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“Starved” for Services: Analyzing Perinatal Depression Resources in Georgia

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# “Starved” for Services: Analyzing Perinatal Depression Resources in Georgia

By

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2019

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An abstract of
A thesis submitted to the Faculty of the
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Abstract

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*Background*

Perinatal depression affects infants, mothers and caregivers throughout the world. The most common complication of giving birth, perinatal depression generally requires the care of a healthcare professional in order to address the diverse symptoms and support needs of the perinatal individual. Appropriate recognition and treatment of perinatal depression is a significant healthcare need throughout the state of Georgia. Treatment accessibility is limited by resource and provider shortages throughout the state.

*Purpose*

In this project, I map the resources and services available to individuals at risk of or suffering from perinatal depression and evaluate the availability of supporting services among medical professionals in Georgia to provide resources and information for partner organization, PEACE for Moms.

*Methods*

Using a multi-pronged approach, I mapped the organizations, practitioners and programs that support mental health in perinatal populations in Georgia and disseminated a survey among healthcare providers to provide further insight on mental healthcare and resources for perinatal populations. These methods resulted in a resource map created using Zeemaps software and recommendations for PEACE for Moms based on provider feedback.

*Results*

Results include the high level of need for perinatal mental health resources throughout the state, though the majority of existing resources are concentrated in the Atlanta metro area. Few resources are available to this population in other areas of the state, particularly rural areas. Results also show high levels of inaccurate information regarding these resources online, and few low cost resources or services that accept insurance. Additionally, survey responses revealed low levels of awareness of the PEACE for Moms program and the particulars of its services.

*Discussion*

Significant access problems exist in the state of Georgia for perinatal mental health resources. Financial and geographic accessibility are causes for concern, brought up by survey respondents and supported by results in the resource map. Further program development should take place to help lower income, rural populations access these services and improve insurance coverage of mental health services. Organizations such as PEACE for Moms play an important role in improving access to mental healthcare for this population.

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I would like to thank the entire team at PEACE for Moms for all the assistance they gave me throughout the completion of this project. I have learned so much through this collaboration and am immensely grateful for the opportunity to work with and for you.

Finally, thank you to all of my mentors at Rollins and my family and friends for all of their support throughout my MPH education. I would not be where I am without you.

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Note: Throughout this thesis project I refer to birthing people as either pregnant individuals, perinatal individuals or individuals who have recently given birth in acknowledgement of the fact that not all birthing people identify as women or as mothers. Some research does refer to birthing people as “women” or “mothers” and any use of that terminology is a result of the limitations of the current research practice and language.

# Chapter 1: Introduction

## Introduction and Significance

### *Perinatal Mood and Anxiety Disorders*

Perinatal mood and anxiety disorders (PMADs) include psychiatric disorders that occur during pregnancy and up to one year following birth. Disorders range from mild anxiety and depression to mania and psychosis (O'Hara & Wisner, 2014). In this project I will focus on perinatal depression which is defined as a mood disorder that can occur both during and after pregnancy. Perinatal depression includes depression that occurs during pregnancy, known as prenatal depression, and depression that occurs following birth, known as postpartum depression. Perinatal depression has been documented since the time of Hippocrates (O'Hara & Wisner, 2014) and can affect any pregnant or postpartum individual regardless of social status, race or ethnicity ("Perinatal Depression"). Individuals with perinatal depression experience symptoms such as sadness, fatigue and anxiety, and can struggle to care for both themselves and others ("Perinatal Depression"). Experts are calling for a greater focus on perinatal depression given the impacts it can have on mothers, infants and loved ones (O'Hara & Wisner, 2014). This project will demonstrate that in the state of Georgia, there is high need for resources to support individuals with Postpartum depression. In addition to this need, there are many barriers to

accessing the resources that do exist. Efforts should be made to expand access to these resources to support a vulnerable and high-needs population.

*Resources for Perinatal Depression*

Treatment for perinatal depression is important not just for the perinatal individual, but also for their infant, family and community. This treatment can include resources such as therapy, medication, support groups and other interventions ("Perinatal Depression"). Clinical options for treatment include psychotherapy and antidepressant medication (Pearlstein et al., 2009). Group psychoeducation (Rouhe et al., 2015), culturally relevant interpersonal therapy sessions (Rojas-García et al., 2014), couples based interventions (Misri et al., 2000), community support interventions (Sealy et al., 2009) as well as cognitive behavioral therapy (Huang et al., 2018) are also examples of successful perinatal mental health resources. Access to resources such as these is important for this population as perinatal populations are more likely to address their mental health concerns if they have access to high quality mental health resources (Byatt et al., 2012).

*PEACE for Moms Program*

To address the paucity of perinatal mental health resources in the state, the Georgia state legislature provided funding for a psychiatric access program to support clinicians in caring for mothers, prospective mothers and families, educate caregivers about community resources, provide information to healthcare professionals to aid in patient treatment, train healthcare providers to recognize and treat perinatal psychiatric illness and to educate physicians about the needs of this population. The resulting program, PEACE for Moms, is a program housed in the Emory University School of Medicine Department of Psychiatry and Biomedical Sciences. It is designed to address psychiatric issues prevalent among populations that have recently given

birth. PEACE stands for Perinatal psychiatry, Education, Assessment, Community Engagement, the key priorities of the initiative ("Peace for Moms"). PEACE for Moms is an initiative still in early phases of resource development. In partnering with PEACE for Moms at this time in their organizational development, I was able to provide valuable resources that had not yet been created by the organization.

*Problem Statement*

There is a critical lack of quality resources and resource information for perinatal mental health conditions throughout the state of Georgia. This shortage is particularly problematic in rural areas of the state and outside of the Atlanta metro area. Though certain resources do exist for this population throughout Georgia, this analysis shows that resources lists that are currently available do not provide up to date and accurate information. And, despite high risk factors in Georgia, there is little research available regarding the ways in which individuals at risk of perinatal depression can find and seek care from mental and reproductive health professionals and within their own community. This information is of vital importance as the lack of resource accessibility may result in adverse mental and physical health consequences for individuals at risk of or suffering from perinatal depression. The availability of resources has changed as a result of the COVID-19 pandemic due to lockdown measures. Therefore, research on the current resources accessible to pregnant individuals in this state is needed. Updated information of this type provides important information to organizations such as PEACE for Moms seeking to provide support to this population now and into the future.

*Purpose Statement*

Through a multi-method project involving resource mapping and a survey distributed to mental and reproductive health service providers throughout the state, I develop an updated

resource guide for the state of Georgia for partner organization, PEACE for Moms. The Project has the following aims:

Aim 1: To map the resources and services available to individuals at risk of or suffering from perinatal depression in Georgia.

Aim 2: To identify the availability and gaps in services for perinatal populations according to medical professionals in Georgia

## Definition of Terms and Abbreviations

### *Definition of Terms*

**Perinatal Depression:** depression that occurs during or after pregnancy ("Perinatal Depression")

**Postpartum depression:** Depression that occurs after giving birth ("Depression During and After Pregnancy")

**Perinatal or postpartum mood and anxiety disorder**: Mild, moderate or severe feelings of distress that occur during pregnancy or throughout the first year following pregnancy ("Perinatal or Postpartum Mood and Anxiety Disorders")

**Resource mapping**: A system of documenting and describing the myriad resources that exist in a community in order to create awareness and improve access to these resources (Zallman et al., 2014)

**Primary Care Service Area**: Collection of counties in which more than 30% of county residents receive their primary care (Zertuche & Spelke, 2013)

### *Abbreviations*

**Postpartum depression**: PPD

**Perinatal or postpartum mood and anxiety disorder**: PMAD

**Obstetrician/Gynecologist**: OB/GYN

## Chapter 2: Literature Review

*Introduction*

Perinatal mental illness is a complication that can occur during pregnancy and during the immediate postpartum period. These disorders can include anxiety disorders, mood disorders and rarely, postpartum psychosis (O'Hara & Wisner, 2014). Perinatal mental illness is generally defined as different from the "baby blues", typically a two week period of sadness or worry that follows the delivery, a natural reaction to hormonal shifts as well as the challenges and transitions following birth. When symptoms are severe or if they last longer than 2 weeks, pregnant or postpartum individuals may be diagnosed with perinatal depression ("Perinatal Depression").

Perinatal depression includes major and minor depressive episodes occurring during pregnancy or in the first year following delivery. It is one of the most common complications during this period, affecting 10-15% of women of childbearing age (Robertson et al., 2004). Traditionally, in both research and practice, there has been more emphasis placed on postpartum depression (PPD) but there are significant impacts of maternal depression both before and after birth. Although universal psychosocial assessment has not been part of routine prenatal care, evidence shows that prenatal depression can have a distinct negative impact as well (Kingston et al., 2012).

Untreated perinatal depression can have devastating implications for both the pregnant parent and the offspring, so it is essential to both diagnose and treat ("Screening for Perinatal Depression," 2018). Symptoms, generally beginning within the first 6 weeks after delivery (Robertson et al., 2004), include mood swings, crying, anxiety, sleep disruption and difficulty

connecting with the child. In severe cases, postpartum depression can put the life of both mother and child at risk ("Screening for Perinatal Depression,", 2018). The American College of Obstetricians and Gynecologists recommends that women be given a complete assessment of mood and emotional well-being to screen for perinatal depression during key perinatal health appointments. For those patients that screen positive, maximum benefit can be achieved if they are referred to mental healthcare providers ("Screening for Perinatal Depression," 2018). Despite the critical need for diagnoses and treatment, most women never seek treatment and data have shown that only 37-65% of women with postpartum depression experience remission (De Crescenzo et al., 2014). Barriers to addressing perinatal depression include stigma, lack of obstetric provider training, lack of resources and limited access to mental health treatment (Byatt et al., 2012).

*Risk Factors for Perinatal Depression*

Postpartum depression symptoms are common following childbirth (Gürber et al., 2012), but there are several factors that influence risk of depression for perinatal individuals (See Table 1). Risk factors for depression during pregnancy include maternal anxiety (Lancaster et al., 2010; Tang et al., 2019) life stress, history of depression, lack of social support, unintended pregnancy, use of Medicaid insurance, domestic violence, lower income, lower education, smoking, maternal single status and poor maternal romantic relationship quality (Lancaster et al., 2010).

Anxiety and the experience of a depressed mood during pregnancy have been shown to be a significant predictor of postpartum depression (O'Hara & Swain, 1996; Robertson et al., 2004; Wilson et al., 1996). Other risk factors for postpartum depression include a traumatic birth experience (Robertson et al., 2004; Tani & Castagna, 2017), low levels of social support, prior

history of depression, breastfeeding problems (Robertson et al., 2004) and preterm birth or infant admission to neonatal intensive care (Ko et al., 2017). One study found that the highest prevalence of postpartum depression occurred in women who were younger than 24 years old, were American Indian/Alaska Natives or Asian/Pacific Islanders, had less than a high school education, were unmarried or were postpartum smokers (Ko et al., 2017). Other research has shown low income to be the most relevant factor in predicting postpartum depression. Women in a lower income bracket can be four times more likely to have clinically significant symptoms of postpartum depression when compared to individuals in the highest income bracket (Segre et al., 2004).

*Protective Factors*

There are certain factors that have a protective influence against the development of perinatal depression (See Table 1). Perceived social support by mothers during pregnancy can play a significant role in protecting against post-partum depression and can also reduce negative clinical aspects of giving birth, leading to a better subjective birth experience and lower rates of postpartum depression. In addition, group psychoeducation for those with severe fear of childbirth can improve maternal adjustment and childbirth experience (Tani & Castagna, 2017). Women who participated in group psychoeducation reported a less fearful childbirth experience, and fewer symptoms of postnatal depression in comparison with conventional care provided to women (Rouhe et al., 2015). Targeted interventions that are relevant to an patient's particular needs have been shown to protect individuals from experiencing perinatal depression symptoms. Other studies have shown that other lifestyle changes such as exercise can be protective factors against the development of perinatal depression (Tang et al., 2019). Finally, addressing maternal distress throughout the period of pregnancy may be one of the most feasible methods for

addressing the negative impacts postpartum depression can have on the infant (Kingston et al., 2012).

| **Table 1. Risk and Protective Factors for Perinatal Depression** | | |
|---|---|---|
| **Prenatal Depression Risk Factors** | **Postpartum Depression Risk Factors** | **Perinatal Depression Protective Factors** |
| Maternal anxiety (Lancaster et al., 2010; Tang et al., 2019) | Anxiety and depression during pregnancy (O'Hara & Swain, 1996; Robertson et al., 2004; Wilson et al., 1996) | Group psychoeducation (Rouhe et al., 2015) |
| Lack of social support (Lancaster et al., 2010) | Lack of social support (Robertson et al., 2004) | Perceived social support (Tani & Castagna, 2017) |
| History of depression (Lancaster et al., 2010) | History of depression (Robertson et al., 2004) | Targeted interventions (Tang et al., 2019) |
| Lower income (Lancaster et al., 2010) | Lower Income (Segre et al., 2004) | Exercise (Tang et al., 2019) |
| Lower education (Lancaster et al., 2010) | Less than a high school education (Ko et al., 2017) | Addressing distress during pregnancy (Kingston et al., 2012) |
| Smoking (Lancaster et al., 2010) | Postpartum Smoking (Ko et al., 2017) | |
| Maternal single status (Lancaster et al., 2010) | Unmarried (Ko et al., 2017) | |
| Living in a rural area (Mollard et al., 2016; Vigod et al., 2013) | Living in a rural area (Mollard et al., 2016; Vigod et al., 2013) | |
| Life stress (Lancaster et al., 2010) | Traumatic birth experience (Robertson et al., 2004; Tani & Castagna, 2017) | |
| Domestic violence (Lancaster et al., 2010) | Infant admission to neonatal intensive care (Ko et al., 2017) | |
| Poor maternal romantic relationship quality (Lancaster et al., 2010) | American Indian/Alaska Natives or Asian/Pacific Islanders (Ko et al., 2017) | |
| Unintended pregnancy (Lancaster et al., 2010) | Younger than 24 years old (Ko et al., 2017) | |
| Use of Medicaid insurance (Lancaster et al., 2010) | Preterm birth (Ko et al., 2017) | |

| | | |
|---|---|---|
| | Breastfeeding problems (Robertson et al., 2004) | |

*Impacts of Perinatal Depression*

Maternal mental health is directly associated with outcomes in the child (Slomian et al., 2019). Patients with anxiety disorders are more likely to have a pre-term delivery (Hermon et al., 2019; Pavlov et al., 2014) or a cesarean section (Pavlov et al., 2014). Low birthweight in particular can both contribute to and result from perinatal depression and can have major impacts on both mother and child. Low birthweight can negatively impact infant psychological health (Baibazarova et al., 2013) and mothers of pre-term infants are at a higher risk of depression than mothers of term infants in the immediate postpartum period (Ko et al., 2017). Another study found that mothers of infants with very-low-birthweight demonstrated a continued risk throughout the first postpartum year (Vigod et al., 2010). Prenatal anxiety can also increase likelihood of developmental delay in the infant (Kingston et al., 2012; Punamäki et al., 2006; Slykerman et al., 2007). Overall, prenatal distress in the mother can have an negative impact on infant cognitive, behavioral, and psychomotor development (Kingston et al., 2012).

Postpartum depression is associated with negative impacts on maternal physical and psychological health as well as a lower quality of life (Slomian et al., 2019). Depressed mothers have been shown to be more likely to engage in risky behaviors such as smoking, and to get caught up in a vicious cycle in which they experience increasingly lowered perception of their own maternal competence (Slomian et al., 2019). Maternal depression impacts the ways mothers interact with their child (Slomian et al., 2019), mothers with postpartum depression are more likely to end breastfeeding early (Wouk et al., 2017) and to struggle to connect with the infant

(Stein et al., 1991). In one study, mother child pairs in which mothers experienced a depressive disorder showed a reduced quality of interaction compared to dyads without experience of depressive disorders (Stein et al., 1991).

*Perinatal Depression in Rural Areas*

The care and experience of perinatal depression has shown to be distinct in urban versus rural areas (Ginja et al., 2020). In general, adults in rural areas receive less frequent mental health treatment and are less likely to see a provider with specialized training (Morales et al., 2020). Rural women are more likely to seek support from informal systems of care and are also more likely to face stigma for seeking out mental healthcare (Mollard et al., 2016). A Canadian study found that the prevalence of postpartum depression was higher among women living in urban areas than rural or semi-urban areas. However, they also found that rural women with less of a connection to urban centers were at a greater level of risk of postpartum depression than women with a connection to urban centers (Vigod et al., 2013). Globally, there is a high prevalence of perinatal depression in rural areas, though little has been done to assess that prevalence or any potential disparity in the United States (Mollard et al., 2016).

*Perinatal Depression During COVID-19*

Global events influence maternal mental health in myriad ways. For example, during SARS outbreak of the early 2000's, uncertainty and stigma were common, and patients reported fear, loneliness, boredom and anger (Maunder et al., 2003). The COVID-19 pandemic has had a significant influence over nearly every aspect of life and medical care, and many factors have led to adverse mental health outcomes for perinatal women in the pandemic (Shidhaye et al., 2020).

Researchers have begun to analyze the ways in which COVID-19 may have impacted the experience, treatment and symptom severity of perinatal depression.

Poorer social support, fear of the virus, economic uncertainty and increases in domestic violence have all been found to lead to an increase in antenatal depression and anxiety during the COVID-19 pandemic (Shidhaye et al., 2020). Several studies have found that women scored higher on the Mean Edinburgh Postnatal Depression Scale, which indicates poorer mental health during the pandemic compared to before (Chmielewska et al., 2021). Women experienced greater risk of psychological distress during the pandemic (Crowe & Sarma, 2022), particularly individuals of low socioeconomic status or a past history of anxiety. It has also been shown that global maternal and fetal outcomes have worsened over the course of the COVID-19 pandemic, researchers have reported increases in maternal death, maternal depression, stillbirth and ruptured ectopic pregnancies (Chmielewska et al., 2021).

The pandemic resulted in a rapid increase in the use of telehealth services, a mode of service provision shown to be an effective method to provide mental healthcare (Reay et al., 2020). Throughout the pandemic, the use of technology and mobile mental healthcare has provided much needed mental healthcare to women with perinatal mental health concerns. (Shidhaye et al., 2020). Telemedicine can improve accessibility to specialized care, allow for direct observations on parent-child interactions in the home environment and facilitate coordination between obstetric and psychiatric healthcare providers. However, telemedicine use may also increase feelings of social isolation. Further research has been recommended by experts to more fully understand the impacts of telehealth on perinatal populations (Wassef & Wassef, 2022).

*Provider Shortages in Georgia*

There is cause for concern regarding low resource availability in the state. Almost half of the 159 counties in Georgia have no psychiatrists (McDonald, 2013) and areas of Georgia with highest rates of preterm births are also areas with the least access to OB/GYNs (Vigod et al., 2010). Georgia, despite having 3.2% of the U.S. population has only 2.3% of the nation's psychiatrists, a deficit that is reflected in other mental health professionals (Beck et al., 2018). Almost half of the counties of Georgia do not have any psychiatrists and there are only 10.9 psychiatrists per 100,000 residents (McDonald, 2013). Georgia also has a deficit of OB/GYN providers with only 10.9 OB/GYNs per 100,000 residents by 2008 (Zertuche & Spelke, 2013). Both problems are worsening, as the current OB/GYN and current psychiatrist population ages into retirement (Zertuche & Spelke, 2013). The shortage of OB/GYN providers is a problem that is most severe in rural areas of the state, with 43 of the 82 Georgia Primary Care Service Areas (PCSAs) having either an overburdening or an absence of obstetric providers (Zertuche & Spelke, 2013). This issue is a result of several key causes, including the demanding nature of the position given the low number of available physicians, a challenging legal and political environment and low reimbursement rates. This problem is unlikely to be resolved in the coming years. In a survey of OB/GYN residents in Georgia, 72% of respondents said that they were either not going to stay in the state after residency or unsure if they would stay in the state after residency. In addition, 75% of the same sample said that they were either unlikely or extremely unlikely to accept a job in rural Georgia (Zertuche & Spelke, 2013).

Risk factors for postpartum depression can be identified by medical providers during the perinatal period ("Screening for Perinatal Depression", 2018). However, Georgia's low numbers of obstetricians in rural areas limits the recognition of risk factors and symptoms in those areas

(Zertuche & Spelke, 2013). The provider shortage is associated with both low birth weight and premature births, two factors that may contribute to poor maternal health outcomes (Zertuche & Spelke, 2013). Other concerning data show that in Georgia the farther a woman is from a care provider, the more likely she will have a preterm birth and mothers of these preterm infants are at higher risk of depression (Vigod et al., 2010).

There is a state-wide deficit in Community Mental Health Services, resulting in services which often lack the trained staff to address the complex and varied needs of the perinatal population (McDonald, 2013). Community Mental Health Centers throughout the state, but particularly in rural areas, struggle to recruit and retain key healthcare providers (Walker et al., 2015).

*Perinatal Depression in Georgia*

There were some promising data regarding the prevalence of postpartum depression in Georgia in the early 2000's-2010's. There was a statistically significant decline in postpartum depression prevalence documented in one country-wide study. Within the study population, the percentage of new mothers with postpartum depression dropped from 17.2% in 2004 to 8% in 2012, compared to a country-wide prevalence of 11.5% (Ko et al., 2017). However, a study in 2019 found that 14.5% of mothers reported depression symptoms in the postpartum period, an increase from their reported depression symptoms before pregnancy ("PRAMS", 2019). In addition, The percentage of mothers who self-reported depression symptoms in the three months before pregnancy, during pregnancy and in the postpartum period increased between 2017 and 2019 ("PRAMS", 2019).

There are other points that indicate that a high need for perinatal mental health resources in rural Georgia. The state birthrate in the year 2020 was 36.5 live births occurring to per 1,000 females, higher on average in rural counties compared to urban counties. Additionally, rural women were more likely to be single mothers, raising a child alone or women who have chosen not to marry and are more likely to be pregnant at younger ages ("Mortality Statistics", 2022). Throughout the state, the percentage of mothers who smoked cigarettes before pregnancy, during pregnancy and in the postpartum period increased between 2017 and 2019 ("PRAMS", 2019), another risk factor for perinatal depression (Ko et al., 2017).

*Solutions*

Treatment of perinatal depression is important for the perinatal individual, infant and family. Treatment can include therapy, medication, support groups and other interventions ("Perinatal Depression"). Women are more likely to address perinatal depression if they feel empowered and validated by healthcare providers (Byatt et al., 2012). Successful treatment can vary by individual and the context in which they live. Culturally relevant, interpersonal therapy interventions have been shown to be the most effective interventions for socially disadvantaged perinatal individuals (Rojas-García et al., 2014) and healthcare interventions specifically targeted to women of low socio-economic status can help reduce symptoms of perinatal depression among that population (Rojas-García et al., 2014). Interventions that enhance self-esteem and increase an individual's satisfaction with social support have been shown to decrease the burden of depressive symptoms among rural and low income women (Jesse et al., 2014). Cognitive behavioral therapy has also been successful in treating perinatal depression (Huang et al., 2018).

Other research has centered on the importance of involving friends, family and community in the identification and treatment of perinatal depression. One study found that fathers are often unable to detect postpartum depression in their partners though they struggled with the emotional toll of perinatal distress. This demonstrated the need for further resources for partners of individuals with perinatal depression. These resources could include peer support groups to manage the impact of postpartum depression in their partners (Ng et al., 2021). Integrating couples-based interventions in perinatal depression care also may help increase maternal emotional and physical well-being (Misri et al., 2000). Training peer facilitators to help women access community resources is another solution that has been shown to be effective (Slade et al., 2021). Other work has highlighted the need for greater community support outside the home, particularly increased community education in order to improve social support for individuals with perinatal depression and to encourage treatment seeking for women and their families (Sealy et al., 2009).

Telehealth has been explored as a solution in recent years, as described above. Telehealth alternatives to standard care are highly successful in mental healthcare in perinatal individuals (van den Heuvel et al., 2018). One study conducted with women of color suggested that increased access to telehealth and improved provider training in cultural competency and social determinants of health can improve resource accessibility (Iturralde et al., 2021). Overall, telehealth interventions can be structured to meet needs of different communities and can increase access to care, regardless of geography or accessibility to in-person services (Latendresse et al., 2021). Experts have also called for interventions that encourage engagement in online social activities to promote perinatal mental wellness and social engagement (Reay et al., 2020).

My research objectives, to map the resources and services available to individuals at risk of or suffering from perinatal depression in Georgia and to identify the availability and gaps in services for perinatal populations according to medical professionals will provide greater insight into this key public health issue in the state of Georgia.

## Chapter 3: Methodology

### *Determination of Need*

Before the initiation of this project I had discussions with Toby Goldsmith, M.D. at PEACE for Moms to discuss their needs as an organization and how this project might be of use. Through our discussions we determined the need for an up to date and accurate resource map for individuals with perinatal depression in Georgia, particularly resources for individuals located outside the Atlanta metro area. In formative online research I determined that a resource such as this did not yet exist and through discussions with Dr. Goldsmith, we determined that it would be of use to PEACE for Moms. We also decided that a method to survey providers about the services they provide, the services that exist in their communities and their awareness of the PEACE for Moms program would provide valuable insight to the resource map and to the organization.

### Resource Mapping

Resource map development was accomplished using a method of resource mapping (Zallman et al., 2014) and the services and resources included were found using existing resource lists, online research and provider insight. I compiled resources into a spreadsheet and uploaded into mapping software, Zeemaps ("Zeemaps"). Resources were categorized into the following categories: psychotherapy/psychiatry, mental health centers and programs with a specialty in PMADs, mental health centers and programs with experience treating PMADS, support groups, hospitals, doula services, midwife services, OB/GYN services, other practitioners and other community resources. This classification method was chosen to be consistent with previous resources created in Georgia. I collected information about each resource, including the name of

the organization, name of practitioner, address, zipcode, description, insurance information, email, phone, website and organization category. The spreadsheet was formatted to be compatible with the ZeeMaps software. All details of each resource will be available for PEACE For Moms through the spreadsheet and the ZeeMaps map (See appendix a).

*Resource Collection*

The first step of resource collection was to utilize the resource lists that had been compiled by other Georgia-based organizations such as Healthy Mothers, Healthy Babies and Project Healthy Moms. All of these lists contained resources used in the final product but all contained inaccurate information on resources whose information had changed or practitioners who were no longer practicing in the state of Georgia. I documented all resources that they included and followed up on each to ensure that all information was correct and up to date. I reviewed the most recent guide created by Project Healthy Moms and Mental Health America of Georgia, available online and last updated in 2016 ("Project Healthy Moms: Resource List for Perinatal Mood and Anxiety Disorders (PMADs)", 2016). I included all resources on that guide and corrected any information that was no longer accurate. I attempted to contact Project Healthy Moms but the email and phone listed were inactive and the website is no longer available. I called other contacts at Mental Health American of Georgia with no response.

I also made use of a resource list of Atlanta area therapists compiled by PEACE for Moms and included updated and detailed information on my final spreadsheet. I searched the Healthy Mothers Healthy Babies online database and included those resources that were available statewide under categories for “perinatal mental health” and “postpartum depression”, correcting inaccurate information and updating incomplete information. I also included resources

found on postpartumprogress.com, a list of therapists specializing in postpartum depression in different states around the country. I found resources publicized on the Postpartum Support International website and support groups publicized on the Psychology Today website.

After I had exhausted the resource lists that had already been created by other organizations, I used the Google search engine to find further services throughout the state and followed all available links to document organizations and resources that provide services for perinatal individuals. I contacted or extensively researched each organization on the list to ensure that the information was correct. Finally, I used a method of snowball sampling (Hennink et al., 2011) by contacting known organizations that were included in the final resource and requesting their help in locating any other resources available to perinatal individuals in their area. I followed up on all leads and included any resources that were suggested and confirmed. Resource collection concluded at the end of February to leave sufficient time for analysis.

*Inclusion and Exclusion Criteria*

Resources were included that were designed specifically to support the mental health of perinatal individuals or that had documented experience caring for perinatal individuals. Resources were excluded if there was insufficient evidence that they provided perinatal mental health services or if their physical address or contact information was out of date or impossible to verify. Certain information, such as email or insurance information, was not included in the map if it was unavailable online or by a follow-up phone call. Resources were excluded if they no longer existed in the state of Georgia or did not provide services for perinatal individuals. Twenty-two online resources are included in the final resource spreadsheet, though they are not able to be included in the final resource map as they no longer have a physical address.

*Mapping Software*

Mapping software was selected based on the software accessibility and price, and the ease of sharing information using an online platform. The final spreadsheet for the resource map was uploaded into the software and further resources can be added should any future updates to the map become necessary. Resource distribution was analyzed using the ZeeMaps software to determine which areas of the state had the greatest concentrations of each resource.

## Survey

*Survey Development*

The goal of the survey was to better understand participants' experience treating perinatal depression, the services offered in their workplace and their familiarity with community resources outside of their workplace. The survey text (See appendix b) was developed in collaboration with PEACE for Moms and feedback from Dr. Goldsmith and Dr. Clark as well as feedback from an OB/GYN and a Clinical Psychologist with experience with perinatal mental health. Questions were refined and changed for clarity and time. Specific questions about PEACE for Moms were also included to provide data regarding awareness of that program amongst perinatal health professionals in Georgia. The survey was designed to be brief to maximize participation amongst the participant population.

Decisions regarding which communities should be targeted in survey sampling were made through discussions with PEACE for Moms as well as informal discussions with healthcare professionals. Listservs and contacts with community organizations and professional

associations were discovered through internet searches and through key contacts at PEACE for Moms and Emory University.

Text for the email accompanying the survey was written to share the purpose and methods of the project, request participation and share contact information. Participants were informed that their participation would be anonymous. Promotional graphics, designed to be included as attachments to the email and in any social media posting, were developed using Canva online software ("Canva") (See appendix c).

*Survey Dissemination*

The survey was disseminated using Google Forms and shared with potential participants via email. The survey was distributed via listservs that agreed to participate in the survey. The listservs used were the Georgia Chapter of Nurse Midwives, the Georgia Rural Health Association, the Georgia Psychological Association, the Metro Atlanta Therapists Network and the Georgia OB/GYN Society. A graphic with the link and information was also distributed via Facebook and online community boards of these organizations when available. All listservs were contacted twice to ensure maximum participation. Other organizations for nurses and mental health professionals were contacted but were unable to disseminate an external resource or unavailable to participate during the requested time frame. The survey was also shared via email to all contacts included in the resource map. Initially, I attempted to contact those resources via phone to provide an option for a phone-based survey but was unable to get in touch with individuals willing to participate in the survey over the phone. Therefore, I determined email to be the best method of dissemination. Snowball sampling (Hennink et al., 2011) was also used by contacting members of the PEACE for Moms network via email to ask for their participation in

the survey. Emailed contacts were also asked to share with other contacts in their network or to suggest further avenues of dissemination.

*Survey Analysis*

The survey was opened and shared initially on December 8th 2021 and was closed on February 24th 2022 in order to ensure sufficient time for analysis. Analysis was conducted using Excel and SAS software. Qualitative data was analyzed separately using word processing software. Data was compiled and shared with PEACE for Moms. In analysis, data respondents were categorized into four categories for ease of analysis, “physician”, “mental health professional”, “midwife” and “other”. This method was chosen in order to compare responses across diverse professions. Participants were given the opportunity to skip any question they did not choose to answer and were able to select more than one professional role, or to write in their professional role if none of the available options fit their role.

*Incentive*

Participation was anonymous, emails from participants were collected if participants wanted to be considered for a chance to win a $50 Amazon gift card that PEACE for Moms donated as an incentive for participation. Participants were informed of the incentive in the survey text as well as in all emails and promotional graphics. Only those respondents who wished to be considered were asked to share an email. The winning entry was selected using a random number generator and sent to the winner via email.

*IRB Review*

In October 2021 I submitted a Determination Form to the Emory University Institutional Review Board (IRB). Following review of the materials used in this project, IRB concluded that this project did not meet the qualifications of "Research" under federal regulations and did not require an IRB review.

*MMRC Data Collection*

Requests were repeatedly submitted to the Georgia Department of Public Health and the Georgia Maternal Mortality Committee (MMRC) for data on pregnancy related deaths associated with mental health diagnoses and substance abuse disorders throughout the state of Georgia. These data were planned to supplement the resource mapping process by identifying the areas of the state with the highest instances of death and how they may relate to service availability. Data were never released and the request remains under review.

# Chapter 4: Results

## Resource Map Results

The final resource map included 237 resources comprised of 105 psychotherapists and psychiatrists, 62 mental health centers and programs with experience treating perinatal depression, 27 support groups, 21 mental health centers and programs with a specialty in perinatal depression, 4 midwife services, 4 hospitals, 3 doula services and 1 OB/GYN clinic. These resources, though certainly not an exhaustive list of all resources made available in Georgia, include all the resources that are widely publicized by common perinatal mental health services and websites in Georgia as well as those resources publicized most widely online.

### *Location*

Most resources were clustered in the northern half of Georgia, particularly in the metro Atlanta area, which is defined as Clayton, Cobb, Coweta, Dekalb, Douglas, Gwinnett, Henry, Fayette, & Fulton counties. Sixty (25%) of all resources were found within the city of Atlanta alone. Larger organizations designed to support perinatal populations in Georgia are often based in Atlanta, and the resources they publicized are also based in Atlanta. The most common resource found was psychotherapist/psychiatrist though very few therapists were found outside of the Atlanta metro area. In addition, most mental health centers with a specific specialty in perinatal depression were found in the Atlanta metro area. Health centers with experience treating perinatal depression were the most widely dispersed resource throughout the state, though these centers may not provide specialty services for perinatal depression. Few resources were found in the southern half of the state, particularly in the Southwest. No support groups were located in southern Georgia.

Former resource lists published online do not have large numbers of non-English resources. The only resources I found that are offered to non-English speakers provide support to Spanish speaking populations. The majority of these non-English resources are located in and around Atlanta though are not well publicized by Georgia perinatal health resources and websites.

*Resource Type*

Most resources found were designed to support the individual, rather than a family unit or community. In addition, most resources found are designed to support individuals with postpartum depression with less emphasis placed on mental health during pregnancy. Low cost resources or resources designed for low-income populations were uncommon. Insurance information was difficult or impossible to locate for many of the resources. In addition, some resources that accepted insurance in the past have shifted to a payment structure that no longer accepts it. Most therapists included in this map are out of network providers. Though some therapists and resources offer sliding scale options for populations that cannot afford the fee, several resources that publicized a sliding scale option in the past no longer do so.

*Resource Mapping Process*

The process of resource mapping revealed high levels of inaccuracy and lack of up-to-date information available online for individuals with perinatal depression. Most websites and databases have not changed their online resource information after the COVID-19 pandemic. It was common throughout the process to come across broken links, change in insurance information, retirement or relocation of the practitioner. Many phone numbers and emails publicized online are no longer active. Many therapists have moved their services online which

allows them to serve the entire state of Georgia, though they no longer see patients in person. Many support groups that existed prior to the pandemic are no longer active or exist in an online format. The process also revealed how challenging it is to find resources in rural areas despite specific searches and outreach to those areas. For example, in exploring websites specifically designed to match Georgians with therapists, few were listed and publicized outside of the Atlanta metro area.

Survey Results

The survey received 64 total responses. The respondents self-identified as Physician, Licensed Professional Counselor, Clinical Social Worker, Psychologist, Clinical Nurse Midwife, Certified Professional Midwife, Master of Social Work Intern, Women's Health Nurse Practitioner, Certified Nurse Midwife, Public Health Educator, Holistic Birth and Postpartum Doula, Family Nurse Practitioner, Peer Support Specialist, Clinical Specialist and Licensed Marriage and Family Therapist These respondents were categorized into four categories: Physician, 25% (n=16), Mental health professional, 32.8% (n=21), Midwife, 34.4% (n=22) and Other, 7.8% n=5.

**Table 2. Respondent Demographics**

| **Type** | **Count n=** | **Percentage** |
|---|---|---|
| Physician | 16 | 25% |
| Licensed Professional Counselor/Clinical Social Worker/Psychologist | 19 | 29.7% |
| Clinical Nurse Midwife | 20 | 31.3% |
| Certified Professional Midwife | 1 | 1.6% |
| Master of Social Work intern | 1 | 1.6% |
| Women's Health Nurse Practitioner | 1 | 1.6% |

| | | |
|---|---|---|
| Certified Nurse Midwife | 1 | 1.6% |
| Public Health Educator | 1 | 1.6% |
| Peer Support Specialist | 1 | 1.6% |
| Clinical Specialist | 1 | 1.6% |
| Licensed marriage and family therapist | 1 | 1.6% |

*Workplace*

Respondents worked in private for profit facilities, private non-profit facilities and public facilities (See Table 3). Overall, 68% (n=43) of respondents worked in a private for profit facility, 17.5% (n=11) worked in a private non-profit facility and 14.3% (n=11) worked in a public facility. Respondents were also asked about their specific workplace environment. 34% of respondents (n=21) worked in a hospital, 32% (n=20) worked in a doctor's office or health clinic. 26% (n=16) worked in a private practice. 5% (n=3) worked in a birth center/midwifery clinic. 2% (n=1) worked in each of the following: community health facility, a free clinic, a home office, self-employed, mobile based care and a university.

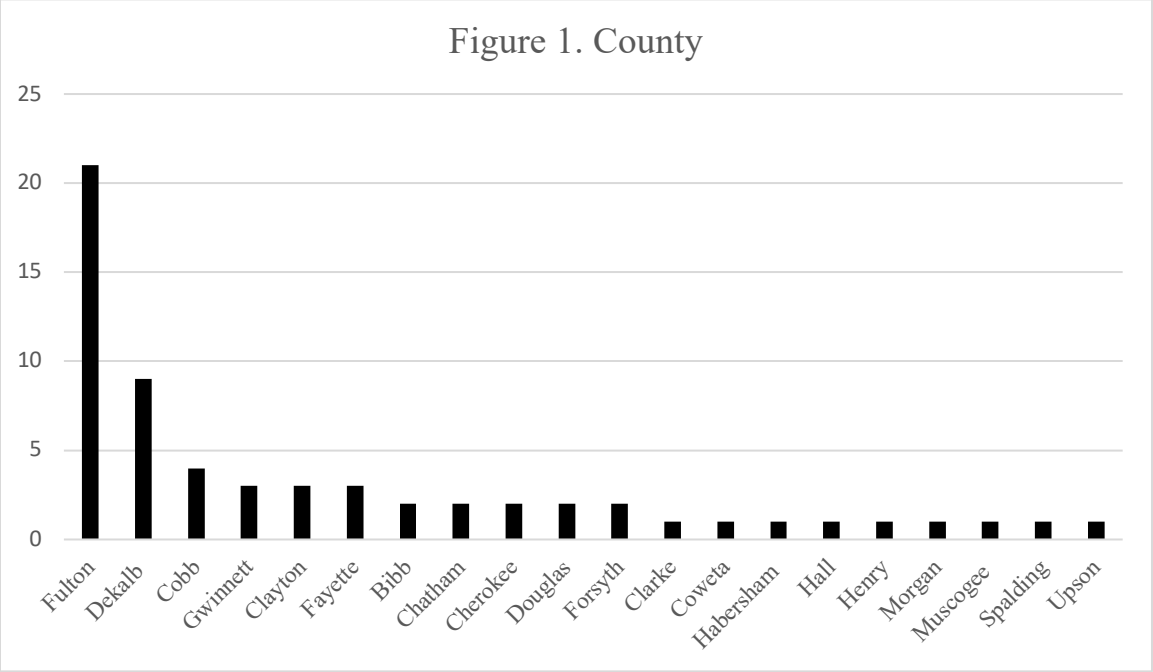
**Table 3. Workplace Type**

| | **Private For-Profit** | **Private Non-profit** | **Public** |
|---|---|---|---|
| **Physician** | 81.3% (n=13) | 12.5% (n=2) | 6.3% (n=1) |
| **Mental Health Professional** | 85.7% (n=18) | 9.5% (n=2) | 4.8% (n=1) |
| **Midwife** | 54.5% (n=12) | 27.3% (n=6) | 18.2% (n=4) |
| **Other** | 0% (n=0) | 25% (n=1) | 75% (n=3) |
| **Total** | 68% (n=43) | 17.5% (n=11) | 14.3% (n=9) |

*County*

Of the counties represented in the study population, only 18% (n=10) of respondents worked outside of the Atlanta metro area. Survey respondents worked in in following counties:

Fulton, Dekalb, Cobb, Gwinnett, Clayton, Fayette, Bibb, Chatham, Cherokee, Douglas, Forsyth, Clarke, Coweta, Habersham, Hall, Henry, Morgan, Muscogee, Spalding and Upson (See Figure 1). Two mental health professionals noted that they worked in telehealth and through online services were able to provide care to individuals in all counties in Georgia.

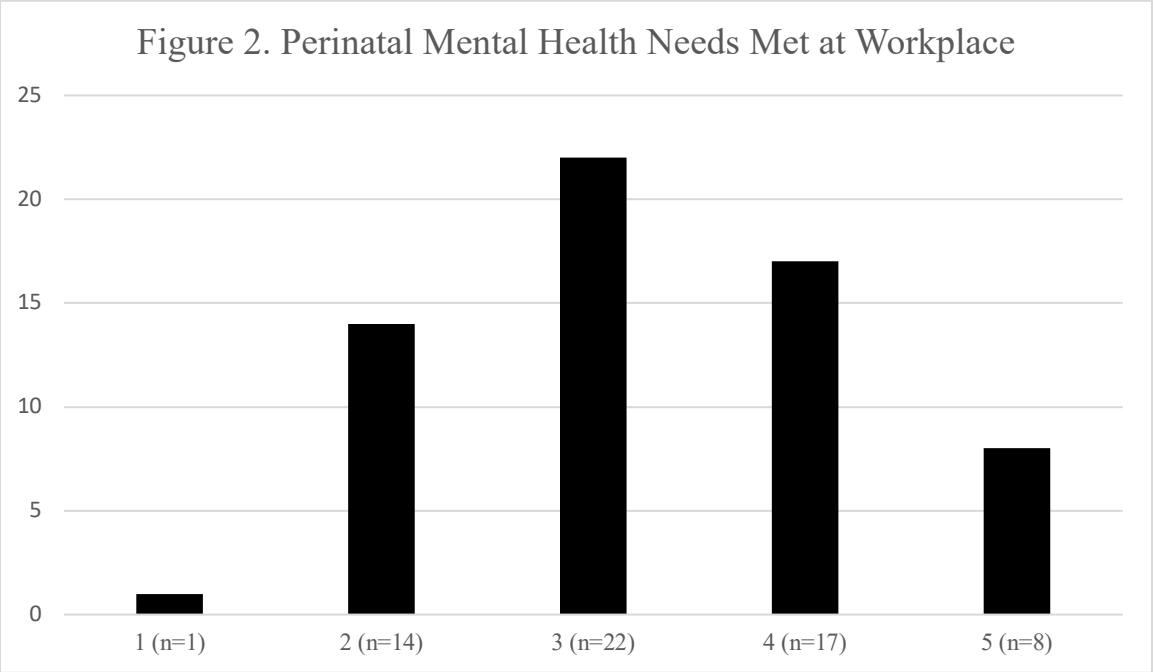



*Services Provided*

In response to a question regarding the mental health support that their workplace provide to perinatal individuals, respondents reported a variety of services provided. 77.8% (n=49) of respondents' workplaces provide assessment, 68.3% (n=43) provide referral to other organization, 44.4% (n=43) provide counseling, 57.1% provide education (n=36), 39.7% (n=25) provide psychotherapy, 31.7% (n=20) provide psychiatric medication management, 19% (n=12) provide support groups. 14.3% (n=9) provide psychotherapy groups, 1.6% (n=1) provide medication information, 1.6% (n=1) said that they did not know and 4.8% (n=3) said none.

*Mental Health Needs Met*

When asked how well their workplace meets the mental health needs of perinatal individuals, respondents rated their workplace on a scale of 1-5 with 1 meaning “meets no needs" and 5 meaning “meets all needs” (See Figure 2). Mental health professionals were most likely to report that their workplace was meeting the mental health needs of perinatal individuals. Mental health professionals scored their workplace with a mean of 4.15, physicians reported a mean of 3.06, midwives reported a mean of 2.73 and other respondents reported a mean of 2.75.




*Community Support*

Though not all respondents felt that their workplace met mental health needs of perinatal individuals, 71.4% (n=45) of respondents found mental health care during and after pregnancy to be extremely important to the community they work in. In response to a question about

where perinatal individuals not seen in respondents' facility find mental health support in their community (See Table 3), respondents said mental health professionals, family, friends, church/religious institution, medical professionals, the internet, community centers, virtual and in-person support groups, Facebook groups and school or academic institutions. 12.5% (n=8) said that they didn't know. One clinical specialist said, "I don't think they get care in general".

When asked if they were aware of specific programs in their community that provide mental health support to perinatal individuals, 51.6% (n=33) of respondents said yes and 48.4% (n=31) said no. 68.8% (n=11) of physicians reported that they were not aware of specific programs in their community that provided mental health support to perinatal individuals. 33.3% (n=7) of mental health professionals were not aware of specific programs in their communities, 50% (n=11) of midwives were not aware of specific programs and 80% (n=4) of other respondents were not aware of specific programs in their community.

When asked to name the resources that exist in communities for perinatal individuals, only 40.6% (n=26) of respondents provided examples of places where perinatal individuals can find support. The most common responses were resources such as Postpartum Support International, Emory Women's Mental Health Program and PEACE for Moms. Other respondents mentioned that women find support from therapists or support groups. No respondent provided an example of a specific resource outside of Atlanta. One clinical nurse midwife identified that cost was a barrier to many of these resources.

**Table 4. Where Perinatal Individuals Find Support**

| **Type** | **Count n=** | **Percentage** |
|---|---|---|
| Mental health professionals | 51 | 79.7% |
| Family | 37 | 57.8% |
| Friends | 35 | 54.7% |

| | | |
|---|---|---|
| Church/religious institutions | 36 | 56.3% |
| Medical professionals | 30 | 46.9% |
| Internet | 30 | 46.9% |
| Community centers | 13 | 20.3% |
| Support groups | 2 | 3% |
| Facebook groups | 1 | 1.6% |
| School/academic institutions | 1 | 1.6% |
| Don't know | 8 | 12.5% |

*Additional Resources Needed*

When asked about the additional resources that are needed for pregnant and postpartum people in either their workplace or community, 75% of respondents provided insight into the resources that are needed. There were many suggestions that were provided, with high levels of need identified in various aspects of perinatal mental healthcare. More mental health providers and support groups was the most common suggestion, many respondents specified that there were few providers that had training to address the needs of perinatal mental health concerns in their region. It was also a common response that affordability is an issue and that few mental health professionals accept payment from insurance, specifically Medicaid. One respondent said, "most therapy groups are not covered by insurance which makes people think they are not needed." The lack of resources within communities is a cause for concern. One respondent said, "There is a real lack of community and systemic support for the postpartum period in terms of both physical and mental health. We need to make maternal mental health a more routine point of care." Another respondent noted that their area was "starved" for services.

Others noted the need to train all healthcare providers in perinatal mental health concerns and to prioritize mental health needs throughout the pregnancy. Training OB/GYNs and other healthcare providers to be "'perinatal mental health informed' healthcare providers" was also

brought up as a particular need. Many respondents noted the need for information about referral options and the resources that are available. One respondent said there was a need for “lists of perinatal mental health providers in the area”.

*PEACE for Moms*

Overall, the majority (67.2%, n=43) of respondents were not familiar with PEACE for Moms. Mental health professionals were most likely to be aware of the PEACE for Moms program (52.4%, n=11) whereas smaller percentages of other groups: 37.5% (n=6) of Physicians and 13.6% (n=3) of midwives were familiar with the program.

PEACE for Moms provides consultation services, support groups, one-time psychiatric medication consultation, one-time in-person patient evaluations, clinician to clinician consultation, referral and resource dissemination and education. In answering questions about the services that PEACE for Mom’s provides, 53% (n=14) of respondents correctly identified that PEACE for Moms provides clinician to clinician consultation, referral and resource dissemination and education, 38.5% (n=10) correctly identified that PEACE for Moms provides support groups and 15.4% (n=4) correctly identified that PEACE for Moms provides in-person patient evaluations. However, respondents incorrectly identified counseling (34.6%, n=9), Psychotherapy groups (23.1%, n=6), Psychotherapy (11.5%, n=3) and Psychiatric medication management (23.1%, n=6) as services provided by PEACE for Moms. Only 26 respondents answered this question, 40.6% of the study population.

*Maternal Mortality Review Committee Data*

Data was requested repeatedly from the Georgia Maternal Mortality Committee (MMRC) in order to analyze those areas of the state with highest incidence of maternal mortality related to a mental health condition during pregnancy and in the postpartum period. Data was requested in September 2022 and has not been released by the MMRC as of April 2022. Therefore, no analyses of this type have been done.

## Chapter 5: Discussion

The process of survey analysis and resource mapping made clear that significant access problems exist in the state of Georgia for perinatal mental health resources. Though the literature outlines the importance of this support both for the individual ("Screening for Perinatal Depression," 2018), their family (Misri et al., 2000; Ng et al., 2021) and their community (Sealy et al., 2009), this project revealed that much work needs to be done before that goal is achieved.

Financial and geographic accessibility are causes for concern, brought up by survey respondents and supported by results in the resource map. Many survey respondents wrote that the most common place that perinatal individuals find mental health support is from mental health professionals, and yet those services can be inaccessible geographically and financially. Few resources found were located in rural areas and the mapping process revealed large areas of the state without documented mental health resources. Though other resources may exist throughout the rural regions of the state that are not captured in this map, they were difficult to locate despite an extensive search, potentially indicating that they do not receive publicity or recognition from resource lists and statewide organizations based in Atlanta. This might make it more difficult for perinatal populations to find them, adding another level of inaccessibility. Even within cities, accessibility may still be an issue. Many of the services provided throughout the state are private, with few public and low cost options, particularly options that accept insurance. Lack of insurance coverage for mental health professionals and low levels of resource accessibility means that mental health support might be difficult to find for low-income or rural individuals. This is a problem that may be worsening, I found more offers of sliding scales and financial aid in older resource guides and lists. The mapping process revealed fewer private providers that offer those options in 2022.

In the mapping process, the resource most widely dispersed throughout the state was found to be health centers with experience treating PMADs, most of which are community health centers and community mental health services. However, many of those centers don't offer the same specialized services as the smaller, private organizations. Detailed analysis of the particular services offered at these institutions is beyond the scope of this project, but further research may be needed on specific services that are available at these facilities and their ability to support the needs of perinatal populations.

Another issue that arose in the resource mapping process was the lack of up to date resource information for perinatal populations. This would indicate that individuals searching for perinatal mental health resources online would come across a considerable amount of inaccurate and out of date information, though from highly respected sources. This is particularly problematic because 20% of healthcare workers surveyed stated that the internet was a place where perinatal individuals find support. The high levels of inaccuracies found in resource guides and lists that are available to the public online may lengthen the process of finding resources for perinatal populations. Out of date services and information could discourage perinatal individuals from persevering to find support due to low quality information online. The difficulty in finding insurance or payment information is also a factor that may be discouraging for individuals looking for services. More research should be conducted regarding these barriers and the ways in which they impact perinatal mental health support.

Information accessibility was a challenge throughout the process of completing this project. Data was repeatedly requested from the Georgia Department of Public Health and the Maternal Mortality Review Committee on pregnancy related deaths associated with mental health diagnoses and substance abuse disorders. Requests were repeated over a period of seven months

and the request is still under review. This challenge in data access is an example of a failure of information transparency and a difficulty in understanding the needs of perinatal populations in the state of Georgia. These data would have added another dimension to this project and may be important in understanding the areas of the state with high levels of need. Further research should center on the varying needs throughout the state so that programs, such as PEACE for Moms, may address them.

There may be avenues to improve service including the expansion into telehealth. A search of clinical providers and therapists on Psychology Today revealed many options of providers who offer telehealth services. These providers can therefore offer support to individuals throughout the state of Georgia, even those in rural areas without access to in-person services. Survey respondents also identified telehealth as a potential improvement to service access in Georgia. However, this does not address the issue of cost and accessibility. Many of these services are still cost prohibitive and require a stable and safe internet connection. Even with the expansion into telehealth, this process revealed very few free and low cost services.

*Strengths*

A strength of this project is its immediate usefulness to PEACE for Moms and the ways in which this information can be utilized to support perinatal mental health in Georgia. This project fills an information gap that was highlighted by healthcare providers in the survey, the need for updated information regarding perinatal mental health resources that can be utilized by providers. In addition, this project's multi-pronged approach of survey analysis and resource mapping provides a multi-leveled benefit to PEACE for Moms in its ability to both provide

feedback on the ways in which the program is currently perceived by providers and resources that can directly benefit its programming.

*Limitations*

There are certain limitations to both the resource map and the survey. As the COVID-19 pandemic is dynamic and changing, the availability of resources may change following termination of this project. This may cause location and availability of resources included on the map to be inaccurate. This resource map is far from a complete map of all resources that exist in Georgia as a time limit needed to be placed on this project due to the time constraints of a thesis project. Additionally, the contacts and survey respondents that I was able to get in touch with are primarily urban, leading to a lack of data and resource documented from rural areas and areas outside the Atlanta Metropolitan Area. Due to the timing of this project, it may have been challenging for providers to take the time to respond to a survey during the pandemic due to high levels of workload and pandemic concerns. The low number of survey responses signify that these data are preliminary, and should be built upon in the future with greater number of contacts. The resource map should be considered an initial resource that can become a living document, updated according to current available resources in the state.

*Future Use*

The resource map and spreadsheet have been made available to PEACE for Moms for their future use and program development. The ZeeMaps software can be imbedded into website in order to share this information more widely with patients and community members. The data received from the survey has also been made available to PEACE for Moms to inform relationships with community providers.

*Recommendations for PEACE for Moms*

Resources such as this will provide much needed information for perinatal patients as well as care providers. PEACE for Moms can begin to address the information gap among providers though sharing this resource with the wider community. In addition, it may be important for PEACE for Moms to clarify the services it provides to patients and to publicize its presence, due to the low levels of awareness of the program articulated by survey respondents. Survey respondents incorrectly assumed that PEACE for Moms is primarily a clinical service rather than a referral based program. Future advertising and outreach may be focused on addressing this misunderstanding. Finally, outreach to churches, communities and families to educate these populations on methods and strategies to provide support to perinatal individuals as well as the development of resources specifically targeted to them may be a future direction for PEACE for Moms or other organizations in Georgia.

This project highlighted the importance of the work that PEACE for Moms does in Georgia. Survey respondents highlighted the need to improve training for healthcare providers, educate physicians about the needs of this population and provide information to healthcare professionals. All of these services, provided by PEACE for Moms, are an essential addition to perinatal care in Georgia.

*Conclusion*

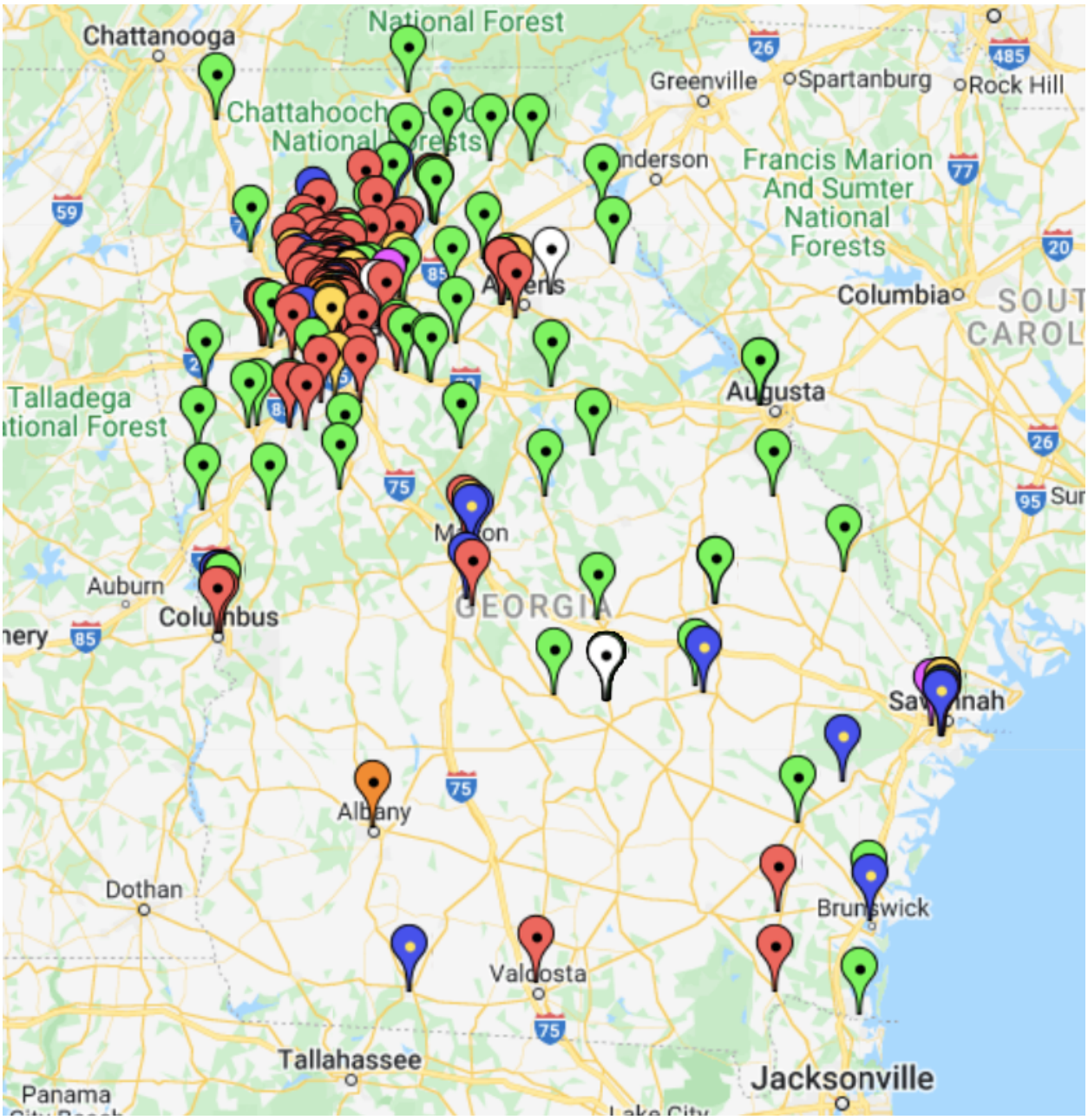
In the development of the resource map I achieved the two aims of my project. I was able to develop an up-to-date resource map of perinatal mental health resources in Georgia, to my knowledge the only current resource available at this time. I was able to conduct analyses on the services provided by healthcare providers and to analyze their suggestions and opinions on the

unmet needs in their communities. In achieving my aims, I created a resource that will help PEACE for Moms in the development of their services and may also help individuals with perinatal depression and their caregivers. This project served to improve access to information regarding perinatal mental health resources and also helped to illustrate the barriers that many face in utilizing these services due to lack of accessibility.

This analysis also raised concerns about resource accessibility throughout the state and the need for increased access to services for rural and low income populations and resources designed to support communities and families of individuals with perinatal depression. Populations throughout the state may benefit from improved resource accessibility in an important time for mental healthcare support.

Further program development should take place to help individuals of lower income and in rural areas access perinatal mental health services. Furthermore, further research should analyze how low rates of insurance acceptance from mental health professionals can impact mental health needs and resource utilization among perinatal populations. Future development of this resource should include more areas of the state and include efforts to stay current as more resources are perinatal resources are developed in Georgia.

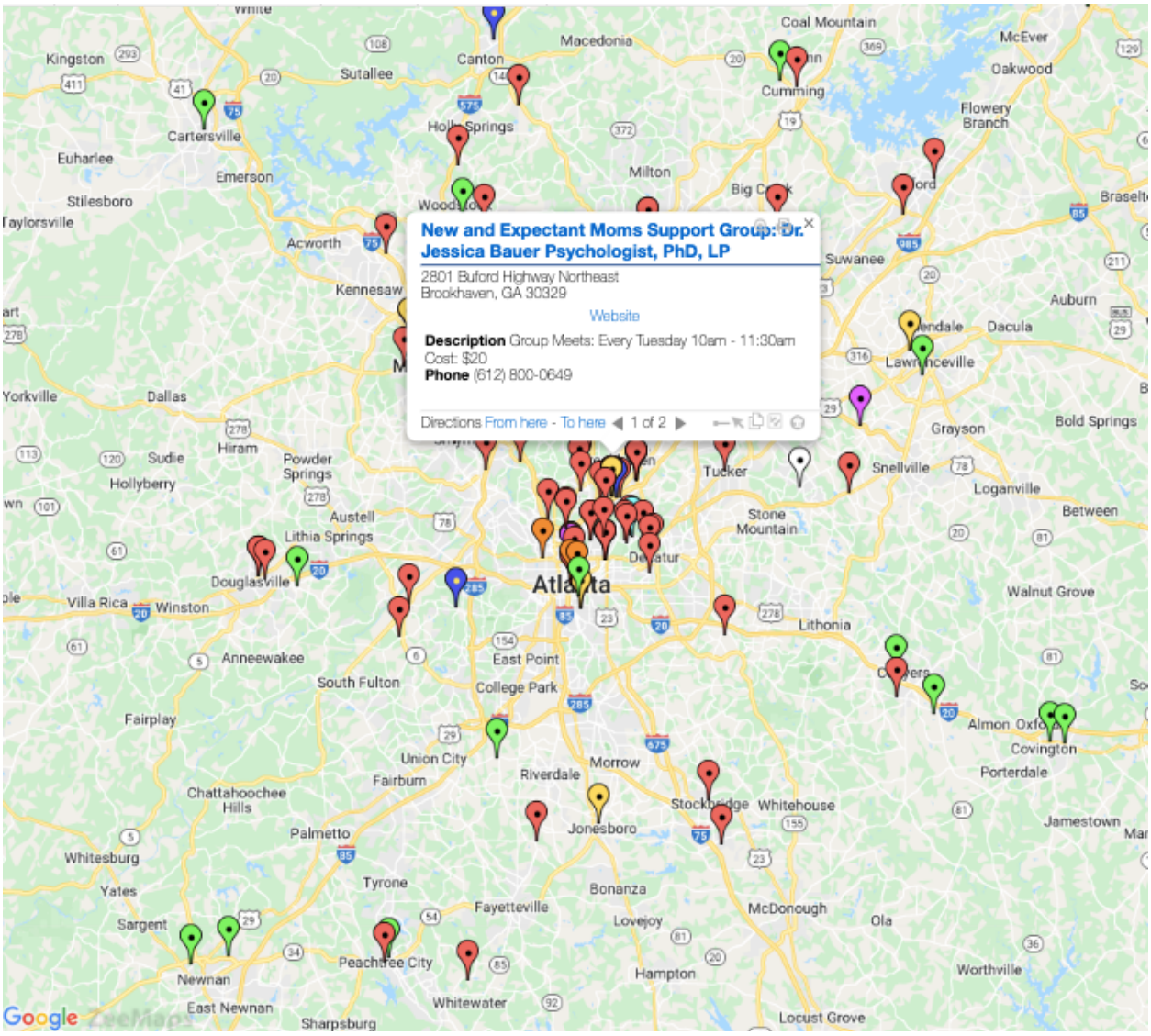
Appendix A1.
Resource Map - Georigia




Legend

Red: Psychotherapy/psychiatry, Blue: Mental health centers and programs with a specialty in PMADs, Green: Mental health centers and programs with experience treating PMADS, Yellow: Support group, Orange: Hospital, White: Doula services, Black: Other community resource, Purple: mMidwife services, Light Blue: OB/GYN Services

Appendix A2.
Resource Map – Detail View




Legend

Red: Psychotherapy/psychiatry, Blue: Mental health centers and programs with a specialty in PMADs, Green: Mental health centers and programs with experience treating PMADS, Yellow: Support group, Orange: Hospital, White: Doula services, Black: Other community resource, Purple: mMidwife services, Light Blue: OB/GYN Services

Appendix B.
Survey instrument

Thank you for taking the time to complete this 5 minute anonymous survey on the mental health resources for people receiving perinatal services in the state of Georgia. This survey will inform a thesis project for a masters student at the Rollins School of Public Health in collaboration with the Peace for Moms Program at Emory University.

In this survey when we refer to perinatal people we are referring to pregnant individuals or those who have recently given birth. All individuals who complete the survey will be eligible to win a $50 Amazon gift card.

1. What is your current position?
   - Physician
   - Psychologist/LPC/LCSW
   - Physician's Assistant
   - Clinical Nurse Midwife
   - Certified Professional Midwife
   - RN/LPN
   - Administrative Clinic or Hospital Staff
   - Other _____

2. Do you work in a private or a public facility?
   - Private for profit
   - Private nonprofit
   - Public

3. What type of health facility do you work in?
   Hospital
   - Doctor's Office or Health Clinic
   - State Health Department Facility
   - Community Health Facility
   - Other _____

4. What county do you work in? _____

5. Which of the following services is provided to perinatal individuals in your workplace? Check all that apply.
   - Ob/gyn
   - Prenatal Services
   - Midwifery Services
   - Newborn Care
   - Parenting Classes
   - Family Planning
   - Other _____

- None of the above

6. What mental health support does your workplace provide for perinatal individuals? Check all that apply.

   - Assessment
   - Counseling
   - Support Groups
   - Psychotherapy Groups
   - Psychotherapy
   - Psychiatric Medication Management
   - Referral to other organization
   - Education
   - Other _____
   - None

7. How well do you think your workplace is meeting the mental health needs of perinatal individuals? (1-5 with 1 meaning “meet no needs’ and 5 meaning “meeting all needs”) 1 2 3 4 5

8. How important is mental health care during and after pregnancy to the community you work in? (1-5 with one meaning “not at all important’ and 5 meaning “extremely important”) 1 2 3 4 5

9. Where do perinatal individuals not seen in your facility find mental health support in your community? Select all that apply.

   - Mental Health Professionals
   - Medical Professionals
   - Church or other religious institution
   - Community Centers
   - Family
   - Friends
   - The Internet
   - School or academic institutions
   - Other _____
   - Don’t Know

10. Are you aware of specific programs in your community that provides mental health support to perinatal individuals? Yes / No

    Please list below:

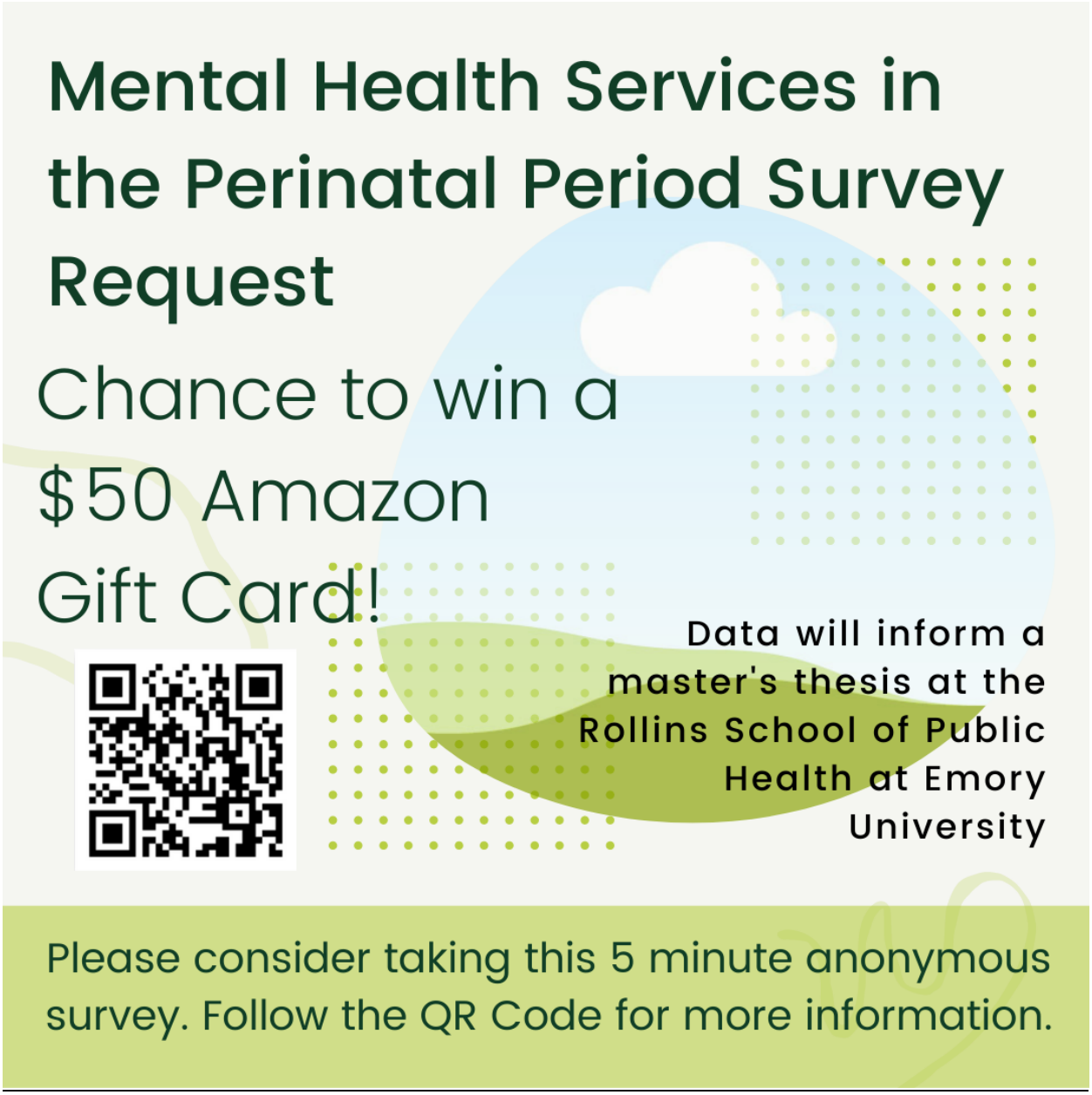
11. What additional resources are needed for pregnant and postpartum people in either your workplace or your community? _____

12. Are you familiar with the PEACE for Moms Program? Yes/No

13. What services do they offer? Check all that apply.
    - Assessment
    - Counseling
    - Support groups
    - Psychotherapy groups
    - Psychotherapy
    - Psychiatric medication management
    - Psychiatric medication consultation
    - In-person patient evaluations
    - Clinician to Clinician consultation
    - Referral and resource dissemination
    - Education

14. If you would like to be entered to win the Amazon gift card please write your email below (your email will not be used for any reason other than gift card dissemination and will not be connected to your responses) _____

Appendix C.
Survey Recruitment Materials



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