Evaluating the Management of Antenatal Depression in a Rural Community

Winbush, Angelina

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Evaluating the Management of Antenatal Depression in a Rural Community

A Senior Comprehensive Project in partial fulfillment of a Bachelor of Science Degree from Allegheny College Department of Global Health

May 2017

Angelina Kate Winbush
Evaluating the Management of Antenatal Depression in a Rural Community

May 2017

I hereby recognize and pledge to fulfill my responsibilities as defined in the Honor Code and to maintain the integrity of both myself and the College community as a whole.

This work is mine unless otherwise cited. Angelina Winbush 04/03/2017

Pledge

This senior comprehensive project has met the minimum requirements of the Global Health major for a Bachelor’s of Science degree

1st Reader and date

2nd Reader and date
ABSTRACT

Name: Angelina Kate Winbush
Graduation Date: May 2017
Title: Evaluating the Management of Antenatal Depression in a Rural Community
First Reader: Professor Rebecca Dawson
Second Reader: Professor Tricia Humphreys

Antenatal depression is depression that occurs during pregnancy and affects between 14-23% of pregnant women in the United States. To effectively treat antenatal depression, health care providers commonly prescribe antidepressant medications. However, recent scientific findings have revealed that antidepressant medications can result in harmful effects to the fetus. These findings have dominated scientific literature as well as secondary sources available to mothers, such as parenting blogs and popular magazines, which have complicated the management of this disorder. Thus, this study sought to investigate how antenatal depression is managed in a rural community, a setting in which few studies concerning antenatal depression management have taken place. Through practitioner interviews with three psychiatric and therapy providers, followed by a qualitative assessment of the data through a thematic analysis, it was revealed that mental health stigma and accessing mental health care were among the most significant barriers to effectively managing antenatal depression in the community. Interestingly, the practitioners interviewed for this study did not discuss concerns they had in regards to antidepressant-fetal drug interactions in their patients. This finding perhaps demonstrates disconnect between the work occurring within the scientific research community and the concerns among practitioners in rural communities. As the national budget for scientific research faces proposed cuts, it is imperative that the medical community closely evaluate the health needs afflicting communities as to best allocate funding and resources. The results of this study indicate that rural towns such as Meadville may benefit from innovations and policies which seek to address larger structural issues such as mental health stigma and accessibility of health services.
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Introduction

What is depression?
Marked by symptoms such as persistent sadness, hopelessness, lack of interest, change in sleep patterns, and suicidal thoughts, depression can be a severe mental illness which affects approximately 7% of the United States population (American Psychiatric Association, 2017). For those suffering from depression, work, relationships, and personal activities are often significantly impacted and the desire to seek help can be diminished as the disease worsens (American Psychiatric Association, 2017). For these reasons, depression is currently categorized by the World Health Organization as the leading cause of disability worldwide (2016).

The specific etiology of depression is not well-understood although researchers have concluded that chemical imbalances in the brain as well as genetic factors are implicated in the onset of this disorder (NIMH, 2016). In addition to depression’s biological determinants, social and environmental influences, such as trauma, abuse, stress, low self-esteem, and exposure to violence can induce the disorder (American Psychiatric Association, 2017). While effective pharmacological and therapeutic treatments exist, social stigma, particularly in low-income and minority groups, greatly impacts the ability to diagnose and treat this disorder (Goodman, 2009; Nadeem et al., 2007).

Throughout the United States, certain groups are disproportionately affected by depression (Abrams, 2012; Nadeem et al, 2007; Osborne & O’Keane, 2009). These groups include racial minorities, those in poverty, and residents of rural areas with reduced access to treatment and

However, one group significantly impacted by depression is pregnant women (Osborne & O’Keane, 2009). While postpartum depression - depression which occurs after birth - has been relatively well researched and understood, antenatal depression - depression which occurs during pregnancy - has only recently been a focus among healthcare providers and researchers (American Pregnancy Association, 2017; Burns, et al., 2013).

What is antenatal depression?

Affecting between 14-23% of pregnant women, antenatal depression is depression which occurs during pregnancy (American Pregnancy Association, 2017). The symptoms and causes of antenatal depression are similar to those of depressive disorder within the general population although pregnancy complications, relationship abuse, and unplanned pregnancies can also lead to or exacerbate this disorder (American Pregnancy Association, 2017; Osborne & O’Keane, 2009). Women with pre-existing depression may become pregnant and experience antenatal depression throughout the course of their pregnancy and beyond or women with no prior mental health history may acquire the illness during their pregnancy thus demonstrating the broad nature of this disorder (American Pregnancy Association, 2017).

Antenatal depression is of particular concern within the obstetrics research and clinical communities due to the potential health risks posed to the unborn child (American Pregnancy Association, 2017; Hampton, 2006; Yonkers et al., 2009). Increased stress hormones produced by the mother coupled with antidepressant medication use have the potential to create a less-than-optimal environment for the fetus which makes carefully managing this disorder of great
importance (Hampton, 2006; Gentile, 2015; Koren & Nordeng, 2012). Furthermore, women suffering from antenatal depression can experience difficulties managing their own health and well-being which can impact the health of the fetus (Gentile, 2015). Women suffering from antenatal depression can also experience difficulties bonding with and caring for their newborns following birth (Lee & Hans, 2015).

Unfortunately, thousands of cases of antenatal depression go undiagnosed and untreated each year due to a lack of understanding surrounding this illness on the part of both the mother and the practitioner (Gentile, 2015). For sufferers, societal norms brought about through social discourse expect women to conform to an unrealistic image of an energetic, healthy, and active mom which has left many women unwilling to seek help for fear of failing to live up to such expectations (Solomon, 2015). Furthermore, for women who do choose to openly acknowledge their illness, many have reported that their symptoms are simply dismissed as a sign of the “baby blues” which impacts proper diagnoses (Lazarus & Rossouw 2015). In addition to the patient, practitioners have also struggled to properly identify and treat antenatal depression (Belluck, 2016). A lack of consensus regarding best treatment and diagnosis techniques has led to confusion and contradictory recommendations which have sparked widespread concern and frustration among patients and clinicians alike (Solomon, 2015; Postpartum Support International, 2015). Thus, it is critical for pregnant women to meet with healthcare providers throughout their pregnancy so screening for antenatal depression may be administered timely.
**Diagnosing Antenatal Depression**

Within the United States, screening for antenatal depression has been recommended, although not fully supported (Belluck, 2016). For instance, it was not until 2016 when the U.S. Preventative Task Force put forth a comprehensive report detailing specific screening and treatment guidelines for women during and after their pregnancy (Belluck, 2016). In contrast, previous reports did not discuss the “antenatal” period as it relates to depression (Belluck, 2016). Additionally, this report received a “B” rating after being published in the Journal of The American Medical Association (JAMA) which resulted in it receiving sufficient credibility so as to enable screening to be covered under the Affordable Care Act (Belluck, 2016). While statistics regarding diagnosis and treatment following implementation of the recommendations of this report are still being gathered, the healthcare community is hopeful that with newfound guidance, practitioners will better manage antenatal depression care (Belluck, 2016).

To screen for antenatal depression, the U.S. Preventative Task Force recommended that the Edinburgh Postnatal Depression Scale be employed (Bunevicius et al., 2009). This screening test consists of a 10-question survey administered to the patient and can be scored quickly by the practitioner (Bunevicius et al., 2009). Research has found this test to be efficient and effective (Bunevicius et al., 2009). However, as the name of the scale implies, the test was designed to assess postnatal, rather than antenatal depression, which demonstrates the extent to which further attention must be given to antenatal depression.
**Treating Antenatal Depression**

Medicinal treatments for antenatal depression include selective serotonin reuptake inhibitors (SSRIs) and tricyclics, two classes of medications used to alter the chemical balances in the brain (Cooper et al., 2007). Because approximately half of pregnancies are not planned, it is estimated that around 9% of women will take an antidepressant medication inadvertently at some point during their pregnancy (Pearlstein, 2008). However, due to the potential consequences of taking antidepressants while pregnant, which will be discussed further in the next section, many women will opt for alternative forms of treatment such as cognitive behavioral therapy (CBT) (Burns et al., 2013).

CBT, a treatment typically extended to patients suffering from general depression, can also be utilized to treat antenatal depression (Burns et al., 2013). CBT entails a sit-down therapy approach and aims to empower patients to redirect negative cognitions and alter maladaptive thought-patterns (NAMI, 2017). Additional non-pharmaceutical antenatal depression treatments include involvement in support groups and light therapy (American Pregnancy Association, 2017).

**Challenges in Treating Antenatal Depression**

With the prevalence of antenatal depression as high as 27.6% in certain demographic groups, the public health community unequivocally agrees that efforts must be increased to improve antenatal depression outcomes (Kopelman, 2008). However, attempts to rectify this growing health concern have been met with numerous challenges including incomplete insurance coverage and social stigma attached to the illness (Kopelman, 2008; Lieber, 2016; Nadeem et al.,...
Practitioners face the additional challenge of treating antenatal depression while striving to minimize the impact of antidepressant medications on fetal health and development (Cooper, 2007; Jong, 2012; Einaron et al., 2010; Karam et al., 2016; Hampton, 2006). Another barrier in this field arises from the ethical and research challenges which pharmaceutical researchers face in involving mentally-ill and often marginalized pregnant populations in their studies which impacts the researchers’ ability to acquire a more complete understanding of this illness (Boukhis, 2016; Einaron et al., 2010; Peachman, 2015; Postpartum Support International, 2015).

**Insurance and stigma barriers**

To gain reimbursements for depression management costs, many insurance companies will require that the patient purchased disability insurance (Kopelman, 2008; Lieber, 2016). However, those privately insured may find themselves ineligible to obtain disability insurance if a mental health diagnosis is characterized as a preexisting condition (Kopelman, 2008; Lieber, 2016). Social stigma surrounding a mental health diagnosis also places a barrier on effectively treating antenatal depression particularly within low-income and minority populations (Nadeem et al., 2007). For instance, Nadeem et al. found that compared to Caucasian women, black and caribbean immigrant women were six times more likely to report stigma as a top challenge in obtaining treatment for their mental illness (2007).

**Drug interaction concerns**

Another challenge to treating antenatal depression arises from the difficulty of devising individual medication treatment plans for patients suffering from this disease (Hampton, 2006; Jong et al., 2012; Karam et al., 2016). Antidepressant medications, which have been proven to effectively treat depression, can transcend the placenta, raising concerns among healthcare
providers (Hampton, 2006; Jong et al., 2012; Karam et al., 2016). While some researchers have found there to be associations between antidepressant medication use and fetal abnormalities such as low birth weight, pulmonary hypertension, premature birth, developmental delays (Einarson et al., 2010; Karam et al., 2016; Hampton, 2006), other studies have reported no such correlations (Clements et al., 2015).

Thus, contradictory research findings have alarmed practitioners who seek to provide the best possible care for their patients and have fostered anxiety among soon-to-be parents who struggle to decipher and interpret scientific analyses (Peachman, 2015; Postpartum Support International, 2015). For instance, in 2016, JAMA, a highly respected medical journal whose publications frequently elicit immediate media attention, published findings which suggested that exposure to antidepressant medications in utero increases an infant’s risk of autism (Boukhis et al., 2016). However, a study published one year prior in a less reputable journal which sampled a large database of healthcare records found no such association (Clements et al., 2015). Nevertheless, JAMA’s research findings dominated news features which, at times, inaccurately portrayed the results of the study, prompting unnecessary fear and concern among parents. (Peachman, 2015; Postpartum Support International, 2015). To overcome the fears of parents, practitioners must be able to forge strong and trusting relationships with their patients, a luxury not many are able to achieve (Peachman, 2015).

In the United States, a survey found that approximately 67% of pregnant women believed it is unacceptable to take antidepressants during pregnancy thus demonstrating the resistance to this treatment (Goodman, 2009). While pregnant women are justified in their concerns regarding
antidepressant use, mothers and practitioners must also consider the risks that untreated depression may pose to a mother and the baby (Goodman, 2009). Researchers have found that among women who had been stabilized through antidepressants, 68% who discontinued their antidepressant medication during pregnancy experienced a depression relapse (Hampton, 2006). In comparison, only 25% of stable women who continued their antidepressant use throughout pregnancy relapsed (Hampton, 2006). When left untreated, antenatal depression can result in increased levels of stress hormones in the body which can have a harmful effect on the fetus (Hampton, 2006; Gentile, 2015; Koren & Nordeng, 2012).

**Research barriers**

A final challenge to ensuring that pregnant women suffering from antenatal depression are timely diagnosed and treated lies in the challenges which antenatal depression researchers face (Boukhis, 2016; Einaron et al., 2010; Peachman, 2015; Postpartum Support International, 2015). When attempting to identify the risk of antidepressant medications incurred to the fetus, it is difficult for researchers to control for the effect of the disorder itself as it would be unethical to purposely prevent women from accessing treatment (Boukhis, 2016; Einaron et al., 2010; Peachman, 2015). Researchers Boukhis et al. experienced this dilemma while attempting to evaluate whether or not antidepressant medication use was associated with an increased risk for autism for the infant (2016). Although their findings noted a positive association between antidepressant use and autism risk, it has been concluded that several of the genes implicated in depression are closely linked with those implicated in autism; thus, because Boukhis et al. could not control for this possibility, generalizing these results is difficult (Boukhis, 2016; Peachman, 2015). Similarly, Einaron et al, in an attempt to determine whether antidepressant use was linked with lower birth weights, noted that their study was unable to conclude whether decreased birth
weights were a result of the antidepressant medication or the depression itself as it would be unethical to secure a control sample of participants with depression who were purposely prevented from using antidepressant medications (2010).

**Research objective**

Much of the research in past decades concerning antenatal depression has focused primarily on the interactions between depression medication drugs and the unborn child. As a result of these studies, contradictory claims and recommendations have emerged across the country. However, little research has specifically focused on how small rural communities, which may face health care accessing issues, are managing antenatal depression.

Thus, the goal of this research is to evaluate the management of antenatal depression care in Meadville, Pennsylvania, a small rural community in Northwestern Pennsylvania. With a population of approximately 13,000 residents and an average per capita income of $33,921 as of 2015, Meadville currently faces poverty challenges among its residents (City Data, 2017). For example, 30.0% of residents in the community live under the poverty line compared to 17% in the state of Pennsylvania (City Data, 2017). Additionally, healthcare practitioners in Meadville are not connected to a research hospital, which might have access to the most innovative medical interventions.

To perform this study, a series of practitioner interviews will be carried out, transcribed, and then qualitatively assessed to draw upon common themes.
**Methods**

*IRB Approval*

IRB approval from the Allegheny College IRB committee was obtained in December of 2016.

*Recruiting participants*

To evaluate the management of antenatal depression, participants from a range of fields and specialties were recruited. These fields included OB/GYN, psychiatry, therapy, and primary care.

According to a report concerning best practice techniques in qualitative research put forth by the Trent Focus Group, a scientific publisher, it is ideal to inform potential participants of the research project via a postcard or email followed up by a phone call (Mathers et al., 1998). This procedure builds credibility and enables the potential participant to opt out of the recruitment process on his or her own time (Mathers et al., 1998). Thus, to recruit participants, an email was sent to the offices of intended participants. The message included a statement explaining the topic of the project and informed participants that they should be expecting a call within two to three days. In the message, a phone number and email address were included and recipients were informed that if they wished to opt-out of receiving a call, they could do so. If no message from the recipients was received, the recipients were called two to three days after the email was sent to inquire about their interest in participating in the project.

During the initial call, a general script was followed whereby the researcher introduced herself, reminded the recipient of the email they had received, shared several details about the general topic and scope of the project, and invited the practitioner to participate in the research project. If
the recipient was willing to participate in an interview, a time and date for the interview was scheduled. One to two days prior to the scheduled interview, the participant was contacted to confirm the interview time, date, and location. All interviews took place between January 1, 2017 and March 1, 2017.

The emails were sent to OB/GYN clinics, counseling centers (both public and private), and psychiatric and primary care offices, and a voluntary sampling technique was utilized, meaning whomever expressed interest in participating was offered an interview.

**Interviews**

The format of this interview methodology was adapted from best practices put forth by Bernard in *Research Methods in Anthropology* (2006) as well as Mather et al. (1998). These researchers state that when collecting information regarding individuals’ opinions and experiences, the semi-structured interview format can be effectively utilized as to allow the participants to thoroughly expand on their opinions while also confining the context of the responses to a particular topic (Bernard, 2006; Mather et al, 1998). These researchers also note that during the interviews, it is important to ask the open-ended questions in a systematic fashion among each participant and to take care to not insert one’s opinion or judgement (Bernard, 2006; Mather et al, 1998).

Thus, within the study, all interviews were semi-structured and a set of four predetermined open-ended prompts were posed to each health practitioner to allow for an expansion on thoughts and ideas. The four questions related to the following categories:
1. Barriers to accessing care experienced by the patient;
2. Navigating wellbeing of the woman and child when treating antenatal depression;
3. Difficulties in making antenatal depression diagnoses; and
4. Common methods employed to treat antenatal depression.

**Informed Consent**

Prior to the beginning of the interview, informed consent was obtained from the participants by signing an informed consent document (*Appendix 1*). This informed consent document provided three levels of consent, namely, consent to be interviewed, consent to be voice-recorded, and consent to use quotations from participants without the presence of names, personally-identifiable information, or affiliated institutions.

**Management of data**

The interviews were recorded; additionally, notes were taken during the interviews. Data analysis occurred in the spring semester of 2017 during which the recordings were downloaded onto a computer which is kept password-protected at all times and used only by the researcher.

**Data Transcription**

Audio recordings were transcribed by hand verbatim onto a word document.

**Confidentiality**

Confidentiality was maintained throughout the research project by ensuring that all data was kept in secure locations and that names of health practitioners in conjunction with their expressed
opinions were not discussed except among the researcher and advisor while in a private setting. Furthermore, in the analysis and final presentation of the data, neither names nor identifying information were included.

**Data Analysis**

Best practices for qualitative data analyses are described in depth by Ritchie and Lewis in *Qualitative Research Practice* in 2003 as well as by Gale et al. in 2013 and were used to inspire the methodology of this analysis. Gale et al. suggests that when confronted with qualitative data obtained via interviews, it is appropriate to conduct a thematic analysis whereby common themes which emerge in the data are organized and discussed (2013). This allows the researcher to present a systematic overview of the opinions gathered from the interviews while still retaining the context in which the opinions were given.

Thus, a thematic analysis was carried out to analyze the data in this project. First, at the suggestion of Ritchie and Lewis as well as Gale et al., the interview transcripts were reviewed to gain familiarity with the responses as a whole (2003 & 2013). Next, the interviewee responses were organized by question and the prominent points in each response were extracted. These points were aggregated into a chart as well as expanded upon in discussion.

**Results**

A total of 13 local health practitioners were contacted and asked to participate in this study. Of these 13 practitioners, three agreed to partake in the study and were interviewed. Each interview lasted approximately 20-30 minutes. One interview took place in the office of the practitioner
while the other two took place on Allegheny College’s campus at the convenience of the practitioners. All practitioners interviewed for this project practiced in the field of therapy and psychiatric care. The responses from these three interviewees were compiled and the prominent themes from each of the four questions were summarized both in Table 1 and in detail below.

### Patient barriers to care

The first question asked the practitioner to describe patient barriers to care they observed among women suffering from antenatal depression. Across the data, four major barriers to accessing antenatal depression care emerged, the first being insurance and financial barriers. According to one practitioner, these barriers are especially prevalent among young mothers in the community. It was noted that insufficient insurance coverage and financial hardships often result in a dependency on medical assistance programs, many of which are at full capacity and require patients to wait months to obtain an appointment.

Recognizing the signs and symptoms of antenatal depression emerged as another barrier to care. One practitioner reported that they often see patients who are unable to identify the symptoms of

<table>
<thead>
<tr>
<th>Patient barriers to care</th>
<th>Navigating wellbeing of the mother and child</th>
<th>Difficulties in making a diagnosis</th>
<th>Common treatment methods</th>
</tr>
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<tbody>
<tr>
<td>Practitioner 1</td>
<td>Insurance/financial burdens Recognizing illness</td>
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<td>Practitioner 3</td>
<td>Prioritizing needs</td>
<td>Cognitive behavior therapy Solutions-based therapy</td>
<td>Distinguishing symptoms Malingering issues</td>
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Table 1. Categorization of themes drawn from interview transcripts with three practitioners concerning opinions on antenatal depression management care in Meadville, Pennsylvania. (* = practitioner had no comment)

**Patient barriers to care**

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Recognizing the signs and symptoms of antenatal depression emerged as another barrier to care. One practitioner reported that they often see patients who are unable to identify the symptoms of
their illness and thus the severity of their depression is significantly worsened as they do not timely seek and obtain care. Related to this, another practitioner noted that patients will often put their own needs and symptoms on the “back burner.” Doing so, in turn, impacts sleep and eating patterns, social connections, and self-care. “All of these things become secondary,” noted the practitioner. Finally, one practitioner commented on the lack of transportation to appointments as well as affordable childcare as additional barriers to accessing care.

Navigating the wellbeing of the mother and child

When asked how the wellbeing of the mother and child were managed when treating antenatal depression, the first practitioner reported that they have observed “varying degrees of success with medications”. From this practitioner’s perspective, it is best to go off medications at the start of pregnancy and provide cognitive behavioral work or engage in preventative planning strategies such as tracking sleeping and eating patterns as well as engage in plenty of physical activity. This practitioner did not provide a rationale for why it is best to cease medication and believes medications should be used when chemical imbalances in the brain are severe but that therapy and support can be just, if not more, effective. “[The] brain has a really natural way of trying to [restore emotional states]” stated this practitioner.

The next practitioner similarly reported that, women will often cease taking their depression medication after learning they are pregnant. The concern with this, the practitioner noted, is that these women will subsequently stop attending psychiatric care appointments as they are no long being prescribed psychiatric medications.
The final practitioner discussed their approach to navigating mother and child wellness through the use of cognitive behavior and solution-based therapies. As detailed before, cognitive behavioral therapies attempt to identify the maladaptive cognitions the patient may be experiencing, thus tackling the root cause of the illness. The practitioner described the solution-based approach as enabling the patient to self-identify the problem at hand and then engage in solution-brainstorming techniques.

**Difficulties in making a diagnosis**

The third question the practitioners were asked concerned their perception of the difficulties in making antenatal depression diagnoses. Four themes were drawn from this question. The first practitioner believes that social stigma plays a large role in making proper diagnoses. When asked about her experience in diagnosing individuals, the practitioner, who works in a psychiatric care clinic, reported, “I hear on a daily basis people will ask me where my location is, what is it across from? But what they are really asking is, who is going to see me come in?”

The second practitioner also believes that stigma impacts the ability to diagnose a patient with antenatal depression. In this practitioner’s experience, patients’ family members will often be opposed to therapy and psychiatric services due to the stigmas attached to mental health care. Additionally, this practitioner commented that some patients may not fully understand the signs of their illness and thus, will not seek help in a timely fashion.

Teasing apart the various symptoms with which a patient may be presenting was identified as a third challenge when seeking to make an antenatal depression diagnosis. This same practitioner
also noted that some physicians are cautious of potential substance abuse which creates a challenge when seeking to make the correct diagnosis. From the perspective of this practitioner, it can be difficult to “rule out malingering issues” and that seeking a diagnosis may be an “overt or covert way of trying to have some needs met”.

Methods commonly employed to treat antenatal depression

In the final question, practitioners were asked to discuss common methods used to treat antenatal depression which they observed in their experience. The first practitioner noted that they often saw social networks involving activities such as “Paint and Sips”, book clubs, and candle parties utilized among women suffering from depression as a way to cope with their illness. This practitioner noted that by creating these social networks, the individuals suffering from depression can seek support without the stigma associated with entering a psychiatric care or therapy office.

The third practitioner noted that in their practice, they often encourage patients not only to utilize therapy approaches but also engage in mindfulness techniques. These techniques, the practitioner stated, involve teaching the patient to be able to stop their activities for a 30-second period during a perceived crisis which effectively allows the individual to reroute her cognitions and attitudes. However, for reasons not specified, this practitioner commented that it is often difficult to bring patients into the clinical setting to provide such services and techniques.
Discussion

The current scientific literature concerning the management of antenatal depression is dominated by research which seeks to investigate the potential antidepressant drug medication interactions incurred to the unborn child (Peachman, 2015; Postpartum Support International, 2015). Furthermore, secondary sources available to mothers, such as parenting blogs and new features, also strongly emphasize the risks associated with antidepressant medication-use during pregnancy in the context of antenatal depression (Peachman, 2015; Postpartum Support International, 2015). These concerns largely inspired the inception of this project as little research has focused on how this complex disorder is managed in small rural communities.

However, the practitioners in this study spent little time discussing their concerns regarding antidepressant medication use and did not once mention the words “drug interaction.” Two practitioners did note that in their experience, they’ve observed patients ceasing their antidepressant or antianxiety medications and two practitioners highlighted the benefits of therapy to treat antenatal depression. However, what stood out as significant concerns for these healthcare practitioners when managing antenatal depression were, instead, large-scale issues such as social stigma and accessing care.

Mental health stigma can significantly impact the ability to prevent, diagnose and treat psychiatric diseases as patients fear discrimination or rejection when revealing their stigmatized diseases to others (Corrigan & Watson, 2002; Nadeem et al., 2007). Practitioners One and Two in this study remarked on the impacts of stigmas by describing the challenges they have encountered in their work with patients who have voiced anxiety around entering psychiatric
offices for fear of being seen by others and anxiety concerning disclosure of their illness to family and friends who view therapy negatively. The extent of these concerns identified by the practitioners are consistent with the literature concerning the prevalence of mental health stigma. For example, in a study published in 2009 involving over 500 pregnant women, 43% identified social stigma as being a significant barrier to seeking antenatal depression care (Goodman, 2009).

While examining the implications of mental health stigma on antenatal depression care, it should also be noted that societal expectations of a woman’s pregnancy journey can affect a woman’s decision to seek help (Lazarus & Rossouw 2015; Solomon, 2015). For instance, Andrew Solomon, a writer and psychologist, interviewed women suffering from antenatal depression and found that many felt that due to their disease, they had “failed” at overcoming the universal pains of childbearing (2015). Furthermore, Solomon writes that these same women experienced a strong pressure to joyfully embrace their newfound identity as a pregnant mom and that divergence from such identity symbolized a “heartless” individual, one who does not appreciate the miracle they have been given (Solomon, 2015).

However, societal stigmas and expectations encompass just a portion of the challenges presented to women with antenatal depression in a rural setting. In rural America, in comparison to urban areas, poverty rates are higher and there is a more significant shortage of physicians and specialists (NRHA, 2017). Thus, accessing treatment, whether financially or physically, remains a continual challenge for much of rural America and was reflected in the comments of the practitioners. Specifically, one practitioner noted that many women in Meadville, due to low
income levels, must rely on government subsidized healthcare services but often must wait months to obtain an appointment as many of these services function at full capacity. For those who are able to secure appointments, finding appropriate transportation, one practitioner noted, is often burdensome for those who do not own cars; the psychological stress of being pregnant can make utilizing public transportation or walking long distances distressing to the body as well.

To further demonstrate the implications of poverty on accessing antenatal depression care, one practitioner commented that rural patients’ inability to afford child-care services also results in trouble attending healthcare appointments. This barrier to care is not exclusive to Meadville and, in fact, speaks to larger cost issues in our country. For example, in the United States, the average cost for full-time enrollment in a childcare center is around $10,000 annually (Hamm, 2015). For those living in poverty, research has found that families spend on average 40% of their income on childcare costs compared to 7% among high-income families (Mathur, 2016). Although politicians such as Hillary Clinton have declared childcare in the United States a “national priority,” few opportunities exist to aid families in navigating these exorbitant costs (Hamm, 2015).

While a great deal of research has attempted to identify antidepressant fetal drug interactions, less success has arisen from investigating ways to overcome larger concerns such as mental health stigmas and accessing health care; from the perspective of the practitioners interviewed, these were among the prominent concerns impacting antenatal depression management. Thus,
perhaps there is disconnect between the goals of the biomedical community seeking to reduce antenatal depression and the actual struggles faced by small communities in the United States.

Therefore, as the national budget for scientific investigation and medical advancement becomes increasingly narrow under the current administration, the medical community must take care to prioritize research questions related to the prevention, diagnosis, and treatment of antenatal depression. For illustration, through what global health scholars refer to the 10/90 gap, it has been determined that only 10% of funding for health research is directed towards health challenges which account for 90% of the global disease burden (Stevens, 2004). Part of the reason for this wide discrepancy is a lack of voice the most vulnerable have in determining what research questions are addressed. This lack of voice could perhaps account for the reason why small towns such as Meadville face challenges managing antenatal depression. Unlike cities such as Philadelphia which are well-equipped with teaching and research hospitals, as well as research universities with students eager to explore local health needs, Meadville has only one hospital and one undergraduate college.

Additionally, it may be necessary to reconsider how funds directed towards policy change and enactment are allocated in an attempt to counter larger structural barriers presented in this study’s findings. There are currently numerous examples of currently ineffective pieces of legislation which could be reformed to better assist women suffering from antenatal depression. For instance, the Child and Dependent Care Tax Credit, which provides tax credits to families who invest in childcare services, has done little to assist those in poverty as those with no tax liability do not benefit from the credit (Mathur 2016). Thus, by restructuring this tax credit to
fully cover low-income groups, families could obtain more reliable access to childcare services which could afford mothers more time to attend depression screenings, medical appointments, and therapy support groups, all of which can help to counter the high rates of antenatal depression.

**Strengths**

The most notable strengths to this study include the breadth of experience held by the practitioners interviewed as well as the method by which an understanding of the management of antenatal depression was obtained. The three practitioners interviewed for this project each have worked closely, and at an individual level, with patients suffering from depression during their pregnancy. Thus, each practitioner was able to draw from a rich repertoire of individual experiences and encounters they have had with sufferers.

Furthermore, while qualitative research often uses focus groups, interviews are perhaps preferable in instances when few practitioners are participating in the study as they allow participants to thoroughly expand upon their opinions and experiences without fear of criticism, which may be present in a focus group setting. Qualitative research work may also use surveys. However, unlike in an interview, survey participants are confined by word limitations. Thus, for evaluating the management of a disease in a community, interviews proved to be an effective and feasible method, capable of capturing a broad range of opinions.
Limitations

Within this study, a voluntary sampling technique was utilized meaning whomever accepted an invitation to participate in the study was offered the opportunity to do so. This technique is limiting in its ability to ensure a diverse array of practitioner perspectives were represented. In this project in particular, the participant sample did not contain primary care physicians, obstetricians, or psychiatrists. Furthermore, due to the format in which the data was obtained (i.e., interviews), practitioners shared only their perceptions, which have not been verified through empirical evidence.

Conclusion

Antenatal depression has received significant attention over the last decade upon the realization that antidepressant medications can cause birth abnormalities and developmental defects in fetuses (Hampton, 2006; Jong et al., 2012; Karam et al., 2016). Thus, much of the current scientific literature is dominated by investigations seeking to examine associations between antidepressants and harm to the unborn fetus (Hampton, 2006; Jong et al., 2012; Karam et al., 2016; Peachman, 2015; Postpartum Support International, 2015). Therefore, this research sought to examine how this disorder is managed in a rural community in light of such discoveries. Interestingly, the findings of this study suggest that from the perspective of three local psychiatric and counseling providers, the more prominent issues concerning antenatal depression management involve issues of mental health stigma and health care accessibility. Thus, to combat challenges in preventing and treating antenatal depression in rural communities, it may be most effective to examine how the implementation of large-scale policies and education initiative may work to decrease mental health stigma and an inability in access treatment.
Appendix 1: Informed Consent

Signing this document provides consent to be interviewed regarding your experience and opinions concerning the management of antenatal depression in the Meadville community.

- The purpose of this research project is to qualitatively assess the management of antenatal depression by interviewing healthcare practitioners in the Meadville community from the fields of general practice, obstetrics and gynecology, pediatrics, psychiatry, and counseling/social work.

- While there is no direct benefit obtained for participating in this interview, you will be helping to contribute to a greater overall understanding of health management in the Meadville community.

- Following the conclusion of this project, you will receive a summary of this project’s findings. A copy of the complete thesis project will be made available to you as well. In addition, you will be invited to attend the Allegheny college senior research symposium at which this research will be featured.

- Participation in this research project is voluntary and no compensation will be provided.

- All participants must be at least 18 years old.

- During the interview, you may opt to skip any question or may opt to end the interview at any time. In addition, you may at any time during the duration of the research project ask to have your responses removed from the data compilation.

- The interview will last approximately 30 minutes and will be facilitated by Angelina Winbush and attended by a student research assistant. Notes will be taken during the interview and a recording device will be used to record the entire interview.

- Your confidentiality will be maintained throughout the research project. If you allow quotes to be utilized in the data analysis generated from this project, no names or identifiable information will be used in conjunction with the quotes. In addition, the names of the interviewees as well as their affiliated institutions will not be mentioned in the any material reporting the results of the project.

This research study has been reviewed and approved by the Institutional Review Board (IRB) at Allegheny College.

I have read and understand the explanation provided to me. I have had all my questions answered to my satisfaction, and I voluntarily agree to participate in this study.

________________________________________________________________________
(signature and date)
I agree to have this interview recorded.
I agree to allow the research team to use anonymous quotes I make during the interview for the project.

If you have questions or concerns, you can contact any of the following individuals.

Angelina Winbush
winbusha@allegheny.edu

Professor Rebecca Dawson
rdawson@allegheny.edu
References


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