

1-1-2013

Postnatal Depression In Mexico: Healthcare Provider Conceptualizations and Policies In the Public Health Sector

Jean Marie Sims Place
University of South Carolina

Follow this and additional works at: <https://scholarcommons.sc.edu/etd>

 Part of the [Public Health Commons](#)

Recommended Citation

Place, J. S. (2013). *Postnatal Depression In Mexico: Healthcare Provider Conceptualizations and Policies In the Public Health Sector*. (Doctoral dissertation). Retrieved from <https://scholarcommons.sc.edu/etd/2570>

This Open Access Dissertation is brought to you by Scholar Commons. It has been accepted for inclusion in Theses and Dissertations by an authorized administrator of Scholar Commons. For more information, please contact dillarda@mailbox.sc.edu.

Postnatal Depression in Mexico:
Healthcare Provider Conceptualizations and Policies in the Public Health Sector

by

Jean Marie Sims Place

Bachelor of Science
Utah State University, 2006

Master of Social Work
University of South Carolina, 2009

Master of Public Health
University of South Carolina, 2009

Submitted in Partial Fulfillment of the Requirements

For the Degree of Doctor of Philosophy in

Health Promotion, Education, and Behavior

The Norman J. Arnold School of Public Health

University of South Carolina

2013

Accepted by:

Deborah L. Billings, Major Professor

Edward A. Frongillo, Committee Member

Christine E. Blake, Committee Member

Joshua R. Mann, Committee Member

Lacy Ford, Vice Provost and Dean of Graduate Studies

© Copyright by Jean Marie Sims Place, 2013
All Rights Reserved

DEDICATION

“And you know that you can’t turn back when you’ve come this far. You’ve got to hold on to the line, you’re gonna learn who you are. You’re gonna pull yourself forward and you better pull hard, you’re gonna keep your eyes open and look up at the stars.”

– Scott Lambert Place, “Canyon Walls”

I dedicate this research to my parents, Brock and Christine Place, and to my husband, Obed Frausto Gatica. When I first listened to those lyrics, I felt as if Scottie had written them just for me. Deep inside, I knew that was the purpose of my dissertation journey: to learn who I am, pull myself forward, and look up at the stars. It is so important to have family who understands that accomplishing something on the *inside* of our own hearts is greater than anything that happens on the outside. My heart is filled with gratitude to have you in my life. What an incredible blessing! Thank you for helping me to be brave, for cheering me, for letting me rest in your arms when I was tired or discouraged. I am deeply, *deeply* grateful to God for you in my life, for being sources of warmth, acceptance, support, and strength.

Mom and Dad, I love you! I feel unspeakable gratitude for how you have simply and beautifully *been there*. Thank you for always picking up the phone, for listening with empathy, and for strategizing, praying, celebrating, hurting and hoping for me. Every landmark we reached, we reached together. I feel like the luckiest daughter in the world.

Mi Obed, the very best data I ever collected in Mexico was you! What a gift you are in my life. I believe in God's tender mercies; having you sit beside me during the hardest parts of my dissertation has been unbelievably strengthening. Without one word of complaint or dissent, you supported me in getting this education. The future is bright, my dear, and there is not a soul in the world I would rather spend it with than you. I love you with all of my heart.

ACKNOWLEDGEMENTS

Dr. Deborah Billings, you are a pillar of compassion, love, and vision. I am honored to have you as my academic advisor, mentor, and dear friend. *Thank you* for guiding me gracefully and skillfully on this journey. From you, I learned the greater purpose of any work within academia - to enrich lives, serve others, and stand for social justice. You provided me with warmth, insight, direction, and encouragement (not to mention bringing me into the circle of your amazing contacts and colleagues)! Most importantly, you inspired me with a high standard for being a professional and for being a woman. The confidence you had in me was so important to my reaching this goal. I am very grateful I was able to learn so much from you during these years and I hope it continues long into the future!

Dr. Ed Frongillo thank you for serving on my dissertation committee. You have been invaluable to me. The time you devoted to personally help me with various projects was instrumental and impressive. Because of your attentiveness, I knew I was cared for during this process and I knew you valued my work. From the very beginning of my time at USC, you invested in my development as a scholar. Thank you! I am very grateful for your guidance, love, and friendship.

Dr. Christine Blake, thank you for taking the time to help me throughout this process. You were my first introduction to qualitative research methods; I still reflect back on the class and how much I learned! You were a positive champion of the project and I am grateful for your care and concern for me.

Dr. Joshua Mann, thank you for agreeing to work with me after only meeting me once! You have faithfully supported me and my work. I am very grateful for the consistent feedback you gave me and the unique perspective you brought to this work. You always made me feel like my efforts were valuable and respectable. Your encouragement buoyed me!

Dr. Filipa Castro, thank you for graciously guiding me during me during my seven-month experience in Mexico. Thank you for still working with me and helping me today! I admire you tremendously for your work, your passion, and your beautiful devotion to your family.

There were so many people who helped me get on my feet in Mexico. These wonderful people not only helped me with this project, but they opened up their hearts in love. Mil gracias! To Dr. Juan Pablo and Lic. Adelaida Solís for going out of your way to help me recruit participants for the project; to Lic. Silvia Ramírez, Lic. Alejandra Sotos Ramos, and Lic. Socorro Nigo for being so willing and able to conduct interviews for me at the Institute of Pediatrics; to Dra. Minerva Romero Álvarez, Lic. Berenice Pérez Amezcua, and Dra. Leonor Rivera Rivera for doing whatever was necessary to help me interview participants at the Women's Hospital in Yautepec (your help was amazing and essential!); to Dr. Francisco Morales Carmona, Dr. Daniel Vélez Sánchez, and Dra. Eugenia Gómez at the National Institute of Perinatology for helping me to negotiate an unfamiliar system and for valuing this project; to Dra. Adriana Salas Reséndiz for working so cheerfully and faithfully with me to interview psychologists at the Women's Hospital in Mexico City; and to Dra. Martha Mandujano Valez at the Health Center in Mexico City for being so very kind and helpful; to Psicóloga María del Milagro Pérez

Fajardo for being extremely loyal to me and to all women who experience mental health problems; to Vero Aguilar, Nohemí Figueroa Miranda, and Esperanza Pina Gaona for translating all of the interviews and being very patient throughout that process; to Dra. María Guadalupe Rodríguez Oliveros who opened up her home to me in Cuernavaca and treated me like a dear friend; to Lic. Guadalupe Landerrecha, Lic. Maricruz Coronado, Dra. Guillermina Natera Rey, Dra. María Asunción Lara, Dra. Guadalupe Mainero del Paso, Dr. Sandra García, Dra. Lilia Arranz, and Lic. Adriana Ortega Ortiz for taking time to speak with me about postnatal depression in Mexico and for being so warm and supportive of this work; and finally to the Frausto-Gatica family who loved me like a daughter and made me fall even farther in love with their country and their son.

I am also grateful to the Department of Health Promotion, Education, and Behavior, the Women's and Gender Studies Program, and the Walker Institute for International Studies at the University of South Carolina for providing financial assistance to me to accomplish this project.

ABSTRACT

Background: The World Health Organization (WHO) and the United Nations Population Fund (UNFPA) highlight education and training for healthcare providers and the development of a policy framework as core strategies to address maternal mental health in low- and middle-income countries. This research critically examines these strategies with respect to postnatal depression in Mexico. The research 1) addresses how healthcare providers in Mexico conceptualize postnatal depression, and 2) assesses the policies that exist in Mexico regarding postnatal depression, which will inform the next steps for policy development. The research informs appropriate healthcare provider education and training, as well as the next steps for policy development. The research aims are 1) to understand the conceptualizations of postnatal depression among physicians, nurses, social workers, and psychologists in primary, secondary, and tertiary levels of care in public-sector healthcare facilities in Mexico City and Yautepec, Morelos, Mexico as well as to understand how healthcare providers apply their understanding of social and behavioral antecedents in their conceptualizations of postnatal depression; and 2) to ascertain whether and how postnatal depression is addressed in policies at federal, state, and local public-sector healthcare facility levels in Mexico. Key components of Kleinman's (1980) Explanatory Framework of Illness, Entman's (1993) functions of framing, the Theory of Planned Behavior (Ajzen and Madden, 1986), and a typology of symbolic versus material policies elaborated by Howlett(2000) and Hood (1986)

were used to examine healthcare providers' conceptualizations of postnatal depression and whether and how postnatal depression is addressed in policies.

Methods: In-depth, semi-structured interviews were conducted with physicians (n=19), nurses (n=18), social workers (n=17), and psychologists (n=10) from five public-sector healthcare facilities in primary, secondary, and tertiary levels of care in Mexico City and Yauatepec, Morelos, Mexico. Healthcare providers were also presented a reality-based vignette that was written based on data from semi-structured interviews with seven Mexican women from Mexico City and Yauatepec, Morelos, Mexico who had experienced postnatal depressive symptoms identified based on a score of 12 on the Edinburgh Postnatal Depression Scale. Follow-up questions followed the presentation of the vignette. National health plans, national action plans, federal and state laws and regulations, clinical practice guidelines, and public-sector healthcare facility policies were collected and evaluated through qualitative content analysis according to whether they included a statement of intent and/or actions related to the care and management of women who experience or who are at risk of experiencing postnatal depression.

Results: Results from the first aim revealed two frameworks that healthcare providers use to conceptualize postnatal depression: biochemical and adjustment. An emerging model illustrates how social and behavioral antecedents influence both frameworks, as well as how symptoms of distress represent a possible case of postnatal depression and how postnatal depression is perceived as affecting responsibilities associated with motherhood. In the second aim, six clinical practice guidelines out of 597 were relevant to postnatal depression and were included in the analysis. Laws (n=3), regulations (n=1), national health plans (n=1), national action plans (n=1), and public-sector healthcare

facility policies (n=1) were also evaluated, for a total of 13 policies. Postnatal depression and other synonymous search terms were not mentioned in 38% (n=5) of policies. In the remaining 61% (n=8) of policies postnatal depression was mentioned in some way, but in only 46% (n=6) of policies was a statement of intent or actions included relating to the care and management of women who experience or who are at risk of experiencing postnatal depression. These policies are the mental health law of Mexico City and its regulation, the clinical practice guidelines on pre-eclampsia, HIV, and prenatal care, and a policy from a tertiary level, public-sector healthcare facility.

Implications: The results of the first aim may also be useful in the development of training materials which build on providers' existing conceptualizations of postnatal depression to enhance women's quality of care. They also provide a foundation for future study of how healthcare providers' conceptualizations of postnatal depression may affect detection and treatment practices. The results of the second aim identify possible areas to focus future policy development efforts. Policy makers should consider building on the mental health law of Mexico City by identifying specific actions to prioritize the care of women who experience postnatal depression, as well as establishing clinical practice guidelines that specifically address maternal mental health problems. Future research can examine the rationale behind policy-makers' choice of the particular actions or lack of actions identified to address postnatal depression in Mexico.

TABLE OF CONTENTS

DEDICATION	iii
ACKNOWLEDGEMENTS	v
ABSTRACT	viii
LIST OF TABLES	xiv
LIST OF FIGURES	xv
CHAPTER 1	1
1.1 Statement of the Problem.....	1
1.2 Research Project.....	4
1.3 Aims and Research Questions	8
CHAPTER 2	10
2.1 Postnatal Mood Disorders.....	10
2.2 Conceptualizations of Postnatal Depression	16
2.3 Policy for Postnatal Depression.....	26
2.4 The Mexican Context.....	31
2.5 Conceptual Framework	35
2.6 Research Project Rationale	40
CHAPTER 3	42
3.1 Overview of Research Design	42
3.2 Research Methods for Aim 1	43
3.3 Research Methods for Aim 2	57

CHAPTER 4	62
4.1 Conceptualizations of Postnatal Depression by Healthcare Providers from Public-Sector Healthcare Facilities in Mexico	63
4.2 Policies that Address Postnatal Depression in Mexico: Whether and how it is Addressed	114
CHAPTER 5	155
5.1 Summary of Findings.....	155
5.2 Implications of Research Project	168
5.3 Recommendations for Future Research.....	171
5.4 Conclusion	172
REFERENCES	174
APPENDIX A – Informed Consent for Mexican Women.....	189
APPENDIX B – Interview Guide for Mexican Women.....	196
APPENDIX C – Vignette Based on Interview in Mexico City, Mexico	202
APPENDIX D – Vignette Based on Interviews in Yautepec, Morelos, Mexico.....	204
APPENDIX E – Informed Consent for Healthcare Providers	206
APPENDIX F – Interview Guide for Healthcare Providers, First Draft	209
APPENDIX G – Interview Guide for Healthcare Providers, Revised.....	215
APPENDIX H – Table of Characteristics of Women Used in Vignettes	223

LIST OF TABLES

Table 3.1 Healthcare Facilities by Level of Care and Location	46
Table 4.1 Study Participant Characteristics	72
Table 4.2 Symptoms of Distress, by Type of Healthcare Provider	82
Table 4.3 Search Terms Used in English and Spanish	128
Table 4.4 Policies by Type of Reference to Postnatal Depression	133
Table H.1 Table of Characteristics of Women Used in Vignettes.....	223

LIST OF FIGURES

Figure 4.1 Model of Healthcare Providers' Conceptualizations of Postnatal Depression and Other Distress.....	95
Figure 4.2 Policy Selection Process.....	132

CHAPTER 1

INTRODUCTION

1.1 Statement of the Problem

In the year 2000, depression was the leading cause of disability worldwide. It is projected to increase from the 5th to 2nd greatest contributor to the global burden of disease by 2020, second only to ischemic heart disease (World Health Organization [WHO], 2013a). Depression is more common in women than men (Stewart, Robertson, Dennis, Grace, & Wallington, 2003). First onset and severe depression are three times higher for a woman in the period after giving birth than at any other time in her life course (Stewart, et al., 2003).

Postnatal depression is defined by the *Diagnostic Statistical Manual of Mental Disorders*, Fifth Edition (DSM-V) as a major or minor depressive episode affecting women within four weeks after childbirth but it is commonly believed by clinicians and researchers to occur anytime within the first year postpartum (5th ed.; DSM-V; American Psychiatric Association [APA], 2013; Stowe, Hosetter, & Newport, 2005). It is characterized by feelings of hopelessness, agitation, sadness, despondency, suicidal ideation, and a perceived inadequacy in caring for the infant (Born, Zinga, & Steiner, 2004; 5th ed.; DSM-V; APA, 2013). Women in low- and middle-income countries are at a higher risk of developing postnatal depression than women in high-income countries (Fisher et al., 2012). Results from meta-analyses that examined the prevalence of

postnatal depression estimate rates of 20% in low- and middle-income countries compared to 13% in high income countries (O'Hara & Swain, 1996; Fisher et al., 2012).

The WHO states that mental health is more than just the mere absence of neurological or psychological disorders; rather, it comprises the capacity for individuals to realize their potential, cope with daily stressors, work fruitfully, and make contributions to society. Postnatal depression inhibits women's capacities in several ways. Women who experience postnatal depression without receiving adequate treatment are at a greater risk of suffering chronic and recurrent depression throughout life which can be profoundly disabling (Patel et al., 2012). Suicide as a result of postnatal depression and other mental disorders is a leading cause of death among women in the postpartum period (Oates, 2003; WHO, 2005a). The consequences of postnatal depression are not only harmful to a woman's well-being, but extend to her family members and wider community. Postnatal depression is associated with weak maternal-infant attachment and delays in children's cognitive and emotional development (Beck, 1998; Murray, 1992; Grace & Sansom, 2003). It is also associated with early cessation of breastfeeding which contributes to malnutrition and diarrheal diseases in infants, especially in low- and middle-income countries (Cooper, Murray, & Stein, 1993). With each depressive episode there is a loss of economic and social productivity, as well as intensification of family stress, isolation, and stigmatization of those who suffer (WHO, 2013a).

Postnatal depression is under-identified and under-treated, especially in low- and middle-income countries (WHO, 2008a). No data exist for the proportion of women in low- and middle-income countries who experience postnatal depression without

receiving treatment, but the WHO reports that close to 60% of those who experience depression overall in these countries are not treated (WHO, 2008b). A treatment gap likely exists for postnatal depression, despite the availability of validated screening tools and low-cost, non-specialist interventions to detect and treat postnatal depression. They include tools such as the Edinburgh Postnatal Depression Scale (Cox, Holden, and Sagovsky, 1987) and interventions such as peer support groups, cognitive behavioral therapies, problem-solving techniques, and guidance on how to stimulate and engage an infant (Fisher et al., 2013).

The United Nation's Population Fund (UNFPA) and the WHO convened the first international expert meeting in Hanoi, Vietnam 2007 to discuss postnatal depression and other maternal mental health issues in low and middle-income countries (Fisher, Mello, Izutsu, & Tran, 2011). This resulted in a consensus statement outlining three recommendations as part of an overall program to improve maternal and child health. First, reduce risk factors associated with postnatal depression; second, promote maternal and child health and development through activities such as bonding and attachment; and third, increase the availability of effective, low-cost, evidence-based interventions for maternal mental health problems in primary care (WHO, 2009a). Key strategies to carry out the recommendations were discussed by 17 expert researchers from high and low- and middle-income countries. They include education and training for healthcare providers, community-based interventions, health service development, health system strengthening, capacity-building in non-health sectors, stigma reduction and awareness-raising among the general population, and development of a legal and policy framework for the protection for maternal mental health (Fisher et al., 2011).

1.2 Research Project

In this project, I research two strategies that are useful in efforts to address postnatal depression in Mexico: 1) education and training for healthcare providers who interface with women in the perinatal period, and 2) development of a policy framework related to postnatal depression.

Education and Training of Healthcare Providers

Appropriate education and training for healthcare providers who interface with women in the perinatal period are critical for the early detection and treatment of women who experience or who are at risk of experiencing postnatal depression. The WHO and UNFPA stated that increased attention needs to be paid to the skills, attitudes, and capacity of healthcare providers in order to increase appropriate recognition of and assistance for women who experience postnatal depression and other maternal mental health problems (WHO, 2008). Prior to creating training interventions targeted to healthcare providers, it is first important to understand how they conceptualize postnatal depression. According to Lloyd and Hawe (2003), understanding healthcare providers' conceptualizations of postnatal depression provides direction in ways to train them to respond to women's needs more effectively.

Development of a Policy Framework

A policy framework for postnatal depression is crucial to adequately addressing postnatal depression within the health sector. Policies can influence the training of healthcare providers, provide financial and human resources, and integrate services for the care and management of women who experience or who are at risk of experiencing postnatal depression into health systems. A mental health policy, as defined by the WHO

(2013b), establishes a vision for the future and outlines a plan to be put in place to manage and prevent mental and neurological disorders. Policy suggests the level of priority that a government assigns to a problem. It also identifies principal stakeholders, designates roles and responsibilities, and facilitates agreements for action among the different stakeholders (WHO, 2004). The WHO (2004) states, “Without adequate policy and plans, mental disorders are likely to be treated in an inefficient and fragmented manner” (p. 1). Mandated hospital screening for postnatal depression, the required provision of written information about postnatal depression to pregnant women and those who have just given birth, and stepped care, which is a system where patient care is ‘stepped up,’ as necessary, to the most effective yet least resource intensive treatment, have been implemented in both high and low income countries based on policies drafted at state and local hospital system levels (Postpartum Support International, 2010; Rahman, 2013). Despite the importance of policy for addressing mental health problems like postnatal depression, the WHO (2005b) reports that 40% of countries have no explicit mental health policy. Surveying what currently exists in terms of policies that address postnatal depression in low and middle income countries is an essential first step to understand the way forward in future policy development.

Context of Research Project

Postnatal depression is a pivotal public health issue in Mexico, affecting not only the woman who experiences it, but also her family and community (Almond, 2009). Rates of postnatal depression globally are found to be the highest among women living in socially and economically disadvantaged settings (Fisher et al., 2012). Mexico is a country where just under half of the population experience a level of poverty where their

income is not sufficient to cover basic needs (Consejo Nacional de Evaluación de la Política de Desarrollo [CONEVAL], 2008). The project took place in Mexico overall and in Mexico City and Yautepec, Morelos, specifically. Mexico City has about 20 million inhabitants. Yautepec is an area of just under 40,000 inhabitants located approximately two hours south of the center of Mexico City.

The WHO, the UNFPA, and leading researchers, advocates, and clinicians have called for increased attention to postnatal depression and other maternal mental health problems, especially in low and middle income countries (WHO, 2009a). Given that education and training for healthcare providers and development of a policy framework are named as strategies to carry out recommendations from the WHO and the UNFPA, it is important to 1) better understand how healthcare providers in Mexico conceptualize postnatal depression, and 2) assess the policies that exist in Mexico regarding postnatal depression. The research informs appropriate healthcare provider education and training, as well as the next steps for policy development.

Framework of Research Project

The framework for this study incorporates concepts from anthropology, public health and the policy sciences. I draw from Kleinman's (1980) Explanatory Framework of Illness, Entman's (1993) functions of framing, the Theory of Planned Behavior (Ajzen and Madden, 1986), and a typology of symbolic versus material policies elaborated by Howlett (2000) and Hood (1986). Kleinman (1980) developed a model that elucidates how people make sense of an illness and their experiences of it. Explanatory models may be used to understand women's experiences of postnatal depression by investigating their perception of the cause, effects, and remedies for their particular experience. Entman

(1993) suggests that frames are a way of communicating certain aspects of a perceived reality to promote a particular problem definition. To provide structure to analyze a particular problem like postnatal depression, Entman suggests investigating the presentation of a problem, its source, the causal agents, as well as what makes it problematic (Entman, 1993). It is also important to look at remedies for the problem and the likely effects of the remedy. The Theory of Planned Behavior suggests that behavioral intention is the strongest determinant of behavior, such as healthcare provider behavior in the detection and treatment of postnatal depression. Behavioral intention is influenced by attitude towards the behavior, subjective norms, and perceived control over performance of the behavior.

Finally, there are generally two categories of policies: material and symbolic. A policy is material if it includes actions that direct the nature, type, quantity or distribution of goods and services in a society or that affect implementation processes (Howlett, 2000; Hood, 1986). Without those actions, or what Howlett and Hood call either substantive or procedural instruments, a policy is symbolic. Symbolic policy is more like a statement of intent that articulates a vision for the future.

Purpose of Research Project

The purpose of this project was to 1) better understand how healthcare providers in Mexico conceptualize postnatal depression, and 2) assess the policies that exist in Mexico regarding postnatal depression. Aim one explores the conceptualizations of postnatal depression among doctors, nurses, social workers, and psychologists in primary, secondary, and tertiary levels of care in five public-sector healthcare facilities in Mexico City and Yautepec, Morelos, Mexico. I conducted semi-structured interviews with

healthcare providers which included the presentation of a brief reality-based vignette. Aim two examines policies related to postnatal depression at federal, state, and local public-sector healthcare facility levels in Mexico overall and specifically in Mexico City. I retrieved and reviewed national health plans, national action plans, federal and state laws, regulations, clinical practice guidelines, and policies from public-sector healthcare facilities to determine if and how postnatal depression is addressed in ways that are likely to affect the care and management of women who experience or who are at risk of experiencing postnatal depression. The purpose of the project is to guide implementation of strategies established by the WHO and UNFPA to address postnatal depression in the context of Mexico. Ultimately, the goal is to improve the lives of women who experience postnatal depression and those who are at risk.

1.3 Aims and Research Questions

Manuscript I

Specific Aim #1. Understand the conceptualizations of postnatal depression among physicians, nurses, social workers, and psychologists in primary, secondary, and tertiary levels of care in the public-sector healthcare facilities in Mexico City and Yauatepec, Morelos, Mexico, as well as understand how healthcare providers apply their understanding of social and behavioral antecedents in their conceptualizations of postnatal depression. The research questions associated with this specific aim are:

Research Question #1a: How do physicians, nurses, social workers, and psychologists in the primary, secondary, and tertiary levels of care in the public

sector in Mexico City, Federal District and Yautepec, Morelos conceptualize postnatal depression within their practice setting?

Research Question #1b: How do these healthcare providers apply their understanding of social and behavioral antecedents in their conceptualizations of postnatal depression?

Manuscript II

Specific Aim #2. Ascertain whether and how postnatal depression is addressed in policies at federal, state, and local public-sector healthcare facility levels in Mexico overall and specifically in Mexico City. The research questions associated with this specific aim are:

Research Question #2a: Is postnatal depression addressed in policies at federal, state, and local public-sector healthcare facility levels in Mexico overall and specifically in Mexico City?

Research Question #2b: How is postnatal depression addressed in these policies?

CHAPTER 2

BACKGROUND AND SIGNIFICANCE

The postpartum period is a particularly stressful time for women due to hormonal, physical, and life-style changes that take place. Brockington (1996) described childbirth as a period of rapid biological, social, and emotional transition. These changes may contribute to women experiencing different mood states, including baby blues, postnatal depression, and postnatal psychosis. In this chapter, I briefly review the mood disorders of baby blues and postnatal psychosis prior to a discussion on postnatal depression. Reviewing other mood disorders in the postpartum period provides context for understanding the definition and diagnosis of postnatal depression specifically. I also review the etiology and risk factors of postnatal depression, including biological, psychosocial, and cultural factors. Finally, I review the evidence on how healthcare providers conceptualize postnatal depression, as well as the global guidance that has been issued by the WHO and other leading institutions to address postnatal depression, particularly in low- and middle-income countries. I conclude by discussing the conceptual framework for this research project.

2.1 Postnatal Mood Disorders

Baby Blues

Baby blues is a common condition affecting over 50% of women after giving birth (Miller, 2002). It is characterized by a heightened response to stimuli, including tearfulness, agitation, and extreme happiness. Due to marked emotional lability,

including euphoria, some researchers consider “blues” a misnomer and believe a more appropriate term is “postpartum reactivity” (Miller, 1999). Symptoms of baby blues generally occur after childbirth within the first few days postpartum and are self-resolved by the second week. In approximately 20% of cases, symptoms persist for more than three weeks and may precipitate a more serious mood disorder such as postnatal depression (Kendell, McGuire, Connor, & Cox, 1981; Cox, Connor, & Kendell, 1982).

Postnatal Psychosis

Postpartum psychosis is a rare but serious condition in women who have given birth, occurring in one or two cases per 1,000 live births (Kendell, Chalmers, & Platz, 1987). It is psychiatric emergency requiring immediate medical attention. It is characterized by confusion, paranoia, hallucinations, and delusions. Postpartum psychosis generally occurs within the first three weeks after giving birth and is typically a result of an accompanying psychiatric mood disorder with manic and depressive features (Postpartum Support International, 2010). Women who experience postpartum psychosis are at an increased risk of hurting themselves or harming their infants, compared to a non-psychotic postnatal depression (Postpartum Support International, 2010).

Postnatal Depression

According to the DSM-V, which represents North American psychiatry, diagnostic criteria for major depression include depressed mood or loss of interest or pleasure. In addition, four or more of the following symptoms must be present for a two week period or longer: weight loss or markedly increased or diminished appetite; insomnia or hyposomnia; psychomotor agitation or retardation; loss of energy; feelings of worthlessness or excessive guilt; lack of concentration or indecisiveness; and recurrent

thoughts of death or suicidal ideations. The presence of these symptoms must also significantly impair daily functioning (APA, 2013).

The DSM-V does not recognize postnatal depression as a discrete diagnosis. Rather, the DSM-V acknowledges that major depression could have a postpartum onset if a depressive episode occurs within four weeks after childbirth. Similar to the DSM-V, the *International Classification of Diseases, Tenth Revision (ICD-10)* published by the WHO (1993), does not classify postnatal depression as a separate disorder, but includes it within the diagnostic category of major depression with a postpartum specifier if onset is within 6 weeks after childbirth. Both standards are used globally to diagnose women in clinical and research settings (Stewart et al., 2003). Researchers have documented the onset of postnatal depressive symptoms beyond the first four weeks after childbirth (Stowe et al., 2005). It is common for studies on postnatal depression to include women who experience postnatal depressive symptoms anytime within the first year postpartum (Miller, 2002; Stewart et al., 2003; Born et al., 2004). For the purpose of this study, I use the term *postnatal depression* to describe a depressive episode that occurs within the first year postpartum. Postnatal depression is synonymous with the term *postpartum depression* also used in the literature.

Etiology. The etiology of postnatal depression is debated. Postnatal depression is likely a multifactorial condition (Stewart et al., 2003). Possible causal pathways exist at the biological, psychosocial, and cultural levels. In this section, I discuss the biological, psychosocial, and cultural factors that may contribute to postnatal depression.

Biological Factors. A woman's hormonal changes after delivery likely play a role in postnatal mood disorders, although, the degree of influence is contested (Born et

al., 2004). After delivery, women experience a drop in cortisol, progesterone, estradiol, and other hormones, as well as a drastic increase in oxytocin and prolactin.

Observational and experimental evidence suggests that women who develop postnatal depression may have an increased vulnerability to the mood-destabilizing effect of these reproductive hormonal changes (Bloch, Schmidt, Danaceau, Murphy, Nieman, Rubinow, 2000). Additional research corroborates the findings of Bloch et al. (2000) and the hormone-withdrawal hypothesis, asserting that some women are particularly sensitive to hormonal changes during pregnancy and childbirth and other periods throughout the life course (Soares & Zitek, 2008; Steiner, Dunn & Born, 2003). Other studies do not support the hormone withdrawal hypothesis (Miller, 2002; Stewart et al., 2003).

Although the association is inconclusive, postnatal thyroid dysfunction and postnatal depression are frequently found together. Both typically peak between two and five months after delivery. Women who are prone to thyroid antibodies in early gestation, a precursor to development of postnatal thyroid dysfunction, also have an increased risk for postnatal depression (Kuijpers et al., 2001; Pop et al., 1993). In a study conducted among 293 white women, thyroid depression levels were measured at different time points during pregnancy and throughout the postpartum year. Thyroid dysfunction occurred twice as often in the 21% of women with depression than women without depression (Pop et al., 1991). Administration of throxine to regulate thyroid function in the postpartum period does not appear to have an effect on depression levels (Harris et al., 2002). In contrast, results from a study conducted among 541 white women did not indicate elevated rates of postnatal depression in women with hormone abnormalities

caused by thyroid dysfunction in the postpartum period (Lucas et al., 2002). In sum, evidence is inconclusive regarding the biochemical mechanisms of postnatal depression.

Psychosocial Factors. Women who experience certain psychosocial risk factors have a higher likelihood of developing postnatal depression. A large meta-analysis of quantitative studies on postnatal depression from 1990 to 2002, including prior results from two landmark meta-analyses of O'Hara and Swain published in 1996 and Beck published in 2001, summarized a breadth of evidence on psychosocial risk factors for postnatal depression in diverse populations (Stewart et al., 2003). Effect sizes were calculated which describe the strength of a relationship between two variables that were obtained in at least two independent studies. Small effect sizes, represented by Cohen's d , are around 0.2, moderate effect sizes are around 0.4, and strong effect sizes are around 0.8. In summary, they found that strong to moderate risk factors include depression during pregnancy, anxiety during pregnancy, stressful recent life events, lack of social support (either perceived or received), and previous history of depression. Moderate risk factors include high levels of childcare stress, low self-esteem, neuroticism, and difficult infant temperament. Lesser risk factors include obstetric and pregnancy complications, cognitive attributions, relationship quality with partner, and socioeconomic status. No evidence exists for the effect of ethnicity, maternal age, level of education, parity or gender of child (mainly within Western societies) (Stewart et al., 2003). Studies from China, India, and Mexico have reported a relationship between spousal disappointment in the sex of a child, particularly if the baby is a girl, and postnatal depression (Patel, Rodrigues, & DeSouza, 2002; Lee, Yip, Leung, & Chung, 2000; de Castro, Hinojosa-Ayala, & Hernandez-Prado, 2011).

Cultural Factors. Culture is defined as “the learned, shared, and transmitted values, beliefs, norms, and life ways of a particular group that guides their thinking, decisions, and actions in a patterned way” (Leininger, as cited in Bina, 2008, p. 569). Cultural variables are indispensable when investigating the etiology of postnatal depression; however studies on the impact of cultural variables on postnatal depression have produced inconclusive results (Bina, 2008). Bina (2008) systematically reviewed studies from 1985 to 2005 that examined the impact of cultural traditions and rituals on postnatal depression. Fourteen studies were included in the analysis. He categorized cultural variables into the following groups a) an alleviating factor, b) a deteriorating factor, c) lack of cultural traditions as deteriorating factor, and d) a neutral factor (neither alleviating nor deteriorating).

Bina affirmed an alleviating influence on postnatal depression when women practice cultural traditions and rituals and perceive them as helpful. For example, *peiyue care*, or female assistance in the month following childbirth, improved reported physiological well-being among a sample of Hong Kong women (Lee, as cited in Bina, 2008). Similarly in Mexico, the practice of *la cuarentena*, like *peiyue care*, has produced evidence of its role in reducing postnatal depression among Latina women (Stern & Kruckman, 1983). The practice of *la cuarentena* generally includes 40 days of rest for the new mother, assistance with household chores, and a special diet (Waugh, 2011). The absence of the above birth rituals and familial support in Western cultures has been associated with postnatal depressive among women in several studies, leading some researchers to consider postnatal depression a “cultural-bound syndrome” (Bashiri & Spielvogel, 1999; Stern, & Kruckman, 1983). Studies on prevalence, however, suggest

postnatal depression is a global phenomenon (Fisher et al., 2011). An international prevalence study by Affonso, Horowitz, and Mayberry (2000) concluded European, Australian and USA women had lower mean levels of postnatal depressive symptomatology compared to women in Asia and South America. These results corroborate the results of other studies that have found high rates of postnatal depressive symptoms in low- and middle-income countries (Fisher et al., 2012).

While some cultural traditions are associated with lower rates of postnatal depressive symptoms, others have a contrasting influence and are considered deteriorating factors. For example, Lee and Heh (as cited in Bina, 2008) concluded women who received *peiyue care* from in-laws, rather than women's mothers, experienced higher rates of postnatal depression. Danaci and colleagues (as cited in Bina, 2008) conducted a study on cultural factors that affect Turkish women's postpartum experiences and the researchers likewise suggested the cultural tradition of living with the husband's parents increased postnatal depression. In summary, there is inconsistent evidence regarding the influence of cultural factors in the etiology of postnatal depression.

2.2 Conceptualizations of Postnatal Depression

Understanding the ways in which healthcare providers think about and conceptualize postnatal depression is important. The way postnatal depression is conceptualized affects the interventions that are used to address the problem (Beck, 2002). The importance of healthcare providers' conceptualizations of postnatal depression is summarized succinctly in the following statement: "Does framing postnatal depression either as a psychiatric disorder or a societal disorder matter? The

consequence lies in where solutions are sought” (Lloyd and Hawe, 2003, p. 1793). The way healthcare providers conceptualize postnatal depression affects how it is detected and treated.

Although there are various ways postnatal depression has been conceptualized, Beck (2002) summarizes two different theoretical perspectives of postnatal depression and the interventions that result from each perspective. When conceptualized as a psychiatric disorder, postnatal depression is considered an illness with an individual pathology. Based on the medical model, treatment is intrapersonal, often involves antidepressants, and may exclude intervening on a woman’s social environment due to the prioritization of medical interventions. When conceptualized as a societal disorder women who experience postnatal depression are considered to be influenced by society’s impossibly high standards of motherhood, such as, for example, that women should have the house clean and the children well-fed and happy at all times. Based on feminist theory, treatment involves a feminist-cognitive approach of giving women opportunities to express negative or ambivalent feelings they may be experiencing in the maternal role.

From my review of the literature, there are no published studies examining conceptualizations of postnatal depression among healthcare providers in low- and middle-income countries. Thus in this section, the limited number of studies examining the issue from high income countries are highlighted. I review the evidence on how healthcare providers conceptualize postnatal depression which has important implications for treatment interventions. In the end of the section I provide a summary of the main findings.

Existing Evidence

Qualitative Studies. A framing analysis was conducted by Lloyd and Hawe (2003) to examine the different ways in which postnatal depression is viewed by senior researchers, policy makers, and practitioners in Australia in the field of postnatal depression. One-on-one, semi-structured interviews were conducted. Three broad approaches to solving the problem of postnatal depression were illuminated, including therapeutic, social, and societal approaches. Those who used a therapeutic approach saw postnatal depression as a biomedical problem with risk factors that can be detected and intervened upon. Those who used a social competence approach saw postnatal depression as a problem of coping, rather than a pathological condition. Skill building, like teaching how to pick up on an infant's communication cues, was encouraged as a tactic to help mothers adjust to a 'normal' experience. Those who used a societal approach to solving the problem saw postnatal depression as a condition related to social adversity. Women may experience postnatal depression because of role conflict in a social environment that does not adequately support women's choices. These professionals had a difficult time articulating societal-level solutions to what they saw as a societal-level problem. The study concluded that successful prevention of mental health problems, like postnatal depression, requires understanding the problem in dynamic relation to the social, historical, cultural, economic, and political context.

A qualitative study conducted by Chew-Graham et al., (2008) explored the attitudes of health visitors and general practitioners in the United Kingdom on the diagnosis and management of women with postnatal depression. Health visitors are

similar to community health workers. The health visitors generally did not feel it was in their scope of practice to diagnose women with postnatal depression because they felt it was a mental health problem, delegating the responsibility to general practitioners or specialist services. All participants attributed a psychosocial etiology to postnatal depression, asserting that the management of postnatal depression needs to address those factors.

Some general practitioners and health visitors were reluctant to label symptoms as depression because they felt a biomedical label was unwarranted, especially if the only solution was a prescription for antidepressants. Instead, symptoms were termed an “emotional turmoil” or “existential crisis.” Other health visitors felt that the label of postnatal depression was useful to the extent that it provided legitimacy to a woman’s symptoms. They regretted, however, that treatment for a diagnosis of postnatal depression likely meant administration of antidepressants because of the lack of other resources to which they could refer women. These findings are similar to studies examining the conceptualizations of chronic depression among healthcare providers in primary care. The healthcare providers associated social circumstances or societal causes in the development of depressive episodes, but acknowledged the impracticality of acting to redress those situations. Instead, symptom relief was most often accomplished through pharmacological or psychotherapeutic treatment in primary care (Maxwell, 2005a; May et al., 2004).

Another qualitative study (McConnell, Baker, & Marks, 2005) was conducted in the United Kingdom. It examined health visitors’ professional formulation of the term ‘postnatal depression’ and how they understood postnatal depression in relation to how

the women they worked with understood it. Health visitors conceptualized symptoms as ‘normal’ and ‘expected’ distress when they felt women were surprised, upset or shocked to hear their experiences pathologized as postnatal depression. In contrast, symptoms were conceptualized as more medical when health visitors felt women had severe problems or were not admitting to their difficulties. Psychosocial factors were acknowledged as contributing to postnatal depression, especially in less severe cases. Healthcare providers drew upon diverse conceptual frameworks to make sense of postnatal depression and to help women understand their situation.

A qualitative study conducted by Mivsek, Hundley, and Kiger (2008) explored Slovenian midwives’ and nurses’ knowledge of and attitude towards postnatal depression and other mental health problems in the postpartum period. Two focus groups were held, each with five participants from a maternity hospital and a community health center. Results suggested that participants misunderstood the signs and symptoms of postnatal depression and had a hard time distinguishing between postnatal depression and maternal blues. Some participants were unaware of risk factors contributing to postnatal depression, although some mentioned that personality and younger age determined a woman’s susceptibility to postnatal depression.

A qualitative study (Edge, 2010) investigated views of perinatal mental healthcare among healthcare providers who work with Black and minority ethnic women in the United Kingdom. Findings indicated that the majority of the 42 general practitioners, midwives, hospital doctors, and health visitors, and senior staff felt they lacked relevant knowledge, skills, and training to manage maternal mental health problems, including postnatal depression. Feelings of incompetence and lack of confidence characterized

healthcare providers' reports. It was concluded that the way healthcare providers conceptualized postnatal depression through their beliefs, attitudes, and knowledge underscored how it was diagnosed, treated, and managed.

Quantitative Studies. A quantitative, descriptive study (Small, Johnston, & Orr, 1997) looked at the knowledge and perceptions of postnatal depression among medical students in an Australian University. Out of the 166 four year students and 141 sixth year students who received a 5-question survey, 44.6% and 42.6% of each group, respectively, returned completed surveys. The majority of students reported that hormonal factors or a 'tendency to depression,' as well as poor social support are the leading contributors to postnatal depression, at the exclusion of social and experiential factors like poor physical health, financial concerns, or lack of time/space for self. Sixth year students who reported hormonal factors and a 'tendency to depression' as the leading contributors also listed seeking medical help as the leading advice they would offer women. Other advice reported by these students was to seek counseling and find someone to talk to.

Another quantitative study in Australia examined knowledge and awareness of perinatal depression in health professionals who work with women in the perinatal period (Buist et al. 2006). A random sample of general practitioners, maternal child health nurses, and midwives in 43 separate maternity services throughout Australia were invited to participate. Two self-report questionnaires were mailed to eligible participants, as well as a vignette and follow-up questions based on a hypothetical woman who is experiencing an antenatal or postnatal mood disorder. Completed questionnaires were returned from 246 general practitioners, 338 maternal and child health nurses, and 569 midwives, reflecting a response rate of 23%, 55%, and 57%, respectively. General

practitioners were more likely than midwives or nurses to provide an “accurate depression diagnosis” for the character in the vignette. Other response options were not described in the study. Both nurses and general practitioners were significantly more likely than midwives to believe the character needed help and to prescribe antidepressants. Midwives and nurses were more likely to view the vignette as a case of psychosis and significantly more midwives reported choosing antipsychotics to treat the character than general practitioners.

Similar to the studies in Australia, a quantitative study conducted by Wiley, Burke, Gill, and Law (2004) assessed knowledge and views about postnatal depression among pediatricians in the United States. Of the 1200 eligible pediatricians sampled through a mailed survey, 389 responded (32%). In the survey, postnatal depression was distinguished from maternal blues. It was defined as depressive symptoms of a moderate severity lasting for longer than two weeks after the delivery. The majority (80%) estimated that the incidence of postnatal depression in their own practice was less than the accepted incidence in the general population of 10 to 15% (O’Hara and Swain, 1996); 45% of pediatricians estimated the incidence of postnatal depression in their practice to be less than 5%. Almost all pediatricians felt that postnatal depression is a validated diagnosis (94%), that it causes lasting effects (83%) and that effective treatment exists (73%). About 10% of pediatricians reported that they would not seek treatment for depression themselves due to a concern about stigma attached to the diagnosis. About two-thirds of pediatricians expressed a lack of confidence in their ability to recognize a woman with postnatal depression in their practice. The belief that postnatal depression

causes lasting effects was independently associated with the intent to begin screening in the next year in a multiple logistic regression model.

Another quantitative study was conducted by Lepper, DiMatteo, and Tinsley (1994) to measure the knowledge and awareness of postnatal depression among 725 obstetric nurses and 204 obstetricians in the state of California in the United States. Questionnaires were mailed to these healthcare providers who were registered with a professional organization. Results indicated that nurses tended to be more aware of the impact of postnatal depression on the woman and her family compared to physicians. Physicians receive specialized training that typically does not emphasize emotional reactions to childbirth. Female physicians were slightly more likely to be aware of the impact of postnatal depression on the woman than male physicians. Authors interpreted this finding as a result of female physicians possibly identifying more with women patients than their male counterparts. Younger, female physicians recognized psychosocial antecedents to postnatal depression to a greater degree than older, male physicians.

A quantitative study conducted in the United States (Thomas, Sleath, Jackson, West, & Gaynes, 2008) examined the relationship between characteristics of physicians who routinely provide care for women experiencing postnatal depression and their treatment preferences for managing symptoms. A self-administered postal survey was sent to 600 obstetricians/gynecologists and 600 family practitioners in North Carolina, USA. Out of 1,200 total participants eligible, 491 (42%) responded. The survey measured attitude towards postnatal depression through a likert-response scale to three items: 1) "I prefer to treat postpartum depression with referral", 2) "Diagnosing

postpartum depression is my responsibility”, and 3) “Treating postpartum depression is my responsibility.” The majority of physicians perceived diagnosis and treatment of postnatal depression as their responsibility. Antidepressants were the most popular form of treatment for physicians, reflecting a biomedical model of postnatal depression. Male physicians were less likely to refer a woman to a social worker or a psychologist for counseling, but were more likely to refer to a psychiatrist. This may also reflect an underlying understanding of postnatal depression as a biomedical problem. Older physicians and non-white physicians were less likely to prefer treatment of postnatal depression with antidepressants.

A quantitative study (Seehusen, Baldwin, Runkle, & Clark, 2005) conducted in the state of Washington in the United States examined how frequently family physicians screen for postnatal depression, what methods they use, and what influences screening frequency. The results of the study illuminated how healthcare providers conceptualize postnatal depression. Of 594 family physicians in a state database who were mailed a 25-item questionnaire, 362 (60.9%) returned the survey. Of those, 298 physicians who work with women in the perinatal period were included in the analysis. In general, postnatal depression was recognized as a common, serious, and treatable disorder. Just over 90% said it is serious enough to warrant screening, 86% said it was common enough to warrant screening, and over 95% of physicians believed therapy for postnatal depression is effective and that postnatal depression affects children and spouses. After controlling for other variables in a multivariate analysis, the belief that postnatal depression is common enough to warrant screening was statistically associated with more frequent screening at postpartum gynecologic visits.

Summary

Qualitative and quantitative studies that examined healthcare providers' conceptualizations of postnatal depression were reviewed. Many of the quantitative studies were hampered by low response rates and may have been biased by the sampling technique. In the mailed surveys, those who are interested in postnatal depression may have been more likely to return the surveys and respond in a certain way. Given such limitations, findings should be interpreted with caution.

Health care providers worked from a variety of conceptual frameworks to understand postnatal depression. Some physicians and health visitors believed postnatal depression had a psychosocial etiology (Chew-Graham et al., 2008; Lloyd & Hawe, 2003; McConnell et al., 2005), especially younger, female physicians compared to older, male physicians (Lepper et al., 1994). Other healthcare providers, including medical students, believed postnatal depression was strongly influenced by hormonal factors (Small et al., 1997; Thomas et al., 2008).

Treatment preference for postnatal depression largely included biomedical approaches, like antidepressants (Thomas et al., 2008; Small et al., 1997; Buist et al., 2006). Although healthcare providers' treatment preferences often mirrored whether they viewed postnatal depression as having a biochemical or psychosocial etiology, other factors like lack of resources to which women could be referred influenced treatment preferences (Chew-Graham et al., 2008).

Some providers were not clear on common risk factors, diagnostic criteria, and incidence for postnatal depression (Small et al., 1997; Miy et al., 2008; Wiley et al., 2004; Buist et al., 2006). For other healthcare providers, postnatal depression was

acknowledged as a legitimate diagnosis and with lasting effects (Buist et al., 2006; Weber et al., 2004; Wiley et al., 2004).. Family physicians who believed postnatal depression is common were more likely to screen for it (Seehusen et al., 2005).

2.3 Policy for Postnatal Depression

Postnatal depression is a public health problem in low and middle-income countries (Almond, 2009). Given the accumulating evidence of the impact of postnatal depression and other maternal mental health problems on women and children, Hanlon (2012) proposes that the next step is to consider options for intervention. Hanlon (2012) summarized the evidence on maternal mental health interventions and suggested areas of focus on, including training non-specialist health professionals to deliver mental healthcare, integrating psychosocial approaches like cognitive-behavioral therapy and psycho-educational groups into primary care during pregnancy and the postpartum period, using home-based interventions through community-based health workers, and supporting stepped-care protocols in health facilities.

Mental-health policies have the potential to shape interventions for women who experience postnatal depression. A mental health policy, as defined by the WHO (2013b), establishes a vision for the future and outlines a plan to be put in place to manage and prevent mental and neurological disorders. Mental health policies are important for the prevention of human rights violations and discrimination, as well as for coordinating programs and services related to treatment and management of those who suffer (WHO, 2013b), yet 40% of countries have no mental health policy and 64% do not have mental health legislation or have legislation that is more than 10 years old (WHO, 2005b). In this section, I review expert guidance related to postnatal depression and other

maternal mental health problems from the WHO, UNFPA, and other leaders in the field. The guidance provides a framework for considering the policies that exist in Mexico and other low- and middle-income countries.

Global Guidance

World Health Organization. Guidance is found in the consensus statement from the first international expert meeting convened in June 2007 by the WHO and the UNFPA (WHO, 2009a). The consensus statement is entitled, “Maternal mental health and child survival, health and development in resource-constrained settings: Essential for achieving the Millennium Development Goals.” Seventeen experts from high and low- and middle-income countries asserted that maternal mental health problems are predominantly socially determined and that the impact of mental health problems constitutes a severe burden for women and children. According to the consensus statement, maternal mental healthcare should take place within existing health services. Interventions to improve mental healthcare and to promote child health and development include early detection, psycho-educational activities, maternal-infant bonding exercises, programs to improve partner relationships and reduce intimate partner violence, solution-focused therapies, social support, improved access to education and vocational training, and stepped-care protocols which may comprise low-cost psychotropic medication for women who are unresponsive to psychosocial interventions.

A global review of the literature related to maternal mental health followed the expert meeting in 2009 (WHO, 2009b). It included a summary of proposals for policy development, especially in low and middle income countries. Policy-makers should consider drafting policy to screen for risk factors of poor mental health in primary

perinatal healthcare. Mental health should also be included in safe motherhood initiatives, programs and recommendations for standard care.

Within WHO documents entitled, “Pregnancy, Childbirth, Postpartum and Newborn Care: A guide for essential practice” (WHO, 2006) and “WHO Recommendations for Interventions for Improving Maternal and Newborn Health” (WHO, 2009), guidance for healthcare providers related to the care and management of postnatal depression is laid out. The two documents are part of WHO’s Integrated Management of Pregnancy and Childbirth (IMPC) program and are supported by UNFPA, UNICEF and the World Bank as an approach to reducing maternal and perinatal mortality and morbidity. The former document outlined symptoms of postnatal depression, according to ICD-10 criteria. It indicated that postnatal depression usually presents after the first week. It also recommended that healthcare providers provide emotional support to women and refer them to emergency care in severe cases. In the latter document, recommendations include recognizing danger signs, including those of maternal blues and depression. Problems with moderate postnatal depressive symptoms should be taken care of in primary care by a routine health worker.

National Institute for Clinical Excellence (NICE). The NICE in the United Kingdom regularly publishes guidance on perinatal mental health. It is referenced by clinicians and researchers in other parts of the world and is considered by many of them to be the gold standard for postnatal depression interventions. The guideline suggests that at a woman’s first contact with health services in both the antenatal and postnatal periods, healthcare providers should ask questions about prior episodes of psychiatric disorders or prior psychiatric treatment. Additionally, healthcare providers should ask

two questions at 4 to 6 weeks and 3 to 4 weeks postpartum. They include: 1) During the past month, have you often been bothered by feeling down, depressed or hopeless? 2) During the past month, have you often been bothered by having little interest or pleasure in doing things? If a woman affirms either question, the healthcare providers should ask the woman if she feels she needs or wants help. Stepped-care protocols for psychological therapies, antidepressant medication, and referral should take place.

Summary

The global guidance that has been issued by the WHO and the NICE for addressing postnatal depression and other maternal mental health problems proposes two main categories for improvement: Integration of maternal mental health into primary care, including systematic screening and stepped-care protocols; and the integration of maternal mental healthcare into cross-sectoral initiatives, including in programs to improve partner relationships, reduce intimate partner violence, and improve access to education and vocational training. Mental health policy is critical for establishing these types of programs and services (WHO, 2013b).

Policies of Interest in Mexico

Several layers of federal, state, and local public-sector healthcare facility policies related to physical and mental health are relevant to examine in Mexico: 1) national health plans (programas nacionales de salud) and national action plans (programas nacionales de acción); 2) laws (leyes); 3) regulations (reglamentos); 4) clinical practice guidelines (guías de practica clínica); and 5) policies in local public-sector healthcare facilities.

National health plans and national action plans are created every six years with the entrance of a new political administration and in response to the incoming president's National Plan of Development. For the national health plan, multiple governmental sectors and community organizations work together to develop measurable objectives, strategies and actions to achieve improved health in the society. National action plans include specific strategies and actions for accomplishing established objectives.

Laws and regulations addressing health are based directly on the Mexican constitution; the 4th article of the constitution guarantees the right to health. Laws begin as initiatives that are drafted by representatives and senators. They are subsequently approved by Congress and signed into law by the president. Laws stipulate what cabinet or branch of the government is responsible for enforcement of the law, such as the Secretary of Environment or the Secretary of Health. There are regulations for every law. Regulations define the processes and procedures for compliance to the laws. They are created by the cabinet or branch that is responsible for the law's enforcement.

Clinical practice guidelines are tools to promote quality healthcare and are not legally binding documents. They are comprised of recommendations, based on the best available evidence and on laws, regulations and other rules established through congress, to aid healthcare providers and patients in making informed healthcare decisions (Fuentes et al., 2000). In Mexico the guidelines are developed under the auspices of the National Center of Technological Health Excellence (Centro Nacional de Excelencia Tecnológica en Salud [CENETEC]). The guidelines are applicable in all of Mexico's healthcare systems.

2.4 The Mexican Context

Mexico provides an opportunity to critically examine healthcare providers' conceptualizations of postnatal depression, as well as the terrain of policies related to postnatal depression in a resource-constrained setting. Only 27% of women over 18 sampled in a national survey in Mexico who reported a depressive episode in the year prior were diagnosed by a healthcare provider (Instituto Nacional de las Mujeres [INMUJERES], 2006), suggesting the need to more closely examine relevant issues relating to the quality of care for women in Mexico. In this section, I provide an overview of Mexico's healthcare system. I also review studies that have examined the prevalence, risk factors, and interventions for postnatal depression in Mexico.

Overview of Mexico

Mexico is an upper middle income country located in North America (World Bank, 2013). According to the World Bank (2013), Mexico's population is about 116 million people. Just under half (44.2%) of its population have insufficient incomes to meet their basic needs, including inadequate education and limited access to housing or food (Consejo Nacional de Evaluación de la Política de Desarrollo [CONEVAL], 2008).

The culture in Mexico places a high value on women as mothers who support and care for the health and well-being of the rest of the family, even to the point of considering motherhood as the key function of womanhood (DiGirolamo & Snyder, 2008). Almost half (43%) of all Mexican women are of reproductive age (ages 15-40) years (INEGI, 2001) and women on average have 2.3 children during those years (World Bank, 2013). The reproductive years represent the peak onset of depression among

women, which is a leading cause of poor mental health and an important contributor to the global burden of disease (Prince et al., 2007).

Healthcare System. Health care is provided by several different healthcare systems. Those who have social security benefits through employment are able to receive healthcare through health systems such as Instituto Mexicano de Seguro Social (IMSS), Instituto de Seguridad y Servicios Sociales de los Trabajadores del Estado (ISSSTE), Petróleos Mexicanos (PEMEX), Secretaria de Defensa (SEDENA), Secretaria de Marina (SEMAR), and others. In contrast, many without formal benefits who are self-employed, unemployed, or who work in the informal sector receive healthcare through public-sector healthcare facilities. Since 2004, those who lack conventional social security benefits through employment have the opportunity to access a benefit package called *Seguro Popular* to receive services in public-sector healthcare facilities. There also exists an extensive and diverse private sector of healthcare services.

The healthcare delivery model for the public-sector is a tiered system of care. Primary care is focused on preventive services and non-emergency health concerns. It is where approximately 80% of health complaints are resolved, including mental health issues (Burr, Pino, Quiroz, & Martin-Lunas, 2011). Physicians within primary-care facilities are the first contact among those seeking mental-health services (INMUJER, 2006). Despite the need for mental-health services, less than 30% of the 12,000 primary-care clinics in Mexico are staffed with psychologists or psychiatrists (Secretaria de Salud, 2002). Secondary care is a network of regional hospitals with providers performing diagnostic tests, surgeries, and vaginal and cesarean births with brief postpartum recuperation of two-to-four days. Tertiary care is the network of hospitals and research

institutes that treat people with rare medical conditions and those needing the highest level of technology and attention. Women who give birth through vaginal or cesarean delivery in tertiary care are discharged between two and four days postpartum. The women do not return to the hospital where they gave birth for a follow-up appointment unless complications arise with the infant or woman or for the removal of stitches from a Cesarean delivery or for a family-planning appointment. To be treated in tertiary care, a patient must first enter a unit in primary or secondary care and get progressively referred to higher levels of care.

Postnatal Depression in Mexico

Prevalence. One community-based study based in the urban area of Monterrey, Mexico used the Edinburgh Postnatal Depression Scale (EPDS) and the Beck Depression Inventory (BDI-II) as measures to screen for postnatal depression. A prevalence of 14.3% was found among adult women and 16.5% among adolescent women recruited from a public-sector hospital that primarily serves low-income patients (de Castro et al., 2011). Other studies available in Mexico have reported prevalence of postnatal depression ranging from 1.8% to 32.6% (Romer-Gutierrez et al., 2010; Alvarado-Esquivel et al., 2010), reflecting important methodological differences, as well as the lack of homogenous and standardized procedures to measure postnatal depression. Problems with retention in these studies might have contributed to the disparate rates (Lara, Navarro, Navarrete, & Le, 2010a).

Risk Factors & Consequences. A community-based study among adolescent and adult women in Monterrey, Mexico found that postnatal depression is associated with poor social support, particularly for adolescents, giving birth to a female baby, lower

levels of education, and reported fear during labor (de Castro et al., 2011). A protective factor for postnatal depression among women in this sample was living with a partner or spouse, but the effect was only significant among adult women (de Castro et al, 2011). In a study of women aged 16 to 43, recruited from public hospitals in Durango, Mexico and the surrounding areas, several risk factors were associated with postnatal depression, including previous episodes of depression, anxiety and stress during pregnancy, history of trauma, poor quality of relationship with partner or abandonment by partner, unplanned pregnancy, and family problems (Alvarado-Esquivel, et al., 2010). Rates of postnatal depression were also higher among rural, non-insured women with low level of education (Alvarado-Esquivel, et al., 2010). In a population study of Mexican adolescents aged 13 to 19, the lack of a partner was significantly associated with depressive symptoms among women in the postpartum period (Lara et al, 2012). There was also a relationship between depressive symptoms in adolescents during pregnancy and symptoms at seven months to one year postpartum (Lara et al., 2012). Lack of maternal efficacy, or a woman's perception of her ability to competently take care of her infant, was also associated with postnatal depression among a sample of Mexican women (Navarro et al., 2011).

Few studies have studied the consequences of postnatal depression among Mexican women. One study conducted among Mexican women without social security benefits has demonstrated a negative association between postnatal depressive symptoms and a woman's decision to continue exclusively breastfeeding (Flores-Quijano et al., 2008).

Interventions. There are few studies addressing treatment and interventions for postnatal depression among Mexican women. One study conducted by Lara, Navarro, and Navarrete (2010b) aimed to evaluate the effectiveness of psycho-educational intervention to prevent postnatal depression. It was delivered to high-risk women in pregnancy, recruited from three community medical centers. There was a trend suggesting that participants in the intervention group had a larger reduction of depressive symptoms at 6 weeks and 4-6 months postpartum, as measured by the BDI-II, than participants receiving usual care in the control group. A treatment effect on depressive symptoms, however, could not be confirmed because of substantial attrition in the study population. This study was the first randomized-control depression prevention trial in high-risk Mexican women during pregnancy.

The first postnatal depression clinic in Mexico was founded in the department of obstetrics and gynecology within a national hospital (IMSS) in Mexico City; the clinic is significant because it does not exist in an exclusively psychiatric setting. Arranz et al. (2008) presented a case study of a woman experiencing moderately severe postnatal depression who was successfully treated in the clinic. The woman and her infant were interned for 10 days in the clinic during which she received daily sessions of cognitive-behavioral therapy and began an antidepressant treatment lasting for six months. A multidisciplinary team attended her and her infant. They included personnel from obstetrics and gynecology, psychiatry, psychology, pediatrics.

2.5 Conceptual Framework

I used components of Kleinman's (1980) Explanatory Model of Illness, Entman's (1993) functions of framing, the Theory of Planned Behavior (Ajzen and Madden, 1986),

and a typology of symbolic and material policies elaborated by Howlett(2000) and Hood (1986) to examine healthcare providers' conceptualizations of postnatal depression and whether and how postnatal depression is addressed in policies.

Explanatory Model of Illness

According to Kleinman (1980), “explanatory models are the notions about an episode of sickness and its treatment that are employed by all those engaged in the clinical process” (Kleinman, 1980, p. 105). Explanatory models guide choices among available treatments and casts social and personal meaning on an episode of sickness (Kleinman, 1980). The basic components of an explanatory model of illness are: 1) assignment of meaning to the illness episode in terms relevant to the individual, 2) strategies for choosing and evaluating treatments, 3) communication used to navigate and manage the illness, 4) healing activities, and 5) management of illness outcomes, whether they be cure, recurrence, chronic illness, impairment or death. Each explanatory model of illness contains explanations for etiology, time and mode of onset of symptoms, pathophysiology, course of sickness (including severity and type of sick role – acute, chronic, impaired, etc.), and treatment.

Functions of Framing

Entman (1993) suggests that frames are a way of communicating certain aspects of a perceived reality to promote a particular problem definition. Moreover, people who frame the same problem in different ways are paying attention to different characteristics of the problem (Schon, 1983). Frames call attention to a certain feature of a perceived reality while simultaneously directing attention away from other aspects (Entman, 1993).

Lloyd and Hawe (2003) argue that understanding the way those who work with women in

the postpartum period frame postnatal depression may provide an opportunity to set the problem more effectively and to propose solutions that will more successfully address it. According to Entman (1993), frames have four important functions: 1) definition of the issue as a problem with respect to its costs; 2) identification of the source of the problem or what brings it about; 3) the evaluation of the source of the problem and its effect; and 4) identification of the remedies or solutions that follow logically from the definition, source, and evaluation.

Theory of Planned Behavior

The Theory of Planned Behavior (TPB), as developed by Ajzen and Madden (1986), provides a framework to understand healthcare providers' intent to detect and treat women with postnatal depression. The TPB is an extension of the Theory of Reasoned Action (Ajzen & Fishbein, 1980). The TPB posits that behavioral intention is the strongest determinant of behavior, such the detection or treatment behavior for postnatal depression. Behavioral intention is influenced by attitude towards the behavior, the subjective norm, and perceived control over performance of the behavior. Attitude towards the behavior is determined by behavioral beliefs. For example, providers' attitudes are determined by their belief about whether engaging in detection or treatment behavior will yield results they deem as positive. Subjective norm is determined by individuals' beliefs about whether referent others approve or disapprove of a certain behavior. For example, subjective norms are determined by whether or not providers feel their colleagues, superiors, or important others approve or disapprove of detection and treatment for postnatal depression, and whether providers are motivated to comply with what others say or feel. Finally, perceived control is determined by individuals'

perception of facilitators and barriers to performance of a certain behavior, such as detection and treatment of postnatal depression (Glanz et al., 2008).

An essential step in the application of this model is to conduct interviews with the target population about their perception of behavioral, normative, efficacy, and control beliefs for a certain behavior like detection and treatment of postnatal depression. After those beliefs have been identified, appropriate measures can be developed and applied to the target population to test what beliefs best explain behavioral intention. Ultimately, education and training can be developed with the goal of targeting specific behaviors for change (Glanz et al., 2008).

Typology of Symbolic and Material Policies

Public policy is a statement by a government of what it intends to do or not to do. It can be linked to actions to be taken (Frongillo, 2011). Lasswell (as cited in Howlett, 2000) emphasized the role of policy in influencing and manipulating symbols. If a policy does not have an explicit instrument, meaning a device used by governments to implement policies, then it is symbolic. Symbolic policies articulate aspirations and goals but will not necessarily lead to implementation of any new actions (Schroff, et al., 2012). Resolutions are good examples of symbolic policies. Material policies, in contrast, likely lead to implementation of actions. There are two types of material policy instruments: substantive and procedural. Hood (1986) developed a taxonomy of substantive policy instruments, or tools which directly affect the production, distribution, and consumption of goods and services in society. Howlett (2000) developed a taxonomy of procedural instruments, or tools which affect the behavior of actors involved in policy implementation. Substantive instruments include licenses, trainings, public

enterprises, and grants, among others (Howlett, 2011). For example, the Melanie Block Stokes MOTHER Act passed as part of the Affordable Care Act in the United States in 2010 includes grant money for research into the causes, diagnoses and treatments for postnatal depression and psychosis. Procedural instruments may include agreements, government reorganization, and advisory committees, among others (Howlett, 2011), such as a statewide work group on maternal mental health problems that was established in Oregon in the United states in 2009.

Conceptual Model

Components from Kleinman's (1980) Explanatory Model of Illness, Entman's (1993) functions of framing, the Theory of Planned Behavior (Ajzen and Madden, 1986), and a typology of symbolic versus material policies elaborated by Howlett(2000) and Hood (1986) provided a foundation for this research project. In Aim #1, I used the Explanatory Model of Illness to guide question development for an interview guide that was used in semi-structured interviews to understand the experiences of postnatal depressive symptoms from the perspective of several Mexican women. Data from the interviews were used to write reality-based vignettes which were presented to healthcare providers. I used Entman's functions of framing to base follow-up questions used in semi-structured interviews with healthcare providers. I used the Theory of Planned Behavior to loosely guide question development in the remainder of the interview guide on healthcare providers' attitudes, perceived control, and subjective norms about detection and treatment of postnatal depression. In Aim #2, I based analysis on a typology of symbolic and material policies elaborated by Howlett (2000) and Hood

(1986) to examine whether and how postnatal depression is addressed in policies in Mexico overall and specifically in Mexico City.

2.6 Research Project Rationale

Postnatal depression is a significant public health issue in low- and middle-income countries, including Mexico (Almond, 2009). The WHO and UNFPA have recognized the burden of postnatal depression on women, children, and families and they have issued guidance on the care and management of those who experience the condition and who are at risk of experiencing it (WHO, 2009a); however, evidence suggests postnatal depression and other maternal mental health problems largely remain undetected and untreated (WHO, 2008). In a consensus statement from an international expert meeting in 2007, the WHO and UNFPA identified two main strategies to address postnatal depression and other maternal mental health problems: 1) education and training for healthcare providers who interface with women in the perinatal period, and 2) development of a policy framework for the protection of maternal mental health (WHO, 2008a).

Preliminary work needs to be conducted to successfully address postnatal depression in Mexico. In terms of the first strategy, research suggests that the way healthcare providers conceptualize postnatal depression affects detection and treatment of it (Seehusen et al., 2005; Lloyd & Hawe, 2003; Chew-Graham et al., 2008; McConnell et al., 2005; Edge, 2010; Small et al., 1997; Buist et al., 2006; Wiley et al., 2004; Thomas et al., 2008). Understanding how healthcare providers conceptualize postnatal depression provides an opportunity to educate and train them to possibly respond more effectively to women's needs (Lloyd and Hawe, 2003). In terms of the second strategy, it is important

to assess the policies that exist in Mexico regarding postnatal depression. It provides a window into the options that are being used to affect the quality care of women who experience or who are at risk of experiencing postnatal depression. Understanding what currently exists and how postnatal depression is addressed creates a base of knowledge on which the next steps of policy development can be constructed (Brewer & DeLeon, 1983).

Numerous studies have documented the deleterious impact of postnatal depression on the mental and physical health of women, children and families (Patel et al., 2012; Oates, 2003; WHOa, 2005; Beck, 1998; Cooper, Murray, & Stein, 1993; Murray, 1992; Grace & Sansom, 2003; Patel et al., 2007). Global guidance from the WHO and UNFPA have indicated strategies to address postnatal depression and other maternal mental health problems, giving us an important opportunity to examine how the strategies should be implemented in the context of Mexico.

CHAPTER 3

RESEARCH DESIGN AND METHODS

3.1 Overview of Research Design

The purpose of applied research is to contribute knowledge that will help people intervene in a societal problem (Patton, 2001). In the case of this research project, I was interested in contributing context-specific knowledge that can be used to successfully implement strategies highlighted by the WHO and UNFPA to address postnatal depression in Mexico. Qualitative research methods were useful in this project because they permit in-depth inquiry into selected issues. I was able to spend seven months in Mexico from January 2012 to August 2012 which allowed me time to examine healthcare provider conceptualizations of postnatal depression and collect policies relevant to postnatal depression.

Units of analysis are important to qualitative research design (Patton, 2001). In Aim #1, which seeks to understand healthcare providers' conceptualizations of postnatal depression, the units of analysis were the individuals, or more specifically, physicians, nurses, social workers, and psychologists in primary, secondary, and tertiary levels of care in public-sector healthcare facilities in Mexico City and Yautepec, Morelos, Mexico. I was interested in how each healthcare provider understood postnatal depression within their practice setting. I also examined the data by demographic group. This unit of analysis allowed me to compare males with females, professional cadre, level of care, and location. Physicians, nurses, and social workers were purposefully selected for maximum

variation and psychologists were later added based on theoretical sampling; the providers selected were interviewed because they were “information-rich” based on their experience working with women in the postpartum period. In Aim #2, which seeks to ascertain whether and how postnatal depression is addressed in policies, the units of analysis were the selected policy documents at federal, state, and local public-sector healthcare facility levels in Mexico overall and specifically in Mexico City, specifically the content area that discussed postnatal depression. I also examined policies within a certain timeframe, thus the timeframe also became a unit of analysis. I was able to make conclusions about the landscape of postnatal depression in Mexico based on data from individuals, groups, the state, and the federal government.

3.2 Research Methods for Aim 1

Theoretical Grounding and Approach

I used grounded theory to understand the landscape of healthcare providers’ conceptualizations of postnatal depression within their practice setting. Grounded theory, as established by Glaser and Strauss (1967), is a methodology used to explore qualitative data and discover explanatory, theoretical frameworks of observed phenomena and social or psychological processes. Grounded theory was further developed by Charmaz (2006) who views theories as constructed from the data, rather than discovered in the data. For Charmaz, theories constructed from the data are “interpretive portrayals” of the studied phenomena built on research participants’ world view as well as the researchers’ assumptions which are brought to the research process and analysis; in contrast, Glaser and Strauss do not explicitly discuss the role of the researcher in constructing theory. According to Charmaz (2006), grounded theories are constructions of reality, assembled

“through [researchers’] past and present involvements and interactions with people, perspectives, and research practices” (p. 10). In this study, I used the tradition of grounded theory developed by Charmaz (2006), recognizing the researchers as instruments through which data are transmitted and interpreted. The results were constructed from my perspective as a US-born woman who is not native to Mexico and who has not had children or experienced depression, as well as the perspectives of my dissertation committee and others who read and provided feedback on the manuscript.

I also tried to incorporate an emic perspective, or interpretations existing from within a culture, into the study. Because depressive symptoms are known to vary significantly across cultures, it was important to know how and what symptoms are expressed in the Mexican context and to examine how a woman’s cultural perspective “provides a coherent statement for what some experience means” (Keyes, 1986).

The goal of the study was to understand healthcare providers’ knowledge frameworks consisting of beliefs, rules, ideas, and concepts used to conceptualize postnatal depression in their practice settings (Spradley, 1972). Grounded theory was a good choice for accomplishing this goal because one purpose of grounded theory is to organize concepts rooted in the data and specify relationships between and among the concepts in order to more fully understand the problem from the participants’ perspectives. Healthcare providers may view postnatal depression differently depending on the basic premises and presuppositions used to organize and give meaning to experience (Goffman, 1974), which may include professional training, gender, facility affiliation, and location.

Data Collection Procedures

Sampling. Nurses, social workers, and physicians, including internists, obstetricians, and general practitioners, were purposively selected to be included in the study because of their contact with women during postnatal care. Theoretical sampling was employed to include interviews with psychologists. I recognized a need to include psychologists after I reviewed the first twelve interviews. Theoretical sampling is a central tenant of grounded theory based on the need to gather more data to explore a category that has emerged from collected data (Coyne, 1997). Psychologists were recruited and interviewed, based on the need to gather more data from these professionals since physicians and nurses referred to psychologists when discussing postnatal depression.

Eligibility. A healthcare provider was eligible if she or he had professional contact with women in the postpartum period, which was considered to be within one year after delivery (Stowe et al., 2005). I did not target specific obstetric or gynecological providers since women may have interaction with a variety of providers within the first year postpartum.

Recruitment. I recruited healthcare providers from five healthcare facilities within the three levels of care in Mexico's public-sector from May to July 2012. Participants included physicians, nurses, social workers, and psychologists working in public-sector healthcare facilities in Mexico City and Yautepec, Morelos, Mexico. They were recruited from the following facilities: one primary health center located in Mexico City; two secondary women's hospitals located in Mexico City and Yautepec, Morelos, Mexico and the tertiary National Institute of Pediatrics and the National Institute of

Perinatology both located in Mexico City. Table 3.1 shows the health facilities by level of care and location.

Table 3.1 Healthcare Facilities by Level of Care and Location

	Primary level of care	Secondary level of care	Tertiary level of care
Mexico City, Mexico	Healthcare Center	Women’s Hospital	National Institute of Perinatology National Institute of Pediatrics
Yautepec, Morelos, Mexico	--	Women’s Hospital	--

Teams in Mexico City and Yautepec, Morelos, Mexico helped with recruitment and data collection within the facilities. In the women’s hospital in Yautepec, Morelos, a team of two local public-health researchers and I received prior authorization from hospital administration to approach healthcare providers in hallways, waiting rooms, or offices and invite participation in the study. The same approach was used in the primary healthcare center in Mexico City. If healthcare providers were willing to participate, they were invited to be interviewed at that moment or to schedule a time later the same day. In the women’s hospital in Mexico City, appointments were made by a supervisor among her staff. I then went to the location and conducted the interviews. At the National Institute of Perinatology, I approached healthcare providers in hallways or offices and invited participation in the study. A supervisor also helped by making appointments among physicians. In the National Institute of Pediatrics, I trained a group of four supervisory social workers to conduct the in-depth qualitative interviews among their

respective social work staff. A one-hour training session was held to instruct the social workers on appropriate administration of the interview guide.

I was able to enter the facilities included in the study because of the assistance of several local public health professionals. I was able to enter the National Institute of Pediatrics and the Women's Hospital in Mexico City because I held an hour-long information session about the study with Dr. Juan Pablo and Adelaida Solís from the Institute of Pediatrics who invited healthcare personnel from their own facility and surrounding public-sector healthcare facilities in Mexico City to attend. The facilities represented were Hospital Juárez de México, Hospital Nacional Homeopática, Hospital General de México, Hospital General Doctor Enrique Cabrera, Hospital Maternal Infantil, Hospital General Doctor Manuel Gea González, Hospital Maternal Infantil Topilejo, Hospital de la Mujer, and the Secretaria de Salud del Distrito Federal. After I presented the study, I asked for interested volunteers to help with recruitment of eligible participants in their respective facilities. Healthcare personnel from the National Institute of Pediatrics and the women's hospital in Mexico City volunteered and I followed-up with them to discuss necessary permissions and how recruitment would take place within their facilities.

I was able to enter the primary care health center and the National Institute of Perinatology in Mexico City because, without an appointment, I personally visited the facilities to introduce myself, speak about the project, and ask for permission to recruit healthcare providers who worked at the facilities. The director of the primary care health center, Dra. Martha Mandujano Valez, instructed I speak with her supervisor who granted me permission to enter the facility and recruit participants. The director of the

department of psychology at the Institute of Perinatology, Dr. Francisco Morales Carmona, facilitated the submission of my project to ethics review board who subsequently granted me permission to enter the facility and recruit participants. I was able to enter the women's hospital in Yautepec, Morelos because Dra. Leonor Rivera Rivera at the National Institute of Public Health facilitated conversations between me and the hospital director which led to permission for me to enter the facility and recruit participants. The study was approved by the Institutional Review Board of the University of South Carolina.

I stopped recruiting at 64 participants because simultaneous analysis of overall data did not yield new insights or categories, referred to as theoretical saturation. At this point, interviews with physicians, nurses, social workers, and psychologists had taken place in each level of care. Three interviews were excluded from analysis: one because the participant gave obviously contradictory statements and thus did not appear to be truthful, one because a member of the research team had not been trained adequately on administration of the interview guide, and one because we had limited access to a transcriptionist and, by mistake, failed to transcribe the interview. The final sample was comprised of 61 healthcare providers, consisting of 18 physicians, 17 nurses, 17 social workers, and nine psychologists.

Interview Guide. To elicit information on how healthcare providers conceptualized postnatal depression, a two-part interview guide was created. In the first part, a brief vignette based on a sample of Mexican women's personal accounts of postnatal depression was presented to healthcare providers. In the vignettes and follow-up questions I did not use the term 'postnatal depression' to allow for healthcare

providers' emic perspectives to emerge. In the second part of the interview guide, I transitioned into asking healthcare providers about their understandings of postnatal depression specifically.

Part #1 of Interview Guide. The first part of the interview guide was based on a reality-based vignette. The aim of the vignettes was to capture a sample of Mexican women's experiences with postnatal depressive symptoms. Questions followed the vignette to explore healthcare providers' reactions to the story, namely whether symptoms were conceptualized as a problem and, if so, how it was conceptualized. Follow-up questions were loosely based on Entman's functions of framing. To provide structure to analyze a particular problem, Entman suggests investigating the presentation of a problem, its source, the causal agents, and the treatment, as well as what makes it problematic (Entman, 1993).

In order to develop the reality-based vignettes, I conducted brief, semi-structured interviews with nine Mexican women about their experiences in the postnatal period: seven were conducted with women from Yautepac, Morelos; two women were interviewed in Mexico City. Morse (1994) suggests using at least six participants in studies trying to understand a particular experience. The average age for the sample of women was 27. This part of the study was also approved by the Institutional Review Board of the University of South Carolina (Appendix A).

Women were recruited in the following ways: In the women's hospital in Yautepac, Morelos, the team of two public-health researchers and I approached women in the general waiting room. Women were eligible if they had given birth in the past nine months, but not less than one month prior to the interview. In Mexico City, women were

introduced to me by a local contact who was familiar with the women and knew they had just given birth. I visited them in their homes. If women agreed to participate and signed an informed consent form, they were invited to complete the Spanish-translated, 10-item EPDS, validated for use in Mexico (Alvarado-Esquivel, Sifuentes-Alvarez, Salas-Martinez, & Martinez-Garcia, 2006). Women who scored above 12 on the EPDS, which is a commonly used cut-off score to detect women with clinically-significant depressive symptoms (Cox et al., 1987), were immediately invited to participate in a one-on-one, semi-structured interview to discuss the postnatal period, depressive symptoms, and her perception of what puts her at risk for experiencing the symptoms. Two women were interviewed who did not meet the EPDS cut-off score in order to also gather information from women who did not have depressive symptoms.

Components of Kleinman's Explanatory Framework guided question development for the interview guide. Questions addressed how women name the experience of depressive symptoms, and their perception of cause, onset, consequences and severity. Questions also addressed what they fear about the symptoms, the problems it has caused for them, and their perception of appropriate treatment (Kleinman, 1980). The interview guide was reviewed and translated to Spanish by a bi-lingual law student. The semi-structured interview guide consisted of 23 questions (Appendix B). Certain demographic information also was collected: maternal age, education, household income, marital status, religion, type of delivery (Cesarean or vaginal), where the baby was born, whether the woman breastfeeds, and the baby's age (Appendix H). The interviews lasted between 15 and 30 minutes and were audio recorded with the woman's permission.

The audio files from all interviews were digitally uploaded to the qualitative software, NVivo 10 (QSR International Pty Ltd. Version 10, 2012). I limited the analysis to women who experienced depressive symptoms based on the EPDS cut-off score of 12, thus, two interviews were excluded; one from a woman in Mexico City who scored a two and one from a woman in Yauatepec, Morelos who scored a four. Seven interviews remained, one from Mexico City and six from Yauatepec, Morelos.

I listened to the audio files and transcribed the interviews. I analyzed the interviews from Mexico City and Yauatepec, Morelos separately. For each group of interviews, I proceeded in a two-step process suggested by Seidman (1998). First, I coded passages that corresponded to depressive symptoms and risk factors. Second, I wrote a vignette based on the common features that were compiled across interviews from Yauatepec, Morelos and within the one interview from Mexico City. The woman's own lived experiences, context, and words were used as much as possible, but pseudonyms were used to protect their identity. The women in the vignettes were hypothetically situated to receive healthcare from the public sector in an attempt to make the vignettes seem relevant and real to healthcare providers (Finch, 1987). Hughes (1998) contends the relevance of the story to the participant is a factor in how well a response matches how the participant would act in real life. Responses to vignettes are reported to resemble those made in actual practice settings (Kirwan, Chaput de Saintonge, Joyce, & Currey, 1983; Langley, Tritchler, Llewellyn-Thomas, & Till, 1991). The analysis and creation of vignettes were done in Spanish. Two vignettes were created, one from the interviews from Yauatepec, Morelos (Appendix D) and one from the interview in Mexico City (Appendix C). Each was about 5 sentences in length.

Part #2 of Interview Guide. Healthcare providers were asked to describe their definition of postnatal depression, what puts women at risk, and what symptoms indicate that something is wrong, as well as their perception of the causes and consequences of postnatal depression, methods of identification, perceived role when presented with depressive symptoms, and facility support for detection and prevention of postnatal depression. I used components of the Theory of Planned Behavior to loosely guide question development on healthcare providers' attitudes, perceived control, and subjective norms, which were conceptualized as important in shaping healthcare providers' behavioral intention of detecting and treating postnatal depression (Glanz et al., 2008).

Theoretical sampling may involve the practice of changing the interview guide as the study progresses. Strauss and Corbin (1990) point out, "Some questions or foci with which you entered the interview or observational site will quickly get dropped, or seem less salient, or at least get supplemented" (p. 183). This leads researchers to ask different questions to different participants as the sample expands. Consistent with theoretical sampling and grounded theory, the interview guide was adapted to include additional questions based on data that emerged from the concurrent analysis of the initial interviews. Because participants spoke in similar terms about postnatal depression and maternal blues, additional questions were included that asked healthcare providers to talk about what distinguished one condition from the other. Additional questions included healthcare providers' feelings of competence in detection of postnatal depression, the stigma, if any, associated with postnatal depression, and the lessons learned if healthcare providers had interacted with a woman at risk of or experiencing postnatal depression. I

initially added questions to the interview guide after I reviewed the data from the first twelve interviews; I occasionally added other questions throughout the data collection process.

I drafted the first version of the interview guide in English and then translated it into Spanish (Appendix F). It was then reviewed by experts from the National Institute of Public Health in Cuernavaca, Morelos, who helped to finalize the guide (Appendix G). After reviewing the initial twelve interviews and occasionally throughout data collection, the interview guide was revised to include additional questions generated from theoretical sampling. Some questions were also modified to improve the meaning in Spanish.

Data collection. Data collection consisted of one-time, one-on-one, semi-structured interviews with open-ended questions and a brief demographic questionnaire. With research teams, I conducted the interviews either in participant offices or department waiting rooms when participants indicated they had free time between consultations. We spent two to four hours in each facility per visit, making contacts with healthcare providers, waiting for a scheduled appointment time, and ultimately interviewing providers. The interviews lasted between 25 and 35 minutes on average. Due to the bustle of the healthcare setting, we experienced occasional, brief interruptions but interviews were quickly resumed, except for one interview that was rescheduled for the next day.

All interviews were audio recorded after participants signed the informed consent (Appendix E) and gave verbal permission to be recorded. Handwritten notes were generally not taken in order to pay full attention to what was being said during the interview. Occasionally a note was written to indicate an additional question that could

be added to the interview guide. If I did not understand a participant's response, I asked for clarification. I wrote field notes at the end of the day, but other members of the research teams did not. The field notes provided me with a way to record my thoughts about the interview, as well as any doubts about the language, the health facility, or questions on the context of the interview. I consulted with local experts to clarify my doubts, which occasionally led to small revisions of the interview guide to improve the meaning in Spanish. The audio recordings were transcribed verbatim by a professional transcriptionist in Spanish, with selected quotes later translated by the first author into English.

Out of a total of 64, I conducted 41 interviews among every cadre of healthcare provider and across all healthcare facilities. The two members of my research team in Yauatepec, Morelos conducted a total of 13 interviews at the women's hospital, which consisted of five nurses, six physicians, one social worker and one psychologist. The four members of my research team at the Institute of Pediatrics conducted ten interviews among social workers at the facility.

Analysis

Data were analyzed using Nvivo 10 software (QSR International Pty Ltd. Version 10, 2012). The method of analysis was through the construction of grounded theory (Charmaz, 2006). Initial coding is the naming of "segments of data with a label that simultaneously categorizes, summarizes, and accounts for each piece of data" (Charmaz, 2006). During initial coding, 11 transcripts were selected to represent physicians, nurses, social workers and psychologists in primary, secondary, and tertiary care, with attention to selecting both males and females. I had previously reviewed all transcripts and chose

the 11 transcripts based on richness of data. Instead of open-coding for emergent themes, data were sorted into pre-defined categories based on main sections of the interview guide. This is a variation on grounded theory suggested by Miles and Huberman (1994). Separating data into pre-defined categories was used as an organizational tool to facilitate coding in the next phase; I felt I needed a way to break-down the quantity of data to manageable groups. The pre-defined categories contained data that revealed 1) how healthcare providers defined postnatal depression through symptomatology, causal factors, and consequences; 2) healthcare providers' detection practices through screening instruments, observation or interviews; 3) how healthcare providers viewed treatment of postnatal depression in light of their professional role and structure of the facility, and 4) the description of the population of women seen in the practice setting. The first category reflected data that were largely pertinent to our research question.

After coding the 11 transcripts into the aforementioned categories, I conducted line-by-line coding within each category.. Line-by-line coding generated a more in-depth analysis of the ideas within each category. A constant comparative method, advanced by Glaser and Strauss (1967), was used to compare data against data within a category and establish distinctions between line-by-line codes.

At this point, I had a basic understanding of the content of the transcripts, thus I was able to initially develop research questions to guide the remaining analysis of the data. The research questions were refined with input from fellow researchers. The research questions are as follows: 1) how do physicians, nurses, social workers, and psychologists in the primary, secondary, and tertiary levels of care in public-sector healthcare facilities in Mexico City and Yauatepec, Morelos, Mexico conceptualize

postnatal depression within their practice setting? and, 2) how do these healthcare providers apply their understanding of social and behavioral antecedents in their conceptualizations of postnatal depression?

As the analysis progressed, the line-by-line codes that had been established through constant comparison in each category were applied to the remaining sample of transcripts. Line-by-line coding had produced “an incisive analytic framework” (Charmaz, 2006) or a flexible template of codes that could guide the analysis of the remaining transcripts. Some additional line-by-line codes were created if the data did not fit with a code already established. I kept analytic memos that identified emerging ideas to answer the research questions and for the development of focused codes, considered the second major phase after initial coding. Focused codes are more conceptual than line-by-line codes (Charmaz, 2006). They are useful to begin to synthesize and explain larger segments of data and to pull together ideas that coalesce within line-by-line codes. Focused codes were compared and contrasted through the constant comparative method, with attention to negative cases. When new focused codes were developed, the first author returned to earlier transcripts to apply or refine those codes within the data. The query tool in Nvivo 10 was used to look for the presence of codes according to cadre of provider, facility, gender, and location. This tool was helpful to identify the need for additional focused codes.

The development of theoretical codes followed focused coding. Theoretical codes helped define possible relationships among the focused codes. Because initial coding tends to fracture the data into “component parts or properties” (Charmaz, 2006), theoretical coding “weaves the fractured story back together” (Glaser, as cited in

Charmaz, 2006). In this paper, the theoretical codes clarify how physicians, nurses, social workers, and psychologists conceptualize postnatal depression within their practice setting and the use of social and behavioral antecedents in those conceptualizations.

3.3 Research Methods for Aim 2

Theoretical Grounding and Approach

I used a directed approach to the qualitative content analysis. The goal of a directed approach is to “extend conceptually a theoretical framework or theory” (Hsieh & Shannon, 2005). A directed approach has several purposes, including helping to focus the research question and shaping the initial coding scheme or relationship between codes (Hsieh & Shannon, 2005).

Data Collection Procedures

Policies of Interest. The federal, state, and local-level policies I examined were: 1) national health plans (programas nacionales de salud) and national action plans (programas nacionales de acción); 2) laws (leyes); 3) regulations (reglamentos); 4) clinical practice guidelines (guías de practica clínica); and 5) policies in local public-sector healthcare facilities.

Policies Included as Data. I searched for policies from January 2012 to August 2012. A three-pronged search strategy was used to identify a list of policies included in the analysis: 1) searches of an electronic governmental database of clinical practice guidelines that is part of the National Center of Technological Health Excellence (Centro Nacional de Excelencia Tecnológica en Salud [CENETEC]); 2) consultations with maternal and child health and mental health experts and lawyers from the National Institute of Psychiatry (Instituto Nacional de Psiquiatría), the National Institute of Public

Health (Instituto Nacional de Salud Publica), and the National Center for Gender Equality and Reproductive Health (Centro Nacional de Equidad de Género y Salud Reproductiva). I explained the aim of this paper to three experts and one lawyer and they directed me to policies they felt were relevant, which included national health plans, national action plans for perinatal health, state and federal laws regarding health and mental health, and regulations for the respective laws. Once I became aware that the policies existed, the search engine Google was used to retrieve them; and 3) speaking with healthcare providers in five public-sector healthcare facilities in primary, secondary, and tertiary care in Mexico City. The healthcare providers were participants in a separate qualitative study on postnatal depression conducted by the first author during the same time frame as data collection for this paper. At the conclusion of the interviews with doctors, nurses, social workers, and psychologists, I asked participants if they were aware of any policies that existed with respect to postnatal depression within their respective facilities, and if so, how to access them.

Inclusion and Exclusion Criteria. I utilized a Microsoft Excel spreadsheet to record all policies that were found through the electronic searches, consultations with experts and lawyers, and speaking with healthcare providers. The policies were subsequently documented as “included” or “excluded,” based on inclusion and exclusion criteria. Inclusion criteria were policies that were published or modified between 2006 and 2012 which were the years of Mexico’s former administration of Felipe Calderon and 2012 was the year when I finished data collection. Exclusion criteria were any policy that was published or modified prior to 2006 and any state policies referring to outside of Mexico City.

Clinical practice guidelines that were found through electronic searches of the CENETEC database were evaluated for inclusion in three phases. In the first phase, I was required to tick boxes of topical interest because of the way the database was set up. Depending on which boxes I ticked, a list of applicable guidelines was generated out of a total of 597 published guidelines. The boxes I ticked included pregnancy, birth, and postpartum; and mental and behavioral health. I also ticked the box ‘miscellaneous,’ within which I selected guidelines based on their relevance to obstetrics and gynecology (OBGYN), maternal and child health (MCH), mental health, or women’s health. I did not tick the boxes that addressed addictions, genetic conditions, hematology, cancer, palliative care, perinatal loss and abortion, among other general health conditions or conditions not relevant to postnatal depression. This process generated a select list of guidelines which was further refined in the second phase.

In the second phase, policies that contained the search terms were included in the study. Within each document, I applied the Spanish spelling variations of the search term “postnatal depression” by using the search function within the portable document format (PDF). I also applied the individual terms of “depression” and “postnatal,” as well as the term “mental health” in order to locate discussions on the postpartum period that may not have been identified earlier. Clinical practice guidelines were excluded if they did not contain the search terms in the text or did not discuss depression in the postnatal period. This eliminated many guidelines addressing, for example, obstructed labor, sepsis, or hemorrhage during childbirth.

In the third phase, some guidelines that did not contain the search terms were retained for analysis; these guidelines were thought to be useful for the study because of

the explicit *absence* of references to postnatal depression despite being relevant to women's mental health in the postpartum period. A policy was determined to be relevant if the topic of the guideline addressed a risk factor that is reported by the WHO to put a woman at risk of postnatal depression (Stewart et al., 2007).

Analysis

We conducted a qualitative content analysis as a way to interpret data in the policy text. The purpose was to classify data into categories and identify themes (Weber, 1990). Once text was coded into explicit categories, we obtained frequencies as a way to summarize the proportion of policies in categories and to provide a basis for interpretation of the data (Morgan, 1993). The units of analysis were the policy documents and the content area was the specific text (or absence thereof) relating to postnatal depression or depression in the postpartum period. I used a directed approach to the qualitative content analysis. The categories we established to code the content areas were based on a theoretical framework developed by Howlett (2000) and Hood (1986) and other researchers in the policy-implementation field (Lasswell, as cited in Howlett, 2000). There are generally two categories of policies: material and symbolic. Symbolic policies are like statements of intent that articulate "healthcare goals" (WHO, 2013c) in society without outlining any specific accompanying actions. These types of policies may not lead to implementation of any particular program or action. In contrast, material policies generally result in "decisions, plans, and actions" (WHO, 2013c). Material policies include, for example, a U.S. Healthy People 2020 objective to increase depression screening by primary care providers (U.S. Department of Health and Human Services, 2011). This policy has the potential to influence other

policies, like the law enacted in the U.S. state of New Jersey requiring healthcare providers who work in hospitals to screen for postnatal depression in women who have recently given birth (Chaudron, Szilagyi, Campbell, Mounts, & McInerney, 2007).

Material policies can be further categorized as using either substantive or procedural instruments. Substantive policy instruments directly affect the nature, type, quantity, and distribution of goods and services in a community (Howlett, 2000), whereas procedural instruments are those that affect, alter, or manipulate the implementation processes (Howlett, 2000).

For the purposes of our study, we created mutually-exclusive categories centered in the theoretical framework (Hsieh & Shannon, 2005; Weber, 1990). The categories were used to code each content area based on whether it 1) included references to postnatal depression, and if so, 2) the ways in which postnatal depression was addressed – possibly as a statement of intent, suggesting the government anticipated taking further action, and 3) if specific actions relating to the care and management of women who experience or who are at risk of experiencing postnatal depression were included. Looking at those features was a means to gauge how postnatal depression is addressed in ways that are likely to affect the care and management of women who experience or who are at risk of experiencing postnatal depression. We also obtained frequencies for the proportion of policy documents in each category, by type of document (i.e. law, regulation, clinical-practice guideline, etc.).

CHAPTER 4

RESULTS

This chapter presents the results of this study in the form of two manuscripts. Manuscript I was prepared for submission to the journal *Qualitative Health Research*. The aim of Manuscript I was to understand the conceptualizations of postnatal depression among physicians, nurses, social workers, and psychologists in primary, secondary, and tertiary levels of care in public-sector healthcare facilities in Mexico City and Yautepec, Morelos, Mexico, as well as understand how healthcare providers apply their understanding of social and behavioral antecedents in their conceptualizations of postnatal depression. Manuscript II was prepared for submission to the journal *Health Policy and Planning*. The aim of Manuscript II was to ascertain whether and how postnatal depression is addressed in policies at federal, state, and local public-sector healthcare facility levels in Mexico overall and specifically in Mexico City.

4.1 Conceptualizations of Postnatal Depression by Healthcare Providers from Public-Sector Healthcare Facilities in Mexico¹

¹ Place, J., Billings, D., Blake, C., Frongillo, E. and Mann, J., and deCastro, F. To be submitted to *Qualitative Health Research*.

Abstract

We describe the knowledge frameworks that physicians, nurses, social workers, and psychologists from five public-sector healthcare facilities in Mexico used to conceptualize postnatal depression in their practice setting. We also demonstrate how healthcare providers apply their understanding of social and behavioral antecedents in their conceptualizations of postnatal depression. Using grounded theory, we identified two frameworks that healthcare providers use to conceptualize postnatal depression: biochemical and adjustment. We highlight an emerging model of how social and behavioral antecedents work within the frameworks, as well as how symptoms of distress represent a possible case of postnatal depression and how postnatal depression is perceived as affecting responsibilities associated with motherhood. In-depth, semi-structured interviews with 61 healthcare providers from primary, secondary, and tertiary care were used to develop the model. The results provide a foundation for future study of how healthcare providers' conceptualizations of postnatal depression may affect detection and treatment practices and may be useful in the development of training materials to enhance the quality of care for women who experience postnatal depression or distress in the postpartum period.

Introduction

The World Health Organization (WHO) and the United Nations Population Fund (UNFPA) recommend that increased attention needs to be paid to the skills, attitudes, and capacity of healthcare providers in order to increase appropriate recognition of and assistance for women who experience postnatal depression and other maternal mental health problems (WHO, 2008). Postnatal depression is the most common complication

of childbirth (March of Dimes, 2011; Stewart, et al., 2003) with estimated prevalence at 13% for high-income countries and 20% for low- and middle-income countries (O’Hara & Swain, 1996; Fisher et al., 2012). Postnatal depression is clinically defined in the *Diagnostic Statistical Manual of Mental Disorders*, Fifth Edition (DSM-V) as a major depressive episode with a postpartum onset (American Psychiatric Association [APA], 2013). Postnatal depression is associated with poor outcomes for women and infants, including prolonged depression and maternal suicide (Goodman, 2004; Oates, 2003), weak maternal-infant attachment, early termination of breastfeeding, and delays in children’s cognitive development (Beck, 1998; Cooper, Murray, & Stein, 1993; Murray, 1992). Despite its high social cost and worldwide prevalence, postnatal depression is under-identified and under-treated in healthcare settings, especially in low- and middle-income countries (WHO, 2008a).

Feelings of incompetence, lack of confidence, and powerlessness have characterized healthcare providers’ reports of diagnosing, treating, and managing both depression (Chew-Graham, et al., 2008) and postnatal depression (Edge, 2010). Before acting to teach skills or modify behavior, it is useful to understand the target audience’s cognitive systems and values related to that behavior (Schweizer, 1998). Understanding how healthcare providers think about postnatal depression is important because the way in which postnatal depression is conceptualized underscores how it is detected, managed, and treated (Lloyd and Hawe, 2003). “Physicians’ interactional behaviors and communication skills [in managing depression] are exercised through their own contextual experiences of *types* of patients, *types* of problems, and *types* of...options.” (May et al., (2004), p. 153, original emphasis). In other words, healthcare providers have

“mentally stored clusters of ideas” that guide how symptoms are conceptualized and the subsequent actions that are taken (Entman, 1993, p. 53). In low- and middle-income countries where close to 60% of those who experience depression overall are not treated (WHO, 2008a), understanding healthcare providers’ conceptualizations of postnatal depression may provide opportunities to respond more effectively and address women’s needs in a more comprehensive manner (Dennis & Chung-Lee, 2006).

Healthcare providers conceptualize depression in many different ways that often exist outside of the clinical definitions in the DSM-V (Maxwell, 2005). Although validated screening tools to detect postnatal depression have been developed for populations in low- and middle-income countries (Alvarado-Esquivel, 2010), healthcare providers do not always follow diagnostic guidelines and sometimes fail to use available screening tools (Edge, 2010). In the United Kingdom, efforts to increase physicians’ adherence to guidelines for the detection or management of depression have yielded only modest improvements (Gilbody et al., 2003; Peveler & Kendrick, 2001). The diagnostic definition of depression may not reflect the range and presentation of what healthcare providers experience in their practice settings (Kendrick, 2000; Maxwell, 2005).

Dependence on screening tools may eclipse the “contextual, sociocultural’ knowledge, which forms a ‘backdrop to diagnostic decision-making,’” thus making the social context invisible (Stoppard, 1999, p. 83). Social and behavioral antecedents like unplanned pregnancy, intimate partner violence, and low emotional and practical support are increasingly found to be associated with postnatal depression in low- and lower-middle-income countries (Fisher et al., 2012). Healthcare providers may feel a tension between conceptualizing depression from a biomedical perspective and paying heed to

the social context of patients' lives (Chew-Graham et al., 2008; Thomas-MacLean & Stoppard, 2004).

Understanding how healthcare providers conceptualize postnatal depression within public-sector healthcare facilities is important because the burden of postnatal depression is high in low- and middle-income countries and especially among economically disadvantaged women (Fisher et al., 2012). Few studies have examined how healthcare providers conceptualize postnatal depression in high-income countries and to our knowledge there are no studies examining this important issue in low- and middle-income countries, like Mexico. The aim of this qualitative study was to understand the conceptualizations of postnatal depression among physicians, nurses, social workers, and psychologists in primary, secondary, and tertiary levels of care in the public-sector healthcare facilities in Mexico City and Yautepec, Morelos, Mexico. Because of the influence of social and behavioral antecedents on postnatal depression among Mexican women (de Castro et al., 2011), this study also aimed to examine how healthcare providers apply their understanding of social and behavioral antecedents in their conceptualizations of postnatal depression.

Study Context

In Mexico, depression overall is reported as the primary cause of psychiatric attention in the country (Instituto Nacional de las Mujeres [INMUJERES], 2006). Reported prevalence of postnatal depression has ranged from 1.8% to 32.6% (Romer-Gutierrez, Duenas de la Rosa, Regalado-Cedillo, & Ponce-Ponce de Leon., 2010; Alvarado-Esquivel et al., 2010) which reflects important methodological differences as well as the lack of homogeneous and standardized procedures to measure postnatal

depression. One community-based study conducted among Mexican women in the urban area of Monterrey Mexico, found prevalence of postnatal depression was 14.3% among adult women and 16.5% among adolescent women, which is consistent with global prevalence rates (de Castro, Hinojosa-Ayala, & Hernandez-Prado, 2011).

In Mexico City, 27.8% of residents experience a level of poverty where their income is insufficient to cover basic necessities and they may lack adequate housing or access to education (Consejo Nacional de Evaluación de la Política de Desarrollo Social [CONEVAL], 2008). In Morelos, Mexico, the state where Yauatepec is located, 48.6% of residents experience this type of poverty (CONEVAL, 2008). Women in these situations likely receive healthcare in the public-sector provided by the Ministry of Health. About half of Mexico's population receives healthcare services in the public-sector. Patients are comprised of informal sector workers, the self-employed, and others who do not have access to formal employee benefits. Depressive and anxiety disorder are the most commonly seen disorder within the public-sector (Sandoval de Escurdia & Munoz, n.d.).

The healthcare delivery model for the public-sector is a tiered system of care. Primary care is focused on preventive services and non-emergency health concerns. It is where approximately 80% of health complaints are resolved, including mental-health issues (Burr, Pino, Quiroz, & Martin-Lunas, 2011). Physicians within primary care facilities are the first contact among those seeking mental-health services (INMUJERS, 2006). Despite the need for mental health services, less than 30% of the 12,000 primary-care clinics in Mexico are staffed with psychologists or psychiatrists (Secretaria de Salud, 2002). Secondary care is a network of regional hospitals with providers performing diagnostic tests, surgeries, and vaginal and cesarean births with brief postpartum

recuperation of two-to-four days. Tertiary care is the network of hospitals and research institutes that treat people with rare medical conditions and those needing the highest level of technology and attention. Women who give birth through vaginal or cesarean delivery in tertiary care are discharged between two and four days postpartum. The women do not return to the hospital where they gave birth for a follow-up appointment unless complications arise with the infant or woman or for the removal of stitches from a Cesarean delivery or for a family-planning appointment. To be treated in tertiary care, a patient must first enter a unit in primary or secondary care and get progressively referred to higher levels of care.

The National Health Plan of 2006-2012 and Mexico City's Mental Health Law of 2012 recognize the postnatal period as a particularly critical time in the development of depression, signifying a central role for healthcare providers in the recognition of and assistance for women who experience postnatal depression. Similar to other low- and middle-income countries, those who experience depression in Mexico do not always receive sufficient treatment (WHO, 2008b). Only 27% of women over age 18 who reported a general depressive episode in the year prior to survey administration were diagnosed by a healthcare provider (INMUJERES, 2006). One of the reasons implicated for the treatment gap is a lack of adequate training among healthcare providers regarding detection and management of depressive disorders (INMUJERES, 2006).

Study Methods

We used grounded theory to understand the landscape of healthcare providers' conceptualizations of postnatal depression within their practice setting. Grounded theory, as established by Glaser and Strauss (1967), is a methodology used to explore qualitative

data and discover explanatory, theoretical frameworks of observed phenomena and social or psychological processes. Grounded theory was further developed by Charmaz (2006) who views theories as constructed from the data, rather than discovered in the data. For Charmaz, theories constructed from the data are “interpretive portrayals” of the studied phenomena built on research participants’ world view as well as the researchers’ assumptions which are brought to the research process and analysis (Charmaz, 2006); in contrast, Glaser and Strauss discuss discovering theory emerging from the data but separate from the researcher or scientific observer. According to Charmaz (2006), grounded theories are constructions of reality, assembled “through [researchers’] past and present involvements and interactions with people, perspectives, and research practices” (p. 10). In our study, we used the tradition of grounded theory developed by Charmaz (2006), recognizing the researcher as an instrument through which data are transmitted and interpreted. Our results were constructed from the perspective of the first author; a woman who is not native to Mexico and who has not had children or experienced depression, as well as the co-authors who are likewise not native to Mexico.

We wanted to understand healthcare providers’ knowledge frameworks consisting of beliefs, rules, ideas, and concepts used to conceptualize postnatal depression in their practice setting (Spradley, 1972). Grounded theory was a good choice for doing this because the goal was to organize concepts rooted in the data and specify relationships between the concepts in order to more fully understand the problem from the participants’ perspectives. Healthcare providers may view postnatal depression differently depending on the basic premises and presuppositions used to organize and

give meaning to experience (Goffman, 1974), which may include professional training, gender, facility affiliation, and location.

Recruitment and Sampling

The sample was comprised of 61 healthcare providers recruited from five healthcare facilities within the three levels of care in Mexico's public-sector from May to July 2012. The study took place in Mexico City and Yautepac, Morelos, Mexico. Mexico City has about 20 million inhabitants. In contrast to the urban environment of Mexico City, Yautepac, Morelos is an area of just under 40,000 inhabitants located approximately two hours south of the center of Mexico City. The sample consisted of 18 physicians, including internists, obstetricians, and general practitioners, 17 nurses, 17 social workers, and nine psychologists. Of the total sample, 50 participants were female and 11 were male. The average age overall was 40 (Table 1). Participants were recruited from the following facilities: one primary health center located in Mexico City; two secondary women's hospitals located in Mexico City and Yautepac, Morelos and the tertiary National Institute of Pediatrics and the National Institute of Perinatology both located in Mexico City. The study was approved by the Institutional Review Board of the University of South Carolina, along with the ethics review boards of all five of the public-sector healthcare facilities included in the study.

Teams in both locations helped with recruitment and data collection. In the women's hospital in Yautepac, Morelos, the first author and a team of two local public health researchers received prior authorization from hospital administration to approach healthcare providers in hallways, waiting rooms, or offices and invite participation in the study. The same approach was used in the primary healthcare center in Mexico City. If

Table 4.1 Study Participant Characteristics (N=61)

	Age		Sex		Level of Care		Specialty	
		N(%)		N(%)		N(%)		N(%)
Physicians (N=18)	<i>Mean(SD)</i>	33(10)	Male	8(44)	Primary	2(11)	Internist	2(11)
	18-24	-(-)	Female	10(56)	Secondary	7(39)	Obstetrician	14(78)
	25-39	16(89)			Tertiary	9(50)	General	1(6)
	40-54	1(6)					Other	1(6)
	55+	1(6)						
Nurses (N=17)	<i>Mean(SD)</i>	38(10)	Male	2(12)	Primary	5(29)	Data not collected	
	18-24	1(6)	Female	15(88)	Secondary	7(41)		
	25-39	6(35)			Tertiary	5(29)		
	40-54	7(41)						
	55+	2(12)						
Unknown	1(6)							
Social Workers (N=17)	<i>Mean(SD)</i>	39(7)	Male	-(-)	Primary	4(24)	Data not collected	
	18-24	-(-)	Female	17(100)	Secondary	2(12)		
	25-39	3(18)			Tertiary	11(65)		
	40-54	11(65)						
	55+	1(6)						
Unknown	2(12)							
Psychologists (N=9)	<i>Mean(SD)</i>	41(15)	Male	1(11)	Primary	1(11)	Data not collected	
	18-24	-(-)	Female	8(89)	Secondary	7(78)		
	25-39	5(56)			Tertiary	1(11)		
	40-45	2(22)						
	55+	2(22)						

healthcare providers were willing to participate, they were invited to be interviewed at that moment or to schedule a time later the same day. In the women's hospital in Mexico City, appointments were made by a supervisor among her staff and the first author came to the location and conducted the interviews. At the Institute of Perinatology, the first author approached healthcare providers in hallways or offices and invited participation in the study. A supervisor also helped by making appointments among physicians. In the Institute of Pediatrics, the first author trained a group of four supervisorial social workers to conduct the in-depth qualitative interviews among their respective social work staff. A one-hour training session was held to instruct the social workers on appropriate administration of the interview guide.

We were able to enter the National Institute of Pediatrics and the women's hospital in Mexico City because the first author worked with two local public health professionals to hold an information session about the study for healthcare personnel from various healthcare facilities in Mexico City. After the first author presented information about the study, she asked for interested volunteers to help with the study and who served as important gatekeepers for their respective facilities. We were able to enter the primary care health center and the National Institute of Perinatology in Mexico City, as well as the women's hospital in Yauhtepec, Morelos because of local public health professionals who facilitated ethics approval processes.

A healthcare provider was eligible if she or he had professional contact with women in the postpartum period, which was considered to be within one year after delivery (Stowe et al., 2005). We did not target specific obstetric or gynecological providers since women may have interaction with a variety of providers within the first year postpartum. Physicians, nurses, and social workers were purposively selected to be included in the study because of their contact with women in postnatal care. Theoretical sampling was later employed to include interviews with psychologists. Theoretical sampling is a central tenant of grounded theory based on the need to gather more data to explore a category that has emerged from collected data (Coyne, 1997). Psychologists were recruited and interviewed, based on the need to gather more data from these professionals since physicians, nurses, and social workers referred to psychologists when discussing postnatal depression.

We stopped recruiting at 64 participants because simultaneous data analysis did not yield new insights or categories, referred to as theoretical saturation. At this point,

interviews with physicians, nurses, social workers, and psychologists had taken place in each level of care. Three interviews were excluded from analysis: one because the participant gave obviously contradictory statements and thus did not appear to be truthful, one because the interviewer had not been trained adequately on administration of the interview guide, and one because we had limited access to a transcriptionist and, by mistake, failed to transcribe the interview.

Interview Guide and Data Collection

To elicit information on how healthcare providers conceptualized postnatal depression, a two-part interview guide was created. In the first part, a brief vignette based on a sample of Mexican women's personal accounts of postnatal depression was presented to healthcare providers. Information on development of the vignettes is provided elsewhere (cite dissertation). Responses to vignettes are reported to resemble those made in actual practice settings (Kirwan, Chaput de Saintonge, Joyce, & Currey, 1983; Langley, Tritchler, & Llewellyn-Thomas, 1991). Questions followed the vignette to explore healthcare providers' reactions to the story, namely whether symptoms were conceptualized as a problem and, if so, how it was conceptualized. Follow-up questions were loosely based on Entman's functions of framing. To provide structure to analyze a particular problem Entman suggests investigating the presentation of a problem, its source, and the causal agents, as well as what makes it problematic (Entman, 1993). The term 'postnatal depression' was not used in the vignettes or the follow-up questions in order to allow for healthcare providers' emic perspectives to emerge.

In the second part of the interview guide, we transitioned into asking healthcare providers about their understandings of postnatal depression specifically. Healthcare

providers were asked to describe their definition of postnatal depression, what puts women at risk, and what symptoms indicate that something is wrong, as well as their perception of the causes and consequences of postnatal depression, methods of identification, perceived role when presented with depressive symptoms, and facility support for detection and prevention of postnatal depression. We used components of the Theory of Planned Behavior to loosely guide question development on healthcare providers' attitudes, perceived control, and subjective norms, which were conceptualized as important in shaping healthcare providers' behavioral intention of detecting and treating postnatal depression (Glanz et al., 2008). Provider behavior associated with detection and treatment of postnatal depression is not addressed in this paper.

Theoretical sampling may involve the practice of changing the interview guide as the study progresses. Strauss and Corbin (1990) point out, "Some questions or foci with which you entered the interview or observational site will quickly get dropped, or seem less salient, or at least get supplemented" (p. 183). This leads researchers to ask different questions to different participants as the sample expands. Consistent with theoretical sampling and grounded theory, the interview guide was adapted to include additional questions based on data that emerged from the concurrent analysis of the initial interviews. Because participants spoke in similar terms about postnatal depression and maternal blues, additional questions were included that asked healthcare providers to talk about what distinguished one condition from the other. Additional questions included healthcare providers' feelings of competence in detection of postnatal depression, the stigma, if any, associated with postnatal depression, and the lessons learned if healthcare providers experienced interacting with a woman at risk of or experiencing postnatal

depression. The interview guide was drafted in English and translated into Spanish by the first author. It was then reviewed by experts from the National Institute of Public Health in Cuernavaca, Mexico and later revised once more to include additional questions generated from theoretical sampling.

Data collection consisted of one-time, one-on-one, semi-structured interviews with open-ended questions and a brief demographic questionnaire. The first author and research teams conducted the interviews either in participant offices or department waiting rooms when participants indicated they had free time between consultations. We spent two to four hours in each facility per visit interviewing, making contacts with healthcare providers, or waiting for a scheduled appointment time. The interviews lasted between 25 and 35 minutes on average. Due to the bustle of the healthcare setting, we experienced occasional, brief interruptions during the interviews but the interviews were quickly resumed, except for one interview that was rescheduled for the next day.

All interviews were audio recorded after participants signed the informed consent and gave verbal permission to be recorded. Handwritten notes were generally not done in order to pay attention to what was being said in the interview. Occasionally a note was written to indicate an additional question that could be added to the interview guide. The first author wrote field notes at the end of each day. The audio recordings were transcribed verbatim by a professional transcriptionist in Spanish, with selected quotes later translated by the first author into English.

Analysis

The research questions that guided the analysis of the data were 1) how do physicians, nurses, social workers, and psychologists in the primary, secondary, and

tertiary levels of care in public-sector healthcare facilities in Mexico City and Yautepec, Morelos, Mexico conceptualize postnatal depression within their practice setting? and, 2) how do these healthcare providers apply their understanding of social and behavioral antecedents in their conceptualizations of postnatal depression?

Data were analyzed using Nvivo 10 software (QSR International Pty Ltd. Version 10, 2012). The method of analysis was through the construction of grounded theory (Charmaz, 2006). Initial coding is the naming of “segments of data with a label that simultaneously categorizes, summarizes, and accounts for each piece of data” (Charmaz, 2006). During initial coding, 11 transcripts were selected to represent physicians, nurses, social workers and psychologists in primary, secondary, and tertiary care, with attention to selecting both males and females. The first author, who had previously reviewed all transcripts, chose the 11 transcripts based on richness of data. Data were sorted into pre-defined categories instead of open-coding for emergent themes. This is a variation on grounded theory suggested by Miles and Huberman (1994). Separating data into categories was used as an organizational tool to facilitate coding in the next phase. The pre-defined categories contained data that revealed 1) how healthcare providers defined postnatal depression through symptomatology, causal factors, and consequences; 2) healthcare providers’ detection practices through screening instruments, observation or interviews; 3) how healthcare providers viewed treatment of postnatal depression in light of their professional role and structure of the facility, and 4) the description of the population of women seen in the practice setting. The first category reflected data that were largely pertinent to our research question.

After coding the 11 transcripts into the aforementioned categories, the first author conducted line-by-line coding within each category, creating a flexible template of codes for analyzing the remaining transcripts. Line-by-line coding generated a more in-depth analysis of the ideas within each category. A constant comparative method, advanced by Glaser and Strauss (1967), was used to compare data against data within a category and establish distinctions between line-by-line codes. Coding based on the above approach produced “an incisive analytic framework” (Charmaz, 2006) that could guide the analysis of the remaining transcripts.

As the analysis progressed, the line-by-line codes that had been established through constant comparison in each category were applied to the entire sample. Some additional line-by-line codes were created if the data did not fit with a code already established. The first author kept analytic memos that identified emerging ideas for the development of focused codes, considered the second major phase after initial coding. Focused codes are more conceptual than line-by-line codes (Charmaz, 2006). They are useful to begin to synthesize and explain larger segments of data and to pull together ideas that coalesce within line-by-line codes. Focused codes were compared and contrasted through the constant comparative method, with attention to negative cases. When new focused codes were developed, the first author returned to earlier transcripts to apply or refine those codes within the data. The query tool in Nvivo 10 was used to look for the presence of codes according to type of provider, facility, gender, and location. This tool was helpful to identify the need for additional focused codes.

The development of theoretical codes followed focused coding. Theoretical codes helped define possible relationships among the focused codes. Because initial

coding tends to fracture the data into “component parts or properties” (Charmaz, 2006), theoretical coding “weaves the fractured story back together” (Glaser, as cited in Charmaz, 2006). In this paper, the theoretical codes clarify how physicians, nurses, social workers, and psychologists conceptualize postnatal depression within their practice setting and the use of social and behavioral antecedents in those conceptualizations.

During the process of analysis, the data and subsequent codes were checked in several ways. Audio recordings were briefly reviewed with local experts from the National Institute of Public Health. Selected text from the interview transcripts was reviewed by native Spanish speakers when the first author had a doubt about the text’s meaning. During line-by-line coding and the establishment of focused codes, the second author who speaks Spanish fluently was consulted to affirm or dispute the interpretations from Spanish to English. If the first and second author did not share a similar interpretation of the text, the matter was discussed until both authors arrived at a consensus. Multiple meetings with all authors also took place during analysis to discuss the codes.

Results

The theoretical codes reported in this paper are: 1) postnatal depression is represented through symptoms of distress; 2) postnatal depression disrupts a woman’s responsibilities associated with motherhood; 3) postnatal depression exists amid other categories of distress; 4) postnatal depression is understood through a biochemical or adjustment framework, or both; 5) social and behavioral antecedents strongly influence development of postnatal depression.

Postnatal Depression is Represented by Symptoms of Distress

Symptoms of distress were important in healthcare providers' conceptualizations of postnatal depression because they alerted providers to a possible case of postnatal depression. Clear and pronounced symptoms of distress were used as a sign to refer women to psychologists for further evaluation. One physician alluded to importance of symptoms when he said, "We don't have systematized screening to [identify postnatal depression]; any patient that looks like she has a problem, I refer." (Physician, male, 26, tertiary care).

Physicians, nurses, and social workers observed symptoms of distress during medical exams or when taking vital signs or social histories. Healthcare providers reported that occasionally women themselves spoke openly about their distress. Healthcare providers considered certain behaviors or moods symptomatic when it was perceived as "abnormal" (Physician, male, 31, tertiary care) within their practice setting. The majority of women in the postpartum period were described by healthcare providers as awake, smiling, carrying the baby, and chatting with companions in waiting rooms or hospital rooms. Despite feeling physical discomfort from labor and delivery, women were portrayed as attentive to the needs of the baby. When women appeared to experience distress or difficulty, a trigger went off in providers' minds. "When you note a little bit of apathy on the part of the patient, well, it starts to call your attention. Or when the patients are irritated for some reason, well, then you ask, "What's wrong?" (Physician, male, 28, tertiary care).

What constituted a symptom to each provider was subjective. One physician thought that a woman's lack of interest in the infant or the tone of her voice was

indicative of a probable case of postnatal depression. He said, “Sometimes with just the lack of interest in their children, you’ll start to ask, ‘And how have you been?’ ‘Well, I am doing alright’, see, this shows her disinterested in those around her, she feels used, frustrated, devalued” (Physician, male, 61, primary care). For other providers a facial expression suggested distress and the possibility of postnatal depression. Another physician said, “One of the principal symptoms of [postnatal depression] is crying, they cry easily, they cry easily. They, I don’t know, they are different” (Physician, male, 26, tertiary care).

Despite the subjectivity of detecting “abnormal” (Physician, male, 31, tertiary care) behavior or moods, all cadres of providers generally referred to the same group of symptoms as representing distress. There were only a few exceptions. Notably more physicians reported under-eating and psychosomatic complaints as symptoms of distress, only psychologists reported guilt and flat affect, and only nurses reported inability to concentrate. The most common symptoms reported by providers were sadness, irritability, loss of enjoyment, neglect or disgust of infant, and under-eating. The symptoms are outlined in Table 4.2.

The majority of physicians, nurses, and social workers recognized that women may not present symptoms for a variety of reasons, including because women may seek to hide symptoms of distress to avoid questions, shame, or stigma associated with their feelings; women may not recognize the distress as problematic; or the symptoms may not present within the window of professional contact.

Table 4.2 Symptoms of Distress, by Type of Healthcare Provider

	Physicians	Nurses	Social Workers	Psychologists
Emotional				
Emotional instability	X	X	X	X
Feeling dead	X	X	X	X
Sadness	X	X	X	X
Loss of enjoyment	X	X	X	X
Irritability	X	X	X	X
Feeling alone	X	X	X	
Suicidal thoughts	X		X	X
Feeling overwhelmed	X			X
Low self esteem	X		X	
Inability to concentrate		X		
Nervousness		X	X	X
Flat affect				X
Guilt				X
Physical				
Fatigue	X	X	X	X
Insomnia	X	X	X	X
Under-eating	X	X	X	X
Unkempt appearance	X	X	X	X
Psychosomatic complaints	X			
Over-eating		X		X
Interpersonal				
Anti-social behavior	X	X	X	X
Neglect/disgust of infant	X	X	X	X

Without clear symptoms of distress, postnatal depression becomes invisible and thus goes undetected: For us it is difficult to ask the woman about her symptoms, like symptoms of depression. If the patient clearly manifests

symptoms then I will ask them directed questions, but if they don't give me any clue, it's not ideal but we almost take for granted that the patient is doing OK emotionally. So yes, I believe that there are patients that have postnatal depression and they don't manifest it or at least they don't express it and these patients aren't detected. Since there is not an intentional, systematized screening for postnatal depression for all patients, well yeah, I think that some patients have it and it isn't detected, I believe this happens (Physician, male, 26, tertiary care).

Postnatal Depression Disrupts a Woman's Responsibilities Associated with Motherhood

When asked to define postnatal depression, many healthcare providers talked in terms of what makes it problematic. Physicians, nurses, social workers, and psychologists discussed how a woman's experience with postnatal depression not only affects the woman personally but ripples out to affect others, namely her children and her spouse. Physicians, nurses, social workers, or psychologists, alluded to how postnatal depression adversely affects woman's responsibility with motherhood, and some physicians discussed how a woman's inability to fulfill maternal duties is one of the most negative outcomes of postnatal depression. For example, one physician explained that if a woman is experiencing postnatal depression, "The kids will do poorly, they won't go to school, the kids that are home, and the baby won't have his needs taken care of if the mom is doing poorly" (Physician, female, 39, secondary care). Another physician referred to other responsibilities of motherhood: "From making dinner, cleaning the toilet, and taking care of the kids and everything, [postnatal depression] is detrimental to the family and obviously it affects the emotional atmosphere; the family is broken"

(Physician, male, 34, secondary care). More than once, women were referred to as “the pillar” (Physician, male, 31, secondary care; Physician, female, 39, secondary care; Psychologist, female, 70, secondary care; Social worker, female, 30, secondary care), one that has the capacity to bring down the rest of the family if her mental health is not adequate and she fails to “carry the very heavy load in the family” (Physician, female, 39, secondary care). One physician commented:

[Postnatal depression] is a period of time that brings with it, well, it is a period of mourning. So, during this time the woman can't do everything that the family expects. See, the family is expecting that the mother is the one who takes care of everything, the one who is always there and strong, and so this [postnatal depression] yeah, it can generate some conflict (Physician, female, 35, tertiary care).

Caring for children was uniformly viewed as a responsibility of motherhood. All physicians, nurses, social workers and psychologists mentioned that postnatal depression leads to the neglect and harm of the infant. One social worker said, “They also could do something to harm their baby - abandonment or neglect - that could put the baby in, well, an unsuitable situation” (Social worker, female, 40, tertiary care).

When maternal duties are not fulfilled, it creates more situations of risk by generating family problems, violence, or separation. One nurse stated, “Yes, I think that depression affects the family a great deal, the family environment, because when the husband comes home from work, well, the husband doesn't understand what is happening and this could even lead to a divorce because they say: ‘Well, this isn't normal.’ He gets annoyed, the husband gets really annoyed because the baby isn't being taken care of, the

house is a mess, but it's all because of the patient's depression" (Nurse, female, 38 , tertiary care). A few providers also discussed how the apathy associated with postnatal depression may lead to missed family-planning appointments, unplanned pregnancies, loss of jobs, and poverty. These factors also have an impact on family stability.

Postnatal Depression Exists Amid Other Categories of Distress

Physicians, nurses, social workers, and psychologists reported that women they see in the postpartum period may experience the symptoms of distress outlined in Table 4.11 for a variety of reasons. Although distress, no matter the cause, was discussed as yielding deleterious consequences for the infant and the woman, not all distress was conceptualized as postnatal depression. One psychologist in the Women's Hospital in Mexico City described how she understood the diversity of distress in the postpartum period:

Here not all obviously have postnatal depression, but there are various problems that women are experiencing that generate sadness or despair, and as I mentioned earlier: the population of this hospital, the patients, they have family problems, financial problems, also misinformation makes them feel anxious, they also can't wait to leave the hospital. Because of these reasons, they cry a lot (Psychologist, female, 32, secondary care).

A nurse at the Women's Hospital in Yautepec, Morelos also separated postnatal depression from other distress women experience, even though the effects of the distress may be similar. "Actually it may not be postpartum depression, but rather a worry about their condition and their situation at home, but ultimately we arrive at the same thing, it is an emotional imbalance of equal magnitude" (Nurse, female, 41, secondary care).

Below we discuss two categories of distress between which some providers distinguish when conceptualizing postnatal depression. The difference between postnatal depression and other categories of distress is largely based on the timeframe when symptoms present. The categories include 1) maternal blues, and 2) distress that originated prior to childbirth.

Maternal blues. Physicians, nurses, social workers, and psychologists in each level of care expressed that women in the postpartum period may present varying severities of distress, ranging from “light, moderate or severe.” (Physician, male, 61, primary care). The levels of distress likely reflect categories listed by the DSM-V, from the less severe maternal blues, which affects 50-70% of women and occurs within the first few days after delivery, to the more severe major depressive episode with onset within four weeks after delivery (APA, 2013).

In the secondary and tertiary levels of care, psychologists who are considered responsible for diagnosing mental disorders, referred to the two to four day window of hospitalization as limiting their ability to diagnosis postnatal depression because symptoms of distress have not been present long enough to constitute a more serious diagnosis. Duration of symptoms for two weeks or longer is required to be considered a major depressive disorder by the DSM-V (APA, 2013). Instead, psychologists who are well-versed in depression as a diagnostic category, referred to the distress as maternal blues. “We aren’t able to diagnosis an official postnatal depression because we aren’t able to detect that here, that develops through the weeks, in the first four weeks after delivery. So, what I think I’ve diagnosed and what I’ve seen is maternal blues” (Psychologist, male, 28, secondary care). Not all psychologists noted that the onset of

postnatal depression must occur within four weeks after delivery. Some talked about postnatal depression presenting within the first few months after delivery. Regardless of time of onset, postnatal depression was considered outside of their capacity to diagnose due to brief hospital stays. Psychologists saw themselves dealing instead with women who may be experiencing maternal blues.

Physicians, nurses, social workers, and psychologists also referred to maternal blues as “light” depression (Physician, male, 39, secondary care) or “warning signs” (Social worker, female, 44, tertiary care), suggesting that this distress often serves as a precursor to postnatal depression. As one psychologist explained, “We can’t really go and diagnose postnatal depression because the time does not permit that, but yes, we can leave the light bulb on to say, ‘This patient is in an episode of depression and we’re not sure of the cause, but there are symptoms that suggest an episode of depression, and for this reason it is very possible that the patient will fall into a postpartum depression” (Psychologist, female, 34, secondary care). Many psychologists surmised that maternal blues would result in postnatal depression, however because of the lack of follow-up once women leave the facility, psychologists expressed caution and uncertainty in “saying 100%” (Psychologist, female, 70, secondary care) that the distress is, or will be, postnatal depression.

Distress originating prior to the postpartum period. For some providers, distress that originated prior to childbirth but that is present in the postpartum period was categorized as something different than maternal blues or postnatal depression. One social worker at the tertiary level was referring to a woman who had an unplanned pregnancy and was presenting with severe distress in the postpartum period. She said:

No, I don't believe that is postnatal depression. It is not a result of having a baby, this is from a situation prior to having the baby because she was a pregnant teenager who didn't plan to get pregnant and, well, everything that comes from that (Social Worker, female, 40, tertiary care).

Distress originating from unplanned pregnancies or a history of financial difficulties and lack of partner support, for example, may play a role in the development of postnatal depression. Distress arising from those situations alone, however, does not constitute postnatal depression. As one psychologist clarified, "It could be that they have some other situation, some other problem that makes them feel that way. Not so much a postpartum depression, it is probably more due to a range of other problems."

(Psychologist, female, 49, secondary care). Another psychologist at the same hospital supported the idea that distress originating from stressful situations prior to pregnancy is different from postnatal depression. She said, "Well, among ourselves, see, it is very common to comment and talk about the situation: 'No, I don't think this is postnatal depression, this is a depression that is from a long time ago, or rather, the baby has triggered unresolved grief or loss from the past.'" (Psychologist, female, 30, secondary care).

Psychologists were largely the providers who saw nuances between what would be and what would not be postnatal depression, based on when the distress began. Many psychologists, compared to physicians and nurses whose "work is physical [health]" (Psychologist, female, 28, secondary care), believe it is their role to talk with women and use interview questions to uncover root sources of distress. One psychologist stated, "So, we more or less try to talk with the women because many times the problem is not new,

but rather it comes trailing from other situations in the past” (Psychologist, female, 70, secondary care).

Unlike psychologists, only a few physicians, nurses, and social workers found differences between maternal blues, distress that originated prior to the postpartum period, and postnatal depression to be relevant in their practice setting. The timing of distress did not appear to have an impact on the majority of physicians’, nurses’, and social workers’ conceptualizations of postnatal depression; they simply referred symptomatic women and left the distinction up to psychologists. Psychologists considered themselves the professionals who determined the legitimacy of postnatal depression. One psychologist affirmed her role by saying that deciphering what the symptoms mean is not the work of physicians and nurses. “In some way, their work is not exploring, that is better left to us, to do an evaluation or to see what it is that is bothering the woman or why she is acting that way” (Psychologist, female, 28, secondary care). Another psychologist reflected on how she and her colleagues are given the responsibility of making the distinction between what is and what is not postnatal depression: “The nursing staff is in constant contact with women, they see women, they observe when a mother has difficulty taking care of her baby or acts sort of indifferent. So, they ask for the psychological evaluation to know what it is that is going on and if it is a situation” (Psychologist, female, 32, secondary care).

Postnatal Depression Frameworks: Biochemical and Adjustment

The majority of physicians, nurses, social workers, and psychologists viewed postnatal depression as a multifactorial problem, often explaining postnatal depression from one of two frameworks (or both): 1) a biochemical problem resulting from the drop

in hormonal levels after childbirth, or 2) an adjustment problem due to life changes associated with a new child. Both male and female physicians were far more likely to view postnatal depression as a biochemical problem than social workers or psychologists. A few physicians also referred to postnatal depression as an adjustment problem. Social workers and psychologists, largely female in this sample, saw postnatal depression as arising from a problem adjusting to being a mother. Nurses, also largely female, were equally distributed between seeing postnatal depression as a biochemical problem or as an adjustment problem.

Biochemical framework. One physician explained that postnatal depression is the result of a hormonal imbalance that “does not stabilize” after childbirth. When discussing what she would say to a woman who is experiencing postnatal depression, the physician referred to physiological processes. Her explanation is reflective of a biochemical framework to understand postnatal depression:

You have a problem that is not your fault, your body is not compensating for the fact that the placenta is gone. That placenta had a lot of hormones that made it so you had different interests, different hormones and imagine if you were drugged and then all of a sudden the drug was taken away, what will happen? You will feel desperate, you will feel bad, it’s the same thing. Remember, it’s the same thing. I took away something that was giving you pleasure, making you feel good, and the moment I took it away, obviously your body decompensated (Physician, Female, 39, secondary care).

Physicians who used the biochemical framework to understand postnatal depression all used the framework as a way to combat the stigma associated with

postnatal depression. Physicians stated that women may feel at fault for experiencing depression and that family and friends close to the woman may claim symptoms are due to laziness or that the woman is faking her distress. One physician stated that postnatal depression “is a problem that isn’t her fault, it doesn’t depend on what she does, she isn’t depressed because her baby is born...because [she gave birth] there are many changes and her body simply could not compensate” (Physician, Female, 39, secondary care).

Another physician referred to the need to be explicit about a biochemical cause:

The fact of the matter is that depression is a pathophysiological issue that doesn’t have anything to do with her or her motivation. It is something that has to do with abnormalities in the central nervous system, so it is important to tell them that they have this illness so that they don’t feel so bad, but rather so that they become aware that this can happen and that this is an illness that can be treated (Physician, Male, 35, secondary care).

Adjustment framework. Providers emphasized that motherhood can be an overwhelming change, especially as a woman adapts to changes in her body and expectations about her role. As one physician said, “It must feel strange to have such a big responsibility upon you. I think that all of this is part of the causes [of postnatal depression]” (Physician, female, 25, tertiary care). The adjustment framework views features of motherhood, such as decreased sleep, the stress of taking care of a newborn, and the modifications in family dynamics, as contributing to postnatal depression. One social worker referred to the adjustment framework by stating that after childbirth “your world changes” (Social worker, female, 40, tertiary care) and some women are unable to adjust in light of those changes.

Providers emphasized women feeling lost amid the many changes in the postpartum period, including breastfeeding a new infant, adjusting to his or her moods, and recognizing the infant's total dependence. Postnatal depression results when a woman has trouble "adapting to a biological change in her body, the fact that she has this new human being that she has to take care, that she has to breastfeed." Those changes, this nurse continued, make the woman feel that "the world is on top of her, she doesn't know why, and she doesn't know where to go" (Nurse, female, 55, primary care). One nurse listed several reasons some women feel lost and overwhelmed and end up experiencing postnatal depression:

You realize that you have this little person, unprotected, and you don't know what to do to make sure this person is ok. He cries, and you don't know why he cries.

You don't know how to feed him, he doesn't speak, you don't know how to communicate with him. I feel like this would make you feel frustrated because, what are you going to do with this baby?" (Nurse, female, 41, secondary care).

Some women feel misinformed about what motherhood requires and often end up having trouble adjusting because "they didn't imagine very well what it would be like to have a baby, or in other words, it seems like a deception because many women really want a baby and they find and go through treatments and then finally when the baby is born, they end up not accepting all of the changes that a baby brings, the fact that they have to take care of him and that he cries morning, afternoon, and night, and that the baby needs diaper changes, etc., So, many women end up with this dilemma of not being able to adjust" (Psychologist, female, 43, tertiary care). A problem adjusting in the postpartum period results from a lack of balance between what women expected the first

few months after childbirth to be like and their reality. One provider referred to the beginning of an adjustment problem as when “the baby is born and the magic ends, the magic of waiting for the baby ends” (Physician, female, 39, secondary care).

Combination of biochemical and adjustment frameworks. The following physician summarizes how the two frameworks often co-exist when providers conceptualize postnatal depression:

During all of the pregnancy, certain hormones are elevated and they stabilize at this level. During a vaginal delivery or a Cesarean, there is a drop in these hormones and the stability of the patient. This can cause you to have postnatal depression, in addition to the fatigue you have from labor and the fact that you have to be taking care of your baby. The fatigue can really be extreme for everything you have to do to take care of the baby’s needs (Physician, female, 28, tertiary care).

Social and Behavioral Antecedents Strongly Influence Development of Postnatal Depression

The social and behavioral antecedents present in women’s lives sets a backdrop for distress in the postpartum period. Social and behavioral antecedents, as seen in Figure 4.1, were consistently mentioned as triggering or compounding postnatal depression, regardless of whether providers saw postnatal depression from a biochemical or an adjustment framework. The milieu of factors anchored both frameworks in a common situation of risk.

Among all the social and behavioral antecedents reported, the factors most commonly mentioned by providers for provoking or compounding postnatal depression

were financial difficulties, history of depression, worry over personal health or the health of the infant, unplanned pregnancy, unidentified family problems, and lack of partner support. No antecedent was disproportionately reported by one cadre of professionals compared to others. The antecedents were highly interrelated, meaning that providers who mentioned one of the antecedents also mentioned several other antecedents when referring to the context of women's lives. Financial difficulties were mentioned in conjunction with every other antecedent, suggesting that financial stress was at the center of many problems perceived by providers in women's lives. For example, providers saw unplanned pregnancy bringing with it a host of other issues, including financial difficulties, lack of partner support, family problems, and lack of preparation. Below we discuss how the social and behavioral antecedents identified by providers undergird their use of the biochemical and adjustment frameworks.

Social and behavioral antecedents in the biochemical framework. Most physicians and nurses saw postnatal depression as a biochemical problem that is provoked or compounded by certain social and behavioral antecedents in a woman's life. These hormonal imbalances were often cited by physicians and nurses as the problem behind both maternal blues and postnatal depression. A psychologist at a woman's hospital in Mexico City inferred that a key difference between an episode of maternal blues that resolves and one that evolves to postnatal depression is the influence of social and behavioral antecedents in a woman's life. Social and behavioral antecedents in women's lives heighten a woman's probability of experiencing increasing distress, or moving a biochemically "susceptible" (Physician, female, 35, tertiary care) woman from maternal blues to postnatal depression. One psychologist stated:

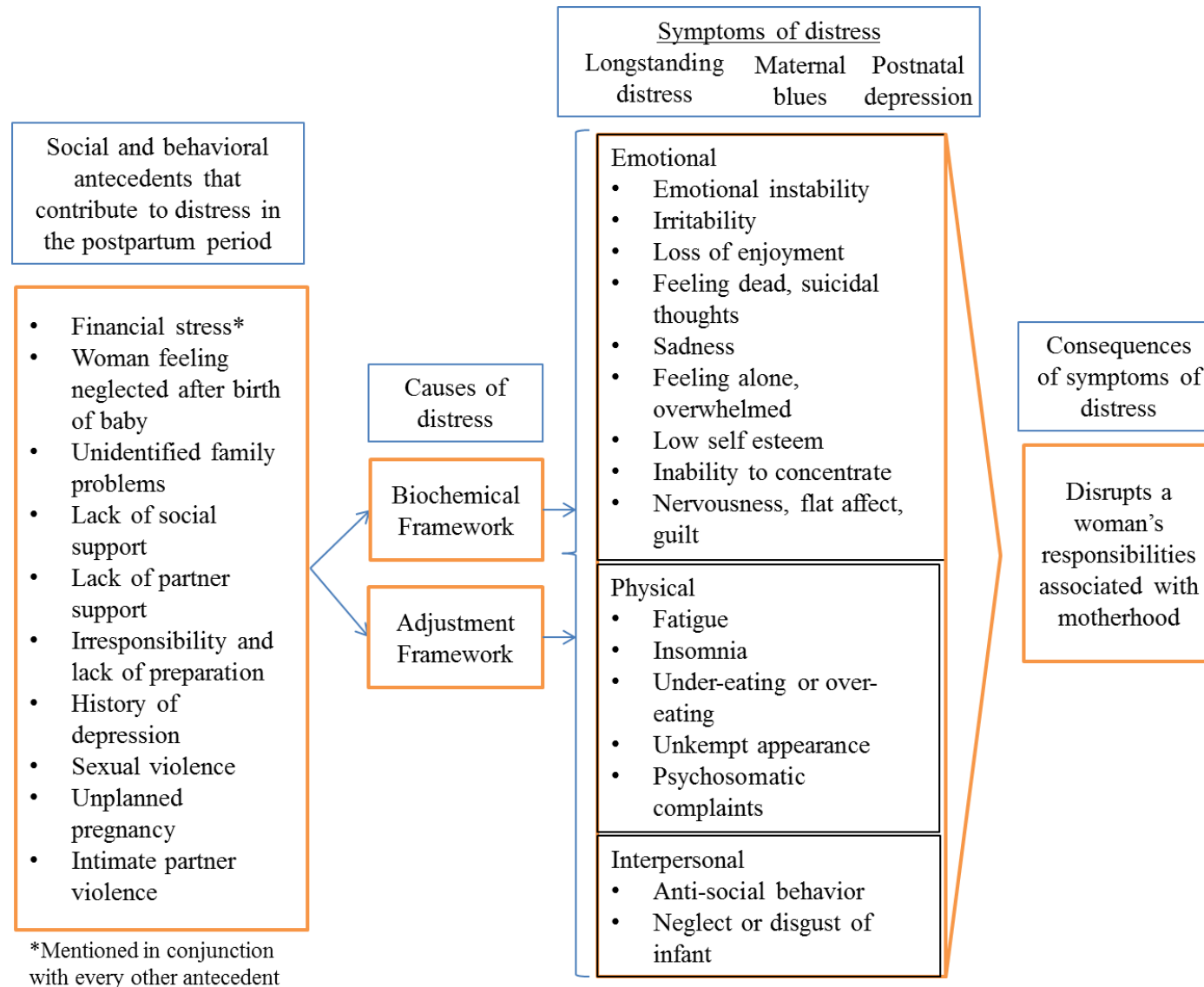


Figure 4.1. Model of Healthcare Providers' Conceptualizations of Postnatal Depression and Other Distress

What I have observed and what I have read in the literature is that the context [of women's lives causes postnatal depression]. I think it is the social context, because patients have come here and they have emotional stability and perhaps they will go through maternal blues, but not as deeply as those that have the probability of postnatal depression (Psychologist, male, 28, secondary care).

Another psychologist affirmed the influence of social and behavioral risk factors on development of postnatal depression, stating that women who experience postnatal depression are “undermined by other social factors, other social problems.” Her statement suggests that a woman with a hormonal imbalance reaches a severe depressive state because her defenses are worn down due to the social and behavioral antecedents she is also managing in her life, like financial stress and partner strife. She continued that these social and behavioral antecedents “intensify” the symptoms a woman is already experiencing. For those women, like her, who experience maternal blues but not postnatal depression, what is the key? She responded, “I obviously didn't have a prior history of depression and yes, I had social support, I had the support of my partner, I have a steady income, I am happy in my job; all of this helped to not fall into a postnatal depression. For me, postnatal depression is an emotional state that is influenced by other characteristics which could generate a not very good prognosis.” (Psychologist, female, 34, secondary care).

One nurse summarized how the biochemical framework for postnatal depression is anchored in social and behavioral antecedents. In other words, hormones and social and behavioral risk factors in women's lives work together to result in postnatal depression:

There is a bio-chemical issue that is generated in pregnancy and that can provoke this [depression], but I also don't believe that it just appears out of nothing, so if there are the risk factors in the pregnancy that I've been talking about and if the biochemical issue doesn't get taken care of, then I think that these two factors work together, the environmental and the hormonal factors combine, and this is what is officially called postnatal depression" (Psychologist, 40, Female, Institute of Perinatology).

Another physician added, "Postnatal depression definitely indicates a maternal pathology that may involve alterations in the [biochemical] adaptive process in the resolution of pregnancy, many times precipitated by the same delivery, sometime by a previous event, but it always has at its base the social conditions in which a woman lives or the social and behavioral risk factors that she has been dealing with" (Physician, Female, 27, tertiary care).

Several providers described the emotional difficulty facing women who, in addition to an unbalanced hormonal state after pregnancy, also face single, adolescent and low-income motherhood, having had an unplanned pregnancy. One social worker continued describing these women as likely having to drop out of school and not receiving sufficient social support. She states, "I believe this causes this depression. Besides the hormonal part, all of the social context is important" (Social Worker, female, 40, secondary care). These examples from providers suggest social and behavioral antecedents compound what providers see as the biochemical root of postnatal depression.

Social and behavioral antecedents in the adjustment framework. Providers, especially social workers and psychologists, recognized that bringing home an infant requires adjustment, adaptation, and flexibility. Women may feel lost amid these changes and have trouble adjusting to the additional roles a new baby brings. Financial stress, unplanned pregnancy, family problems, poor partner support, or other social and behavioral antecedents in women's lives heighten women's susceptibility to postnatal depression as women struggle to adjust to the new reality of their lives.

Being an adolescent mother was commonly mentioned as compounding an already difficult adjustment, suggesting that young age complicates the adjustment process through mechanisms like increased financial stress, isolation, single motherhood, a complicated living situation with in-laws, and simple lack of preparation. Given those challenges, one social worker stated, "It is a very desperate situation for them if they didn't plan on being mothers right now. Imagine facing everything that it means to be a mom, you know? They don't take care of themselves, what if their child gets sick, the bills add up, everything gets complicated. So, they reach a level of stress where they really don't take care of themselves and I think they just end up feeling really bad" (Social worker, female, 40, secondary care). A nurse added that there are babies that cry frequently, especially if they are sick. She continued that this situation, along with breastfeeding every two hours, causes women to lose sleep. The nurse's message was to imagine if a woman in that situation was a single mother who had to go to work in the morning. Social and behavioral antecedents like single or adolescent motherhood would compound an already difficult adjustment process, likely resulting in postnatal depression.

Another nurse hypothetically described an adolescent mother who had an unplanned pregnancy and eventually dropped out of school due to her responsibilities at home. He stated, “This new situation creates insecurity in the person, discomfort, fatigue, sadness, and they end up viewing their child as a burden when if they had done the process right, it could have been something happy and beautiful for both the mother and the child” (Nurse, male, 27, primary care). His comment suggests that social and behavioral antecedents like young motherhood and unplanned pregnancy disrupt the adjustment process after childbirth and are responsible for inducing postnatal depression.

Many providers discussed that social and behavioral antecedents in women’s lives represent the key difference between women who experience maternal blues and those who experience postnatal depression. Referring to the women she sees in her facility, one psychologist stated, “A lot has to do with difficulty adjusting, given that the partner isn’t there.” Social and behavioral antecedents, like lack of partner support, undergird the development of postnatal depression when seen through the adjustment framework. The psychologist continued, “We see what is happening in their environment and this is the difference, or in other words, there is an external situation that is provoking [postnatal depression].” (Psychologist_9, female, 49, tertiary care).

Discussion

The deleterious impact of postnatal depression extends beyond the individual woman to affect the infant, the family, and the community. In the postnatal period, women have increased interaction with healthcare providers, creating space for the early detection and treatment of women who are experiencing or who are at risk of experiencing postnatal depression. What constitutes postnatal depression, however,

varies among healthcare providers. In our findings we illuminated components of the knowledge frameworks healthcare providers used to conceptualize postnatal depression in their practice setting, as well as how social and behavioral antecedents were applied in those conceptualizations.

Our findings contribute to the literature on postnatal depression in four important ways. First, symptoms of distress are a salient concept related to women's mental health in the postpartum period for healthcare providers. Although we did not set out to examine generalized distress in the postpartum period, healthcare providers highlighted this concept so we included it in our discussion. Second, women's role fulfillment is important to healthcare providers and postnatal depression is one of several categories of distress that is perceived as disrupting a woman's ability to carry out maternal responsibilities and expectations. Third, the dominant models in the scientific literature for understanding the causes of postnatal depression are confirmed in our results in what we have termed the biochemical and adjustment frameworks. Fourth, social and behavioral antecedents are universally understood as influencing the development of postnatal depression, as well as other categories of distress, among our sample of healthcare providers. No notable differences in the data were found between Mexico City and Yauatepec, Morelos, Mexico regarding healthcare providers' conceptualizations of postnatal depression or their applications of social and behavioral antecedents.

Healthcare providers were confronted with symptoms of distress for a variety of reasons, including long-standing distress that originated prior to the postpartum period, the common case of maternal blues, or postnatal depression. The majority of physicians, nurses, and social workers acknowledged a spectrum of distress that exists among women

in the postpartum period, that postnatal depression was a unique condition, and that the presence of symptoms of distress would alert them to a woman who is experiencing emotional difficulties and who may possibly be at risk for postnatal depression. These results contribute to Green's (1998) argument that postnatal depression sits on the far end of the spectrum of pre and postnatal dysphoria or "postnatal unhappiness" (p. 144) and that any indicators of negative mood, rather than an exclusive focus on postnatal depression, merits consideration by healthcare providers.

The healthcare providers in our study mentioned the same symptoms used to represent a possible case of postnatal depression that are used to diagnosis a major depressive episode in the DSM-V. Symptoms that were mentioned and that are not included in the DSM-V include feeling alone or feeling overwhelmed, unkempt appearance, psychosomatic complaints, anti-social behavior, and neglect and disgust of infant. Although not specified in the DSM-V and with the exception of psychosomatic complaints, these symptoms are commonly recognized to be associated with postnatal depression (Postpartum Support International, 2013); feeling overwhelmed is used as an item in the Edinburgh Postnatal Depression Scale (EPDS; Cox, Holden, & Sagovsky., 1987), a screening tool validated for use in Mexico to identify women at risk for postnatal depression. According to healthcare providers, these symptoms did not only indicate a possible case of postnatal depression, but rather any emotional difficulty, including long-standing distress or maternal blues.

Psychologists, compared to physicians, nurses, and social workers, used specific criteria from the DSM-V like two-week duration of negative symptoms arising after childbirth and onset within four weeks after delivery to distinguish maternal blues or

distress originating prior to pregnancy from a case of postnatal depression. Some researchers advocate distinguishing ‘proper’ disorders like postnatal depression from other forms of distress in order for the provision of appropriate treatments, like counseling or antidepressants (Middleton and Shaw, 2000), and to avoid the medicalization of distress (Pilgrim & Bentall, 1999). The results of our study suggest that psychologists received all distressed women and were left to filter what women had ‘proper’ disorders according to the DSM-V criteria of not only presence, but also duration of symptoms. Among the majority of physicians, nurses, and social workers, the presence of any symptom of distress was noteworthy, regardless of whether it fulfilled diagnostic criteria for a case of postnatal depression.

Women seen in secondary or tertiary care generally have a hospital stay of two to four days, which limits healthcare providers’ access to women in the weeks and months following delivery. For women who have a vaginal delivery without complications, follow-up appointments with healthcare providers in secondary and tertiary care are rare; women are instead referred back to primary care. In our results, postnatal depression was not routinely diagnosed by psychologists in secondary and tertiary care. Psychologists in primary care have more long-term contact with women after delivery, suggesting they may recognize symptoms of distress and be in a better position to diagnose postnatal depression. We were prevented from deeply examining the differences between conceptualizations of psychologists at secondary and tertiary care compared to those in primary care because our sample only included one psychologist in primary care.

Symptoms of distress, whether they are from long-standing distress, maternal blues, or postnatal depression, were perceived as problematic because of how symptoms

disrupt women's responsibilities with motherhood, such as being a caretaker of children, keeping up the house, and nurturing a partner relationship. This result is reflective of the Mexican context which highly values women as mothers (DiGirolamo & Snyder, 2008). In light of women's perceived role as the caretaker of the family's well-being, DiGirolamo and Snyder (2008) state, "taking care of their children, husbands, and families is the main priority; taking care of their own physical and mental health comes later, if at all" (p. 517).

The presence of maternal blues, distress originating prior to pregnancy, and postnatal depression among women seen by this sample of healthcare providers in public-sector healthcare facilities suggest that these women face a great deal of hardship which contributes to psychological distress. Lara (1993) suggests that the demands and expectations placed on Mexican women, particularly with regards to motherhood, are associated with depression, anxiety, repressed hostility, and psychosomatic disorders. Reducing perceived stress is reported to have the greatest impact on the high prevalence of depressive symptoms among low-income women in rural Mexico. The stresses that these women face include separation, divorce, financial stress, and loss (Fleisher et al., 2002). A systematic review on the prevalence and determinants of postnatal depression in low and lower-middle-income countries found that the risk of postnatal depression was increased with the presence of gender-based factors, like unpaid workloads and among women who assume the majority of housework and infant care (Fisher et al., 2012). Regardless of psychological distress, some women in Mexico, especially those who are economically disadvantaged, are expected to hold the family and home together.

Our results align with the two dominant models created by researchers that suggest postnatal depression is best understood as a biochemical problem or an adjustment problem, or both (Dalton, 1980; Brown, 1987). In a study conducted by Lloyd and Hawe (2003), researchers, policy-makers, and healthcare providers from Australia who worked in the field of postnatal depression were interviewed regarding how they viewed postnatal depression. One approach was to see postnatal depression as exposing innate biochemical vulnerability, resulting in poor mental health. This was similar to the biochemical framework largely supported by physicians and some nurses in our study. Physicians appeared to use the biochemical framework as a way to minimize stigma associated with postnatal depression, citing a physiological effect of childbirth for which women are not at fault. Another study has indicated that the women themselves also feel that a hormonal explanation for their feelings releases them from blame and responsibility (Mauthner, 1994). In contrast, a study by Chew-Graham et al. (2008) described how general practitioners and health visitors who are similar to community health workers in the United Kingdom viewed postnatal depression as an adjustment reaction to a change in life circumstances and the difficult reality of motherhood. This result was similar to the adjustment framework largely supported by social workers and psychologists in our study.

Our results suggest that while physicians, nurses, social workers, and psychologists may understand postnatal depression through a biochemical framework or an adjustment framework, or both, the social and behavioral antecedents women often confront in a low-income context, like socioeconomic stress and single motherhood, were central to healthcare providers' understanding of postnatal depression. A constellation of

social and behavioral antecedents were universally considered to underscore each framework, compounding or provoking hormonal or adjustment difficulties in the postpartum period. This supports an increasing number of studies reporting the statistical association between social and behavioral risk factors and postnatal depression (Beck, 2001; Stewart, Robertson, Dennis, Grace, & Wallington, 2003; Fisher et al., 2012; de Castro et al., 2011). The healthcare providers also recognized that social and behavioral antecedents were not only at the root of postnatal depression, but other categories of postpartum distress, as well.

The general practitioners in Chew-Graham's study, as well as physicians in other studies, often stepped out of the medicalized discourse of depression to comment on the social context of patients' lives (Chew-Graham 2008; Thomas-MacLean & Stoppard, 2004). The health visitors in Chew-Graham's studies described a reluctance to label depressive symptoms as postnatal depression because they believed depressive symptoms had a psychosocial etiology, thus warranting neither a medicalized term nor medicalized treatment like antidepressants. A similar pattern occurred among the majority of physicians and nurses interviewed for our study. The physicians and nurses who viewed postnatal depression from the biochemical framework also extensively commented on the hardships women experience in their everyday lives that contribute to postnatal depression. This suggests that many physicians and nurses are attuned to the social and behavioral antecedents contributing to postnatal depression.

Conclusion

We conclude that the presence of symptoms of distress is a salient concept related to women's mental health in the postpartum period for our sample of healthcare providers

in public-sector healthcare facilities; it indicated an experience of emotional difficulties and served as a marker for postnatal depression. The array of symptoms of distress, and not solely an experience of postnatal depression, was perceived as problematic. Different categories of postpartum distress, including long-standing distress originating prior to childbirth, maternal blues, and postnatal depression, was understood by healthcare providers as having a deleterious impact on their perception of women's responsibilities in the home and family. The healthcare providers were also aware of the pivotal role of social and behavioral antecedents on the development of distress. According to the healthcare providers, social and behavioral antecedents underscore biochemical and adjustment frameworks for understanding postnatal depression, specifically.

Interventions aimed at increasing healthcare providers' appropriate recognition of and assistance for postnatal depression, as recommended by the WHO and the UNFPA, should capitalize on the current understandings and knowledge frameworks of postnatal depression that healthcare providers already possess, which includes building on their recognition of symptoms of distress. A key point of intervention is helping healthcare providers to recognize symptoms of distress in their practice setting and appropriately refer these women, if necessary, to specialty services. Symptoms of distress can serve as a gateway to addressing postnatal depression. Furthermore, because of the universal recognition among healthcare providers that social and behavioral antecedents play a role in postpartum distress, including postnatal depression, discussions on local and macro level policies that address occupational justice, education and economic empowerment, poverty reduction, gender equality, as well as violence against women and unplanned pregnancy are relevant (Rahman et al., 2013; Herman & Swartz, 2007).

Lloyd and Hawe (2003) argue that there is a need to conceptualize postnatal depression as a “construct in dynamic relation to the social, historical, cultural, economic, and political context” (p. 1793). Inclusion of social and behavioral antecedents in healthcare providers’ conceptualizations of postnatal depression and other categories of distress represents an important shift that has occurred in the last decade from an exclusive focus on the medical model of postnatal depression (Robertson, Celasum, & Stewart, 2003). It is encouraging that the 2008 Clinical Practice Guide for the Diagnosis and Treatment of Depressive Disorders, produced by the Secretary of Health in Mexico, recommends that certain social and behavioral antecedents be investigated by healthcare providers among their patients, like history of depression or recent losses the patient may have experienced (Secretaria de Salud [SSA], 2009). It does not indicate how healthcare providers should go about doing this, or what their current practices are. Further research is needed to investigate how conceptualizations of postnatal depression affect detection and treatment of it.

References

- American Psychiatric Association. (2000). *Diagnostic and statistical manual of mental disorders* (5th ed.). Washington, DC: American Psychiatric Association
- Alvarado-Esquivel, C., Sifuentes-Álvarez, A., Estrada-Martínez, S., Salas-Martínez, C., Hernández-Alvarado, A., Ortiz-Rocha, S.,...Sandoval-Herrerad, F. (2010). Prevalencia de depresión postnatal en mujeres atendidas en hospitales públicos de Durango, México. *Gac Med Mex*, 146(1).
- Beck, C. (1998). The effects of postpartum depression on child development: a meta analysis. *Archives of psychiatric nursing*, 12(1), 12-20.
- Beck, C., (2001). Predictors of postpartum depression: An update. *Nursing research*, 50(5), 297.
- Brown, G. & Harris, T. (1987). *The social origins of depression*. London: Tavistock.
- Burr, C., Pino, A., Quiroz, L., and Martin-Lunas, E. (2011). Guia para el paciente participativo. (Chapter 4). Distrito Federal: Centro de Contraloria Social y Estudios de la Construccion Democratica [CIESAS]
- De Castro, F., Hinojosa-Ayala, N., & Hernandez-Prado, B. (2011). Risk and protective factors associated with postnatal depression in Mexican adolescents. *Journal of Psychosomatic-Obstetrics & Gynecology*, 32(4): 210-217.
- Charmaz, K. (2006). *Constructing grounded theory: A practical guide through qualitative analysis*. London: Sage.
- Chew-Graham, C., May, C., Cole, H., & Hedley, S. (2000). The burden of depression in primary care: a qualitative investigation of general practitioners' constructs of depressed people in the inner city. *Primary Care Psychiatry*, 6(4), 137-141.
- Chew-Graham, C., Chamberlain, E., Turner, K., Folkes, L., Caulfield, L., & Sharp, D. (2008). GPs' and health visitors' views on the diagnosis and management of postnatal depression: A qualitative study. *The British Journal of General Practice*, 58(548), 169.

- Consejo Nacional de Evaluación de la Política de Desarrollo Social (CONEVAL), 2008. Módulo de Condiciones Socioeconómicas de la Encuesta Nacional de Ingresos y Gastos de los Hogares. Distrito Federal: Instituto Nacional de Estadística y Geografía (INEGI).
- Cooper, P., Murray, L., & Stein, A. (1993). Psychological factors associated with the early termination of breast-feeding. *Journal of Psychosomatic Research*, 37(2), 171-176.
- Cox, J., Holden, J., & Sagovsky, R. (1987). Detection of postnatal depression. Development of 10-item Edinburgh Postnatal Depression Scale. *British Journal of Psychiatry*, 150, 782-786.
- Coyne, I. (1997). Sampling in qualitative research. Purposeful and theoretical sampling; merging or clear boundaries. *Journal of Advanced Nursing*, 26, 623-630.
- Dalton, K. (1980). *Depression after childbirth*. Oxford: Oxford University Press.
- Dennis, C. & Chung-Lee, L. (2006). Postpartum depression help-seeking barriers and maternal treatment preferences: A qualitative systematic review. *Birth*, 33(4), 323-331.
- DiGirolamo, A. & Snyder, N. (2008). Women as primary caregivers in Mexico: challenges to well-being. *Salud Publica Mex*, 50(6), 516-522.
- Edge, D. (2010). Falling through the net – Black and minority ethnic women and perinatal mental healthcare: Health professionals' views. *General Hospital Psychiatry*, 32, 17-25.
- Entman, R. (1993). Framing: Towards clarification of a fractured paradigm. *McQuail's Reader in Mass Communication Theory*, 390-397.
- Fisher, J., Mello, M., Patel, V., Rahman, A., Tran, T., Holton, S., & Holmes, W. (2012). Prevalence and determinants of common perinatal mental disorders in women in low- and lower-middle-income countries: A systematic review. *Bulletin of the World Health Organization*, 90, 139-149.
- Fleisher, N., Fernald, L., & Hubbard, A. (2002). Depressive symptoms in low-income women in rural Mexico. *Epidemiology*, 18(6), 678-685.
- Gilbody, S., Whitty, P., Grimshaw, J., & Thomas, R. (2003). Educational and organizational interventions to improve management of depression in primary care: A systematic review. *Journal of the American Medical Association*, 289(23), 3145-3151.

- Glanz, K., Rimer, B., & Viswanath, K. (2008). *Health behavior and health education: Theory, research, and practice* (4th ed.). San Francisco, CA: Jossey-Bass.
- Glaser, B. & Strauss, A. (1967). *The discovery of grounded theory: Strategies for qualitative research*. Chicago: Aldine.
- Glaser, B. (1978). *Theoretical sensitivity: Advances in the methodology of grounded theory*. Sociology Press.
- Goffman, E. (1974). *Frame analysis: An essay on the organization of experience*. Boston: Northeastern University Press.
- Goodman, J. (2004). Postpartum depression beyond the early postpartum period. *Journal of Obstetric, Gynecologic, & Neonatal Nursing*, 33(4), 410-420.
- Green, J. (1998). Postnatal depression or perinatal dysphoria? Findings from a longitudinal community-based study using the Edinburgh Postnatal Depression Scale. *Journal of Reproductive and Infant Psychology*, 16, 143-155.
- Herman, H., and Swartz, L. (2007). Comment: Promotion of mental health in poorly resourced countries. *Lancet*, 370, 1195-1197.
- Instituto Nacional de las Mujeres (INMUJERES) (2006). Panorama de la salud mental en las mujeres y los hombres mexicanos. Mexico: INMUJERES.
- Kendrick, T., (2000). Why can't GPs follow guidelines on depression? *British Medical Journal*, 320(7229), 200.
- Kirwan, JR, Chaput de Saintonge, DM, Joyce, CR, & Currey, HL. (1983). Clinical judgment in rheumatoid arthritis. I. Rheumatologists' opinions and the development of 'paper patients'. *Annals of the rheumatic diseases*, 42(6), 644.
- Langley, G.R., Tritchler, D.L., Llewellyn-Thomas, H.A., & Till, J.E. (1991). Use of written cases to study factors associated with regional variations in referral rates. *Journal of clinical epidemiology*, 44(4-5), 391-402.
- Lara, M. (1993). Inventario de masculinidad y feminidad (IMAFE). Mexico: El Manual Moderno.
- Lloyd, B., & Hawe, P. (2003). Solutions forgone? How health professionals frame the problem of postnatal depression. *Social Science and Medicine*, 57(10), 1783-1795.
- March of Dimes, 2013. Postpartum depression. Retrieved from <http://www.marchofdimes.com/pregnancy/postpartum-depression.aspx>

- Mauthner, N. (1994). Postnatal depression: A relational perspective. Unpublished PhD thesis, University of Cambridge, Cambridge.
- Maxwell, M. (2005). Women's and doctor's accounts of their experiences of depression in primary care: the influence of social and moral reasoning on patients' and physicians' decisions. *Chronic Illness, 1*(1), 61-71.
- Miles, M. and Huberman, M. (1994). *Qualitative Data Analysis: An expanded sourcebook* (2nd ed.). London: Sage Publications.
- Murray, L. (1992). The impact of postnatal depression on infant development. *Journal of Child Psychology and Psychiatry, 33*(3), 543-561.
- May, C., Allison, G., Chapple, A., Chew-Graham, C., Dixon, C., Gask, L.,...Roland, M. (2004). Framing the doctor-patient relationship in chronic illness: A comparative study of general practitioners' accounts. *Sociology of Health & Illness, 26*(2), 135-158.
- O'Hara, M., & Swain, A. (1996). Rates and risks of postpartum depression – a meta analysis. *International Review of Psychiatry, 8*(1), 37-54.
- Oates, M. (2003). Suicide: the leading cause of maternal death. *The British Journal of Psychiatry, 183*(4), 279-281.
- Pilgrim, D., & Bentall, R. (1999). The medicalization of misery: A critical realist analysis of the concept of depression. *Journal of Mental Health, 8*(3), 261-274.
- Peveler, R. & Kendrick, T. (2001). Treatment delivery and guidelines in primary care. *British Medical Bulletin, 57*(1), 193-206.
- Postpartum Support International, 2010. Perinatal mood and anxiety disorders overview. Retrieved from <http://www.postpartum.net/Get-the-Facts.aspx>
- NVivo qualitative data analysis software: QSR International Pty Ltd. Version 10, 2012.
- Rahman, A. Surkan, P., Cayetano, C., Rwagatare, P., and Dickson, K. (2013). Grand challenges: Integrating maternal mental health into maternal and child health programmes. *PLOS Medicine, 10*(5), 1-7.
- Rios, E. (2006). *The Mexican health care system: A federal perspective*. [PowerPoint Slides]. Retrieved from http://www.sandiego.edu/peacestudies/documents/tbi/rios_aug10_06.pdf
- Robertson, E., Celasun, N., & Stewart, D. (2003). Risk factors for postpartum depression. In Stewart D., Robertson, E., Dennis, C., Grace, S., & Wallington, T. *Postpartum depression: Literature review of risk factors and interventions*.

- Romer-Gutierrez, G., Duenas de la Rosa, E., Regalado-Cedillo, C., Ponce-Ponce de Leon, A. (2010). *Prevalence of maternal sadness and its associated factors. Ginecologica Obstetrica de Mexico*, 78(1), 53-57.
- Sandoval de Escurdia, J. and Munoz, M. (n.d.). *La Salud Mental en Mexico. Servicio de Investigacion y Análisis*
- Secretaria de Salud (2009). *Diagnóstico y Tratamiento del Trastorno Depresivo. Mexico: Secretaria de Salud.*
- Schweizer, T. (1998). *Epistemology. The nature and validation of anthropological knowledge.* In R.H. Bernard (Ed.). *Handbook of method in cultural anthropology* (pp. 39-87). Walnut Creek: CA.: Alta Mira Press.
- Spradley, J. (1972). *Foundations of cultural knowledge.* Prospect Heights, Ill: Waveland Press.
- Stewart, D., Robertson, E., Dennis, C., Grace, S., & Walkington, T. (2003). *Postpartum depression: Literature review of risk factors and interventions. Toronto: University Health Network Women's Health Program for Toronto Public Health.*
- Strauss, A. & Corbin, J. (1990). *Basics of Qualitative Research: Grounded theory procedures and techniques.* Sage Publications.
- Stoppard, J. (1999). *Why new perspectives are needed for understanding depression in women. Canadian Psychology*, 40, 79-90.
- Stowe, Z., Hostetter, A., & Newport, J. (2005). *The onset of postpartum depression: Implications for clinical screening in obstetrical and primary care. American Journal of Obstetrics and Gynecology*, 192(2), 522-26.
- Thomas-MacLean, R. & Stoppard, J. (2004). *Physicians' constructions of depression: Inside/outside the boundaries of medicalization. Health: An International Journal for the Social Study of Health, Illness and Medicine*, 8(3), 275-293.
- World Health Organization. (2008a). *Maternal mental health and child development in low and middle income countries.* Geneva, Switzerland: WHO.
- World Health Organization. (2008b). *mhGAP: Mental health gap action program. Scaling up care for mental, neurological, and substance use disorders.* Geneva, Switzerland: WHO.

4.2 Policies that Address Postnatal Depression in Mexico: Whether and how it is Addressed²

² Place, J., Billings, D., Frongillo, E., Blake, C., and Mann, J. To be submitted to *Health Policy and Planning*.

Abstract

There is increasing recognition in the global community that an individual's mental health affects their overall physical health. In 2007, the World Health Organization (WHO) and the United Nations Population Fund (UNFPA) organized an expert meeting to discuss the impact of maternal mental health problems on child development, particularly in low- and middle-income countries. The result of the meeting was a consensus statement that highlighted policy development as a core strategy to ameliorate the burden of maternal mental health problems like postnatal depression. This research critically examines the policies that exist in Mexico regarding postnatal depression at the federal, state, and local public-sector healthcare facility levels. National health plans, national action plans, federal and state laws and regulations, clinical practice guidelines, and public-sector healthcare facility policies were collected and evaluated through qualitative content analysis according to whether they included a statement of intent and/or actions related to the care and management of women who experience or who are at risk of experiencing postnatal depression. Analysis was grounded in a theoretical framework of material and symbolic policies advanced by Howlett (2000) and Hood (1986). National health plans (n=1), national action plans (n=1), federal and state laws and regulations (n=4), clinical practice guidelines (n=6), and public-sector healthcare facility policies (n=1) were collected and evaluated through qualitative content analysis according to whether they included a statement of intent and/or actions related to the care and management of women who experience or who are at risk of experiencing postnatal depression. Postnatal depression and other synonymous search terms were not mentioned in 38% (n=5) of policies. In the remaining 61% (n=8) of policies postnatal

depression was mentioned in some way, but in only 46% (n=6) of policies was a statement of intent or actions included relating to the care and management of women who experience or who are at risk of experiencing postnatal depression. These policies are the mental health law of Mexico City and its regulation, the clinical practice guidelines on pre-eclampsia, HIV, and prenatal care, and a policy from a tertiary level, public-sector healthcare facility. Results of our analysis identify possible areas to focus future policy development efforts. Future research can examine the rationale behind policy-makers' choice of the particular actions or lack of actions identified to address postnatal depression in Mexico.

Introduction

An individual's mental health has an impact on overall health. Poor mental health increases the risk for communicable and non-communicable diseases, and unintentional and intentional injury (Prince et al., 2007). Maternal mental health allows a woman to realize her own abilities, cope with normal life stressors, and work productively and fruitfully in her home and community (Herrman et al., 2006). A mother's mental health, because of her central role in the family, affects not only her own health but also that of family members and the wider community. According to the World Health Organization [WHO], 2008), maternal mental health is foundational to achieving at least five of the eight Millennium Development Goals, including promoting gender equality and empowering women, reducing child mortality, achieving universal primary education, improving maternal health, and reducing poverty.

In light of the health implications of poor maternal mental health for a woman, her family members and the wider community, the first international expert meeting

Maternal mental health and child health and development in resource-constrained settings was convened in Hanoi, Vietnam in June 2007 by the WHO and the United Nations Population Fund (UNFPA) to begin to better understand the implications of poor maternal mental health and to help policy makers and healthcare providers find and implement effective, low-cost, and non-stigmatizing solutions, particularly in low- and middle-income countries (WHO, 2009). The seventeen expert researchers from high and low- and middle-income countries highlighted the use of policy as a strategy to integrate maternal mental health into the services offered at primary levels of health systems.

In this study, we examined existing policies in Mexico that address postnatal depression, one of the most recognized problems by researchers in the field of maternal mental health (Breedlove and Fryselka, 2011; WHO, 2009). Understanding how postnatal depression is addressed in different policies, if at all, is a crucial first step that will clarify the way forward in policy development for maternal mental health in low- and middle-income countries because it will provide a window into the options that are available for potential policy change and the policies that are currently in use to address postnatal depression in Mexico (Brewer & DeLeon, 1983) This study also provides a basis for understanding the types of policies that might affect the care and management of women who experience or who are at risk of experiencing postnatal depression in low- and middle-income countries by examining what is outlined in terms of supervisorial responsibility, promised resources, and strategies of care. We aimed to ascertain whether and how postnatal depression is addressed in policies at federal, state and local public-sector healthcare facility levels in Mexico overall and specifically in Mexico City.

Justification of Research

The WHO states, “Without adequate policy and plans, mental disorders are likely to be treated in an inefficient and fragmented manner” (p. 1). Successfully addressing maternal mental health requires political priority, meaning international and national political leaders publically and privately express sustained concern for an issue, organizations and political systems provide the financial, technical, and human resources that are needed, and effective policies are enacted (Shiffman and Smith, 2007). Mental health policies are important for the prevention of human rights violations and discrimination, as well as for coordinating programs and services related to treatment and management of mental disorders (WHO, 2013)

Guidance from the WHO, UNFPA, as well as the National Institute for Clinical Excellence (NICE) in the United Kingdom which publishes guidance on mental disorders in the perinatal period and is considered by many clinicians around the world to be a gold standard for care, provides a framework for policy development on maternal mental health, particularly in low- and middle-income countries. The guidance can be summarized in the following ways: 1) Take steps to integrate maternal mental health into health systems and within existing and future initiatives, such as programs to eliminate violence against women. Integration of maternal mental health includes assessment of a woman’s well-being in the antenatal and postnatal period by primary healthcare providers through screenings of risk factors and symptoms of poor mental health. It also includes stepped-care protocols that include first, postnatal psycho-educational interventions, and if needed, antidepressant medication; 2) Take steps to strengthen health services. Strengthening health services includes the provision of appropriate mental health training

materials and resources for primary healthcare providers. It also includes needs assessments and demonstration projects within the health system in order to create, implement, and evaluate training materials and community-based interventions.

Policy is needed to integrate maternal mental healthcare into maternal and child health programs (Rahman et al., 2013). Maternal mental health initiatives are absent from large-scale global maternal and child health (MCH) programs, such as the WHO Partnership for Maternal, Newborn, and Child Health (PMNCH; 2011). The PMNCH list of essential interventions to reduce reproductive, maternal, newborn, and child mortality and to promote reproductive health does not include interventions for maternal mental health, despite the impact of poor mental health on newborn and child development (Rahman et al., 2013). Community-based interventions in low- and middle-income countries that included a maternal mental health component provide a strong case for its integration in MCH programs. A nutrition program, a community health program, and a child development program that implemented activities such as home visiting, empathic listening, and cognitive-behavioral techniques carried out by community health workers have all successfully demonstrated a decline of depressive symptoms among women in intervention groups compared to control groups and fewer episodes of diarrhea, more secure attachment, and higher likelihood of immunizations among infants of those women (Baker-Henningham, Powell, Walker & Grantham-Mc-Gregor, 2005; Rahman, 2008; Cooper, Tomlinson, Swartz, Landman, & Molteno, 2009).

Policy is important to addressing appropriate training for healthcare providers, community-health workers and volunteers who deliver mental health interventions in resource-constrained settings (Fisher et al., 2012). A limited and inequitable distribution

of human resources available for mental healthcare is considered a primary obstacle to mental healthcare in low- and middle-income countries (Saraceno et al., 2007). Cost-effective, non-specialist led interventions are available to treat maternal mental health problems in low- and middle-income countries where adequate mental health budgets and formally-trained healthcare professionals are often limited. They include peer support groups, cognitive behavioral therapies, problem-solving techniques, and guidance on how to stimulate and engage an infant (Fisher et al., 2013). Nevertheless, maternal mental health problems remain under-detected and under-treated (WHO, 2008a). No studies have examined the treatment gap for these problems specifically, but close to 60% of those who experience depression overall in low- and middle-income countries are not treated (WHO, 2008b). Additional obstacles to implementing treatment interventions in low- and middle-income countries include meager resource allocation, stigma, lack of professional expertise, weak health systems, and an overall poor understanding of maternal mental health, ranging among the women themselves to healthcare providers (Engle, 2009; Saraceno et al., 2007). Effective maternal mental health policies are central to overcoming these obstacles.

Mexico provides an opportunity to look at the terrain of policies related to maternal mental health in a resource-constrained setting. The culture in Mexico places a high value on women as mothers who support and care for the health and well-being of the rest of the family, even to the point of considering motherhood as the key function of womanhood (DiGirolamo & Snyder, 2008). A high percentage (43%) of women is in their reproductive years (ages 15-40) and women on average have 2.2 children during those years (INEGI, 2001). The reproductive years represent the peak onset of

depression among women, which is a leading cause of poor mental health and an important contributor to the global burden of disease (Prince et al., 2007). Consistent with low rates of treatment for depression in low- and middle-income countries, only 27% of women over 18 sampled in a national survey in Mexico who reported a depressive episode in the year prior were diagnosed by a healthcare provider (Instituto Nacional de las Mujeres [INMUJERES], 2006).

Postnatal depression is defined by the *Diagnostic Statistical Manual of Mental Disorders*, Fifth Edition (DSM-V) as a major or minor depressive episode affecting women within four weeks after childbirth (American Psychiatric Association [APA], 2013) but it is commonly believed by clinicians and researchers to occur anytime within the first year (Stowe et al., 2005). Postnatal depression affects about 13% of women in high-income countries and 20% in low- and middle-income countries (O'Hara & Swain, 1993; Fisher et al., 2012). Sequelae of postnatal depression for children and infants include higher risks of delayed psycho-social development, increased diarrheal episodes, and stunted physical growth (Murray, 1992; Patel et al., 2004; Rahman et al., 2004; Rahman et al., 2007). Suicide, as a result of postnatal depression, significantly contributes to deaths among women in the perinatal period in high and low- and middle-income countries (Oates, 2003; WHO, 2005). Left untreated, women who experience postnatal depression are likely to experience chronic and recurrent depressive episodes throughout life (Patel et al., 2012). Postnatal depression is reported as straining marital relationships, upsetting social and leisure activities, causing financial difficulties in the family, and negatively affecting parenting practices through less healthy feeding and

sleeping routines with infants and children (Boath, Ryce, & Cox, 1998; Paulson, Dauber, & Leiferman, 2006).

Among the many areas of unmet mental health needs, postnatal depression merits attention in policy because it affects a significant proportion of women, it potentially has long term impacts on the mental and physical health of women and children, and healthcare providers in Mexico are aware of women experiencing the condition within their practice setting and would benefit from the guidance and support of public policies that address this problem (cite first paper).

Study Methods

Study Setting

Mexico is classified as an upper-middle income country by the World Bank; however, just under half (44.2%) of its population have insufficient incomes to meet their basic needs, including inadequate education and limited access to housing or food (Consejo Nacional de Evaluación de la Política de Desarrollo [CONEVAL], 2008). The prevalence of postnatal depressive symptoms among adult women in Mexico includes estimates ranging from 1.8% to 32.6%, reflecting a lack of homogenous and standardized procedures and instruments to measure postnatal depression (Romer-Gutierrez, Duenas de la Rosa, Regalado-Cedillo, & Ponce-Ponce de Leon, 2010; Alvarado-Esquivel et al., 2010; de Castro, Hinojosa-Ayala, 2011; Lara et al., 2012).

Parameters of the Policy Analysis

The purpose of health policy is to articulate a vision for the future, outline priorities and expectations of certain groups, build consensus, and/or inform (WHO, 2013). According to the WHO definition of health policy, several layers of federal, state,

and local public-sector healthcare facility policies related to physical and mental health are relevant to examine: 1) national health plans (programas nacionales de salud) and national action plans (programas nacionales de acción); 2) laws (leyes); 3) regulations (reglamentos); 4) clinical practice guidelines (guías de practica clínica); and 5) policies in local public-sector healthcare facilities.

In Mexico, national health plans and national action plans are created every six years with the entrance of a new political administration and in response to the incoming president's National Plan of Development. For the national health plan, multiple governmental sectors and community organizations work together to develop measurable objectives, strategies and actions to achieve improved health in the society. National action plans include specific strategies and actions for accomplishing established objectives.

Laws and regulations addressing health are based directly on the Mexican constitution; the 4th article of the constitution guarantees the right to health. Laws begin as initiatives that are drafted by representatives and senators. They are subsequently approved by Congress and signed into law by the president. Laws stipulate what cabinet or branch of the government is responsible for enforcement of the law, such as the Secretary of Environment or the Secretary of Health. There are regulations for every law. Regulations define the processes and procedures for compliance to the laws. They are created by the cabinet or branch that is responsible for the law's enforcement.

Clinical practice guidelines are tools to promote quality healthcare and are not legally binding documents. They are comprised of recommendations, based on the best available evidence and on laws, regulations and other rules established through congress,

to aid healthcare providers and patients in making informed healthcare decisions (Fuentes et al., 2000). In Mexico the guidelines are developed under the auspices of the National Center of Technological Health Excellence (Centro Nacional de Excelencia Tecnológica en Salud [CENETEC]). The guidelines are applicable in all of Mexico's healthcare systems.

In Mexico, healthcare is provided by several different healthcare systems. Those who have social security benefits through employment are able to receive healthcare through health systems such as Instituto Mexicano de Seguro Social (IMSS), Instituto de Seguridad y Servicios Sociales de los Trabajadores del Estado (ISSSTE), Petróleos Mexicanos (PEMEX), Secretaria de Defensa (SEDENA), Secretaria de Marina (SEMAR), and others. In contrast, many without formal benefits who are self-employed, unemployed, or who work in the informal sector receive healthcare through public-sector healthcare facilities. Since 2004, those who lack conventional social security benefits through employment have the opportunity to access a benefit package called *Seguro Popular* to receive services in public-sector healthcare facilities. There also exists an extensive and diverse private sector of healthcare services.

In the public sector, there are primary, secondary, and tertiary levels of care. Primary care is focused on preventative services. Secondary care is a network of regional hospitals with healthcare providers performing diagnostic tests, surgeries, and birth and delivery. Tertiary care is the network of hospitals and research institutes that treat people with rare medical conditions and those requiring the highest level of technology and attention. To be treated in tertiary care, a patient must first enter a unit in primary or

secondary care and get progressively referred to higher levels (Burr, Pino, Quiroz, & Martin-Lunas, 2011).

Data Collection

Policies Included as Data. We searched for policies from January 2012 to August 2012. A three-pronged search strategy was used to identify a list of policies included in the analysis: 1) searches of an electronic governmental database of clinical practice guidelines that is part of the National Center of Technological Health Excellence (Centro Nacional de Excelencia Tecnológica en Salud [CENETEC]); 2) consultations with maternal and child health and mental health experts and lawyers from the National Institute of Psychiatry (Instituto Nacional de Psiquiatría), the National Institute of Public Health (Instituto Nacional de Salud Pública), and the National Center for Gender Equality and Reproductive Health (Centro Nacional de Equidad de Género y Salud Reproductiva). The first author, who led data collection, explained the aim of this paper to three experts and one lawyer and they directed her to policies they felt were relevant, which included national health plans, national action plans for perinatal health, state and federal laws regarding health and mental health, and regulations for the respective laws. Once we became aware that the policies existed, the search engine Google was used to retrieve them; and 3) speaking with healthcare providers in five public-sector healthcare facilities in primary, secondary, and tertiary care in Mexico City. The healthcare providers were participants in a separate qualitative study on postnatal depression conducted by the first author during the same time frame as data collection for this paper. At the conclusion of the interviews with doctors, nurses, social workers, and psychologists, we asked participants if they were aware of any policies that existed with

respect to postnatal depression within their respective facilities, and if so, how to access them.

Inclusion and Exclusion Criteria. The first author utilized a Microsoft Excel spreadsheet to record all policies that were found through the electronic searches, consultations with experts and lawyers, and speaking with healthcare providers. The policies were subsequently documented as “included” or “excluded,” based on inclusion and exclusion criteria. Inclusion criteria were policies that were published or modified between 2006 and 2012 which were the years of Mexico’s former administration of Felipe Calderon and 2012 was the year when we finished data collection. Exclusion criteria were any policy that was published or modified prior to 2006 and any state policies referring to outside of Mexico City, Federal District.

Clinical practice guidelines that were found through electronic searches of the CENETEC database were evaluated for inclusion in three phases. In the first phase, we were required to tick boxes of topical interest because of the way the database was set up. Depending on which boxes we ticked, a list of applicable guidelines was generated out of a total of 597 published guidelines. The boxes we ticked included pregnancy, birth, and postpartum; and mental and behavioral health. We also ticked the box ‘miscellaneous,’ within which we selected guidelines based on their relevance to obstetrics and gynecology (OBGYN), maternal and child health (MCH), mental health, or women’s health. We did not tick the boxes that addressed addictions, genetic conditions, hematology, cancer, palliative care, perinatal loss and abortion, among other general health conditions or conditions not relevant to postnatal depression. This process generated a select list of guidelines which was further refined in the second phase.

In the second phase, policies that contained the search terms were included in the study. Within each document, we applied the Spanish spelling variations of the search term “postnatal depression” by using the search function within the portable document format (PDF). We also applied the individual terms of “depression” and “postnatal,” as well as the term “mental health” in order to locate discussions on the postpartum period that may not have been identified earlier. The search terms are provided in Table 4.3. Clinical practice guidelines were excluded if they did not contain the search terms in the text or did not discuss depression in the postnatal period. This eliminated many heavily-medical guidelines addressing, for example, obstructed labor, sepsis, or hemorrhage during childbirth.

In the third phase, some guidelines that did not contain the search terms were retained for analysis; these guidelines were thought to be useful for our study because of the explicit *absence* of references to postnatal depression despite being relevant to women’s mental health in the postpartum period. A policy was determined to be relevant if the topic of the guideline addressed a risk factor that is reported by the WHO to put a woman at risk of postnatal depression (Stewart, Robertson, Dennis, Grace, & Wallington, 2007).

Analysis

We conducted a qualitative content analysis as a way to interpret data in the policy text. The purpose was to classify data into categories and identify themes (Weber, 1990). Once text was coded into explicit categories, we obtained frequencies as a way to summarize the proportion of policies in categories and to provide a basis for interpretation of the data (Morgan, 1993). The units of analysis were the policy

Table 4.3 Search Terms Used in English and Spanish

English	Spanish
Postnatal depression	Depresión postnatal; depresión posnatal; depresión postparto; depresión posparto; depresión puerperio;
Depression	Depresión
Postnatal	Postnatal; posnatal; postparto; posparto; puerperio
Mental health	Salud mental

documents and the content area was the specific text (or absence thereof) relating to postnatal depression or depression in the postpartum period.

We used a directed approach to the qualitative content analysis. The goal of a directed approach is to “extend conceptually a theoretical framework or theory” (Hsieh & Shannon, 2005). The categories we established to code the content areas were based on a theoretical framework developed by Howlett (2000) and Hood (1986) and other researchers in the policy-implementation field (Edelmann, 1988). There are generally two categories of policies: material and symbolic. Symbolic policies are like statements of intent that articulate “healthcare goals” (WHO, 2013) in society without outlining any specific accompanying actions. These types of policies may not lead to implementation of any particular program or action. In contrast, material policies generally result in “decisions, plans, and actions” (WHO, 2013). Material policies include, for example, a U.S. Healthy People 2020 objective to increase depression screening by primary care providers (U.S. Department of Health and Human Services, 2011). This policy has the potential to influence other policies, like the law enacted in the U.S. state of New Jersey requiring healthcare providers who work in hospitals to screen for postnatal depression in women who have recently given birth (Chaudron, Szilagyi, Campbell, Mounts, &

McInerny, 2007). Material policies can be further categorized as using either substantive or procedural instruments. Substantive policy instruments directly affect the nature, type, quantity, and distribution of goods and services in a community (Howlett, 2000), whereas procedural instruments are those that affect, alter, or manipulate the implementation processes (Howlett, 2000).

For the purposes of our study, we created mutually-exclusive categories centered in the theoretical framework (Hsieh & Shannon, 2005; Weber, 1990). The categories were used to code each content area based on whether it 1) included references to postnatal depression, and if so, 2) the ways in which postnatal depression was addressed – possibly as a statement of intent, suggesting the government anticipated taking further action, and 3) if specific actions relating to the care and management of women who experience or who are at risk of experiencing postnatal depression were included. Looking at those features was a means to gauge how postnatal depression is addressed in ways that are likely to affect the care and management of women who experience or who are at risk of experiencing postnatal depression. We also obtained frequencies for the proportion of policy documents in each category, by type of document (i.e. law, regulation, clinical-practice guideline, etc.).

Results

Of 597 total clinical practice guidelines listed on the CENETEC electronic database, 100 policies were initially identified for potential inclusion based on the boxes of topical interest that we selected which limited “hits” to pregnancy, birth and the postpartum, mental and behavioral health, and miscellaneous. Of those, 96 were excluded because the search term “postnatal depression” was not included in the text of

the PDF (n=75), duplication (n=2), and some policies within the miscellaneous results lacked relevance to OBGYN, MCH, mental health or women's health (n=19). Out of the initial 96 policies that were rejected, two policies were determined to be useful for our study because of their relevance to women's mental health in the postpartum period, thus they were included in the six total policies that were extracted from the search of the electronic database. Additional policies were included based on conversations with experts and lawyers who directed us to relevant national plans and action plans (n=2), federal and state mental and physical health laws (n=3), and regulations (n=1). There was one policy from a tertiary public-sector healthcare facility included in the analysis. Health care providers from the other four facilities whom we interviewed for the qualitative study were unaware of policies that addressed maternal mental health in their respective facilities. The total policies included in the analysis are 13. The policy selection process is shown in Figure 1.

To explain our results, we grouped the policies by type of document. At the beginning of each section, we include a brief summary of what was found. Table 2 shows the distribution of policies by whether they included a statement of intent or actions relating to the care and management of women who experience or who are at risk of experiencing postnatal depression.

National Health Plans and National Action Plans

There was not a statement of intent or any actions regarding the care and management of postnatal depression in the national health plan and the national action plan. Instead postnatal depression was briefly alluded to as background information when the epidemiology of Mexico was discussed. There is an absence of references to

postnatal depression in parts of the national health plan and the national action plan where its inclusion would be relevant.

In the 2007-2012 national health plan, major depression was listed as the number one cause of healthy years lost among Mexican women in 2005. An information box in the same section noted that the postpartum period was a particularly critical time in the development of depression among women. These statements were included as background information in a chapter on the principle causes of mortality and morbidity for the Mexican population by gender. This discussion on depression among women, along with obesity and heart disease, highlighted the epidemiological transition in Mexico from infectious to chronic diseases.

Based on the health challenges in Mexico, objectives, strategic goals, and action items for completion within the six year administration were developed to establish a vision for the future, outline how it would be accomplished, and “adequately meet the health needs of Mexicans” (Secretaria de Salud [SSA], 2007, p. 77). For the years 2007 through 2012, the five objectives were to improve health conditions, reduce inequalities, provide quality health services, ensure poor health does not contribute to impoverishment, and guarantee that health services also work towards social development and poverty reduction. The first objective to improve health conditions targeted seven specific health issues, including heart disease, breast cancer, infant mortality, diabetes, and illegal drug use. Despite the burden of depression among women in Mexico, neither general depression nor postnatal depression was included as one of the strategic goals.

The second objective and accompanying strategic goal was to reduce health

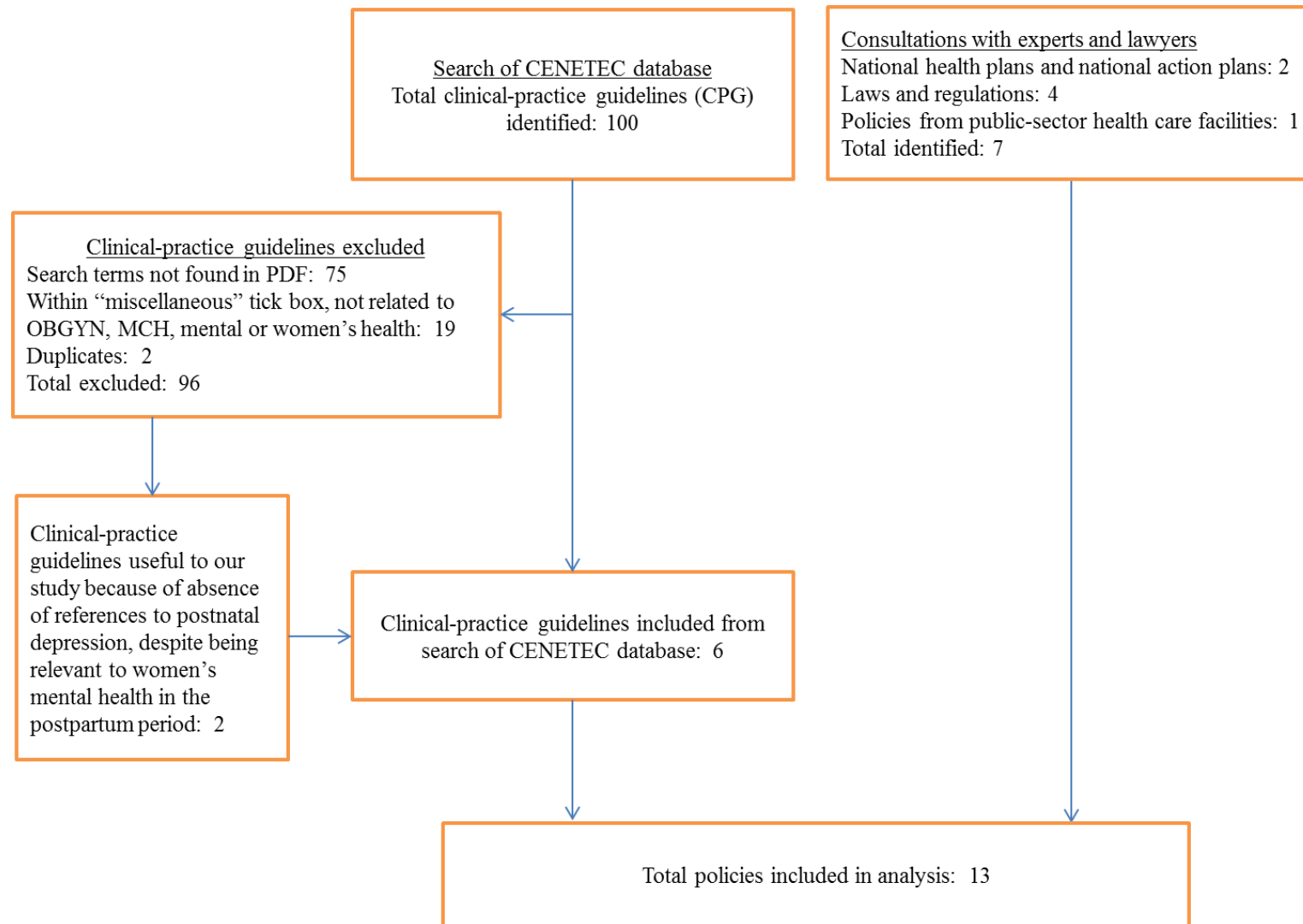


Figure 4.2 Policy Selection Process

Table 4.4 Policies by Type of Reference to Postnatal Depression

	<i>Has the potential to affect the care and management of women who experience or who are at risk of experiencing postnatal depression</i>			<i>Does not affect the care and management of women who experience or who are at risk of experiencing postnatal depression</i>	
	<i>Includes statement of intent, tied to actions</i>	<i>Includes statement of intent, not tied to actions</i>	<i>Includes actions</i>	<i>Does not include a statement of intent or actions; does include other references to postnatal depression</i>	<i>No references to postnatal depression</i>
<i>National health plans and national action plans(N=2)</i>	--	--	--	National health plan	National action plan
<i>Laws and regulations (N=4)</i>	--	Regulation of mental health law of Mexico City Mental health law of Mexico City*	--	--	National health law Health law of Mexico City
<i>Clinical-practice guidelines (N=6)</i>	--	--	Clinical practice guideline on HIV Clinical practice guideline on pre-eclampsia Clinical practice guideline on prenatal care	Clinical practice guideline on child abuse	Clinical practice guideline on depression Clinical practice guideline on violence
<i>Policies from public-sector healthcare facilities (N=1)</i>	Policy within public-sector healthcare facility	--	--	--	--
Total of policies in each category	8%	15%	23%	15%	38%

*Prioritizes mental health in the postpartum period

inequalities by reducing maternal mortality among women in low-income areas in Mexico. Maternal mortality is defined as deaths of women during pregnancy, or up to 42 days postpartum, excluding death due to accidents or suicide. The strategic goal aims to reduce by one half the causes of maternal mortality, such as obstetric hemorrhage and severe pre-eclampsia, in the 100 most impoverished municipalities. The Plan of Action for an Equal Start in Life (El Programa de Acción Arranque Parejo en la Vida), under the responsibility of the Secretary of Health's Center for Gender Equality and Reproductive Health, elaborates on the strategies and actions outlined in the national health plan to address maternal mortality. Although the plan is guided by the International Conference on Population and Development's (ICPD) definition of reproductive health which includes the state of physical, social, *and mental* well-being during the process of reproduction, the action plan does not address mental health generally or postnatal depression specifically.

Laws and Regulations

Postnatal depression was mentioned in the mental health law of Mexico City and named in the accompanying regulation. The regulation serves as a statement of intent for postnatal depression because it states that postnatal depression is a disorder that should be prioritized. It does not detail any decisions, plans, or actions related to the care and management of women who experience or who are at risk of experiencing postnatal depression. In the national health law and the health law of Mexico City, there were no references to postnatal depression.

Article 14 of the 2011 mental health law of Mexico City prioritizes mental health for certain vulnerable groups, including children, adolescents, menopausal women, older

adults, and homeless individuals. Women who are pregnant or who are in the postpartum period are included as one of the vulnerable populations. The law recognizes that the mental health of these women should be prioritized because of the risk they present to their own safety and that of others.

Postnatal depression is considered a mental health disorder that should be given priority, according to the regulation that accompanies the 2011 mental health law. It cites the WHO's *International Statistical Classification of Diseases and Related Health Problems*, tenth edition, which specifies postnatal depression as a disorder that merits special attention for two reasons. First, it only affects women. Second, mental disorders that occur in the postpartum are associated with a high risk of suicide.

There is an absence of references to postnatal depression in the national health law, established in 1984 and modified in 2012, and in Mexico City's 2012 health law. In article 16 of the national law and article 49 of Mexico City's law, maternal and child health is designated as an area of health that should receive prioritized attention, namely services for women in pregnancy, childbirth, and the postpartum period. References to postnatal depression or maternal mental health are absent.

Clinical Practice Guidelines

Postnatal depression is referenced in four clinical practice guidelines on HIV, child abuse, preeclampsia, and prenatal care. There are no statements of intent regarding postnatal depression, but several actions to be taken by healthcare providers related to the care and management of women who experience or who are at risk of experiencing postnatal depression are outlined. There is an absence of references to postnatal depression in other relevant clinical practice guidelines.

In the guideline “Prevention, Diagnosis, and Treatment of the Mother-Child Dyad with HIV,” published in 2009 and updated in 2012, postnatal depression is used as a comparison in a recommendation for women with HIV infection. The recommendation stated that women with HIV infection should receive counsel about appropriate birth control, just as counsel is important for other vulnerable women, like those with cancer, substance abuse problems, or postnatal depression. The recommendation indirectly provides information on actions that should be taken related to the care and management of women who experience or who are at risk of experiencing postnatal depression.

In the 2011 guideline for primary healthcare providers “Early Detection of Physical Abuse from Birth to Twelve Years of Age,” postnatal depression was mentioned in a recommendation. The recommendation stated that postnatal depression is something healthcare providers should investigate in the histories of caretakers suspected of child abuse, along with knowing the history of employment, problems with addiction, and previous patterns of discipline. Unlike the recommendation on HIV, this recommendation did not include actions relating to the care and management of women who experience or who are at risk of experiencing postnatal depression.

In the 2008 guideline, “Prenatal care with a Focus on Risk,” references to postnatal depression were included in a section on evidence to support a recommendation. Statements are made that antenatal depression is associated with postnatal depression. Additionally, evidence is presented that women who receive prenatal courses that include material about postnatal depression do not appear to experience a lower prevalence of postnatal depression compared to those who have not received the courses. These references to postnatal depression were included in a section

on evidence used to support the recommendation that a woman's psychiatric history should be assessed early in the pregnancy by healthcare providers. Those with a prior history should be referred to a psychiatrist. The recommendation does not explicitly mention the goal of preventing postnatal depression, however actions relating to the care and management of women who are at risk of experiencing postnatal depression are implicit.

In the 2011 guideline, "Nursing Interventions for Patients with Preeclampsia," the protocol for tertiary care nurses includes specific action relating to postnatal depression. It directs nurses to talk to women with high-risk pregnancies to provide them with anticipatory guidance about common experiences they may confront in the postpartum period, including fatigue, relationship difficulties, stress, and depression. The protocol includes specific actions related to the care and management of women who experience or who are at risk of experiencing postnatal depression, but it does not provide information on appropriate methods of implementation.

The 2008 clinical practice guideline "Detection and Treatment of Depressive Episodes" does not reference postnatal depression despite its stated target population of men and women 18 through 59 and its goal of detecting those who are high risk for the disorder. References to postnatal depression were also missing from the 2010 clinical practice guideline that addresses violence against women, "Intimate Partner Violence and Sexual Violence," both situations of which are risk factors for postnatal depression (CENETEC, 2010; Fisher et al., 2012).

Policies within Public-Sector Healthcare Facilities

Postnatal depression is referenced in a draft of a guide created by two physicians within a tertiary public-sector healthcare facility. The references to postnatal depression include a statement of intent, as well as outlining actions healthcare providers should take when working with women in the postpartum period.

The guide entitled, “Mental Health and Pregnancy” is still in draft form and is not currently in use in any public-sector healthcare facility. It is based on the 2007 NICE guide, “Antenatal and postnatal mental health: The NICE guideline on clinical management and service guidance.” It recognizes prenatal and postpartum care as an optimal time for healthcare providers to identify women who are at risk of experiencing a mental health disorder, especially considering the impact of maternal mental health on the infant, the partner, and other family members.

It provides specific guidance for healthcare providers, including the following: 1) in consultations with all women, questions should be asked about risk factors and prior mental health disorders, including past episodes of postnatal depression; 2) in all consultations, women should be asked, “During the last month, have you often felt sad or hopeless?” and other pertinent questions relating to their mental state; 3) among the women who affirm risk factors or who respond “yes” to the above questions, the Edinburgh Postnatal Depression Scale (EPDS) and Goldberg’s general health questionnaire should be administered; 4) depending on a woman’s score, stepped-care protocols include referral to a psychiatrist or psychologist, medication, and certain therapeutic approaches, like group or interpersonal therapy.

Discussion

Three important findings emerged from this analysis to provide insight into whether and how postnatal depression is addressed in policies at federal, state, and local public-sector healthcare facility levels in Mexico overall and specifically in Mexico City. First, postnatal depression is addressed in 46% (n=6) of policies in ways that might improve the quality of care for women experiencing or who are at risk of experiencing postnatal depression because they include statements of intent tied to actions, or include either a statement of intent or actions. These policies include a law and regulation, specifically the mental health law of Mexico City and its regulation; clinical-practice guidelines, specifically on pre-eclampsia, HIV and prenatal care, and a policy from a public-sector healthcare facility, specifically the drafted policy from a tertiary-care facility. Second, in 15% (n=2) of policies postnatal depression is mentioned but not addressed in a way that would affect the care and management of women who experience or who are at risk of experiencing postnatal depression. These policies include the national health plan and the clinical practice guideline on child abuse. Third, postnatal depression was not addressed at all in 38% (n=5) of policies, despite the considerable morbidity of depression among women in Mexico, the relevance of postnatal depression to a family's overall health, and the strong association of postnatal depression to other health issues. These policies include the national action plan, federal and state health laws, and the clinical practice guidelines on depression and violence against women.

In several policies postnatal depression was addressed in a way that has the potential to positively affect women who experience the problem or who are at risk of experiencing it. The public-sector healthcare facility articulated the importance of

addressing postnatal depression and included specific actions for how to do so. Although the mental health law of Mexico City and the accompanying regulation do not include specific actions related the care and management of women who experience or who are at risk of experiencing postnatal depression, the fact that postnatal depression is prioritized is promising. Assigning importance to mental health in the postpartum period means that revisions of clinical practice guidelines and future plans of action might address postnatal depression more comprehensively and include specific guidance for how to care for women who experience it or who are at risk.

Three clinical practice guidelines included actions related to the care and management of women who experience or who are at risk of experiencing postnatal depression even though the topics of the guidelines focused on other public health issues. First, the clinical practice guideline on pre-eclampsia directed nurses to talk with high-risk women in prenatal care to provide them with anticipatory guidance on postnatal depression. Second, the clinical practice guideline on HIV suggests that women with postnatal depression should receive counseling. The recommendation implies that counseling for women with postnatal depression is a well-known practice because it was used as a comparison for counseling women with HIV about birth control. Third, the clinical practice guideline on prenatal care indicates that healthcare providers should ask women in prenatal care if they have a history of psychiatric disorders and if affirmed, refer those women to a psychiatrist during their pregnancy. Because evidence is cited that antenatal depression is a precursor to postnatal depression (NICE, 2003), the recommendation implies that an appropriate way to prevent postnatal depression is to detect high-risk women and treat problems during pregnancy.

Several policies included references to postnatal depression, but it was not addressed in a way that would alter how women are cared for or how symptoms are managed. The clinical practice guideline on child abuse did not include any actions related to the care and management of women who experience or who are at risk of experiencing postnatal depression. Instead, postnatal depression was mentioned in a recommendation as a possible causal factor of child abuse and something healthcare providers should investigate in the histories of caretakers suspected of child abuse. By linking the two issues together, the recommendation sends the message that caring about child abuse means caring about postnatal depression. We were unable to find any guidelines on preventing or addressing postnatal depression, however, signifying a ‘dead end’ for healthcare providers who may wish to do something about child abuse by first addressing the mental health of the caretakers. In the national health plan, the postpartum period was noted as a critical time in the development of depression among women, but neither postnatal depression nor general depression was included as a strategic goal despite its health burden in the Mexican population. One reason to explain the discrepancy is the fact that the strategic goals focus on causes of mortality and depression is largely a cause of morbidity (WHO, 2013).

Several policies did not address postnatal depression in any way. Postnatal depression was not included in the Plan of Action for an Equal Start in Life, which was designed in response to the 2nd objective of the national health plan, as well as the 5th Millennium Development Goal signed by Mexico to develop efforts to cut global rates of maternal mortality by three-quarters by 2015. The national action plan does not address the association between postnatal depression and maternal mortality, despite evidence

suggesting suicide is the leading cause of death among women in the postnatal period in both high-income and low- and middle-income countries (WHO, 2008a; WHO, 2005; Oates et al., 2003).

Postnatal depression was also not included in the clinical-practice guidelines on violence and depression. The exclusion of postnatal depression in the guideline on violence is noteworthy because of the strong association between the two issues (Place & Billings, 2012; Valentine et al., 2011; Bacchus, 2004; Antoniou et al., 2008; Ludermir et al., 2010). Postnatal depression was also left out of the clinical practice guideline on depression. The absence may reflect a view that symptomology, detection, and treatment for postnatal depression do not differ from that of a general depression. Notwithstanding, references to postnatal depression would be warranted given that research suggests first onset and severe depression are three times higher in the postpartum period than at other times in a woman's life (Stewart et al., 2003).

The policies we looked at from Mexico do not reflect the level of attention global leaders from the WHO and UNFPA recommend, excepting the drafted policy in the tertiary public-sector healthcare facility which includes stepped-care protocols that largely follow the NICE clinical guidelines. We are not aware of when this policy is planned for implementation. Efforts to address postnatal depression do not appear to be integrated into the health systems or initiatives to combat violence against women, ameliorate general depression, or reduce maternal mortality. It is important to note that the clinical practice guidelines on violence, depression, and prenatal care were published prior to the announcement of the 2011 mental health law and regulation regarding the prioritization of mental health for women in the postpartum period, including those who

experience postnatal depression. Although this law and regulation pertain to Mexico City, this law may serve as an example for more comprehensive legislation and could represent an important shift in material included in future revisions of clinical practice guidelines. In addition, the regulation of the mental health law of Mexico City includes various actions for the improvement of mental health, such as charging the Secretary of Health with development of an Internet page to orient the public to the risks, detection, treatment, and rehabilitation of mental health disorders. This is not explicit to postnatal depression, but it does reflect an important starting point that could lead to actions specifically targeted towards a specific disorder.

Postnatal depression also extends outward to affect children's development (Wachs, 2009). United Nations conventions ratified by Mexico, such as the Convention on the Elimination of All Forms of Discrimination Against Women (CEDSAW) in 1981, the Convention on the Rights of the Child (CRC) in 1990, and the Convention on the Rights of Persons with Disabilities (CRPD) in 2007 are rights-based strategies that can be used by nongovernmental organizations and advocacy groups to pressure the government to take action on postnatal depression (Engle, 2009).

The General Recommendation 24 of Article 12 of the CEDAW, adopted in 2003, recommends that governments who have ratified CEDAW should report data on the health status of women and on how the governments' policies address women's specific healthcare needs, including those who experience postnatal depression. The General Recommendation 24 also explains that measures to eliminate discrimination against women are inappropriate if a healthcare system lacks services to prevent, detect, and treat illnesses specific to women. Because postnatal depression is a condition that greatly

affects women, health systems in Mexico should have protocols in place to prevent, detect, and treat it. The tertiary public-sector health facility is on a good path for fulfilling the call from CEDAW because of their drafted policy that addresses care and management of women with postnatal depression.

Several articles in the CRPD and the CRC are relevant to women who experience postnatal depression. The CRPD requires governments who have ratified the convention to provide both medical and social support for those who experience disabilities, which includes maternal depression listed as a disability in Article 1 (Dhanda & Narayan, 2007). Article 2 of the CRC states that children should not face discrimination on the basis of their parents' disability. It states that governments "shall render appropriate assistance to parents...in the performance of their child-rearing responsibilities" (CRC, 1989).

To protect women's and children's rights and improve their health outcomes, maternal mental-health policies are needed in Mexico and other low- and middle-income countries. Patel, Saraceno, and Kleinman. (2006) describe how governments from India to South Africa changed their policy on antiretroviral drugs for people living with HIV/AIDS in response to human rights-based arguments, including that these people had the right to access antiretroviral drugs, that the state had to provide them for free, and that drug companies had to lower their prices. Subsequently, care for people living with HIV/AIDS improved. The same rights-based argument, Patel claims, is needed for mental health. Wach et al. (2009) states that policies for maternal mental health are needed in order for the health systems in low- and middle-income countries to develop effective and accessible identification, treatment, and prevention strategies. Policies can

help overcome what Rahman et al. (2013) have called misconceptions regarding maternal mental health, such as the belief that maternal depression is rare, difficult to be treated, and not relevant to maternal and child health programs.

Other scholars recommend that not only are local-level interventions needed, but also macro policies that address occupational justice, education and economic empowerment, poverty reduction, and gender equality (Rahman et al., 2013; Herman & Swartz, 2007). Intervening upon the social determinants of health, or the societal conditions in which people are born, grow, live, work, and age, is crucial. The Rio Political Declaration on Social Determinants of Health (WHO, 2011) recognizes the importance of developing policies that address social determinants, advocating for special attention in policies to gender and early child development. Postnatal depression is a gendered health issue with the burden falling heavily on women (Fisher, 2012; Goodman, 2004). Healthcare providers who interface with low-income women in public-sector healthcare facilities in Mexico have commented extensively on the social determinants or root causes of postnatal depression and other forms of perinatal distress (cite first paper). Federal, state, and local-level policies on maternal mental health should speak to the social determinants of health that providers recognize in their practice setting.

Conclusion

While postnatal depression is addressed in several policies in Mexico, as a whole it is not addressed in ways that affect the care and management of women who experience or who are at risk of experiencing postnatal depression. Statements of intent included in laws regarding the importance of maternal mental health are essential because they bring attention to an issue and influence other policies, but lacking effective and

specific actions, they are inadequate. Strategic goals within national health plans related to postnatal depression are also needed to bring concerted action to maternal mental health. Postnatal depression is mentioned in clinical practice guidelines, which indirectly suggest actions for detection and treatment of postnatal depression, but guidelines devoted entirely to maternal mental health are needed, such as the NICE guidelines for antenatal and postnatal mental healthcare used by primary healthcare providers in the United Kingdom. The drafted policy in the tertiary public-sector healthcare facility which includes stepped-care protocols that largely follow the NICE clinical guidelines is a promising start for a local-level hospital.

Addressing depression generally is not sufficient; specific direction on postnatal depression in policies would bridge a gap in maternal mental healthcare given that medication, treatment, and timing of intervention is unique in the postpartum context. Specific policy on postnatal depression would be ground-breaking in Mexico, paving the way for not only an enhanced focus on maternal mental healthcare in low- and middle-income countries, but an expanded focus the issues interwoven with postnatal depression, including violence against women, unplanned pregnancy, poverty reduction, gender equality, and child development. Significant work must take place in Mexico to ensure the development of policies that explicitly addresses the care and management of women who experience or who are at risk of experiencing postnatal depression and to integrate these policies in the healthcare systems of Mexico

The consensus statement from the expert meeting held in Vietnam in 2007 concluded with a call for governments to “take immediate action to address mental health in their endeavors to improve maternal and child health, survival and development.

Political commitment in the form of concerted action by global stakeholders and resources is needed now to integrate maternal mental health in strategies to achieve the Millennium Development Goals” (WHO, 2009, p. 3). Effective policies are just one component of many that advance an issue like postnatal depression on the political agenda. Implementation of concrete practice changes requires financing, coordination, organization of services, human resources and training, and research and evaluation, among other factors (WHO, 2004).

References

- Almond, P. (2009). Postnatal depression: A global public health perspective. *Perspectives on Public Health*, 129(5), 221-227.
- Alvarado-Esquivel, C., Sifuentes-Álvarez, A., Estrada-Martínez, S., Salas-Martínez, C., Hernández-Alvarado, A., Ortiz-Rocha, S.,...Sandoval-Herrerad, F. (2010). Prevalencia de depresión postnatal en mujeres atendidas en hospitales públicos de Durango, México. *Gac Med Mex*, 146(1).
- Anderson, J. (2003). *Public policymaking: An introduction*. Boston: Houghton Mifflin Company.
- Antoniou, E., Vivilaki, V., and Daglas, M. (2008). Correlation of domestic violence during pregnancy with postnatal depression: Systematic review of bibliography. *Health Science Journal*, 2(1), 15-19.
- Bacchus L, Mezey G, and Bewley S. (2002). Women's perceptions and experiences of routine enquiry for domestic violence in a maternity service. *British Journal of Obstetrics and Gynecology*, 109, 9-16.
- Baker-Henningham, H. Powell, C., Walker, S., Grantham-McGregor, S. (2005). The effect of early stimulation on maternal depression: A cluster randomized controlled trial. *Archives of Disability in Children*, 90, 1230-1234.
- Boath, E., Pryce, A., and Cox, J. (1998). Postnatal depression: The impact on the family. *Journal of Reproductive and Infant Psychology*, 16(2/3), 1998
- Breedlove, G. and Fryzelka, D. (2011). Depression screening during pregnancy. *Journal of Midwifery Women's Health*, 56(1), 18-25.
- Brewer, G. and DeLeon, P. (1983). *The Foundations of Policy Analysis*. Homewood, NJ: Dorsey Press.
- Castro, F., Hinojosa-Ayala, N., & Hernandez-Prado, B. (2011). Risk and protective factors associated with postnatal depression in Mexican adolescents. *Journal of Psychosomatic-Obstetrics & Gynecology*, 32(4): 210-217.
- CENETEC. (2009). *Guia de Practica clinica prevencion, diagnostico, y tratamiento en el binomio madre-hijo con infección por el VIH*. Mexico: Instituto Mexicano del Seguro Socia

- CENETEC. (2011). Detección temprana del abuso físico desde el nacimiento hasta los 12 años de edad en el primer nivel de atención. Mexico: Secretaria de Salud, 2011.
- CENETEC. (2008). Guia de practica clinica para el control prenatal con enfoque de riesgo. Mexico: Secretaria de Salud.
- CENETEC. (2011). Guia de practica clinica intervenciones de enfermería en la paciente con preeclampsia/eclampsia. Mexico: Secretaria de Salud.
- CENETEC. (2010). Detección y atención de la violencia de pareja y de la violencia sexual, en el primer y segundo niveles de atención. Mexico: Secretaria de Salud.
- CENETEC. (2009). Diagnóstico y Tratamiento del Trastorno Depresivo. Mexico: Secretaria de Salud.
- Centro de Contraloria Social y Estudios de la Construcción Democrática [CIESAS] (2011). *Guia para el paciente participativa* (Chapter 4). Distrito Federal, Mexico: Burr, C., Pino, A., Quiroz, L., and Martin-Lunas, E.
- Chaudron, L., Szilagyi, P., Campbell, A., Mounts, K., and McInerney, T. (2007). Legal And ethical considerations: Risks and benefits of postpartum depression screening at well-child visits. *Pediatrics*, 119(1), 123-128.
- Consejo Nacional de Evaluación de la Política de Desarrollo Social (CONEVAL), 2008. Módulo de Condiciones Socioeconómicas de la Encuesta Nacional de Ingresos y Gastos de los Hogares. Distrito Federal: Instituto Nacional de Estadística y Geografía (INEGI).
- Cooper, P., Tomlinson, M., Swartz, L., Landman, M., Molteno, C. (2009). Improving the quality of mother-infant relationship and infant attachment in socioeconomically deprived community in South Africa: Randomised controlled trial. *British Medical Journal*, 338, b974.
- Dhanda, A. Narayan, T. (2007). Mental health and human rights. *The Lancet*, 370.
- DiGirolamo, A. & Snyder, N. (2008). Women as primary caregivers in Mexico: challenges to well-being. *Salud Publica Mex*, 50(6), 516-522.
- Edelman, M. (1988). *Constructing the Political Spectacle*. Chicago, IL: University of Chicago Press.
- Engle, P. (2009). Maternal mental health: Program and policy implications. *American Journal of Clinical Nutrition*, 89(suppl): 963S-966S.

- Fisher, J., Mello, M., Patel, V., Rahman, A., Tran, T., Holton, S., & Holmes, W. (2012). Prevalence and determinants of common perinatal mental disorders in women in low- and lower-middle-income countries: A systematic review. *Bulletin of the World Health Organization*, 90, 139-149.
- Fisher, J. Mello, M., Izutsu, T., and Tran, T. (2011). The Ha Noi Expert Statement: Recognition of maternal mental health in resource-constrained settings is essential for achieving the Millennium Development Goals. *International Journal of Mental Health Systems*, 5(2), 1-6.
- Fuentes, C., Castillejos, F., Alejandro, J., Anaya, R., Cedillo, D., Hernandez, J., and Garcia, L., (2000). Que es una guía clínica? *Revista de Medicina IMSS*, 38(2), 113-117.
- Goodman, J. (2004). Paternal postpartum depression, its relationship to maternal postpartum depression, and implications for family health. *Journal of Advanced Nursing*, 45(1), 26-35.
- Graneheim, U, and Lundman, B. (2004). Qualitative content analysis in nursing research: Concepts, procedures and measures to achieve trustworthiness. *Nurse Education Today*, 24, 105-112.
- Herrman, H., Saxena, S., Moodie, R. (2006). Promoting mental health: Concepts, emerging evidence, practice. Geneva: World Health Organization.
- Herrman, H., and Swartz, L. (2007). Comment: Promotion of mental health in poorly resourced countries. *Lancet*, 370, 1195-1197.
- Hood, C. (1986). *Tools of Government: Public Policy and Politics*. London, England: Chatham House Publishers.
- Howlett, M. (2000). Managing the “hollow state”: Procedural policy instruments and modern governance. *Canadian Public Administration*, 43(4), 412-431.
- Hsieh, H. and Shannon, S. (2005). Three approaches to qualitative content analysis. *Qualitative Health Research*, 15(9), 1277-1288.
- Instituto Nacional de las Mujeres (INMUJERES) (2006). Panorama de la salud mental en las mujeres y los hombres mexicanos. Mexico: INMUJERES.
- Instituto Nacional de Estadística y Geografía (INEG) (2001). Poblacion. Retrieved August 13, 2013 from <http://www3.inegi.org.mx/Sistemas/temasV2/Default.aspx?s=est&c=17484>

- Khan, S. (1999). Role of the convention on the elimination of discrimination against women (CEDAW) in realization of women's reproductive health, sexual health and reproductive rights. The Hague Forum: Netherlands.
- Lara, M., Berenzon, S., Garcia, F., Medina-Mora, M., Rey, G., Velazquez, J., and Lopez, M. (2012). Population study of depressive symptoms and risk factors in pregnant and parenting adolescents. *Revista Panamericana de Salud Pública*, 31,(2), 102-108.
- Ludermir, A., Lewis, G., Valongueiro, S., Araujo, T., and Araya, R. (2010). Violence against women by their intimate partner during pregnancy and postnatal depression: a prospective cohort study. *The Lancet*, 376(9744), 903-910.
- Morgan, D. (1993). Qualitative content analysis: A guide to paths not taken. *Qualitative Health Research*, 3, 112-121.
- Navarro, C., Navarette, L., Lara, M. (2011). Factores asociados a la percepción de eficacia materna durante el posparto. *Salud Mental*, 34, 37-43.
- NICE (2003). Antenatal and postnatal mental health: Clinical management and service guidance. Manchester: National Institute for Health and Clinical Excellence.
- NVivo qualitative data analysis software: QSR International Pty Ltd. Version 10, 2012.
- O'Hara, M., & Swain, A. (1996). Rates and risks of postpartum depression – a meta analysis. *International Review of Psychiatry*, 8(1), 37-54.
- Oates, M. (2003). Suicide: the leading cause of maternal death. *The British Journal of Psychiatry*, 183(4), 279-281.
- Patel, M., Bailey, R., Jabeen, S., Ali, S., Barker, N. and Osiezagha, K. (2012). Postpartum depression: A review. *Journal of Health Care Poor Underserved*, 23(2), 534-542.
- Patel, V. et al., (2004). Effect of maternal mental health on infant growth in low income countries: New evidence from South Asia. *British Medical Journal*, 328, 820-823.
- Patel, V., Saraceno, B., and Kleinman, A. (2006). Beyond evidence: The moral case for international mental health. *American Journal of Psychiatry*, 163(8), 1312-1315.
- Pattinson, R., Say, L., Souza, J., Broek, N., and Rooney, C. (2009). WHO maternal death and near-miss classifications. *Bulletin of the World Health Organization*, 87, 734-34.

- Paulson, J., Dauber, S., and Leiferman, J. (2006). Individual and combined effects of postpartum depression in mothers and fathers on parenting behavior. *Pediatrics*, *118*(2), 659-668.
- Perinatal HIV Guidelines Working Group (2008). Recommendations for Use of Antiretroviral Drugs in Pregnant HIV-Infected Women for Maternal Health and Interventions to Reduce Perinatal HIV Transmission in the United States, July 8, 2008
- Place, J. and Billings, D. (2011). Detecting intimate partner violence and postpartum depression: Neglected issues in pregnancy and women's health. *The Journal of Global Health*, *1*(2), 27-30
- Partnership for Maternal, Newborn, and Child Health (2011). *A global review of the key interventions related to reproductive, maternal, newborn and child health*. Geneva, Switzerland: PMNCH.
- Prince, M., Patel, V., Saxena, S., Maj. M., Maseka, J., Phillips, M., & Rahman, A. (2007). No health without mental health. *The Lancet*, *370*, 859-877.
- Rahman, A. et al. (2004). Impact of maternal depression on infant nutritional status and illness: A cohort study. *Archives of General Psychiatry*, *61*, 946-952.
- Rahman, A., et al. (2007). Association between antenatal depression and low birth weight in a developing country. *Acta Psychiatrica Scandinavica*, *115*, 481-486.
- Rahman, A., (2008). Cognitive behavior therapy-based intervention by community health workers for mothers with depression and their infants in rural Pakistan: a cluster-randomized controlled trial. *Lancet*, *372*, 902-909
- Rahman, A. Surkan, P., Cayetano, C., Rwagatare, P., and Dickson, K. (2013). Grand challenges: Integrating maternal mental health into maternal and child health programmes. *PLOS Medicine*, *10*(5), 1-7.
- Robertson, E., Celasun, N., & Stewart, D. (2003). Risk factors for postpartum depression. In Stewart D., Robertson, E., Dennis, C., Grace, S., & Wallington, T. *Postpartum depression: Literature review of risk factors and interventions*.
- Romer-Gutierrez, G., Duenas de la Rosa, E., Regalado-Cedillo, C., Ponce-Ponce de Leon, A. (2010). *Prevalence of maternal sadness and its associated factors*. *Ginecologica Obstetrica de Mexico*, *78*(1), 53-57.
- Saraceno, B., Markvan, O., Batniji, R., Cohen, A., Gureje, O., Mahone, J., . . . Underhill, C. (2007). Barriers to improvement of mental health services in low-income and middle-income countries. *Lancet*, *370*, 1164-1174.

- Secretaria de Salud (2009). *Diagnóstico y Tratamiento del Trastorno Depresivo*. Mexico: Secretaria de Salud.
- Secretaria de Salud (2007). *Programa Nacional de Salud 2007-2012*. Mexico: Secretaria de Salud
- Shekelle, P. (1999). Developing Guidelines. *British Medical Journal*, 318(7183), 593-596.
- Shiffman, J., & Smith, S. (2007). Generation of political priority for global health initiatives: a framework and case study of maternal mortality. *The Lancet*, 370(9595), 1370-1379.
- Stewart, D., Robertson, E., Dennis, C., Grace, S., & Wallkington, T. (2003). Postpartum depression: Literature review of risk factors and interventions. *Toronto: University Health Network Women's Health Program for Toronto Public Health*.
- Stowe, Z., Hostetter, A., & Newport, J. (2005). The onset of postpartum depression: Implications for clinical screening in obstetrical and primary care. *American Journal of Obstetrics and Gynecology*, 192(2), 522-26.
- Valentine, J., Rodriguez, M., Lapeyrouse, L., and Zhang, M. (2011). Recent intimate partner violence as a prenatal predictor of maternal depression in the first year postpartum among Latinas. *Archives of Women's Mental Health*, 14, 135-143.
- Wachs, T., Black, M., Engle, P. (2009). Maternal depression: A global threat to children's health, development, and behavior and to human rights. *Society for Research in Child Development*, 3(1), 51-59.
- Weber, R. (1990). *Basic Content Analysis*. Sage Publications, Newbury Park, CA.
- UN General Assembly, *Convention on the Rights of the Child*, 20 November 1989, United Nations, Treaty Series, vol. 1577, p. 3. Retrieved June 14, 2013 from <http://www.ohchr.org/EN/ProfessionalInterest/Pages/CRC.aspx>
- UN General Assembly, *Convention on the Elimination of All Forms of Discrimination Against Women*, 18 December 1979, United Nations, Treaty Series, vol. 1249, p. 13. Retrieved June 14, 2013 from <http://www.un.org/womenwatch/daw/cedaw/>
- UN General Assembly, *Convention on the Rights of Persons with Disabilities : resolution adopted by the General Assembly*, 24 January 2007, A/RES/61/106. Retrieved June 14, 2013 from <http://www.un.org/disabilities/convention/conventionfull.shtml>

- U.S. Department of Health and Human Services. (2000). *Healthy People 2010*. Retrieved June 14, 2013 from <http://www.healthypeople.gov/2020/topicsobjectives2020/objectiveslist.aspx?topicId=28>
- World Health Organization (2005). *Maternal mortality in Vietnam, 2000: An in-depth analysis of causes and determinants*. (NLM Classification: WA 900). Manila, Phillipines: WHO.
- World Health Organization. (2004). *Mental health policy, plans, and programmes*. Geneva, Switzerland: WHO.
- World Health Organization. (2008). *Maternal mental health and child development in low and middle income countries*. Geneva, Switzerland: WHO.
- World Health Organization. (2009). *Maternal mental health and child health and development in resource-constrained settings*. Geneva, Switzerland: WHO.
- World Health Organization. (2009). *Mental health aspects of women's reproductive health*. (NLM classification No. WA 309). Geneva, Switzerland: WHO.
- World Health Organization. (2012). Depression Retrieved June 13, 2013, from http://www.who.int/mental_health/management/depression/definition/en/
- World Health Organization. (2013). Health policy. Retrieved June 13, 2013, from http://www.who.int/topics/health_policy/en/

CHAPTER 5

This chapter summarizes the overall findings from my research project. It is organized by specific aim and corresponding research questions. I discuss the findings of each study in the context of related literature. I also outline the limitations of each study. Finally, this chapter concludes with the implications of the project and recommendations for future research.

5.1 Summary of Findings

Specific Aim #1

The first aim is to understand the conceptualizations of postnatal depression among physicians, nurses, social workers, and psychologists in primary, secondary, and tertiary levels of care in the public-sector healthcare facilities in Mexico City and Yautepec, Morelos, as well as understand how healthcare providers apply their understanding of social and behavioral antecedents in their conceptualizations of postnatal depression.

Research Question #1. How do physicians, nurses, social workers, and psychologists in the primary, secondary, and tertiary levels of care in the public sector in Mexico City and Yautepec, Morelos, Mexico conceptualize postnatal depression within their practice setting?

Grounded theory was used to identify four themes that illustrate how healthcare providers conceptualize postnatal depression within their practice setting: 1) postnatal depression is represented through symptoms of distress; 2) postnatal depression disrupts a

woman's responsibilities with motherhood; 3) postnatal depression exists amid other categories of distress; and 4) postnatal depression is understood through a biochemical or adjustment framework, or both.

Postnatal depression is represented through symptoms of distress. The first theme is exemplified in the following quote:

“If the patient clearly manifests symptoms then I will ask them directed questions, but if they don't give me any clue, it's not ideal but we almost take for granted that the patient is doing OK emotionally.” (Physician, male, 26, tertiary care)

Healthcare providers, many of whom do not have contact with women beyond 24 to 48 hours after delivery, used symptoms of distress in the postnatal period to recognize women who are experiencing emotional difficulties, such as long-standing distress originating prior to childbirth and maternal blues, and who may possibly be at risk for postnatal depression. The recognition of symptoms of distress supports Green's (1998) argument that healthcare providers should be interested in broader extremes of mood than just those that qualify for psychiatric labels like depression. For healthcare providers, symptoms of distress are an early indicator that women are experiencing emotional difficulty and may be at risk for postnatal depression, thus symptoms of distress may provide an opportunity for healthcare providers to refer women to appropriate services. The symptoms of distress used by healthcare providers to represent a possible case of postnatal depression are not diagnostically different than symptoms of depression experienced at other times of life according to the DSM-V, except it is influenced by the postpartum context. This supports an argument made by Whiffen (1992) that postnatal

depression is not a unique entity from depression at other times in a woman's life (Whiffen 1992; Riecher-Rossler, et al., 2003).

Postnatal depression disrupts a woman's responsibilities with motherhood. The second theme is exemplified in the following quote:

“From making dinner, cleaning the toilet, and taking care of the kids and everything, [postnatal depression] is detrimental to the family and obviously it affects the emotional atmosphere; the family is broken.” (Physician, male, 34, secondary care)

Symptoms of distress due to long-standing distress originating prior to childbirth, maternal blues, or postnatal depression are conceptualized as disrupting a woman's responsibilities associated with motherhood. This idea is consistent with research suggesting that women are seen as the primary caregivers in the home in Mexico (DiGirolamo & Snyder, 2008). Because of this role, a woman has the responsibility of supporting and guiding the family, as well as being her husband's sexual and social partner, the nurturer of children, the educator, and the main person responsible for reproduction, maintenance of the family's health and well-being, and transmission of cultural and social values to children (DiGirolamo & Snyder, 2008). According to the healthcare providers in the study, postnatal depression and other categories of postpartum distress disrupt a woman's capacity to fulfill those responsibilities. Consistent with my findings that suggest postnatal depression and other categories of distress is perceived as disrupting mothering, other studies have reported women with postnatal depression have less positive interactions with their infants, experience impaired cognitive processes

which may hinder adherence to recommended infant immunization schedules, and express decreased gratification in the maternal role (Logsdon et al., 2006).

Postnatal depression exists amid other categories of distress. The third theme is exemplified in the following two quotes. One represents maternal blues as a category of distress and the other represents distress originating prior to the postpartum period:

Maternal blues: *“We aren’t able to diagnosis an official postnatal depression because we aren’t able to detect that here; that develops through the weeks, in the first four weeks after delivery. So, what I think I’ve diagnosed and what I’ve seen is maternal blues” (Psychologist, male, 28, secondary care)*

Distress originating prior to the postpartum period: *“No, I don’t think this is postnatal depression, this is depression that is from a long time ago.” (Psychologist, female, 30, secondary care)*

Psychologists consistently used specific criteria from the DSM-V, including the two-week duration of symptoms and onset within four weeks after delivery, to distinguish maternal blues and distress originating prior to pregnancy from a case of postnatal depression, whereas physicians, nurses, and social workers acknowledged a difference between postnatal depression and other distress but did not use specific criteria to articulate the difference.

The healthcare providers distinguished postnatal depression from maternal blues. Maternal blues is a common diagnostic category for transitory emotional lability occurring one or two days after delivery and lasting no longer than two weeks (Miller, 1999). The symptoms of distress the majority of healthcare providers recognized in their practice setting may pertain to maternal blues because of the timing of providers’

interactions with women after delivery. Health care providers recognized, however, that symptoms of distress after delivery also represent a woman who may be at risk for postnatal depression. Research findings from around the world show that women who experience maternal blues have a higher likelihood of experiencing postnatal depression (Beck, 1996; Beck, 2001).

Healthcare providers also distinguished postnatal depression from distress originating prior to pregnancy. It was unclear whether distress prior to pregnancy referred to an ongoing depressive disorder, dysphoria, or stress. Postnatal depression, according to the DSM-V, must have onset of depressive symptoms within four weeks after delivery. Many studies that measure postnatal depression, however, do not only refer to new onset cases but rather look at the total prevalence of depression in the postpartum period regardless of when it began (Riecher-Rossler & Fallahpour, 2003). Like the DSM-V, the healthcare providers and especially psychologists in this study specified whether symptoms originated prior or after delivery.

Postnatal depression is understood through a biochemical or adjustment framework, or both. The fourth theme is exemplified in the following two quotes. One quote represents the biochemical framework and the other quote represents the adjustment framework.

Biochemical: “There are many changes [during pregnancy] and her body simply could not compensate.” (Physician, female, 39, secondary care)

Adjustment: “It must feel strange to have such a big responsibility upon you. I think that all of this is part of the causes [of postnatal depression].” (Physician, female, 25, tertiary care)

Postnatal depression was conceptualized by healthcare providers as a biochemical problem, an adjustment problem, or both. There was a tendency for doctors to view postnatal depression through the biochemical framework, for social workers and psychologists to view it through the adjustment framework, and for nurses to straddle both perspectives. Consistent with these results, Schon (1983) contends that professionals frame problems in ways that reflect their training and the techniques of their discipline. These results reflect dominant models used by researchers and clinicians in the field of maternal mental health. The medical model, or what I have termed the biochemical framework, takes an individualistic approach to postnatal depression, looking at it as a pathological condition rooted in a hormonal imbalance (Dayton, 1971; Mauthner, 1998). Other healthcare providers, including general practitioners and health visitors who are similar to community health workers in the United Kingdom, have likewise conceptualized postnatal depression through a biochemical framework (Lloyd & Hawe, 2003; McConnell et al., 2005; Small et al., 2007; Thomas et al., 2008). The adjustment framework is also supported in studies, termed the social model (McConnell et al., 2005) or the social competence model (Lloyd and Hawe, 2003). In these models, postnatal depression is seen as an adjustment difficulty related to problems with competency in the maternal role, as well as problems acclimating to the life-changing experience of having a child. I used the terms ‘adjustment’ framework and ‘biochemical’ framework to stay consistent with the words used by healthcare providers.

Research Question #2. How do these healthcare providers apply their understanding of social and behavioral antecedents in their conceptualizations of postnatal depression?

Grounded theory was also used to identify one theme that illustrates how healthcare providers apply their understanding of social and behavioral antecedents in their conceptualizations of postnatal depression.

Social and behavioral antecedents strongly influence development of postnatal depression. The theme is exemplified through the following quote:

“[Postnatal depression] always has at its base the social conditions in which a woman lives or the social and behavioral risk factors that she has been dealing with.”

(Physician, female, 27, tertiary care)

Social and behavioral antecedents, like financial difficulties and unplanned pregnancy, underscored healthcare providers’ conceptualizations of postpartum distress, including long-standing distress originating prior to childbirth, maternal blues, and postnatal depression. Regardless of whether providers viewed postnatal depression from a biochemical or adjustment framework, they extensively commented on the hardships women experience in their everyday lives that contribute to postnatal depression. The social and behavioral antecedents were seen as triggering or compounding postnatal depression.

A meta-analysis conducted in 17 low and lower-middle income countries examined the determinants of postnatal mental disorders including depression. The risk factors were socioeconomic disadvantage, unintended pregnancy, being younger, being unmarried, lacking intimate partner empathy and support, having hostile in-laws, experiencing intimate partner violence, having insufficient emotional and practical support, and in some settings, giving birth to a female and having a history of mental health problems (Fisher et al., 2012). The healthcare providers in this study referred to

very similar risk factors, which were termed social and behavioral antecedents to use the words used by healthcare providers. Consistent with healthcare providers' reports, quantitative studies among women in Mexico have demonstrated the statistical association between postnatal depression and poor social support (de Castro et al., 2011); history of depression, poor partner relationship, unplanned pregnancy, and family problems (Alvarado-Esquivel et al., 2010); and lack of partner (Lara et al., 2012).

Strengths and Limitations. While this study had a number of strengths, including the quantity of healthcare providers interviewed and the diversity of public-sector healthcare facilities included, I acknowledge several limitations. One limitation is that the sample included many healthcare providers in secondary and tertiary care who see women for a short time after delivery and not in the period when postnatal depression is clinically defined. These healthcare providers were nevertheless recruited to participate because of the contact they have with low-income women who generally do not interface frequently with healthcare providers except during the perinatal period. The conceptualizations of postnatal depression among this sample of healthcare providers are important because of their unique position to detect mental health problems early and refer women to appropriate services and treatment. Conceptualizations of postnatal depression among these providers are important given that they do not normally encounter a clinical case in their practice; because of the timing of their interactions with women, any symptom of distress became relevant, indicating a possible case of postnatal depression. I also interviewed healthcare providers in one primary care facility where women in the postpartum period receive follow-up services. These healthcare providers theoretically have more contact with women in the months following delivery. In future

studies on postnatal depression in the Mexican health system, plans to recruit more facilities in primary care should be considered.

An additional limitation is that the sample only included one psychologist in primary care. This prevented me from deeply examining the differences between conceptualizations of psychologists at secondary and tertiary care compared to those in primary care. This presents a problem of generalizability. Unlike quantitative studies, the goal of generalizability in qualitative studies is not demographic but *situational* representativeness. Because only one psychologist from primary care was interviewed, there was insufficient information about how psychologists in primary care overall conceptualized postnatal depression.

Another limitation is that responses to the vignettes may not have accurately and sufficiently reflected how healthcare providers would react in their own practice setting. One reason for this is that vignettes do not allow the interaction and feedback between patient and provider that would normally ensue. Hughes (1998) argues, however, that the purpose of vignettes is to highlight certain aspects of the real world in order to reveal respondents' perceptions, beliefs, and attitudes. To address this limitation, the second part of the interview guide addressed healthcare providers' understandings of postnatal depression specifically and did not rely on emic interpretations of the vignette. The second part of the interview guide complemented the presentation of the vignettes to create a more balanced picture of how healthcare providers react in real life (Hughes, 1998).

Another limitation with respect to the vignettes is that not all healthcare providers responded to a single vignette; instead, some healthcare providers responded to the

vignette based on the interview from Mexico City and others responded to the vignette based on interviews from Yautepec. The different vignettes may have produced different responses, however, both vignettes presented an account of women's postnatal depressive symptoms, hence I am confident that healthcare providers were responding to vignettes with similar features.

Reactivity is another problem I encountered in this study. Reactivity is the influence of the researcher on the setting or individuals studied (Maxwell, 2005b). The presence of the researcher can induce socially desirable responses or other participant reactions. It is impossible to eliminate the influence researchers carry in an interview, but it is paramount to understand how it impacts data collection and how it influences the inferences the researcher is able to draw from the interview. I addressed this limitation by trying to avoid leading questions in the interview guide and by reading vignettes verbatim. The interview guide and vignettes were checked by a bi-lingual expert for applicability and readability. Because I am neither Mexican nor a native speaker of Spanish, my nationality and accent may have additionally influenced the interview. At the beginning of the interviews, I informed the participants that I was not from Mexico and I asked them if they adequately understood my Spanish. Although all participants affirmed they understood me, their perception of my language abilities may have caused them to simplify their responses or otherwise modify their answers. During the course of data collection, I was associated with the National Institute of Public Health in Mexico (INSP), a leading institution of public health in Latin America, so the institutional base may have given me perceived legitimacy as a researcher (Lapping et al., 2011).

Conversely, being associated with the INSP may have created distance or distrust for some participants.

Researcher bias is another important consideration when working with qualitative data, especially because the researcher is the main data-collection and analysis instrument (Bernard, 2000). It is critical to bring a researcher's theories, beliefs, values, and expectations to the light. The goal is not to eliminate these biases, but rather examine their possible influence on the conduct and conclusions of the study (Maxwell, 2005b). Reflexivity, or attending systematically to one's own perspectives and how they may affect the research process, was incorporated into the research process. During data collection, I recorded field notes at the end of the day to reflect upon decisions I made and the reasons I made them, as well as how I understood the data. I also conducted research memos throughout data analysis. I acknowledge that I began the study believing that healthcare providers in Mexico would not be addressing postnatal depression in any way, yet I also believed healthcare providers were indispensable in successfully addressing postnatal depression. I was consistently challenged to remain open and non-judgmental to the knowledge frameworks participants revealed to me through the interviews.

Aim #2

The second aim is to ascertain whether and how postnatal depression is addressed in policies at federal, state, and local public-sector healthcare facility levels in Mexico overall and specifically in Mexico City.

Research Question #1. Is postnatal depression addressed in policies at federal, state, and local public-sector healthcare facility levels in Mexico overall and specifically in Mexico City?

Qualitative content analysis was used to evaluate whether postnatal depression was addressed in 13 selected policies, which included laws, regulations, national health plans and national action plans, clinical practice guidelines, and public-sector healthcare facility policies. No references to postnatal depression were mentioned in 38% (n=5) of policies. They are the national health plans, federal and state health laws, and the clinical practice guidelines on depression and violence against women. In the remaining 61% (n=8) of policies postnatal depression was mentioned in some way. These are the mental health law of Mexico City and its regulation, clinical practice guidelines on pre-eclampsia, HIV, and prenatal care, and a policy from a public-sector healthcare facility.

Research Question #2. How is postnatal depression addressed in these policies?

Qualitative content analysis was also used to evaluate how postnatal depression was addressed in the 13 selected policies. Postnatal depression was mentioned in 46% (n=6) of policies in ways that might improve the quality of care for women who experience or who are at risk of experiencing postnatal depression. A drafted but not yet implemented policy in the tertiary public-sector healthcare facility includes stepped-care protocols that largely follow the NICE clinical guidelines.. In 15% (n=2) of policies postnatal depression is mentioned, but not in a way that would affect the care and management of women who experience or who are at risk of experiencing postnatal depression.

The potential to affect the care and management of women was determined by whether the policies included a statement of intent and/or actions related to postnatal depression. The public-sector healthcare facility policy included both a statement of intent and actions, compared to the mental health law of Mexico City and its regulation which included a statement of intent but did not include any actions related to the care and management of women with postnatal depression. The clinical practice guidelines on pre-eclampsia, HIV, and prenatal care suggested actions to address postnatal depression, even though the main topics of the guidelines focused on other public health issues. The actions included recommendations that women with postnatal depression should receive counseling and that a woman's psychiatric history should be assessed early in pregnancy by healthcare providers. Protocol for nurses included providing anticipatory guidance to high-risk women with pre-eclampsia about postnatal depression. In the two policies where postnatal depression was mentioned but not addressed in a way that would affect the care and management of women, postnatal depression was mentioned as background information in a larger commentary on depression in the national health plan and as a possible causal factor of child abuse in a clinical practice guideline. In sum, postnatal depression is in the public policy lexicon to a limited extent, but it has not been fully integrated into the health systems and laws of Mexico.

Strengths and Limitations. The study's strengths include the unique angle of looking at maternal mental health policies in a low- and middle-income country. Systematically evaluating clinical practice guidelines also lended confirmability to the study. It is also important to consider several limitations to this study. Selecting the most appropriate method for data collection is important for establishing credibility in a

content analysis (Graneheim & Lundman, 2004). It is possible that some policies were inadvertently missed because of the subjective nature of asking for experts and lawyers to select relevant policies. I believe, however, that their familiarity with the field of maternal and child health and mental health provided me with comprehensive data.

Another potential issue is that the focus on policies that address postnatal depression caused the scope of our analysis to be too narrow. Nevertheless, selecting content areas that address a specific issue is justified in our analysis. Content areas that are too broad are difficult to manage and may be hard to interpret (Graneheim and Lundman, 2004). To ensure that I did not miss relevant discussions on postnatal depression that did not include the term ‘postnatal depression,’ other search terms like ‘mental health’ were applied to the unit of analysis and then evaluated for its relevance to postnatal depression. When a content unit was identified, meaning text was found that included a search term or referred to postnatal depression, I read the whole paragraph, section or chapter in order to preserve semantic coherence and to more broadly understand the context (Weber, 1990).

5.2 Implications of Research Project

Two main strategies are named by the WHO and UNFPA as ways to address postnatal depression and other maternal mental health problems: 1) education and training for healthcare providers who interface with women in the perinatal period, and 2) development of a policy framework for the protection of maternal mental health. In this research, I critically examined how healthcare providers in Mexico conceptualized postnatal depression, the findings of which can be used to develop appropriate education and training. I also assessed the policies that exist in Mexico regarding postnatal

depression, thereby creating a base of knowledge on which the next steps of policy development can be constructed.

Implications of Aim #1

Results from the first aim have several implications for the education and training of healthcare providers. First, there is value in focusing provider education and training on reducing the burden of postnatal depression. Postnatal depression has specific needs for care, the healthcare providers in the study were aware of the condition, and they are establishing a common language to talk about it. Symptoms of distress were used by healthcare providers to characterize a woman who was experiencing emotional difficulties and someone who may be at risk for postnatal depression later in the postpartum period. Recognizing symptoms of distress provides a solid base upon which to build training for detection and referral of postnatal depression.

Second, social and behavioral antecedents were universally viewed as contributing to postnatal depression, regardless of whether healthcare providers saw postnatal depression from a biochemical or adjustment framework. Education and training should consider ways to capitalize on healthcare providers' understandings of social and behavioral antecedents. Possible options include psychosocial screening and interventions. Psychosocial interventions that increase social support, for example, and that target women who are at high risk rather than the general maternal population, are particularly useful in efforts to prevent postnatal depression (Dennis, 2004). The Antenatal Psychosocial Health Assessment (ALPHA) tool has been shown to assist healthcare providers in detecting more psychosocial concerns among pregnant women than providers who did not use the tool, which could lead to detection of women at risk of

postnatal depression and the opportunity to intervene early (Carroll et al., 2005). Furthermore, because healthcare providers understand the influence of social and behavioral antecedents on postnatal depression, promoting discussions on local and macro-level policies that address occupational justice, education and economic empowerment, poverty reduction, and gender equality are relevant (Rahman et al., 2013; Herman & Swartz, 2007).

Third, postnatal depression was seen by healthcare providers as disrupting responsibilities associated with motherhood, along with other categories of distress like long-standing distress originating prior to childbirth and maternal blues. Education and training should leverage healthcare providers' perception of the importance of effective mothering in efforts to address postnatal depression (Logdson et al., 2006). Care should be taken to address the topic of postnatal depression sensitively in order to avoid shaming, blaming, or stigmatizing women who are not able to complete responsibilities associated with motherhood.

Implications of Aim #2

Results from the second aim have an important implication for policy development on postnatal depression in Mexico. The study shed light on whether and how postnatal depression is addressed in policies, either in a statement of intent or in actions relating to the care and management of women. First, the statement of intent that was included in the mental health law of Mexico City and its regulation sets up the importance of addressing postnatal depression. It stated that postnatal depression is a mental health disorder that should be given priority. Because the prioritization of postnatal depression was written into a law, future policy development should incorporate

appropriate actions to address it. A clinical practice guideline devoted to maternal mental health may be needed in order to adequately address the problem, for example.

Policy development on postnatal depression should not focus exclusively on one implementation instrument over another. Implementation instruments are the techniques and means through which governments attempt to attain their goals (Howlett, 2011). Substantive instruments affect the way goods and services are delivered to the public, such as regulation on the quantity of screenings during prenatal and postnatal care. Procedural instruments affect the way implementation unfolds by intervening in the behavior of policy actors. Rather than focusing on one instrument over another, policy development should aim for the optimal mix of instruments (Howlett, 2011).

5.3 Recommendations for Future Research

Additional research needs to take place in order to carry out the strategies proposed by the WHO and UNFPA to address postnatal depression and other maternal mental health problems. Further research is needed to examine the current detection and treatment practices of healthcare providers with respect to postnatal depression in their practice settings. Studying healthcare provider conceptualizations of postnatal depression was essential to uncover how postnatal depression is understood. The next step is to investigate how their conceptualizations of postnatal depression may affect the detection and treatment of it. Development of appropriate education and training materials and subsequent effectiveness studies of materials among healthcare providers are additional lines of research. Future research could also examine the relationship between the presence of symptoms of distress in the first postpartum week and later onset of postnatal depression.

Research is also needed to examine the governing resources Mexico has at its disposal, such as information provision, education, regulations, advisory committees, grants, evaluations, and conferences, among others. Governing resources may be affected by the political and policy environments, as well as by policy actors (Howlett & Ramesh, 2003). Additional research is needed into what Shiffman and Smith (2007) call the determinants of political priority, or the factors that facilitate successful development and implementation of policies and resources to address an issue. Those determinants are the strength of individuals and organizations concerned with the issue, the ways in which those involved with the issue understand and communicate it, the environments in which actors operate, and the issue's unique features. Study of these determinants in Mexico related to the issue of postnatal depression would lend further insight into the potential to gain ground for policy development in maternal mental health.

5.4 Conclusion

The last decade has seen increasing attention on the importance of maternal mental health, particularly in low- and middle-income countries (WHO, 2008a; WHO, 2009a). In light of core strategies established by the WHO and UNFPA in 2007 to provide education and training for healthcare providers and develop a policy framework for the protection of maternal mental health, this research project aimed to understand the conceptualizations of postnatal depression among physicians, nurses, social workers, and psychologists in primary, secondary, and tertiary levels of care in the public-sector healthcare facilities in Mexico City and Yautepec, Morelos, Mexico, as well as understand how healthcare providers apply their understanding of social and behavioral antecedents in their conceptualizations of postnatal depression. It also aimed to ascertain

whether and how postnatal depression is addressed in policies at federal, state, and local public-sector healthcare facility levels in Mexico overall and specifically in Mexico City.

The project's results suggest that Mexico is in a position to build upon healthcare providers' conceptualizations of postnatal depression, as well as the existing policy framework in order to address maternal mental health in a comprehensive way and enhance the quality of care for Mexican women who experience and are at risk for postnatal depression.

References

- Affonso, D., De, A., Horowitz, J., & Mayberry, L. (2000). An international study exploring levels of postpartum depressive symptomatology. *Journal of Psychosomatic Research*, 49(3), 207-216.
- Ajzen, I. and Madden, T. (1986). Prediction of goal directed behavior: Attitudes, intentions, and perceived behavioral control. *Journal of Experimental Social Psychology*, 22, 453-474.
- Almond, P. (2009). Postnatal depression: A global public health perspective. *Perspectives on Public Health*, 129(5), 221-227.
- Alvarado-Esquivel, C., Sifuentes-Álvarez, A., Estrada-Martínez, S., Salas-Martínez, C., Hernández-Alvarado, A.B., Ortiz-Rocha, S.G., . . . Sandoval-Herrerad, F. (2010). Prevalencia de depresión posnatal en mujeres atendidas en hospitales públicos de Durango, México. *Gac Med Mex*, 146(1).
- Alvarado-Esquivel, C., Sifuentes-Alvarez, A., Salas-Martinez, C., & Martinez-Garcia, S. (2006). Validation of the Edinburgh Postpartum Depression Scale in a population of puerperal women in Mexico. *Clin Pract Epidemiol Ment Health*, 2(33).
- American Psychiatric Association (2013). Diagnostic and statistical manual of mental health disorders: DSM-5 (5th ed.). Washington, DC: American Psychiatric Publishing.
- Antoniou, E., Vivilaki, V., and Daglas, M. (2008). Correlation of domestic violence during pregnancy with postnatal depression: Systematic review of bibliography. *Health Science Journal*, 2(1), 15-19.
- Arranz, L., Aguirre-Rivera, W., Ruiz-Ornelas, J., Gavino-Ambriz, S., Cervantes-Chavez, J., Carsi-Bocanegra, E., . . . Ochoa-Madrigal, M. (2008). Enfoque multidisciplinario en la depresión posparto. *Ginecología Obstétrica Mexico*, 76(6), 341-348.
- Baker-Henningham, H. Powell, C., Walker, S., Grantham-McGregor, S. (2005). The effect of early stimulation on maternal depression: A cluster randomized controlled trial. *Archives of Disability in Children*, 90, 1230-1234.

- Bacchus L, Mezey G, and Bewley S. (2002). Women's perceptions and experiences of Routine enquiry for domestic violence in a maternity service. *British Journal of Obstetrics and Gynecology*, 109, 9-16.
- Beck, C. (1996). A meta-analysis of predictors of postpartum depression. *Nursing research*, 45(5), 297.
- Beck, C. (1998). The effects of postpartum depression on child development: a meta-analysis. *Archives of psychiatric nursing*, 12(1), 12-20.
- Beck, C. (2001). Predictors of postpartum depression: an update. *Nursing research*, 50(5), 275.
- Bernard, H.R. (2000). *Social research methods: Qualitative and quantitative approaches*. Thousand Oaks, CA: Sage Publications.
- Bina, R. (2008). The impact of cultural factors upon postpartum depression: A literature review. *Health Care for Women International*, 29, 568-592.
- Bloch, M., Schmidt, P., Danaceau, M., Murphy, J., Nieman, L., & Rubinow, D. (2000). Effects of gonadal steroids in women with a history of postpartum depression. *American Journal of Psychiatry*, 157(6), 924-930.
- Boath, E., Pryce, A., and Cox, J. (1998). Postnatal depression: The impact on the family. *Journal of Reproductive and Infant Psychology*, 16(2/3), 1998
- Born, L., Zinga, D., & Steiner, M. (2004). Challenges in identifying and diagnosing postpartum disorders. *Primary Psychiatry*, 11(3), 29-36.
- Breedlove, G. and Fryzelka, D. (2011). Depression screening during pregnancy. *Journal Of Midwifery Women's Health*, 56(1), 18-25.
- Brewer, G. and DeLeon, P. (1983). *The Foundations of Policy Analysis*. Homewood, NJ: Dorsey Press.
- Brockington, I. (1996). *Motherhood and Mental Health*. Oxford, UK: Oxford University Press.
- Brown, G. & Harris, T. (1987). *The social origins of depression*. London: Tavistock.
- Buist, A., Bilszta, J., Milgrom, J., Barnett, B., Haynes, B., MP, A. (2006). Health professional's knowledge and awareness of perinatal depression: Results of a national survey. *Women and Birth*, 19(1), 11-16.

- Burr, C., Pino, A., Quiroz, L., and Martin-Lunas, E. (2011). Guía para el paciente participativo. (Chapter 4). Distrito Federal: Centro de Contraloría Social y Estudios de la Construcción Democrática [CIESAS]
- Carroll, J., Reid, A., Biringier, A., Midmer, D., Glazier, R., Wilson, L., Permaul, J., . . . Stewart, D. (2005). Effectiveness of the antenatal psychosocial health assessment (ALPHA) form in detecting psychosocial concerns: A randomized controlled trial. *Canadian Medical Association Journal*, 173(3), 253-259.
- CENETEC. (2009). Guía de Práctica clínica prevención, diagnóstico, y tratamiento en el binomio madre-hijo con infección por el VIH. México: Instituto Mexicano del Seguro Social
- CENETEC. (2011). Detección temprana del abuso físico desde el nacimiento hasta los 12 años de edad en el primer nivel de atención. México: Secretaría de Salud, 2011.
- CENETEC. (2008). Guía de práctica clínica para el control prenatal con enfoque de riesgo. México: Secretaría de Salud.
- CENETEC. (2011). Guía de práctica clínica intervenciones de enfermería en la paciente con preeclampsia/eclampsia. México: Secretaría de Salud.
- CENETEC. (2010). Detección y atención de la violencia de pareja y de la violencia sexual, en el primer y segundo niveles de atención. México: Secretaría de Salud.
- CENETEC. (2009). Diagnóstico y Tratamiento del Trastorno Depresivo. México: Secretaría de Salud.
- Charmaz, K. (2006). *Constructing grounded theory: A practical guide through qualitative analysis*. London: Sage.
- Chaudron, L., Szilagyi, P., Campbell, A., Mounts, K., and McInerney, T. (2007). Legal and ethical considerations: Risks and benefits of postpartum depression screening at well-child visits. *Pediatrics*, 119(1), 123-128.
- Chew-Graham, C., Chamberlain, E., Turner, K., Folkes, L., Caulfield, L., and Sharp, D. (2008). GPs' and health visitors' views on the diagnosis and management of postnatal depression: a qualitative study. *The British Journal of General Practice*, 58(548), 169.
- Chew-Graham, C., Sharp, D., Chamberlain, E., Folkes, L., and Turner, K. (2009). Disclosure of symptoms of postnatal depression, the perspectives of health professionals and women: a qualitative study. *BMC family practice*, 10(1), 7.

- Consejo Nacional de Evaluación de la Política de Desarrollo Social (CONEVAL), 2008. Módulo de Condiciones Socioeconómicas de la Encuesta Nacional de Ingresos Gastos de los Hogares. Distrito Federal: Instituto Nacional de Estadística y Geografía (INEGI).
- Cooper, P.J., Murray, L., & Stein, A. (1993). Psychosocial factors associated with the early termination of breast-feeding. *Journal of Psychosomatic Research*, 37(2), 171-176.
- Cooper, P.J., Landman, M., Tomilson, M., Molteno, C., Swartz, L., & Murray, L. (2002). Impact of a mother--infant intervention in an indigent peri-urban South African context: Pilot study. *The British Journal of Psychiatry*, 180(1), 76.
- Cooper, P., Tomlinson, M., Swartz, L., Landman, M., Molteno, C. (2009). Improving the quality of mother-infant relationship and infant attachment in socioeconomically deprived community in South Africa: Randomised controlled trial. *British Medical Journal*, 338, b974.
- Cox, J, Holden, J, and Sagovsky, R. (1987). Detection of postnatal depression. Development of the 10-item Edinburgh Postnatal Depression Scale. *The British Journal of Psychiatry*, 150(6), 782-786.
- Cox, J., Conner, Y., and Kendell, R., (1982). Prospective study of the psychiatric disorders of childbirth. *The British Journal of Psychiatry*, 140, 111-117.
- Coyne, I. (1997). Sampling in qualitative research. Purposeful and theoretical sampling; merging or clear boundaries. *Journal of Advanced Nursing*, 26, 623-630.
- Dalton, K. (1980). Depression after childbirth. Oxford: Oxford University Press.
- Dhanda, A. Narayan, T. (2007). Mental health and human rights. *The Lancet*, 370.
- de Castro, F., Hinojosa-Ayala, N., & Hernandez-Prado, B. (2011). Risk and protective factors associated with postnatal depression in Mexican adolescents. *Journal of Psychosomatic Obstetrics & Gynecology*(00), 1-8.
- Dennis, C. (2004). Treatment of postpartum depression, part 2: A critical review of nonbiological interventions, 65(9), 1252-1265.
- Dennis, C.L., & Chung-Lee, L. (2006). Postpartum Depression Help-Seeking Barriers and Maternal Treatment Preferences: A Qualitative Systematic Review. *Birth*, 33(4), 323-331.
- DiGirolamo, A. & Snyder, N. (2008). Women as primary caregivers in Mexico: challenges to well-being. *Salud Publica Mexico*, 50(6), 516-522.

- Edge, D. (2010). Falling through the net – Black and minority ethnic women and perinatal mental healthcare: Health professionals' views. *General Hospital Psychiatry*, 32, 17-25.
- Engle, P. (2009). Maternal mental health: Program and policy implications. *American Journal of Clinical Nutrition*, 89(suppl): 963S-966S.
- Entman, R.M. (1993). Framing: Towards clarification of a fractured paradigm. *McQuail's reader in mass communication theory*, 390-397.
- Finch, J. (1987). The Vignette Technique in Survey-Research. *Sociology-the Journal of the British Sociological Association*, 21(1), 105-114.
- Fisher, J., Mello, M., Izutsu, T., and Tran, T. (2011). The Ha Noi Expert Statement: Recognition of maternal mental health in resource-constrained settings is essential for achieving the Millennium Development Goals. *International Journal of Mental Health Systems*, 5(2), 1-6.
- Fisher, J., Cabral de Mello, M., Patel, V., Rahman, A., Tran, T., Holton, S., and Holmes, W. (2012). Prevalence and determinants of common perinatal mental disorders in women in low- and lower-middle-income countries: a systematic review. *Bulletin of the World Health Organization*, 90(2), 77-156.
- Fleisher, N., Fernald, L., & Hubbard, A. (2002). Depressive symptoms in low-income women in rural Mexico. *Epidemiology*, 18(6), 678-685.
- Flores-Quijano, M. (2008). Risk for postpartum depression, breastfeeding practices, and mammary gland permeability. *Journal of Human Lactation*, 24(1), 50-57.
- Fuentes, C., Castillejos, F., Alejandro, J., Anaya, R., Cedillo, D., Hernandez, J., and Garcia, L., (2000). Que es una guía clínica? *Revista de Medicina IMSS*, 38(2), 113-117.
- Frongillo, Ed. (2011). *Policy Making*. [PowerPoint slides].
- Gilbody, S., Whitty, P., Grimshaw, J., & Thomas, R. (2003). Educational and organizational interventions to improve management of depression in primary care: A systematic review. *Journal of the American Medical Association*, 289(23), 3145-3151.
- Goodman, J. (2004). Paternal postpartum depression, its relationship to maternal Postpartum depression, and implications for family health. *Journal of Advanced Nursing*, 45(1), 26-35.
- Glanz, K., Rimer, B., Viswanath, K., (2008). *Health behavior and health education: Theory, research, and practice* (4th ed.). San Francisco, CA: Jossey-Bass.

- Glaser, B., and Strauss, A. (1965). *The discovery of grounded theory*. Chicago: Aldine.
- Goffman, E. (1963). *Stigma: Notes on the management of spoiled identity*. Englewood Cliffs, New Jersey: Prentice-Hall, Inc.
- Goffman, E. (1974). *Frame analysis: An essay on the organization of experience*. Boston: Northeastern University Press.
- Gomez-Beloz, A., Williams, M.A., Sanchez, S.E., & Lam, N. (2009). Intimate partner violence and risk for depression among postpartum women in Lima, Peru. *Violence and Victims, 24*(3), 380-398.
- Goodman, J.H. (2004). Postpartum depression beyond the early postpartum period. *Journal of Obstetric, Gynecologic, & Neonatal Nursing, 33*(4), 410-420.
- Goodman, J.H., & Tyler-Viola, L. (2010). Detection, treatment, and referral of perinatal depression and anxiety by obstetrical providers. *Journal of Women's Health, 19*(3), 477-490.
- Graneheim, U, & Lundman, B. (2004). Qualitative content analysis in nursing research: Concepts, procedures and measures to achieve trustworthiness. *Nurse Education Today, 24*, 105-112.
- Green, J. (1998). Postnatal depression or perinatal dysphoria? Findings from a longitudinal community-based study using the Edinburgh Postnatal Depression Scale. *Journal of Reproductive and Infant Psychology, 16*, 143-155.
- Hanlon, C. (2012). Maternal depression in low- and middle-income countries. *International Health, 3*(2), 1-2.
- Harris, B., Oretti, R., Lazarus, J., Parkes, A., Richards, C., Newcombe, R. and Hall, R. (2002). Randomized trial of thyroxine to prevent postnatal depression in thyroid antibody positive women. *The British Journal of Psychiatry, 180*, 327-380.
- Herrman, H., Saxena, S., Moodie, R. (2006). Promoting mental health: Concepts, emerging evidence, practice. Geneva: World Health Organization.
- Herrman, H., and Swartz, L. (2007). Comment: Promotion of mental health in poorly resourced countries. *Lancet, 370*, 1195-1197.
- Hood, C. (1986). *The Tools of Government: Public Policy and Politics*. London: Chatham House Publishers.
- Howlett, M. (2000). Managing the “hollow state”: Procedural policy instruments and modern governance. *Canadian Public Administration, 43*(4), 412-431.

- Howlett, M. and Ramesh, M. (2003). *Studying Public Policy: Policy Cycles and Policy Subsystems* (2nd ed.). New York, NY: Oxford University Press.
- Howlett, M. (2011). *Designing Public Policies: Principles and Instruments*. New York, NY: Routledge.
- Hughes, R. (1998). Considering the vignette technique and its application to a study of drug injecting and HIV risk and safer behaviour. *Sociology of Health & Illness*, 20(3), 381-400.
- Hughes, R., & Huby, M. (2002). The application of vignettes in social and nursing research. *Journal of advanced nursing*, 37(4), 382-386.
- Hsieh, H. and Shannon, S. (2005). Three approaches to qualitative content analysis. *Qualitative Health Research*, 15(9), 1277-1288.
- Instituto Nacional de las Mujeres (INMUJERES) (2006). *Panorama de la salud mental en las mujeres y los hombres mexicanos*. Mexico City, Mexico: Instituto Nacional de las Mujeres.
- Instituto Nacional de Estadística y Geografía (INEG) (2001). *Poblacion*. Retrieved August 13, 2013 from <http://www3.inegi.org.mx/Sistemas/temasV2/Default.aspx?s=est&c=17484>
- Kendrick, T. (2000). Why can't GPs follow guidelines on depression? *BMJ*, 320(7229).
- Kendell, R., McGuire, R., Connor, Y., and Cox, J. (1981). Mood changes in the first three weeks after childbirth. *Journal of Affective Disorders*, 3(4), 317-326
- Kendell, R., Chalmers, J., and Platz, C. (1987). Epidemiology of puerperal psychoses. *British Journal of Psychiatry*, 150, 662-673.
- Keyes, C. (1985). Culture and Depression. A. Kleinman and B. Good, (Eds.). Berkley, CA: University of California Press.
- Kirwan, JR, Chaput de Saintonge, DM, Joyce, CR, & Currey, HL. (1983). Clinical judgment in rheumatoid arthritis. I. Rheumatologists' opinions and the development of 'paper patients'. *Annals of the rheumatic diseases*, 42(6), 644.
- Kuijpers, J., Vader, H., Drexhage, H., Wiersinga, W., van Son, M., and Pop, V. (2001). Thyroid peroxidase antibodies during gestation are a marker for subsequent depression postpartum. *European Journal of Endocrinology*, 145(5), 579-584.
- Kleinman, A. (1980). Patients and healers in the context of culture. Berkley: University of California Press.

- Langley, G.R., Tritchler, D.L., Llewellyn-Thomas, H.A., & Till, J.E. (1991). Use of written cases to study factors associated with regional variations in referral rates. *Journal of clinical epidemiology*, 44(4-5), 391-402.
- Lapping, K., Frongillo, E.A., Studdert, L.J., Menon, P., Coates, J., & Webb, P. (2011). Prospective analysis of the development of the national nutrition agenda in Vietnam from 2006 to 2008. *Health Policy and Planning*.
- Lara, M. (1993). *Inventario de masculinidad y feminidad (IMAFE)*. Mexico: El Manual Moderno.
- Lara, M. Navarro, C., Navarrete, L., and Le, H. (2010a). Retention rates and potential predictors in a longitudinal randomized control trial to prevent postpartum depression. *Salud Mental*, 33, 429-436.
- Lara, M., Navarro, C., and Navarrete, L. (2010b). Outcome results of a psycho-educational intervention in pregnancy to prevent PPD: A randomized control trial. *Journal of Affective Disorders*, 122, 109-117.
- Lara, M., Berenzon, S., Garcia, F., Medina-Mora, M., Rey, G., Velazquez, J., and Lopez, M. (2012). Population study of depressive symptoms and risk factors in pregnant and parenting adolescents. *Revista Panamericana de Salud Pública*, 31,(2), 102-108.
- Lee, D., Yip, A., Leung, T., and Chung, T. (2000). Identifying women at risk of postnatal depression: Prospective longitudinal study. *Hong.Kong.Med.J.*, 6, 349-354.
- Lepper, H., DiMatteo, R., and Tinsley, B. (1994). How much do obstetric nurses and obstetricians know? *Birth*, 21(3), 149-154.
- Lloyd, B., & Hawe, P. (2003). Solutions forgone? How health professionals frame the problem of postnatal depression. *Social science & medicine*, 57(10), 1783-1795.
- Lucas, A., Pizarro, E., Granada, M., Salinas, I., & Sanmarti, A. (2001). Postpartum thyroid dysfunction and postpartum depression: are they two linked disorders? *Clinical Endocrinology*, 55(6), 809-814.
- Ludermir, A., Lewis, G., Valongueiro, S., Araujo, T., and Araya, R. (2010). Violence against women by their intimate partner during pregnancy and postnatal depression: a prospective cohort study. *The Lancet*, 376(9744), 903-910.
- March of Dimes. (2011). Postpartum depression. Retrieved from www.marchofdimes.com/pregnancy/postpartum_depression.html.
- Mauthner, N. (1994). Postnatal depression: A relational perspective. Unpublished PhD thesis, University of Cambridge, Cambridge.

- Mauthner, N. (1998). 'It's a woman's cry of help': A relational perspective on postnatal depression. *Feminism & Psychology*, 8(3), 325-355.
- Maxwell, M. (2005a). Women's and doctors' accounts of their experiences of depression in primary care: the influence of social and moral reasoning on patients' and doctors' decisions. *Chronic Illness*, 1(1), 61-71.
- Maxwell, J. (2005b). *Qualitative research design: An interactive approach* (2nd ed.). Thousand Oaks, CA: Sage Publications.
- May, C., Allison, G., Chapple, A., Chew-Graham, C., Dixon, C., Gask, L., . . . Roland, M. (2004). Framing the doctor-patient relationship in chronic illness: a comparative study of general practitioners' accounts. *Sociology of Health & Illness*, 26(2), 135-158.
- McConnell, J., Baker, M., & Marks, L. (2005). Experiencing a dilemma accounts of working with PND. *Community Practitioner*, 78(7), 251-254.
- Miles, M. and Huberman, M. (1994). *Qualitative Data Analysis: An expanded sourcebook* (2nd ed.). London: Sage Publications.
- Middleton, H. and Shaw, I. (2000). Distinguishing mental illness in primary care. *British Medical Journal*, 27(320), 142-1421.
- Miller, L.J., & LaRusso, E.M. (2010). Preventing Postpartum Depression. *Psychiatric Clinics of North America*.
- Miller, L. (1999). *Postpartum mood disorders*. Arlington, Virginia: American Psychiatric Association.
- Miller, L. (2002). Postpartum depression. *Journal of American Medical Association*, 287(6), 762-765.
- Mivsek, A., Hundley, V., and Kiger, A. (2008). Slovenian midwives' and nurses' views on post-natal depression: An explanatory study. *International Nursing Review*, 55, 320-326.
- Morgan, D. (1993). Qualitative content analysis: A guide to paths not taken. *Qualitative Health Research*, 3, 112-121.
- Morse, J. (1994). Designing funded qualitative research. *Handbook of qualitative research*, N. Denzin and Y. Lincoln (Eds.). Thousand Oaks, CA: Sage Publications.

- Murray, L. (1992). The impact of postnatal depression on infant development. *Journal of Child Psychology and Psychiatry*, 33(3), 543-561.
- Navarro, C., Navarette, L., Lara, M. (2011). Factores asociados a la percepción de eficacia materna durante el posparto. *Salud Mental*, 34, 37-43.
- NICE (2003). Antenatal and postnatal mental health: Clinical management and service guidance. Manchester: National Institute for Health and Clinical Excellence.
- NICE (2007). Antenatal and postnatal mental health: Clinical management and service guidance. (Clinical Guideline 45). Manchester: National Institute for Health and Clinical Excellence.
- NVivo qualitative data analysis software: QSR International Pty Ltd. Version 10, 2012.
- O'Hara, M.W., & Swain, A.M. (1996). Rates and risk of postpartum depression-a meta-analysis. *International review of Psychiatry*, 8(1), 37-54.
- Oates, M. (2003). Suicide: the leading cause of maternal death. *The British Journal of Psychiatry*, 183(4), 279-281.
- Patel, V., Rodrigues, M., and DeSouza, N. (2002). Gender, poverty, and postnatal depression: A study of mothers in Goa, India. *American Journal of Psychiatry*, 159, 43-47.
- Patel, V. et al., (2004). Effect of maternal mental health on infant growth in low income countries: New evidence from South Asia. *British Medical Journal*, 328, 820-823.
- Patel, V., Saraceno, B., and Kleinman, A. (2006). Beyond evidence: The moral case for international mental health. *American Journal of Psychiatry*, 163(8), 1312-1315.
- Patel, M., Bailey, R., Jabeen, S., Ali, S., Barker, N. and Osiezagha, K. (2012). Postpartum depression: A review. *Journal of Health Care Poor Underserved*, 23(2), 534-542.
- Patton, M., (2001). *Qualitative Research and Evaluation Methods*. Saint Paul, Minnesota: Sage Publications.
- Paulson, J., Dauber, S., and Leiferman, J. (2006). Individual and combined effects of postpartum depression in mothers and fathers on parenting behavior. *Pediatrics*, 118(2), 659-668.
- Peveler, R. & Kendrick, T. (2001). Treatment delivery and guidelines in primary care. *British Medical Bulletin*, 57(1), 193-206.

- Pop, V., de Rooy, H., Vader, H., van der Heide, D., van Son, M., Komproe, I., Essed, G., and de Geus, C., (1991). Postpartum thyroid dysfunction and depression in an unselected population. *New England Journal of Medicine*, 324(25), 1815-1816.
- Pop, V., de Rooy, H., Vader, H., van der Heide, D., van Son, M., and Komproe, I. (1993). Microsomal antibodies during gestation in relation to postpartum thyroid dysfunction and depression. *Acta Endocrinologica (Copenh)*, 129(1), 26-30.
- Postpartum Support International (2010). Depression during pregnancy and the postpartum. Retrieved July 10, 2013, from <http://www.postpartum.net/Get-the-Facts/Depression-During-Pregnancy-Postpartum.aspx>
- Postpartum Support International (2010). Postpartum Psychosis. Retrieved July 10, 2013, from <http://www.postpartum.net/Get-the-Facts/Postpartum-Psychosis.aspx>
- Pilgrim, D., & Bentall, R. (1999). The medicalization of misery: A critical realist analysis of the concept of depression. *Journal of Mental Health*, 8(3), 261-274.
- Place, J. and Billings, D. (2011). Detecting intimate partner violence and postpartum depression: Neglected issues in pregnancy and women's health. *The Journal of Global Health*, 1(2), 27-30
- Partnership for Maternal, Newborn, and Child Health (2011). *A global review of the key interventions related to reproductive, maternal, newborn and child health*. Geneva, Switzerland: PMNCH.
- Prince, M., Patel, V., Saxena, S., Maj. M., Maseka, J., Phillips, M., & Rahman, A. (2007). No health without mental health. *The Lancet*, 370, 859-877.
- Rahman, A. et al. (2004). Impact of maternal depression on infant nutritional status and illness: A cohort study. *Archives of General Psychiatry*, 61, 946-952.
- Rahman, A., et al. (2007). Association between antenatal depression and low birth weight in a developing country. *Acta Psychiatrica Scandinavica*, 115, 481-486.
- Rahman, A. Surkan, P., Cayetano, C., Rwagatare, P., and Dickson, K. (2013). Grand challenges: Integrating maternal mental health into maternal and child health programmes. *PLOS Medicine*, 10(5), 1-7.
- Rahman, A., (2008). Cognitive behavior therapy-based intervention by community health workers for mothers with depression and their infants in rural Pakistan: a cluster randomized controlled trial. *Lancet*, 372, 902-909
- Riecher-Rossler, A., Hofecker, F. (2003). Postpartum depression: Do we still need this diagnostic term? *Acta Pscyhiatrica Scandinavia*, 108(418), 51-56.

- Robertson, E., Celasun, N., & Stewart, D. (2003). Risk factors for postpartum depression. In Stewart D., Robertson, E., Dennis, C., Grace, S., & Wallington, T. *Postpartum depression: Literature review of risk factors and interventions*.
- Romer-Gutierrez, G., Duenas de la Rosa, E., Regalado-Cedillo, C., Ponce-Ponce de Leon, A. (2010). Prevalence of maternal sadness and its associated factors. *Ginecologica Obstétrica de Mexico*, 78(1), 53-57.
- Saraceno, B., Markvan, O., Batniji, R., Cohen, A., Gureje, O., Mahone, J., . . . Underhill, C. (2007). Barriers to improvement of mental health services in low-income and middle income countries. *Lancet*, 370, 1164-1174.
- Sandoval de Ecurdia, J. and Munoz, M. (n.d.). La Salud Mental en Mexico. *Servicio de Investigacion y Analisis*
- Schon, D. (1983). *The reflective practitioner: How professionals think in action*. New York, NY: Basic Books.
- Schweizer, T. (1998). *Epistemology. The nature and validation of anthropological knowledge*. In R.H. Bernard (Ed.). *Handbook of method in cultural anthropology* (pp. 39-87). Walnut Creek: CA.: Alta Mira Press.
- Secretaria de Salud (2009). Diagnóstico y Tratamiento del Trastorno Depresivo. Mexico: Secretaria de Salud.
- Secretaria de Salud (2007). Programa Nacional de Salud 2007-2012. Mexico: Secretaria de Salud
- Seehusen, D., Baldwin, L., Runkle, G., and Clark, G. (2005). Are family physicians appropriately screening for postpartum depression? *The Journal of the American Board of Family Medicine*, 18(2), 104.
- Seidman, I. (1998). *Interviewing as qualitative research: A guide for researchers in education and the social sciences* (2nd ed.). New York, NY: Teachers College Press.
- Schroff, M., Jones, S., Frongillo, E., and Howlett, M. (2012). Policy instruments used by states seeking to improve school food environments. *American Journal of Public Health*, 102(2), 222-229.
- Shiffman, J., & Smith, S. (2007). Generation of political priority for global health initiatives: a framework and case study of maternal mortality. *The Lancet*, 370(9595), 1370-1379.

- Soares, C. and Zitek, B. (2008). Reproductive hormone sensitivity and risk for depression across the female life cycle: a continuum of vulnerability? *Journal of Psychiatry Neuroscience*, 33(4), 331-343.
- Small, R., Johnston, V., Orr, A. (1997). Depression after childbirth: The views of medical students and women compared. *Birth*, 24(2), 109-115.
- Spradley, J. (1972). *Foundations of cultural knowledge*. Prospect Heights, Illinois: Waveland Press.
- Steiner, M., Dunn, E., Born, L. (2003). Hormones and mood: from menarche to menopause and beyond. *Journal of Affective Disorders*, 74(1), 67-83.
- Stern, G. & Kruckman, L. (1983). Multi-disciplinary perspectives on post-partum depression: An anthropological critique. *Social Science and Medicine*, 17(15), 1027-1041.
- Stewart, D., Robertson, E., Dennis, C., Grace, S., & Wallington, T. (2003). Postpartum depression: literature review of risk factors and interventions. *Toronto: University Health Network Women's Health Program for Toronto Public Health*.
- Stoppard, J. (1999). Why new perspectives are needed for understanding depression in women. *Canadian Psychology*, 40, 79-90.
- Stowe, Z., Hostetter, A., & Newport, J. (2005). The onset of postpartum depression: Implications for clinical screening in obstetrical and primary care. *American Journal of Obstetrics and Gynecology*, 192(2), 522-26.
- Strauss, A., and Corbin, J. (1990). *Basics of qualitative research: Grounded theory procedures and techniques*. Newbury Park, CA: Sage Publications.
- Tiwari, A., Chan, KL, Fong, D., Leung, WC, Brownridge, DA, Lam, H., . . . Chan, A. (2008). The impact of psychological abuse by an intimate partner on the mental health of pregnant women. *BJOG: An International Journal of Obstetrics & Gynaecology*, 115(3), 377-384.
- Thomas-MacLean, R. & Stoppard, J. (2004). Physicians' constructions of depression: Inside/outside the boundaries of medicalization. *Health: An International Journal for the Social Study of Health, Illness and Medicine*, 8(3), 275-293.
- Thomas, N. Sleath, B., Jackson, E., West, S., and Gaynes, B. (2008). Survey of characteristics and treatment preferences for physicians treating postpartum depression in the general medical setting. *Community Mental Health*, 44, 47-56.
- UN General Assembly, *Convention on the Rights of the Child*, 20 November 1989, United Nations, Treaty Series, vol. 1577, p. 3. Retrieved June 14, 2013 from <http://www.ohchr.org/EN/ProfessionalInterest/Pages/CRC.aspx>

- UN General Assembly, *Convention on the Elimination of All Forms of Discrimination Against Women*, 18 December 1979, United Nations, Treaty Series, vol. 1249, p. 13. Retrieved June 14, 2013 from <http://www.un.org/womenwatch/daw/cedaw/>
- UN General Assembly, *Convention on the Rights of Persons with Disabilities : resolution adopted by the General Assembly*, 24 January 2007, A/RES/61/106. Retrieved June 14, 2013 from <http://www.un.org/disabilities/convention/conventionfull.shtml>
- Valentine, J., Rodriguez, M., Lapeyrouse, L., and Zhang, M. (2011). Recent intimate partner violence as a prenatal predictor of maternal depression in the first year postpartum among Latinas. *Archives of Women's Mental Health*, 14, 135-143.
- Wachs, T., Black, M., Engle, P. (2009). Maternal depression: A global threat to children's health, development, and behavior and to human rights. *Society for Research in Child Development*, 3(1), 51-59.
- U.S. Department of Health and Human Services. (1999). *Mental health: A report to the Surgeon General*. Retrieved from <http://www.surgeongeneral.gov/library/mentalhealth/home.html>.
- U.S. Department of Health and Human Services. (2000). *Healthy People 2010*. Retrieved from <http://www.healthypeople.gov/2020/topicsobjectives2020/objectiveslist.aspx?topicId=28>
- Valentine, J.M., Rodriguez, M.A., Lapeyrouse, L.M., & Zhang, M. (2011). Recent intimate partner violence as a prenatal predictor of maternal depression in the first year postpartum among Latinas. *Archives of women's mental health*, 1-9.
- Waugh, L. (2011). Beliefs associated with Mexican immigrant families' practice of La Cuarentena during postpartum recovery. *Journal of Obstetric, Gynecologic, and Neonatal Nursing*, 40, 1-10.
- Weber, R. (1990). *Basic Content Analysis* (2nd ed.). Newbury Park, CA: Sage Publications.
- Whiffen, V. (1992). Is postpartum depression a distinct diagnosis? *Clinical Psychology Review*, 12(5), 485-508.
- World Health Organization (2004). *Mental health policy, plans and programmes*. (NLM Classification: WM 30). Geneva, Switzerland: WHO.

- World Health Organization (2005a). *Maternal mortality in Vietnam, 2000: An in-depth analysis of causes and determinants*. (NLM Classification: WA 900). Manila, Philippines: World Health Organization.
- World Health Organization (2005b). *Mental health atlas*. (NLM Classification: WM 17). Geneva, Switzerland: WHO.
- World Health Organization (2006). *Pregnancy, childbirth, postpartum and newborn care: A guide for essential practice*. (NLM classification: WQ 175). Geneva, Switzerland: World Health Organization.
- World Health Organization (2008a). *Maternal mental health and child development in low and middle income countries*. (NLM Classification: WS 105.5.F2). Geneva, Switzerland: World Health Organization.
- World Health Organization (2008b). *mhGAP: Mental health gap action program. Scaling up care for mental, neurological, and substance use disorders*. (NLM Classification: WM 140). Geneva, Switzerland: World Health Organization.
- World Health Organization (2009a). *Maternal mental health and child health and development in resource constrained settings: Report of a UNFPA/WHO international expert meeting- the interface between reproductive health and mental health*. Geneva, Switzerland: World Health Organization.
- World Health Organization (2009b). *Mental health aspects of women's reproductive health*. (NLM classification: WA 309). Geneva, Switzerland: World Health Organization.
- World Health Organization (2009c). *WHO Recommendations for Interventions for Improving Maternal and Newborn Health*. Geneva, Switzerland: World Health Organization.
- World Health Organization (2013a). Depression. *WHO.int*. Retrieved July 10, 2013, from http://www.who.int/mental_health/management/depression/definition/en/
- World Health Organization (2013b). Mental Health Policies and Action Plans. *WHO.int*. Retrieved July 10, 2013, from http://www.who.int/mental_health/policy/services/en/index.html
- World Health Organization (2013c). Health Policy. *WHO.int*. Retrieved July 11, 2013, from http://www.who.int/topics/health_policy/en/

Wiley, C., Burke, G., Gill, P., & Law, N. (2004). Pediatricians' views of postpartum depression: a self-administered survey. *Archives of women's mental health*, 7(4), 231-236.

World Bank (2013). Mexico. Retrieved July 11, 2013, from <http://data.worldbank.org/country/mexico>

APPENDIX A – INFORMED CONSENT FOR MEXICAN WOMEN

FORMA DE AUTORIZACIÓN

Estudio para entender la depresión posparto desde la perspectiva de las mujeres mexicanas

Mtra. Jean Marie Place
Dra. Filipa de Castro
Dra. Deborah Billings

Introducción y Propósito

Usted está invitada a participar en el estudio llevado a cabo por la Mtra. Jean Marie Place. Soy estudiante de doctorado en la Facultad de Comportamiento, Educación y Promoción de la Salud en la Universidad de Carolina del Sur (University of South Carolina).

Realizo este estudio como parte de los requisitos para mi doctorado en Salud Pública, y me gustaría invitarle a participar. Este estudio está financiado por el Programa de la Mujer y Estudios de Género de la Universidad de Carolina del Sur. El propósito del estudio es comprender la forma en la que las mujeres mexicanas definen, interpretan, y entienden los síntomas de depresión posparto. Con este documento quiero explicarles lo que tiene que hacer en caso de que acepten participar en este proyecto. Por favor léalo cuidadosamente y no dude en preguntarme sobre cualquier duda que tenga antes de tomar la decisión sobre su participación.

Descripción de los Procedimientos del Estudio

Si usted ha experimentado un episodio psiquiátrico o enfermedad, aparte de la depresión y la ansiedad, no puede participar en el proyecto. Si usted es apta y está interesada en participar en este estudio, usted deberá leer y firmar este documento de autorización. Usted puede hacerme cualquier pregunta que tenga sobre este proceso durante la entrevista. Le voy a hacer algunas preguntas demográficas, como su edad, su nivel de educación, la edad de su bebe, y donde dio a luz a su bebe. Todas sus respuestas se mantendrán confidenciales. Enseguida, le voy a preguntar de 15 a 20 preguntas sobre sus experiencias en las semanas y meses después de dar a luz a su bebe. Las preguntas son acerca de cómo se sintió física y emocionalmente. También le preguntare sobre la relación con su bebe, miembros de la familia, y otros. No hay respuestas correctas o incorrectas, solo quiero saber acerca de sus experiencias y opiniones.

Si usted me da permiso, voy a grabar la entrevista con una grabadora digital. Después de terminar de hacerle las preguntas, voy a apagar la grabadora. Utilizo la grabadora para que más adelante yo sea capaz de recordar lo que platicamos hoy. La grabadora me permite escucharle sin distracciones. Le reitero, con el fin que quede muy claro, que todas sus respuestas serán confidenciales.

La entrevista durará entre 15 y 25 minutos más o menos. Después de nuestra entrevista, se tomarán medidas para mantener confidencial la información que usted compartió. Si usted decide firmar la autorización, el documento será escaneado a mi computadora personal, la cual está protegida por contraseña. El documento será posteriormente destruido. Después de la entrevista, las grabaciones de audio también serán cargadas a mi computadora personal. No se utilizarán ni su nombre ni cualquier información de identificación en ningún reporte u otros documentos que puedan resultar de esta entrevista.

Riesgos de Participación

No se conocen los riesgos físicos o financieros asociados a la participación en este estudio. Existe la posibilidad de que usted pueda sentir un cierto malestar o angustia al recordar el periodo después del parto. Con el fin de reducir el riesgo de que esto ocurra, un psicólogo me acompañará durante esta entrevista para ayudar en caso de que sea necesario. Además, le entregaremos una lista de profesionales de salud mental en la Ciudad de México en caso de que quiera hacer uso de sus servicios.

Costos

No habrá ningún costo por participar en este estudio.

Confidencialidad de los Expedientes

Su participación en este estudio será confidencial. Se le asignará un número a cada participante al inicio del proyecto y se utilizará este número en los registros del proyecto en lugar de su nombre. Nadie que no sean los investigadores será capaz de vincular la información con su nombre. Los registros y datos del estudio serán almacenados en los archivos de mi computadora personal, la cual está protegida por contraseña. Los resultados del estudio podrán ser publicados o presentados en congresos profesionales, pero su identidad no será revelada.

Aunque haremos todo lo posible para proteger su privacidad, no puede ser totalmente asegurada. En circunstancias inusuales, este estudio puede ser evaluado por una agencia de supervisión, tal como el Comité de Revisión Institucional de la University of South Carolina o la Oficina de EEUU para la Protección de Sujetos Humanos en la Investigación. Si esto ocurre, los registros que la identifican a usted y al documento de autorización firmado por usted pueden ser inspeccionados para que puedan evaluar que el estudio se desarrolle correctamente y se protejan adecuadamente los derechos de los participantes.

Personas de Contacto

Para más información sobre este estudio, o si usted cree que puede haber sufrido algún daño relacionado con el estudio, póngase en contacto con una persona de la lista a continuación:

- Dra. Filipa de Castro, Psicóloga, 553-901-5775 o por correo electrónico filipa.castro@gmail.com
- Dra. Deborah Billings, Profesora de la Universidad de Carolina del Sur, 1-803-777-3909 o por correo electrónico billindl@mailbox.sc.edu
- Mtra. Jean Marie Place, investigadora principal, 554-965-0092 o por correo electrónico jmsplace@gmail.com
- Thomas Coggins, Director de la Oficina de Cumplimiento de Estudio de la Universidad de Carolina del Sur, 1-803-777-7095 o por correo electrónico tcoggins@mailbox.sc.edu

Participación Voluntaria

Su participación en este estudio es voluntaria. Usted es libre de no participar o retirarse en cualquier momento, por cualquier razón, sin ninguna consecuencia negativa. En caso de que usted decida abandonar el estudio, la información que ya ha proporcionado se mantendrá confidencial.

Firmas / Fechas

He comprendido adecuadamente el contenido de este documento de autorización. Me dieron la oportunidad de expresar mis dudas y han respondido mis preguntas. Estoy de acuerdo con participar en este estudio, y comprendo que me puedo retirar en cualquier momento sin consecuencias negativas. Autorizo el uso de la información que compartiré para fines del estudio y entiendo que ésta se mantendrá confidencial. He recibido una copia de este formulario para mi referencia futura.

Nombre

Fecha

INFORMED CONSENT FORM

Situated Knowledge:
Understanding Postpartum Depression from Mexican Women's Experiences

Jean Marie Place, MSW, MPH
Deborah Billings, PhD
Filipa de Castro, PhD

Introduction and Purpose

You are invited to participate in research study conducted by Jean Marie Place. I am a doctoral candidate in the Health Promotion, Education, and Behavior Department at the University of South Carolina.

I am conducting a research study as part of the requirements for my doctoral degree in public health, and I would like to invite you to participate. This study is funded by the Women's and Gender Studies Program at the University of South Carolina. The purpose of the study is to understand the ways Mexican women define, interpret, and make sense of postpartum depressive symptoms. This form explains what you will be asked to do if you decide to participate in this study. Please read it carefully and feel free to ask any questions you like before you make a decision about participating.

Description of Study Procedures

If you have experienced a psychiatric episode or illness, other than depression and anxiety, I will not be able to interview you. If you are eligible and interested in participating in this research study, you will have the opportunity to read and sign this consent form. You may ask me any questions you have about this process during the interview. I will be asking you a few demographic questions, including your age, the state in Mexico you are from, your income, your marital status, your level of education, the age of your baby, and where you gave birth to your baby. All of these answers will be kept confidential. Next, I will ask you between 15 and 20 questions about your experiences in the weeks and months after giving birth to your child. The questions are aimed to understand how you felt emotionally and physically. The questions will also ask about how you felt about your relationship with your baby, family members, and

others. There are no right or wrong answers. I just want to know about your own experiences and opinions.

If you give me permission, I will tape record our interview on a digital recorder. After I finish asking the questions, I will turn off the tape recorder. I am using the tape recorder so that I will be able to remember what we talked about later. The tape recorder will allow me to listen to you without distractions. Again, all of your answers will be kept confidential.

The interview is anticipated to last between 25 and 35 minutes. After our interview, steps will be taken to keep the information you shared confidential. If you choose to sign the informed consent, it will be scanned into a personal password protected laptop and the paperwork will be subsequently shredded. The audio recordings will also be uploaded after the interview to a password protected laptop. Neither your name nor any identifying information will be used in any manuscripts or other data uses that may result from this interview.

Risks of Participation

There are no known physical or financial risks associated with participation in this research study. You may experience some discomfort or distress upon reflection of the postpartum depressive episode. In order to minimize the risk of this occurring, a licensed psychologist has accompanied me to this interview to assist if you feel distressing feelings. In addition, a listing of select mental health providers in Mexico City will be given to you, in case you would like to access their services.

Benefits of Participation

Taking part in this study is not likely to benefit you personally. However, this research will help us understand the influence of postpartum depression Mexican women's lives. The information may also be used to help educate and train healthcare providers who work with Mexican women in the perinatal period to better detect, manage, and treat postpartum depressive symptoms.

Costs

There will be no costs to you for participating in this study, other than the cost of gas or parking to arrive at this interview location.

Compensation for Injury

If you feel substantial emotional distress by participation in this research study, I and the licensed psychologist accompanying me will assist you in locating a mental health specialist who will be able to provide appropriate treatment. However, neither myself, the licensed psychologist, nor the University of South Carolina has set aside funds to compensate you for any complications or treatment costs associated with participation in this study. By signing this form, you are not waiving any of your legal rights.

Confidentiality of Records

Participation will be confidential. A number will be assigned to each participant at the beginning of the project. This number will be used on project records rather than your name, and no one other than the researchers will be able to link your information with your name. Study records/data will be stored in password protected computer files. The

results of the study may be published or presented at professional meetings, but your identity will not be revealed.

While we will make every effort to protect your privacy, it cannot be absolutely guaranteed. In rare cases, a research study may be evaluated by an oversight agency, such as the USC Institutional Review Board or the U.S. Office for Human Research Protections. If this occurs, records that identify you and the consent form signed by you may be inspected so that they may evaluate whether the study is properly conducted and the rights of participants were adequately protected.

Contact Persons

For more information concerning this research, or if you believe you may have suffered a research related injury, you should contact a person listed below:

- Dr. Filipa de Castro, Licensed Psychologist, at 553-901-5775 or email filipa.castro@gmail.com
- Dr. Deborah Billings, Faculty Advisor, at 1-803-777-3909 or email BILLINDL@mailbox.sc.edu
- Jean Marie Place, Principal Investigator and Doctoral Candidate, at 554-965-0092 or email jmsplace@gmail.com

If you have any questions about your rights as a research subject, you may contact:

Thomas Coggins, Director, Office of Research Compliance, University of South Carolina, Columbia, SC 29208, Phone - (803) 777-7095, Fax - (803) 576-5589, E-Mail - tcoggins@mailbox.sc.edu

Voluntary Participation

Participation in this study is voluntary. You are free not to participate or to withdraw at any time, for whatever reason, without negative consequences. In the event that you do withdraw from this study, the information you have already provided will be kept in a confidential manner.

Signatures/Dates

I have read (or have had read to me) the contents of this consent form and have been encouraged to ask questions. I have received answers to my questions. I give my consent to participate in this study, although I have been told that I may withdraw at any time without negative consequences. I have received (or will receive) a copy of this form for my records and future reference.

Name

Date

APPENDIX B – INTERVIEW GUIDE FOR MEXICAN WOMEN

Guía de Entrevista para Mujeres Mexicanas

[¡Hola!] Muy buen día. Mi nombre es _____. Llevo a cabo investigaciones en donde pretendo conocer las experiencias que viven las mujeres que han padecido de dificultades emocionales después del parto. Le voy a leer el consentimiento informado, y si en algún momento tiene duda me puede interrumpir y preguntar.

(Leer el consentimiento informado)

La entrevista durará aproximadamente 15 a 30 minutos. Usted puede contestar cómodamente. Como bien le platicaba anteriormente podrá ser de mucho beneficio para otras mujeres que pasen por una situación similar. También quiero preguntarle, ¿Si está de acuerdo con realizar una grabación? Esta grabación únicamente se escuchará para fines de análisis. Quiero decirle que la entrevista se realizará de manera confidencial y su nombre no va a aparecer escrito en ningún lado. ¿Tiene alguna pregunta hasta el momento?

Entonces damos inicio. En esta ocasión, le voy a realizar una serie de preguntas las cuales usted puede responder con toda confianza, si hay alguna pregunta que le moleste o no se sienta cómoda, puede omitirla y no responderla.

Características demográficas

- 1) ¿Dónde nació su bebe (hospital y ciudad)?
- 2) ¿Qué edad tiene?
- 3) ¿Cuál es su ingreso familiar (semanal o mensual)?
- 4) ¿Cuál es su estado civil (casada, unión libre, soltera)?
- 5) ¿Hasta qué nivel escolar ha llegado (primaria, secundaria, preparatoria, etc.)?
- 6) ¿Cuántos meses tiene su bebe?
- 7) ¿Cuál considera usted que es su religión?
- 8) ¿Su parto fue de cesarí (¿motivo?) o parto natural (¿dónde)?

9) ¿Le ha dado pecho a su bebe? ¿Cuánto tiempo? ¿Cómo se sintió?

Preguntas de la Entrevista

10) ¿Cómo se sintió usted después del parto? (Si el participante se sentía bien, pregunte, “¿Cómo cambiaron estos sentimientos en los meses después del parto?”)

- a. ¿Cuándo se empezó a sentir de esta manera?
- b. ¿Por cuánto tiempo duraron los sentimientos?

11) ¿Podría decirme un poco sobre lo que pasó y como se sentía después de traer al bebe a casa?

- a. ¿Cuándo se empezó a sentir de esta manera?
- b. ¿Por cuánto tiempo duraron los sentimientos?

12) ¿Cuál crees que fue la causa de [insertar tipo de problemas expresados]?

13) ¿Los sentimientos [insertar tipo de sentimientos expresados] le causaban problemas en tu vida?

- a. ¿Podría usted describirlos?

14) ¿Los sentimientos le causaron preocupación o que tuviera miedo de algo?

- a. De qué?

15) ¿Cuándo se sentía [insertar tipo de sentimientos expresados], trataba de resolver esa sensación?

- a. Cómo?

16) ¿Qué hacía usted para que se sintiera mejor?

17) ¿Cuáles cosas le hacían sentir peor?

¿Le dijo a alguien acerca de cómo se sentía? (Si, no, pregunte, “¿Por qué no?”)

18)

- a. ¿A quién se lo dijo?
- b. ¿Por qué a él/ella?
- c. ¿Qué fue lo que le dijo?
- d. ¿Cuál fue su sugerencia?
- e. ¿Se lo dijo a alguien más? [Repetir]

19) ¿Quién podría haberla ayudado cuando se sentía [insertar tipo de sentimientos expresados]?

- a. ¿Como podrían haberla ayudado?

- 20) ¿Qué opina usted sobre el papel que un médico podría tomar cuando alguien se siente [insertar el tipo de sentimientos expresados]?
- ¿Le dijo a un profesional (i.e. médico) acerca de cómo usted se sentía?
 - ¿Por qué si o por qué no?
- 21) ¿Que se imagina cuando escucha “depresión posparto”?
- ¿Había escuchado el término “depresión posparto”?
- 22) ¿En su religión, como se tratan a los sentimientos depresivos?
- 23) Un manual diagnóstico de los trastornos mentales destaca los siguientes síntomas de un episodio de depresión:
- ¿Ha experimentado los siguientes síntomas?
- Estado de ánimo triste o irritable durante la mayor parte del día
 - Ha disminuido la capacidad para disfrutar o mostrar interés o placer en las actividades habituales
 - Su apetito ha disminuido o aumentado
 - No puede dormir o duerme demasiado
 - Movimiento de lentitud o ansiosos
 - Sensación de debilidad física
 - Sentimientos frecuentes de inutilidad o culpa
 - Pensamientos frecuentes de muerte o ideas suicidas
- ¿Existen otros sentimientos que tuvo y que no están incluidos en esta lista?

Interview Guide for Mexican Women

Hello! My name is_____. I am conducting this interview with the intent to understand the experiences that women who have faced some emotional difficulties in the postpartum period have faced. I am going to read the informed consent to you, and if in any moment you have a question, you can interrupt me and ask me any question.

(Read the informed consent)

The interview will last approximately 15 to 30 minutes. You can feel comfortable answering the questions. As I have already mentioned, your answers will be a great help to other women who have also experienced something similar. I would like to ask you if it is OK to audio-record this interview? This interview will only be listened to during my analysis. I would like to also let you know that everything you say is confidential. Do you have any questions?

We can get started. I would like to read to you a series of questions and you can answer however you fee. If there is a question that you would prefer not to answer, you can skip it; you do not have to answer it.

Demographic Questions

- 1) Where was your baby born (hospital and city)?
- 2) How old are you?
- 3) What is your income (weekly or monthly)?
- 4) What is your civil status? (married, living together, single)?
- 5) What level of education do you have? (primary, secondary, high school, etc.)?
- 6) How old is your baby?
- 7) What is your religion?
- 8) Your delivery was Cesarian (motive?) or vaginal?
- 9) Do you breastfeed? How long? How did it go for you?

Interview Questions

- 10) How did you feel after delivery? (If she answers that she felt good, ask, “How did those feelings change in the weeks/months after delivery?”)
 - a. When did you start to feel this way?
 - b. For how long did those feelings last?
- 11) Could you tell me a little bit about how you felt once you brought the baby home?
 - a. When did you start to feel this way?
 - b. For how long did those feelings last?
- 12) What do you think was the cause of [the type of feelings expressed]?
- 13) Did the [type of feelings expressed] cause problems for you?

- a. Could you describe them?
- 14) Did those feelings cause you to become fearful of anything?
a. What?
- 15) When you felt [type of feelings expressed], did you do anything to try to feel better in that moment?
a. What?
- 16) What other sorts of things did you do to try and feel better?
- 17) What sort of things made you feel worse?
- 18) Did you tell anyone about how you felt? (If no, ask, “Why not?”)
a. How did you tell?
b. Why that person?
c. What did you tell them?
d. What did they suggest, if anything?
e. Did you tell anyone else? (If so, repeat other questions)
- 19) Who do you think could have helped you when you felt [type of feelings expressed]?
a. How could they have helped you?
- 20) What is your opinion of the role a physician could have taken when you felt [type of feelings expressed]?
a. Did you tell a professional (i.e. physician) about how you were feeling?
b. Why or why not?
- 21) What do you think when you hear the words ‘postnatal depression’?
a. Have you ever heard that term before?
- 22) In your religion, how are depressive feelings dealt with?
- 23) A manual of mental disorders outlines the following symptoms to classify an episode of depression. Have you feel any of the following symptoms?
a. Sadness or irritability during a lot of the day?
b. Decreased pleasure in doing things you used to enjoy?
c. Decreased appetite or increased appetite?
d. Sleep too much or have trouble sleeping?
e. Feel like you are slow moving? Feel anxious?
f. Feel very weak physically
g. Feel like you are worthless or feel excessive guilt?
h. Have frequent thoughts about death or suicidal thoughts?
Have you felt some other symptom that is not included on this list?

APPENDIX C – VIGNETTE BASED ON INTERVIEW IN
MEXICO CITY, MEXICO

Viñeta basada en entrevistas de la Ciudad de Mexico, Mexico

Una mujer, que tiene 25 años, se presenta en una institución de salud, ya que tiene una cita con los médicos para que ellos examinen un problema viral de su bebe, el que tiene mes y medio. Ella tiene miedo por causa de este motivo. Además, una semana después de traer al bebe a casa, ella comienza a sentir un gran cansancio, mucha debilidad, dolor en todo su cuerpo y soledad. Menciona ella que “anda como triste” y ocasionalmente tiene deseos de llorar. Durante el día llegan estos sentimientos de manera paulatina, aun a pesar de ello trata de cuidar a sus otros dos pequeños. Ella ha bajado el peso.

Vignette based on interviews in Mexico City, Mexico

A 25 year-old woman comes to this healthcare facility because she has an appointment with a doctor so that they can examine a virus that is affecting the baby. The baby is one and one half months-old. She has been worried about the appointment for a while. In addition, one week after bringing the baby home from the hospital, she started to feel really tired, very weak, and with a lot of pain all over her body. She has felt very lonely. She mentions that she just feels like a sad person and occasionally feels like she is on the verge of tears. During the day, these feelings come to her gradually. Amid her feelings, she is trying to take care of her other two children. She has lost weight.

APPENDIX D – VIGNETTE BASED ON INTERVIEWS IN
YAUTEPEC, MORELOS, MEXICO

Viñeta basada en entrevistas de Yautepec, Morelos, Mexico

Una mujer, que tiene 24 años, se presenta en una institución de salud 7 meses después del parto ya que tiene una cita para atención regular. Ella está casada y de bajos recursos. Ella ha bajada de peso, casi no se da hambre, y menciona ella que no puede dormir en las noches, a pesar de estar bien cansada por cuidar sus otros 2 pequeños. Llega en la institución de salud sin ser peinada. Se da cuenta que ella se siente una impotencia ya que no juega con su bebe y no sabe calmar su bebe.

Vignette based on interviews in Yautepec, Morelos, Mexico

A 24 year-old woman comes to this healthcare facility seven months after her baby was born for a regular check-up appointment. The woman is married and has a low-income. She has lost weight and hardly has an appetite. She mentions that she can't sleep at night, even though she is really tired from taking care of her other two kids. She comes to this healthcare facility without combing her hair. You can tell that she doesn't play with her baby or seem to know how to calm him.

APPENDIX E – INFORMED CONSENT FOR HEALTHCARE PROVIDERS

FORMA DE AUTORIZACIÓN

Estudio para entender la atención durante el puerperio desde la perspectiva del equipo médico en sistemas públicos de salud en México

Mtra. Jean Marie Place
Dra. Filipa de Castro
Dra. Deborah Billings

Introducción y Propósito

Usted está invitada a participar en el estudio llevado a cabo por la Mtra. Jean Marie Place. Soy estudiante de doctorado en la Facultad de Comportamiento, Educación y Promoción de la Salud en la Universidad de Carolina del Sur (University of South Carolina).

Realizo este estudio como parte de los requisitos para mi doctorado en Salud Pública, y me gustaría invitarle a participar. Este estudio está financiado por el Programa de la Mujer y Estudios de Género de la Universidad de Carolina del Sur. El propósito del estudio es comprender la forma en la que el equipo médico atiende y vigila la salud de la mujer durante el puerperio. Este documento sirve para explicarle lo que tiene que hacer en caso de que acepte participar en este proyecto. Por favor léalo cuidadosamente y no dude en preguntarme sobre cualquier duda que tenga antes de tomar la decisión sobre su participación.

Descripción de los Procedimientos del Estudio

Si usted es apta y está interesada en participar en este estudio, usted deberá leer y firmar este documento de autorización. Usted puede hacerme cualquier pregunta que tenga sobre este proceso durante la entrevista. Le voy a hacer algunas preguntas demográficas, como su edad, su nivel de educación y cuánto tiempo ha trabajado en la institución. Todas sus respuestas se mantendrán confidenciales. Enseguida, le voy a preguntar de 20 a 25 preguntas sobre la atención del puerperio y cómo se sienten las mujeres física y emocionalmente después de dar a luz a su bebé. También le preguntaré su opinión acerca del papel del médico en el periodo después del parto. No hay respuestas correctas o incorrectas, solo quiero saber acerca de sus experiencias y opiniones.

Si usted me da permiso, voy a grabar la entrevista con una grabadora digital. Después de terminar de hacerle las preguntas, voy a apagar la grabadora. Utilizo la grabadora para

que más adelante yo sea capaz de recordar lo que platicamos hoy. La grabadora me permite escucharle sin distracciones. Le reitero, con el fin que quede muy claro, que todas sus respuestas serán confidenciales.

La entrevista durará ente 15 y 25 minutos más o menos. Después de nuestra entrevista, se tomarán medidas para mantener confidencial la información que usted compartió. Si usted decide firmar la autorización, el documento será escaneado a mi computadora personal, la cual está protegida por contraseña. El documento será posteriormente destruído. Después de la entrevista, las grabaciones de audio también serán cargadas a mi computadora personal. No se utilizarán ni su nombre ni cualquier información de identificación en ningún reporte u otros documentos que puedan resultar de esta entrevista.

Riesgos de Participación

No se conocen los riesgos físicos o financieros asociados a la participación en este estudio.

Costos

No habrá ningún costo por participar en este estudio.

Confidencialidad de los Expedientes

Su participación en este estudio será confidencial. Se le asignará un número a cada participante al inicio del proyecto y se utilizará este número en los registros del proyecto en lugar de su nombre. Nadie que no sean los investigadores será capaz de vincular la información con su nombre. Los registros y datos del estudio serán almacenados en los archivos de mi computadora personal, la cual está protegida por contraseña. Los resultados del estudio podrán ser publicados o presentados en congresos profesionales, pero su identidad no será revelada.

Aunque haremos todo lo posible para proteger su privacidad, no puede ser totalmente asegurada. En circunstancias inusuales, este estudio puede ser evaluado por una agencia de supervisión, tal como el Comité de Revisión Institucional de la University of South Carolina o la Oficina de EEUU para la Protección de Sujetos Humanos en la Investigación. Si esto ocurre, los registros que la identifican a usted y al documento de autorización firmado por usted pueden ser inspeccionados para que puedan evaluar que el estudio se desarrolle correctamente y se protejan adecuadamente los derechos de los participantes.

Personas de Contacto

Para más información sobre este estudio, o si usted cree que puede haber sufrido algún daño relacionado con el estudio, póngase en contacto con una persona de la lista a continuación:

- Dra. Filipa de Castro, Psicóloga, 553-901-5775 o por correo electrónico filipa.castro@gmail.com
- Dra. Deborah Billings, Profesora de la Universidad de Carolina del Sur, 1-803-777-3909 o por correo electrónico billindl@mailbox.sc.edu
- Mtra. Jean Marie Place, investigadora principal, 554-965-0092 o por correo electrónico jmsplace@gmail.com
- Thomas Coggins, Director de la Oficina de Cumplimiento de Estudio de la Universidad de Carolina del Sur, 1-803-777-7095 o por correo electrónico tcoggins@mailbox.sc.edu

Participación Voluntaria

Su participación en este estudio es voluntaria. Usted es libre de no participar o retirarse en cualquier momento, por cualquier razón, sin ninguna consecuencia negativa. En caso de que usted decida abandonar el estudio, la información que ya ha proporcionado se mantendrá confidencial.

Firmas / Fechas

He comprendido adecuadamente el contenido de este documento de autorización. Me dieron la oportunidad de expresar mis dudas y han respondido mis preguntas. Estoy de acuerdo con participar en este estudio, y comprendo que me puedo retirar en cualquier momento sin consecuencias negativas. Autorizo el uso de la información que compartiré para fines del estudio y entiendo que ésta se mantendrá confidencial. He recibido una copia de este formulario para mi referencia futura.

Nombre

Fecha

APPENDIX F – INTERVIEW GUIDE FOR HEALTHCARE PROVIDERS,
FIRST DRAFT

Guía de Entrevista para los Proveedores de Salud

Definición del Problema

1. Qué opina usted: ¿Cuáles son las principales experiencias a las que se enfrentan una mujer en el periodo del posparto?
- 2.

Presentación de Viñetas (3)

¿Qué le parece esta situación? (Si le contesta “no” pregunte, “¿Por qué no? ¿Cómo es ella similar a una paciente cotidiana que ve en su consulta?”)

Si considera que hay algún problema con ella:

- ¿Qué tipo de problema considera que es?
- ¿Qué síntomas o factores de riesgo le indican que algo está mal?

Diagnosticar las causas

3. En su opinión, ¿qué es lo que está causando el problema? Por qué cree que es un problema?

Juicios morales / estigma

4. ¿Cómo describiría usted a esta paciente a sus colegas?
5. ¿Qué dirían los otros médicos acerca de esta paciente?
 - ¿Por qué dirían estas cosas?
 - ¿A quiénes les dirían? (¿A la paciente, a sus amigos, a su familia, a sus colegas?)
6. ¿Cuál cree usted que sea la diferencia en el trato hacia aquéllas mujeres que no se presentan con estos síntomas comparado con el trato que reciben las mujeres que los presentan?

Sugerir Soluciones

7. ¿Cuáles son las necesidades de atención que tiene la paciente?
 - ¿A cuáles de estas necesidades le puede dar atención este hospital?
 - ¿Qué acción tomaría usted si se le presentara esta situación?

¿Existen lineamientos o guías de práctica clínica para evaluar el riesgo que presenta esta paciente? (¿Para detectar los síntomas? ¿Para diagnosticar? ¿Para tratar?
¿Le daría consejos a la mujer? (Si le contesta “no” pregunte, “¿Por qué no?”)

- ¿Cuál sugerencia le daría?
- ¿En qué sentido cree que el consejo podría ser útil a la mujer?
- ¿Qué barreras cree que existan para que la mujer siga o haga caso del consejo?

Preguntas basadas en la Teoría del Comportamiento Planificado

8. Durante su práctica ¿Ha visto a alguien en una situación similar a las mujeres que se describen en las viñetas?

- ¿Qué tan frecuentemente llegan mujeres con síntomas de depresión?

En su práctica cotidiana, ¿usted evalúa la salud mental de las pacientes? (Si le contesta “no,” pregunte “¿Qué factores le impiden evaluar?” (¿Protocolos de oficinas? ¿Reglas? ¿Horarios?)

- ¿Cómo?
- ¿Qué factores facilitan la evaluación de la salud mental? (protocolos de oficinas, procedimiento administrativos, un menor número de pacientes)

Si usted está preocupado acerca de la salud mental de la mujer, ¿Cómo interviene?”

- ¿Qué tipo de procedimientos se ofrecen normalmente a las mujeres que padecen un trastorno mental?
- ¿Cómo se registra el procedimiento en los expedientes de las pacientes?
- ¿Tiene conocimiento de los instrumentos de detección?
- ¿Tiene conocimiento de las opciones de tratamiento o fuentes de referencia para la depresión?

Actitudes

9. ¿Qué significa para usted “depresión posparto”?

10. ¿Qué resultados percibe usted como positivos en la detección de la depresión posparto?

11. ¿Qué resultados percibe usted como negativos en la detección de la depresión posparto?

Las normas subjetivas

12. ¿Existen colegas en esta misma institución u otra institución que hagan algo para detectar o tratar la depresión posparto?

- ¿Qué hacen ellos?
- ¿Qué tan importante es su opinión para usted?

13. ¿Qué tan frecuente se discute el tema de depresión posparto entre sus colegas?

14. ¿Qué dicen ellos/ustedes?

15. ¿Qué tanto apoyo brinda la institución a los médicos de las unidades en capacitación de detección o tratamiento de la depresión posparto?

Percepción de Control

21. En su opinión, ¿cuáles son las barreras para la detección de la depresión posparto?

- ¿De qué manera se pueden reducir o eliminar estas barreras?

Demográficas

Su edad:

Sexo:

Grado de estudios:

Institución educativa:

¿Qué tipo de práctica tiene usted en esta institución?

¿Cuánto tiempo lleva en esta institución?

Dentro de su formación profesional, ¿recibió alguna información sobre depresión posparto u otros trastornos mentales en el periodo perinatal? ¿De qué tipo? ¿En qué términos se presentó el tema de depresión posparto? ¿En dónde recibió la información?

Dentro de su entrenamiento escolar, ¿recibió algún entrenamiento acerca de depresión posparto u otros trastornos mentales en el periodo perinatal? ¿De qué tipo? ¿En dónde recibió entrenamiento?

¡MUCHAS GRACIAS POR SU PARTICIPACIÓN!

***Podría usted sugerir tres colegas (en el sector de salud público) con los que pudiera yo contactarme?*

Interview Guide for Healthcare Providers

Definition of Problem

What do you see as the main experiences a woman faces in the postpartum period?

Presentation of Vignette (3)

Do you think the woman has a problem? (If no, “Why not? How is she similar to a routine patient that comes into your office?”)

- What do you think the problem is?

What symptoms or risk factors tell you something is wrong?

How would you describe this patient to your colleagues?

Diagnose Causes

In your opinion, what is causing the problem?

Moral Judgments / Stigma

What is it about the [identified cause] that influences the problem?

What would other doctors say about this patient? Why would they say these things? Who would they say them to? The woman herself? Only friends or family? Colleagues?

Do you think this woman will be treated differently in the healthcare setting compared to other women who do not present with these symptoms? Why? What would be different?

Suggest Remedies

What is the best way to handle this situation? What course of action would you take, if any?

Would you use any clinical guidelines to assess risk? Detect symptoms? Diagnose? Treat?

Would you follow any office (hospital) protocols to detect a problem? Diagnose? Treat?

Would you give advice to the woman? (If no, “Why not?”)

- What advice would you give?
- Why do you think the advice would be helpful?
- What barriers do you anticipate would inhibit the patient from following through on advice?

Interview questions based on Theory of Planned Behavior

Have you seen anyone in your practice similar to the women described in the vignettes?

- How often do you see them in your practice?

In your day-to-day practice, do you tend to assess a woman's mental health? (If no, "What factors prevent you from assessing? Prompt with: workload? Schedule? Office protocols? Restrictions?)

- How?
- What factors make it possible for you to assess? (prompt with: office protocols, fewer patients, etc.)

If you are concerned about a woman's mental health, how would you tend to intervene?

- Are you aware of screening instruments?
- Are you aware of treatment options or referral sources?

Attitudes

What does the word "postpartum depression" mean to you?

What do you perceive to be the positive outcomes for screening for postpartum depression?

What do you perceive to be the negative outcomes for screening for postpartum depression?

Subjective Norms

Do your colleagues do anything to detect postpartum depression?

- What do they do?

Do your colleagues do anything to treat postpartum depression?

- What do they do?

What do your administrators say about screening for postpartum depression?

What do your administrators say about treating women with postpartum depression?

How important is their opinion to you?

Perceived Control

What are the barriers to screening for postpartum depression? (in the office, structure time)

- Are any of those features in your control to change?

What facilitators are in place to help you screen for postpartum depression?

What are the barriers for treating postpartum depression?

- Are any of those features in your control to change?

What facilitators are in place to help you screen for postpartum depression?

Demographics

Age:

Sex:

Highest educational level obtained:

Where was the training completed:

Years in practice:

Years at current institution:

APPENDIX G – INTERVIEW GUIDE FOR HEALTHCARE PROVIDERS, REVISED

Guía de Entrevista para los Proveedores de Salud

en la Investigación de Depresión Postnatal

Jean Marie Place, MSW, MPH

2012

Médic@s / Enfermer@s / Trabajadores Sociales / Psicolog@s

DEMOGRAFICAS

Su edad:

Sexo:

Título de profesión:

Grado de estudios:

Institución educativa:

¿Qué tipo de práctica tiene usted en esta institución?

¿Cuánto tiempo lleva en esta institución?

PREGUNTAS DE LA ENTREVISTA

Qué opina usted: ¿Cuáles son las principales situaciones a las que se enfrenta una mujer en el periodo del postparto?

PRESENTACION DE CASO...

¿Qué está pasando en esta situación?

Si considera que hay algún problema con ella:

¿Qué tipo de problema considera que es?

¿Qué síntomas o factores de riesgo le indican que algo está mal?

Si le contesta que no hay algún problema con ella:

¿Cómo es ella similar a una paciente cotidiana que ve en su consulta?

¿Qué cree usted que es su papel en esta situación?

¿Cómo describiría esta paciente a sus colegas? ¿Qué les diría usted acerca de ella?

¿Qué cree usted que dirían los otros () acerca de esta paciente?

¿Qué tan común se presenta esta situación (o depresión posparto) en su práctica cotidiana? (¿La semana pasada identifique alguna? ¿Cuándo fue la última vez? ¿Cuántas mujeres del periodo posparto ve en su consulta diario?)

En su práctica cotidiana, ¿usted evalúa la salud mental de las pacientes? (En caso de “no” Por qué no?)

¿Cómo?

¿Qué factores le impiden evaluar?

¿Qué significan para usted la “depresión posparto”? ¿Qué causa la depresión posparto?

¿Conoce usted los factores de riesgo para depresión posparto? En su opinión, ¿cuáles son algunos de los factores de riesgo?

¿Cómo los detecta?

¿Usted ha identificado alguna mujer con depresión posparto? (En caso de “no” ¿Qué características cree usted que tendría una mujer con depresión?)

¿Cómo?

¿Qué le hizo pensar que esa mujer estaba deprimida? ¿Cuáles fueron las características que usted identificó que le hizo pensar que ese era un caso de depresión?

Cuando identificó el caso de depresión posparto, ¿usted le dio a la mujer algún tratamiento, sugerencia o consejo?

¿A dónde la refirió?

¿Qué diría usted que aprendiera de la experiencia de detectar depresión posparto en el caso que usted me mencionó?

¿Cómo es que se registra este tipo de diagnóstico en los expedientes de las pacientes?

Qué opina usted: ¿Que es la mejor manera de salir adelante de la depresión posparto?

¿Cómo distingue entre depresión posparto y los cambios normales que les pasan a las mujeres en el periodo después del parto?

¿Usted aplica algún instrumento / evaluación específica para detectar la depresión posparto?

Si contesta “si” ¿cuál?

Si contesta “no”, ¿tiene conocimiento de los instrumentos de detección para depresión posparto? Aplica algún instrumento para detectar violencia sufrido por las mujeres?

Como se sientes con la detección de la depresión posparto? Se sientes cómodo o incomodo? ¿Capaz o inútil en la detección de depresión posparto?

¿De qué manera diría usted que la depresión posparto puede afectar a la mujer y a su familia?

¿Qué consecuencias tiene la institución en la detección de la depresión posparto?

¿Si se detecta que una paciente tiene depresión posparto, es mejor que la mujer esté enterada o no? Por qué si o por qué no?

¿Cuáles palabras o términos usaría para decírselo a la mujer?

¿Qué dice la comunidad (los Mexicanos, los chilangos) sobre mujeres que tienen síntomas depresivos, como rechazo de su bebe, desinterés en ser mama? Por qué dicen así?

¿Cuáles son las barreras que les prohíben a las mujeres salir adelante de su depresión?

¿Cómo cree que se sienten las mujeres en decirles sus sentimientos a los médicos?

¿Qué tan frecuente se discute el tema de depresión posparto entre sus colegas? (Si “no,” por qué no?)

¿Existen colegas (médicos, enfermeras, etc.) en esta misma institución u otras instituciones que hagan algo para detectar o tratar la depresión posparto? ¿Qué hacen ellos? ¿Qué tan importante es que se haga esto?

¿Qué tanto apoyo brinda la institución a los (_____), así como usted, para que se capaciten en la detección o tratamiento de la depresión posparto? Por qué?

En su opinión, ¿el sistema de detectar y tratar depresión posparto en esta institución es adecuada? ¿Por qué si o porque no?

¿Usted cree que es importante que los médicos como usted, tengan mayor capacitación sobre depresión posparto? ¿Por qué si o por qué no? ¿En qué sentido le gustaría aprender más?

Dentro de su formación profesional o dentro de su entrenamiento escolar, ¿recibió alguna información sobre depresión posparto u otros trastornos mentales en el periodo perinatal?

¿De qué tipo? ¿En qué términos se presentó el tema de depresión posparto? ¿En dónde recibió la información?

¿Cómo usted inicialmente fue enterado de depresión posparto?

¿Para usted por qué es importante trabajar en este lugar?

¿Desde su posición institucional cómo logras sus metas y objetivos laborales?

¿Le gustaría agregar algo más?

Interview Guide for Healthcare Providers

Study on Postnatal Depression

Jean Marie Place, MSW, MPH

2012

Doctors / Nurses / Social Workers / Psychologists

Demographics

Age:

Sex:

Professional title:

Education level:

University:

Professional duties in this facility?

How long have you worked here?

Interview Questions

In your opinion, what are the principle situations that a woman faces in the postpartum period?

PRESENTATION OF VIGNETTE

What is happening in this situation?

(If they believe there is a problem...)

What type of problem is it?

What symptoms or risk factors indicate that there is a problem?

(If they don't believe there is a problem...)

How is this woman similar to the women you see in your daily practice?

What is your role in this situation? Solution?

How would you describe her to your colleagues?

What do you think your colleagues would say about her?

How often do you see this type of situation in your daily practice? (In the last week did you identify a situation like this? When was the last time? How many women who are in the postpartum period do you see daily?)

In your daily practice, do you evaluate the mental health of patients? (If not, why not?)

How?

What are barriers to evaluation?

What does the term “postnatal depression” mean to you? What causes postnatal depression?

Are you familiar with any risk factors for postnatal depression? In your opinion, what are the risk factors for postnatal depression?

How are they detected?

Have you ever identified a woman with postnatal depression? (If not, ask what characteristics they think a woman with postnatal depression would have.)

How?

What made you think that the woman was depressed? What characteristics made you think that it was a case of depression?

When you identified a case of postnatal depression, did you give the woman any treatment, suggestions, or counsel?

Did you refer her anywhere? Where?

What would you say you learned from this experience that you have just mentioned?

How do you record this type of diagnosis on patients' charts?

In your opinion, what is the best way to resolve postnatal depression?

How do you distinguish between postnatal depression and the normal changes that happen to a woman in the postpartum period?

Do you use any specific screening instrument or tool to detect postnatal depression?

If yes, ask what one?

If no, ask if they are familiar with postnatal depression screening instruments. Also ask if they use a screening tool to detect for violence against women.

How do you feel in terms of detection of postnatal depression? Do you feel comfortable with it or not? Competent or incompetent?

In what ways would you say postnatal depression could affect the woman and her family?

If postnatal depression is not detected and treated, does the institution suffer any consequences?

If you detect a woman with postnatal depression, is it better that the woman be aware of her condition or not? Why or why not?

What words or terms would you use to tell the woman of her condition?

What does the Mexican culture say about women who experience depressive symptoms, such as neglect of a baby or difficulty in being a mother? Why do they say such things?

What are the barriers that hinder a woman recovering from depression?

How do you think a woman with postnatal depression feels about expressing her feelings/symptoms to a physician?

How often do you discuss postnatal depression with your colleagues? (If they don't, ask why not.)

Are there colleagues in this same institution or other institutions that do something to detect or treat postnatal depression? What do they do? How important is it that they do those things?

How much support does the institution give you and your colleagues to get trained in the detection or treatment of postnatal depression? Why?

In your opinion, the system in this institution to detect and treat postnatal depression is adequate? Why or why not?

Do you believe it is important that you and your colleagues have more training about postnatal depression? Why or why not? In what area would you like to learn more?

Within your educational or professional training, did you receive any information about postnatal depression or other maternal mental health problems? What kind of

information? How was postnatal depression talked about or described? Where did you receive the information?

When and how did you first learn about postnatal depression?

Why is it important to you that you work in this institution?

What methods do you use to reach your daily and career goals?

Would you like to add anything else?

APPENDIX H – TABLE OF CHARACTERISTICS OF WOMEN
USED IN VIGNETTES

Table H.1 Table of Characteristics of Women Used in Vignettes

	Women (N=7)	
		N(%)
Age	18-24	2(29)
	25-31	3(43)
	31-37	1(14)
	38-44	1(14)
Location	Mexico City	1(14)
	Yautepec, Morelos	6(86)
Level of Education	Primary	3(43)
	Middle school	-(-)
	High school	3(43)
	College	1(14)
Household Income	< \$200/month	2(29)
	\$200-400/month	4(57)
	>\$400/month	1(14)
Marital Status	Married	4(57)
	Living together	1(14)
	Single	2(29)
Religion	Catholic	4(57)
	Evangelical	1(14)
	No religion	-(-)
	Other	2(29)
Type of Delivery	Vaginal	3(43)
	Cesarean	4(57)
Currently Breastfeeding	Yes	5(71)
	No	2(29)
Months of baby	1-3	3(43)
	4-6	1(14)
	7-9	3(43)