARCH

Title of Project: The Early Postpartum Experience of Previously Infertile Mothers

Principal Investigator: Sigrid Ladores, MSN, ARNP

Faculty Supervisor: Karen Aroian, PhD, RN, FAAN

You are being invited to take part in a research study. Whether you take part is up to you.

- The purpose of this study is to describe the lived experience of previously infertile mothers in the early postpartum period. Findings from this study will be used to identify the possible difficulties of previously infertile mothers during the early postpartum period. Understanding their lived experience will provide insight into possible areas of need that remain unmet by healthcare providers.

What you will be asked to do in the study:

- Answer a questionnaire about yourself (for example: age, ethnicity, marital status, education level, zip code, number of pregnancies, number of children, type of delivery for most recent birth, feeding method for infant, history of depression, and history of infertility). The questionnaire should take about 5 minutes to answer.
- Complete a face-to-face, taped interview with the researcher twice. The first interview will be between 4 and 6 weeks after your baby's birth, and the second interview will be between 8 and 10 weeks after your baby's birth. For the interviews, you and the researcher will set up a date, time and location that is convenient to you. The location can be your home, office, or any other place that is best for you. You will be asked questions about what your life is like now as a new mother after infertility. You do not have to answer every question. Each interview can last from 30 minutes to 2 hours. The interviews will then be transcribed into a written record to be analyzed later. As a token of appreciation for your time, you will receive a $10.00 gift card to a local supermarket after completing your first interview, and another $10.00 gift card after completing your second interview.
- You may withdraw from the study anytime without penalty.

- The researcher will be working on this study for about 18 months.

You must be 18 years of age or older to take part in this research study.

Study contact for questions about the study or to report a problem: If you have questions, concerns, or complaints, please contact Sigrid Ladores at (407) 823-3758 or by email at sladores@mail.ucf.edu; or Dr. Karen Aroian at (407) 823-4290 or by email at karoian@mail.ucf.edu.

IRB contact about your rights in the study or to report a complaint: Research at the University of Central Florida involving human participants is carried out under the oversight of the Institutional Review Board (UCF IRB). This research has been reviewed and approved by the IRB. For information about the rights of people who take part in research, please contact: Institutional Review Board, University of Central Florida, Office of Research & Commercialization, 12201 Research Parkway, Suite 501, Orlando, FL 32826-3246 or by telephone at (407) 823-2901.

APPENDIX J: CERTIFICATE OF COMPLETION OF CONTINUING EDUCATION FOR PROTECTION OF HUMAN PARTICIPANTS IN RESEARCH

CITI Collaborative Institutional Training Initiative

Human Research Curriculum Completion Report
Printed on 3/14/2010

Learner: Sigrid Ladores (username: sladores@mail.ucf.edu)
Institution: University of Central Florida
Contact Information 2776 Hazel Grove Lane
Oviedo, FL 32766 USA
Department: College of Nursing
Phone: 407-823-3758
Email: sladores@mail.ucf.edu

Group 2.Social / Behavioral Research Investigators and Key Personnel:

Stage 1. Basic Course Passed on 03/14/10 (Ref # 4219075)

Required Modules	Date Completed	Score
Introduction	03/13/10	no quiz
History and Ethical Principles - SBR	03/13/10	3/4 (75%)
Defining Research with Human Subjects - SBR	03/14/10	5/5 (100%)
The Regulations and The Social and Behavioral Sciences - SBR	03/14/10	5/5 (100%)
Assessing Risk in Social and Behavioral Sciences - SBR	03/14/10	5/5 (100%)
Informed Consent - SBR	03/14/10	5/5 (100%)
Privacy and Confidentiality - SBR	03/14/10	2/3 (67%)
Research with Prisoners - SBR	03/14/10	4/4 (100%)
Research with Children - SBR	03/14/10	3/4 (75%)
Research in Public Elementary and Secondary Schools - SBR	03/14/10	4/4 (100%)
International Research - SBR	03/14/10	3/3 (100%)
Internet Research - SBR	03/14/10	4/5 (80%)
HIPAA and Human Subjects Research	03/14/10	1/2 (50%)
Conflicts of Interest in Research Involving Human Subjects	03/14/10	1/2 (50%)
UCF	03/14/10	no quiz

For this Completion Report to be valid, the learner listed above must be affiliated with a CITI participating institution. Falsified information and unauthorized use of the CITI course site is unethical, and may be considered scientific misconduct by your institution.

Paul Braunschweiger Ph.D.
Professor, University of Miami
Director Office of Research Education
CITI Course Coordinator

Return

APPENDIX K: IRB APPROVAL (ORIGINAL AND MODIFIED)

University of Central Florida Institutional Review Board
Office of Research & Commercialization
12201 Research Parkway, Suite 501
Orlando, Florida 32826-3246
Telephone: 407-823-2901 or 407-882-2276
www.research.ucf.edu/compliance/irb.html

Approval of Exempt Human Research

From: **UCF Institutional Review Board #1**
FWA00000351, IRB00001138

To: **Sigrid Lynn Ladores**

Date: **January 20, 2011**

Dear Researcher:

On 1/20/2011, the IRB approved the following activity as human participant research that is exempt from regulation:

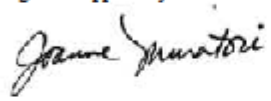
Type of Review:	Exempt Determination
Project Title:	The Early Postpartum Experience of Previously Infertile Mothers
Investigator:	Sigrid Lynn Ladores
IRB Number:	SBE-11-07399
Funding Agency:	
Grant Title:	
Research ID:	N/A

This determination applies only to the activities described in the IRB submission and does not apply should any changes be made. If changes are made and there are questions about whether these changes affect the exempt status of the human research, please contact the IRB. When you have completed your research, please submit a Study Closure request in iRIS so that IRB records will be accurate.

In the conduct of this research, you are responsible to follow the requirements of the Investigator Manual.

On behalf of Joseph Bielitzki, DVM, UCF IRB Chair, this letter is signed by:

Signature applied by Joanne Muratori on 01/20/2011 04:49:10 PM EST



IRB Coordinator

University of Central Florida Institutional Review Board
Office of Research & Commercialization
12201 Research Parkway, Suite 501
Orlando, Florida 32826-3246
Telephone: 407-823-2901 or 407-882-2276
www.research.ucf.edu/compliance/irb.html

Approval of Exempt Human Research

From: **UCF Institutional Review Board #1**
FWA00000351, IRB00001138

To: **Sigrid Lynn Ladores**

Date: **April 20, 2011**

Dear Researcher:

On 4/20/2011, the IRB approved the following modification to human participant research that is exempt from regulation:

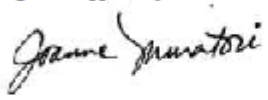
Type of Review:	Exempt Determination
Modification Type:	Participants will also be recruited via Facebook postings.
Project Title:	The Early Postpartum Experience of Previously Infertile Mothers
Investigator:	Sigrid Lynn Ladores
IRB Number:	SBE-11-07399
Funding Agency:	
Grant Title:	
Research ID:	N/A

This determination applies only to the activities described in the IRB submission and does not apply should any changes be made. If changes are made and there are questions about whether these changes affect the exempt status of the human research, please contact the IRB. When you have completed your research, please submit a Study Closure request in iRIS so that IRB records will be accurate.

In the conduct of this research, you are responsible to follow the requirements of the Investigator Manual.

On behalf of Kendra Dimond Campbell, MA, JD, UCF IRB Interim Chair, this letter is signed by:

Signature applied by Joanne Muratori on 04/20/2011 10:47:09 AM EDT



IRB Coordinator

APPENDIX L: CURRICULUM VITAE

SIGRID LYNN LADORES, MSN, PNP

University of Central Florida College of Nursing
12201 Research Parkway Suite 300
Orlando, FL32826
(407) 823-3758—Office
(407) 823-5675—Fax

EDUCATION

Year	Degree	Institution	Clinical Major	Role Preparation
Current	PhD	University of Central Florida, Orlando, FL *GPA 4.0/4.0*	PhD in Nursing	Researcher, Academic Faculty
2002	MSN	University of Pennsylvania, Philadelphia, PA *GPA 3.9/4.0*	Clinical Nurse Specialist; Pediatric Acute / Chronic Nurse Practitioner	Clinical Nurse Specialist (CNS) & Pediatric Nurse Practitioner (PNP)
1997	BSN	University of Pennsylvania, Philadelphia, PA *GPA 3.6/4.0*	Nursing	Registered Nurse

LICENSURE/CERTIFICATION

ARNP	Florida, 3207472
RN	Pennsylvania, 357598L

EMPLOYMENT

ACADEMIC APPOINTMENTS:

08-2008 to present	**Instructor**, University of Central Florida College of Nursing, Orlando, FL
08-2004 to 08-2008	**Visiting Instructor**, University of Central Florida College of Nursing, Orlando, FL
08-2003 to 08-2004	**Adjunct Instructor**, University of Central Florida College of Nursing, Orlando, FL

CLINICAL APPOINTMENTS:

06-1999 to 09-2003	**Supervisor, Quality Assurance Coordinator, Home Health Pediatric Nurse,** Nursecare, Inc., Fort Lauderdale, FL
11-2002 to 09-2003	**Per Diem Pediatric Staff Nurse**, Northwest Medical Center, Margate, FL
04-2000 to 08-2001	**Per Diem Pediatric Staff Nurse,** Plantation General Hospital, Plantation, FL
08-1999 to 01-2001	**Per Diem Pediatric Staff Nurse,** Joe DiMaggio Children's Hospital, Hollywood, FL
01-1999 to 05-1999	**Traveling Pediatric Nurse,** Cross County Staffing, Boca Raton, FL
10-1997 to 01-1999	**Charge Nurse, Pediatric Nurse,** Baptist Children's Hospital of Miami, Miami, FL

PUBLICATIONS

NON-REFEREED PUBLICATIONS:

- Ladores, S. (2002). *Constipation Instruction Sheet* - a form that serves as a teaching tool in constipation care for the Children's Hospital of Philadelphia, PA.

- Ladores, S. (2002). *Your Child's Low-Profile Balloon Gastrostomy Tube* - a form that serves as a teaching tool in gastrostomy tube care for the Children's Center for Gastroenterology and Nutrition, Hollywood, FL.

***ABSTRACTS*:** (# Refereed)

- Ladores, S. *Postpartum Depression in Previously Infertile Mothers: A Meta-Analysis.* Sigma Theta Tau's 21st International Nursing Research Congress, July 12-16, 2010, Orlando, Florida. #
- Ladores, S. *Postpartum Depression in Previously Infertile Women: The State of the Science.* Southern Nursing Research Society, February 3-6, 2010, Austin, Texas. #
- Ladores, S. *Investigating Postpartum Depression Using Three Qualitative Approaches.* Sigma Theta Tau International Theta Epsilon Chapter, April 2009, Orlando, Florida. #
- Ladores, S. *Paper or Plastic: Innovative Use of Electronic Diaries in Research.* Southern Nursing Research Society, February 22-24, 2007, Galveston, Texas. #
- Ladores, S. *An Evolutionary Concept Analysis of Healthcare Transition Among Adolescents with Chronic* Illnesses. Southern Nursing Research Society, February 22-24, 2007, Galveston, Texas. #
- Ladores, S. *An Evolutionary Concept Analysis of Healthcare Transition Among Adolescents with Chronic Illnesses.* Sigma Theta Tau International Theta Epsilon Chapter, Cultivating Nursing Scholarship, October 13, 2006, Orlando, Florida. #

RESEARCH and GRANTS

Date	Role	Title	Agency	Type	Amount
2011	PI	The Early Postpartum Experience of Previously Infertile Mothers	Sigma Theta Tau International, Theta Epsilon Chapter	Extramural	$500

PRESENTATIONS—NATIONAL/INTERNATIONAL

Date	Type	Title	Conference Title, City/State	Refereed/ Invited
12-2012	Podium	Welcome to America: Now What? The Challenges Faced by Newly Immigrated Filipino Nurses	Special Presentation for Iloilo Doctor's College, School of Nursing, Iloilo City, Philippines	Invited
07-2010	Poster	Postpartum Depression in Previously Infertile Mothers: A Meta-Analysis.	Sigma Theta Tau's 21st International Nursing Research Congress, Orlando, Florida	Refereed

PRESENTATIONS—LOCAL/REGIONAL/STATE

Date	Type	Title	Conference Title, City/State	Refereed/ Invited
10-2013	Podium	Co-moderated three days of the Philippine Nurses Association of America, Leadership Retreat	PNACF Leadership Cruise to the Bahamas, Orlando, FL	Invited
10-2013	Podium	Mentoring the Young; Not Eating the Young	PNACF Leadership Cruise to the Bahamas, Orlando, FL	Invited
04-2013	Podium	From Developing the Research Question to Writing the Dissertation: Lessons Learned from Research in Progress	Evidence-Based Practice (keynote speaker): MSN/DNP course, University of Central Florida College of Nursing, Orlando, FL	Invited
09-2012	Podium	The Early Postpartum Experience of Previously Infertile Mothers: Research in Progress	Doctoral Qualitative Research Course, University of Central Florida College of Nursing,	Invited

			Orlando, FL	
05-2012	Podium	Co-moderated two days of the Philippine Nurses Association of America 12th South Central Regional Conference	PNACF and PAPCF - Keep the Flame of Engagement Burning Through Collaboration and Teamwork – Orlando, Florida	Invited
08-2011	Podium	Beyond Bedside Nursing (and co-moderator of entire leadership retreat)	PNACF Leadership Retreat – Igniting the Fire of Leadership and Engagement, Orlando, Florida	Invited
09-2010	Poster	Postpartum Depression in Previously Infertile Women: The State of the Science	Philippine American Physicians of Central Florida, State of the Art Update in Medicine 2010, Orlando, Florida	Refereed
02-2010	Podium	Professional Poster Creation and Presentation	Organization of Doctoral Nursing Students, University of Central Florida, Orlando, Florida	Invited
02-2010	Poster	Postpartum Depression in Previously Infertile Women: The State of the Science	Southern Nursing Research Society, Austin, Texas	Refereed
04-2009	Poster	Investigating Postpartum Depression Using Three Qualitative Approaches	Sigma Theta Tau International Theta Epsilon Chapter, Orlando, Florida	Refereed
04-2007	Podium	How to Write an Abstract and Present a Poster	Organization of Doctoral Nursing Students, University of Central Florida, Orlando, Florida	Invited
04-2007	Poster	An Evolutionary Concept Analysis of Healthcare Transition Among Adolescents with Chronic Illnesses.	Sigma Theta Tau International Research Day, Winter Park, Florida	Refereed
04-2007	Poster	Paper or Plastic: Innovative Use of Electronic Diaries in Research.	Sigma Theta Tau International Research Day, Winter Park, Florida	Refereed
02-2007	Poster	An Evolutionary Concept Analysis of Healthcare Transition Among Adolescents with Chronic Illnesses.	Southern Nursing Research Society, Galveston, Texas	Refereed
02-2007	Poster	Paper or Plastic: Innovative Use of Electronic Diaries in Research.	Southern Nursing Research Society, Galveston, Texas	Refereed
10-2006	Poster	An Evolutionary Concept Analysis of Healthcare Transition Among Adolescents with Chronic Illnesses.	Sigma Theta Tau International Theta Epsilon Chapter, Cultivating Nursing Scholarship, Orlando, Florida	Refereed

HONORS/AWARDS

Date	Award	Organization/Group
01-2013	Dr. Linda and Glenn Hennig Scholarship - $1,000	University of Central Florida College of Nursing
12-2012	MVP Recognition Award for Outstanding Contribution	Philippine Nurses Association of Central Florida
11-2012	March of Dimes Nurse of the Year (Central Florida): Graduate Student Category (recipient)	March of Dimes
11-2012	March of Dimes Nurse of the Year (Central Florida): Clinical and Academic Education Category (nominee)	March of Dimes
03-2012	Knightingale Scholarship - $1,000	University of Central Florida College of Nursing
01-2012	Advance Nursing Education Traineeship Grant toward PhD at University of Central Florida College of	University of Central Florida College of Nursing

Date	Award	Organization/Group
	Nursing - $400	
09-2011	Advance Nursing Education Traineeship Grant toward PhD at University of Central Florida College of Nursing - $450	University of Central Florida College of Nursing
08-2011	Outstanding Speaker Award	Philippine Nurses Association of Central Florida
07-2011	Philippine Nurses Association of America Scholarship - $1,000	Philippine Nurses Association of America
06-2011	Promise of Nursing Central Florida Regional Faculty Fellowship - $4,000	Trustees of the Foundation of the National Student Nurses' Association
06-2011	Sigma Theta Tau, Theta Epsilon Chapter Grant - $500	Sigma Theta Tau, Theta Epsilon Chapter
05-2011	Advance Nursing Education Traineeship Grant toward PhD at University of Central Florida College of Nursing - $245	University of Central Florida College of Nursing
01-2011	Advance Nursing Education Traineeship Grant toward PhD at University of Central Florida College of Nursing - $1,000	University of Central Florida College of Nursing
05-2010	Promise of Nursing Central Florida Regional Faculty Fellowship - $2,000	Trustees of the Foundation of the National Student Nurses' Association
4-2009	3rd Place for Poster Presentation, *Investigating Postpartum Depression Using Three Qualitative Approaches*	Sigma Theta Tau International Theta Epsilon Chapter
08-2008	Named into the Madison Who's Who for outstanding academic standing	Madison Who's Who
04-2007	Induction into Phi Kappa Phi Honor Society, UCF Chapter	Phi Kappa Phi Honor Society, UCF Chapter
02-2007	Honorable Mention for Poster Presentation, *Paper or Plastic: Innovative Use of Electronic Diaries in Research*	Southern Nursing Research Society
08-2002	Summa Cum Laude (GPA 3.91/4.0) – Master of Science in Nursing (MSN)	University of Pennsylvania School of Nursing
09-2001	Advance Nursing Education Traineeship Grant toward MSN at University of Pennsylvania School of Nursing ~ $10,000	University of Pennsylvania School of Nursing
05-1997	Induction into Sigma Theta Tau International Honor Society for Nursing, Xi Chapter	Sigma Theta Tau International Honor Society for Nursing, Xi Chapter
05-1997	Nightingale Award – Highest honor conferred to undergraduate nursing student who most exemplifies excellence in clinical care	University of Pennsylvania School of Nursing
05-1997	Magna Cum Laude (GPA 3.60/4.0) – Bachelor of Science in Nursing (BSN)	University of Pennsylvania School of Nursing
1996-1997	Dean's List	University of Pennsylvania School of Nursing

PROFESSIONAL ACTIVITIES & COMMUNITY SERVICE

PROFESSIONAL ORGANIZATIONS:

Date	Organization	Role
2013 - present	March of Dimes – Nurse of the Year Committee	Member, Marketing and Nomination Committee
2012 - present	National League for Nursing	Member
2010 - present	Association of Women's Health, Obstetric and Neonatal	Member

Date	Organization	Role
	Nurses	
2008 - present	Madison Who's Who	Member
2007 - present	Sigma Theta Tau, Theta Epsilon Chapter (University of Central Florida)	Member (Board Member, Webmaster & Newsletter Chair in 2008-2010)
2007 - present	Phi Kappa Phi Honor Society, UCF Chapter	Member
2007 - present	Southern Nursing Research Society	Member
2007 - present	Philippine Nurses Association, Central Florida Chapter	Board of Directors, Education Committee co-chair
2005 - present	Organization of Doctoral Nursing Students at University of Central Florida	Member
2002 - present	National Association of Pediatric Nurse Practitioners	Member
2002 - present	Florida Chapter of National Association of Pediatric Nurse Practitioners	Member
1997- present	Florida Nurses Association	Member
1997 - 2007	Sigma Theta Tau, Xi Chapter (University of Pennsylvania)	Member

PUBLICATION EDITORIAL BOARDS AND REVIEW:

Date	Journal or Publisher	Role
2010	D'Amico & Barbarito (2010). *Health and Physical Assessment in Nursing* (2nd ed.) Chapter 25: Assessment of Infants, Children and Adolescents. Upper Saddle River, NJ: Prentice Hall Health.	Book Chapter Reviewer

COMMUNITY SERVICE:

Date	Organization	Role
2012 - present	Iloilo Doctor's College, School of Nursing, Iloilo, Philippines	Mentor / Educator / Collaborator
2008 - present	Center for Reproductive Medicine, Orlando, FL	Mentor
2005 - present	Senior Resource Alliance, Orlando, FL	Volunteer / Educator
2005 - present	PACE Center for Girls, Winter Park, FL	Volunteer / Educator
2004 - present	Orlando Union Rescue Mission, Orlando, FL	Volunteer
1997 - present	University of Pennsylvania, School of Nursing students, Philadelphia, PA	Mentor
2005 - 2007	Lisa Merlin House, Orlando, FL	Volunteer / Educator

CONSULTATION:

Date	Consulting Organization/Individuals	Consultation Role
2010	Focus group on Nurse Educator Shortage – Workforce Central, Orlando, FL	Focus group participant

UNIVERSITY ACTIVITIES

UNIVERSITY SERVICE:

Date	Level	Committee	Role
2012	College	Instructor Promotion Committee	Member
2012-present	University	Parking Advisory Committee	Member
2010- 2012	University	Library Advisory Committee	Member

Date	Level	Committee	Role
2010- present	College	Student Scholarships and Awards	Member
2008 - 2010	College	Student Scholarships and Awards	Chairperson
2008 - 2010	College	Leadership Council	Member
2006 - 2008	College	Student Affairs Committee	Co-chairperson
2004 - 2006	College	Student Affairs Committee	Member

DISSERTATION / THESIS / RESEARCH PROJECT ADVISING:

Dates	Student	Title	Level	Role
2012	Jennifer McGee	Nursing Care and Management of First-Trimester Miscarriage	BSN	Thesis Committee Chair
2011	Amanda Ortiz	Effects of Alternative Therapies in Alleviating Pain and Promoting Coping in Pediatric Patients	BSN	Thesis Committee Chair
2011	Crystal Cavanaugh	Cognitive Development Outcomes in the Pediatric Solid Organ Transplant Patient	BSN	Thesis Committee Member (student withdrew from HIM & did not complete thesis)
2011	Lauren Flaherty	Effectiveness of Nonpharmacological Techniques for Procedural Analgesia in the NICU	BSN	Thesis Committee Member
2010	Erica Basora Campbell	The Nurse's Role in Postpartum Depression Assessment, Education and Referral for Women and their Support System	BSN	Thesis Committee Chair
2010	Tasnim-e-Zehra M. Jagani	Barriers in the Implementation of Family-Centered Care	BSN	Thesis Committee Member
2010	Julie Wunderlich	Nursing Interventions to Promote Coping Strategies in Adolescent Oncology Patients	BSN	Thesis Committee Member
2009	DaniellaVaccino	Nursing Interventions for the Early Detection and Treatment of Postpartum Depression	BSN	Thesis Committee Member (student withdrew from HIM & did not complete thesis)
2009	JoAnna Pompeii	Pain Management in Pediatric Patients	BSN	Thesis Committee Member
2004	Jade Anderson	The Role of the Primary Care Nurse Practitioner in Managing Adolescent Females with Eating Disorders	MSN	Thesis Committee Member

COURSES TAUGHT:

Semester	Course	Course Name	Enrollment	Role
Fall 2013	NUR3065-0001	Health Assessment	119	Instructor

Semester	Course	Course Name	Enrollment	Role
	NUR3065L-0011	Health Assessment Lab	13	Instructor
	NUR3445-0001	Nursing Care of Families	67	Co-instructor
	NUR3445L-0011	Nursing Care of Families Clinical	7	Instructor
	NUR3634L-0021	Community Health Nursing Clinical	13	Instructor
	NUR4971H-0204	Honors Directed Readings I – Honors in the Major	1	Instructor
Spring 2013	NUR3445-0001	Nursing Care of Families	119	Co-instructor
	NUR3445L-0011	Nursing Care of Families Clinical	9	Instructor
	NUR3445L-0012	Nursing Care of Families Clinical	10	Instructor
	NUR3445L-0013	Nursing Care of Families Clinical	10	Instructor
	NUR4637L-0061	Public Health Nursing Clinical	11	Instructor
	NUR4945L-0161	Nursing Practicum	16	Instructor
Fall 2012	NUR3065-0001	Health Assessment	124	Instructor
	NUR3065L-0011	Health Assessment Lab	15	Instructor
	NUR3445-0001	Nursing Care of Families	60	Co-instructor
	NUR3445L-0017	Nursing Care of Families Clinical	9	Instructor
	NUR3634L-0026	Community Health Nursing Clinical	11	Instructor
	NUR4971H-0204	Honors Directed Readings II – Honors in the Major	1	Instructor
Summer 2012	NUR3065-C001	Health Assessment	64	Instructor
	NUR4945L-C062	Nursing Practicum	11	Instructor
Spring 2012	On Professional Development Leave			
Fall 2011	On Professional Development Leave			
Summer 2011	NUR3065-C001	Health Assessment	60	Instructor
	NUR3065L-C013	Health Assessment Lab	0	Coordinator
	NUR4945L-C062	Nursing Practicum	10	Instructor
Spring 2011	NUR3445L-0011	Nursing Care of Families Clinical	9	Instructor
	NUR3445L-0012	Nursing Care of Families Clinical	10	Instructor
	NUR3445L-0013	Nursing Care of Families Clinical	10	Instructor
	NUR3445-0002	Nursing Care of Families	119	Co-instructor
	NUR4637L-0162	Public Health Nursing Clinical	11	Instructor
	NUR4945L-0062	Nursing Practicum	14	Instructor
	NUR4971H-0203	Honors Thesis – Honors in the Major	1	Instructor
Fall 2010	NUR3065-0003	Health Assessment	121	Instructor
	NUR3065L-0018	Health Assessment Lab	17	Instructor
	NUR3065L-0019	Health Assessment Lab	18	Instructor
	NUR3065L-0013	Health Assessment Lab	0	Coordinator
	NUR3445-0002	Nursing Care of Families	58	Co-instructor
	NUR3634L-0028	Community Health Nursing Clinical	11	Instructor
	NUR4940H-0206	Honors Directed Readings II – Honors in the Major	1	Instructor
Summer 2010	NUR3065-C001	Health Assessment	58	Instructor
	NUR3065L-C014	Health Assessment Lab	14	Instructor
	NUR3065L-C015	Health Assessment Lab	15	Instructor
	NUR3065L-C013	Health Assessment Lab	0	Coordinator
	NUR4907H-C201	Honors Directed Reading Research – Honors in the Major	1	Instructor
	NUR4945L-C062	Nursing Practicum	14	Instructor
	NUR4971H-C202	Honors Thesis – Honors in the Major	1	Instructor

Semester	Course	Course Name	Enrollment	Role
Spring 2010	NUR3445-0001	Nursing Care of Families	123	Co-instructor
	NUR3445L-0013	Nursing Care of Families Clinical	6	Instructor
	NUR4637L-0065	Public Health Nursing Clinical	10	Instructor
	NUR4637L-0066	Public Health Nursing Clinical	11	Instructor
	NUR4945L-0163	Nursing Practicum	18	Instructor
Fall 2009	NUR3065-0002	Health Assessment	137	Instructor
	NUR3065L-0017	Health Assessment Lab	18	Instructor
	NUR3065L-0018	Health Assessment Lab	17	Instructor
	NUR3065L-0013	Health Assessment Lab	0	Coordinator
	NUR3445-0002	Nursing Care of Families	63	Co-instructor
	NUR3634L-0028	Community Health Nursing Clinical	12	Instructor
Summer 2009	NUR3065-C001	Health Assessment	63	Instructor
	NUR3065L-C014	Health Assessment Lab	16	Instructor
	NUR3065L-C015	Health Assessment Lab	16	Instructor
	NUR3065L-C013	Health Assessment Lab	0	Coordinator
	NUR4945L-C062	Nursing Practicum	14	Instructor
Spring 2009	NUR3445-0001	Nursing Care of Families	110	Co-instructor
	NUR3445L-0001	Nursing Care of Families Clinical	10	Instructor
	NUR3445L-0002	Nursing Care of Families Clinical	9	Instructor
	NUR4932L-0014	Special Topics: Public Health Nursing Clinical	14	Instructor
	NUR4945L-0162	Nursing Practicum	15	Instructor
	NUR3065L-0W58	Health Assessment Lab	28	Instructor
	NUR3065L-0W59	Health Assessment Lab	27	Instructor
Fall 2008	NUR3065-0002	Health Assessment	120	Instructor
	NUR3065L-0011	Health Assessment Lab	1	Instructor
	NUR3065L-0013	Health Assessment Lab	0	Coordinator
	NUR3445L-0001	Nursing Care of Families Clinical	10	Instructor
	NUR3445-0001	Nursing Care of Families	59	Co-instructor
	NUR3634L-0028	Community Health Nursing Clinical	12	Instructor
Summer 2008	NUR3065-C001	Health Assessment	60	Instructor
	NUR3065L-C011	Health Assessment Lab	14	Instructor
	NUR3065L-C012	Health Assessment Lab	12	Instructor
	NUR3065L-C013	Health Assessment Lab	12	Instructor
	NUR4945L-C062	Nursing Practicum	12	Instructor
Spring 2008	Maternity Leave			Instructor
Fall 2007	NUR3065-0002	Health Assessment	120	Instructor
	NUR3445-0L02	Nursing Care of Families	57	Co-instructor
	NUR3445-0T71	Nursing Care of Families	36	Co-instructor
	NUR3445-0T81	Nursing Care of Families	21	Co-instructor
	NUR3634L-0028	Community Health Nursing Clinical	12	Instructor
Summer 2007	NUR3065-C003	Health Assessment	60	Instructor
	NUR3065L-C013	Health Assessment Lab	0	Coordinator
	NUR3065L-C014	Health Assessment Lab	15	Instructor
	NUR3065L-C015	Health Assessment Lab	15	Instructor
	NUR4945L-C062	Nursing Practicum	15	Instructor
Spring 2007	NUR3930-0004	Special Topics: Nursing Care of Families	119	Co-instructor
	NUR3930L-0016	Special Topics: Nursing Care of Families Clin.	10	Instructor
	NUR3930L-0018	Special Topics: Nursing Care of Families Clin.	10	Instructor
	NUR4636L-0163	Community as a Continuum	9	Instructor
	NUR4745-0T70	Nursing Care of Acute Illness	37	Co-instructor
	NUR4745L-0013	Nursing Care of Acute Illness Clinical	11	Instructor
	NUR4745L-0014	Nursing Care of Acute Illness Clinical	11	Instructor
Fall 2006	NUR3065-0002	Health Assessment	116	Instructor

Semester	Course	Course Name	Enrollment	Role
	NUR3930L-0008	Special Topics: Nursing Care of Families Clin.	12	Instructor
	NUR3930L-0028	Special Topics: Nursing Care of Families Clin.	12	Instructor
Summer 2006	NUR3940-C062	Internship	10	Instructor
	NUR3065L-C011	Health Assessment Lab	13	Instructor
	NUR3065L-C012	Health Assessment Lab	14	Instructor
	NUR4945L-C062	Nursing Practicum	11	Instructor
Spring 2006	NUR3235L-0067	Promoting Physical & Mental Health Clinical	11	Instructor
	NUR4636L-0163	Community as a Continuum	11	Instructor
	NUR4745-0L01	Nursing Care of Acute Illness	49	Co-instructor
	NUR4945L-C065	Nursing Practicum	20	Instructor
	NUR4945L-C066	Nursing Practicum	8	Instructor
Fall 2005	NUR3026L-0M08	Therapeutic Interventions Lab	16	Instructor
	NUR3065L-C011	Health Assessment Lab	15	Instructor
	NUR3616L-0161	Promoting Healthy Families Clinical	12	Instructor
	NUR4745-0001	Nursing Care of Acute Illness	111	Co-instructor
Summer 2005	NUR3065L-C012	Health Assessment Lab	14	Instructor
	NUR3065L-C013	Health Assessment Lab	12	Instructor
	NUR3065L-CW92	Health Assessment Lab	14	Instructor
	NUR3065L-CW93	Health Assessment Lab	15	Instructor
	NUR3940-C062	Internship	7	Instructor
	NUR4945L-C062	Nursing Practicum	14	Instructor
Spring 2005	NUR3235L-0066	Promoting Physical & Mental Health Clinical	11	Instructor
	NUR4636L-0066	Community as a Continuum	11	Instructor
	NUR4945L-C063	Nursing Practicum	12	Instructor
Fall 2004	NUR3026L-0M08	Therapeutic Interventions Lab	12	Instructor
	NUR3065L-0012	Health Assessment Lab	3	Instructor
	NUR3616L-0161	Promoting Healthy Families Clinical	11	Instructor
Summer 2004	NUR3065L-C011	Health Assessment Lab	16	Instructor
	NUR3065L-C012	Health Assessment Lab	13	Instructor
	NUR3065L-C013	Health Assessment Lab	12	Instructor
	NUR3065L-C014	Health Assessment Lab	1	Instructor
	NUR4636L-0061	Community as a Continuum	6	Instructor
	NUR4945L-C062	Nursing Practicum	7	Instructor
Spring 2004	NUR4745L-0011	Nursing Care of Acute Illness Clinical	6	Instructor
	NUR4745L-0071	Nursing Care of Acute Illness Clinical	11	Instructor
	NUR4945L-C063	Nursing Practicum	13	Instructor
	NUR4945L-0161	Nursing Practicum	6	Instructor
Fall 2003	NUR4745L-01631	Nursing Care of Acute Illness Clinical	11	Instructor
	NUR4745L-0164	Nursing Care of Acute Illness Clinical	9	Instructor

OTHER:

- Master of Ceremony for the UCF College of Nursing Recognition Ceremony – Orlando, FL - August 2, 2013.
- Participated in CAE Healthcare, "Program for Nursing Curriculum Integration" (PNCI) Simulation Workshop, University of Central Florida, College of Nursing – Orlando, FL – May 2, 2013.
- Participated as a model for a fundraiser fashion to benefit UCF College of Nursing scholarships – Bella Boutique, Winter Park, FL – March 27, 2013.
- Wrote an article, "From Iloilo to Florida and Back: A Nursing Faculty Returns to Her Hometown" for the Inside PNAA Newsletter – April 2013 edition.
- Participated as a model for a fundraiser fashion show to benefit Femmes de Coeur – Citrus Club, Orlando, FL – April 25, 2012.
- Participated as a model for a fundraiser fashion show to benefit UCF College of Nursing scholarships – Bella Boutique, Winter Park, FL – March 15, 2012.

- Precepted Nurse Educator interns who participated in all aspects of teaching and service responsibilities: Fall 2010, Spring 2010, Fall 2008, Fall 2007, Fall 2006.
- Precepted RN-BSN student completing Public Health Nursing clinical requirements: Fall 2007, Fall 2006, Fall 2005.
- Developed the "Nursing Care of Families" course's pediatric content with the new curriculum implemented in Spring 2007.
- Mentored new graduate teaching assistants as assigned by Associate Dean of Undergraduate Studies.
- Mentored new full-time faculty as assigned by Associate Dean of Undergraduate Studies.
- Mentored new adjunct clinical faculty for NUR3065L and NUR3445L.
- Continually assessed the need to update textbooks, lab manuals, DVDs and other resource materials in all courses taught.
- Completed IDL6543 by CDWS to develop online course: Summer 2007.
- Coordinated Health Assessment Labs and mentored new lab instructors: every semester of NUR3065L.
- Guest lectured for Pediatric Nurse Practitioner course (topic – Cystic Fibrosis): Fall 2005.