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The Use and Knowledge of Herbal Therapy in Postpartum Women Reporting Symptoms of
Depression

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Abstract

Postpartum depression (PPD) affects 9-16% of postpartum women, with potentially devastating consequences for mother, child, and family. Increasingly, alternative therapies are becoming treatment modalities of choice for patients with depression. The purpose of this pilot study was to focus on postpartum women with self-reported symptoms of depression and their knowledge and use of self-prescribed alternative therapy.

Women who self-describe as suffering PPD and participate in the Perinatal Outreach Encouragement for Moms (POEM) support group were recruited through the POEM list serve to complete an on-line survey regarding use of alternative therapies to treat depressive symptoms. The 11 item pilot survey was designed by the student researcher with content validity established by expert researchers and nurses working with women with PPD. Questions included the use of herbal, other alternative, and prescription therapy, knowledge of side effects and interactions, and disclosure of usage of alternative therapies to healthcare providers. Descriptive statistics were used to analyze prevalence of alternative and medical drug usage and disclosure. Tables and descriptive data were used to describe the demographics between women who did compared to those who did not use herbal therapy, prescribed therapy, or other alternative modalities.

Of the 13 participants, 12 (92%) took medicine prescribed by their doctor or midwife for their PPD, 5 (42 %) used alternative modalities other than herbs to relieve their PPD, and 3 (23%) used herbs for their PPD. Participants had a basic knowledge extent of herbals but were unable to identify herbal and drug interactions. This pilot study showed that none of the participants using herbal therapy notified their healthcare provider of their use. This pilot study is expected to benefit healthcare professionals by identifying strengths and weaknesses of this survey. In the future, alterations of this survey can be used to identify alternative therapy usage

and knowledge so that health care providers may perform focused screening and education for patients.

Key Words: Alternative Therapy, Herbal Therapy, Postpartum Depression

I. Introduction

Postpartum mothers are expected to be cheerful and excited when bringing home their newborn infants and introducing them to the world. Unfortunately, this is not the case with women who suffer from a mood disorder. Postpartum depression (PPD) is defined by the American Psychological Association (APA) in 2008 as an emotional disturbance during a time of increased responsibilities in the care of an infant and is a severe mental health problem. PPD can develop anytime in the first year after childbirth and needs to be treated by a healthcare professional. (National Institute of Mental Health (NIMH), 2005) It is estimated that of all postpartum women, 9-16 % will experience postpartum depression. Forty-one percent of women who have experienced PPD after previous pregnancies are at an increased risk of developing it again. (APA, 2008)

Depression in women may be triggered by hormonal changes in estrogen and progesterone due to the rapid drop after childbirth. It can also be triggered by stressful life events, a death in the family, or the cause may be unclear (NIMH, 2005). A few symptoms of postpartum depression include, but are not limited to: lack of energy, withdrawal from loved ones, eating or sleeping too little or too much, feeling irritable, restless, sad, hopeless, or overwhelmed, crying a lot, and having trouble focusing or remembering (Horowitz & Goodman, 2004).

PPD can be treated through traditional modalities such as medicine and, psychotherapy, as well as through alternative modalities such as light therapy, massage therapy, aromatherapy, acupuncture therapy, herbal therapy, or a combination of any of the above (NIMH, 2008). Women with PPD often use alternative therapy because they feel it allows them to seek help and treatment in a less authoritarian way. In addition, many women are apprehensive to use antidepressants when breastfeeding for fear of adverse effects on their infant because they are secreted in breast milk (Luskin & Misri, 2008), and thus choose to use an alternative therapy, often herbal based. Little is known, however, about the effects of herbs on labor and delivery, lactation, or recovery from childbirth. Among the most common herbals used in the treatment of depression are St. John's wart and Kava (Weier & Beal, 2004), each of which had been shown to have effects on multiple body systems. Few studies were identified that addressed women who suffer from PPD regarding their use and knowledge of herbal therapy. For example, do they inform their health providers? Do they take other drugs that are contraindicated with herbals? For safe, effective treatment of PPD, it is imperative that we, as healthcare providers, know about the woman's use and knowledge of herbal therapy. Thus, this study pilots a new survey that seeks to answer the above questions in hopes of gaining more understanding of postpartum depressed mothers' use and knowledge of herbal therapy. In addition, this pilot study will assist the researcher in evaluating the effectiveness of the survey for use in future research investigations.

II. Review of Literature

Postpartum Depression

Postpartum depression (PPD) is defined as a serious mental health problem occurring within several weeks after delivery which can have significant consequences for the well-being of the mother, baby, and family (Horowitz & Goodman, 2004). PPD also is a significant problem in healthcare today and is often unreported and therefore undetected by healthcare professionals (Hanna, Jarman, Savage, & Layton, 2003). Often postpartum women develop mood changes due to the change in hormones and major life change (APA, 2008). Some women experience a transient condition referred to as postpartum blues which peak on the fifth day postpartum and resolve in about 2 weeks. Postpartum blues are rapid, mild mood swings from joy to tearfulness, sadness, anxiety, and irritability. (Luskin & Misri, 2008) Other women with history of schizoaffective, bipolar disorder, and/or psychosis are at an increased risk of developing a condition called postpartum psychosis. Postpartum psychosis is characterized by hallucinations and delusions and obsessive thoughts of harming oneself and/or the infant. This type of psychosis can form independent of depression and usually begins in the first 6 weeks of childbirth (APA, 2008).

The incidence of postpartum depression is estimated to develop in one out of eight (13 percent) women (Wisner, Parry, & Piontek, 2002). If women have previously experienced PPD, the prevalence increases to an estimated 41 percent who will develop it again (APA, 2008). These statistics may be underestimated because some women may choose to not disclose their depression to their healthcare provider. This may be due to embarrassment or lack of knowledge of the signs and symptoms. Postpartum blues is more common than depression with 40 to 80 percent of mothers developing mood changes (Luskin & Misri, 2008). On the other hand, postpartum psychosis is less common and happens in about 0.1 to 0.2 percent of women (APA, 2008).

Women who are at higher risk of developing postpartum depression may have a history of depression, marital conflict, stressful life events, a lack of supportive environment, and/or hormone and chemical changes. Other factors associated with increased risk of PPD include: anxiety about the fetus, young age of mother, unplanned pregnancy, previous miscarriage, unemployment of mother, not breastfeeding, and personality factors or conflicts. Sometimes levels of thyroid hormone decrease after delivery and can cause symptoms of depression such as: sleep problems, weight gain, irritability, and fatigue (Corwin & Arbour, 2007). If depression is suspected, screening of thyroid hormones should be done to rule out thyroid problems. This can be easily detected through a blood test and treated with thyroid medicine (NIMH, 2005).

To diagnose postpartum depression, a defined time of onset and duration has to be present, plus four or more symptoms have to occur nearly every day. Symptoms of PPD are: weight loss or gain (when not dieting), trouble sleeping, agitation, fatigue, feeling worthless, suicide ideation, difficulty concentrating, lack of energy, and feeling guilty. Some of these symptoms may be a result of demands and changes associated with infant care and thus, must be closely evaluated (Horowitz & Goodman, 2004). Additional warning signs of depression occur when the mother has no interest in her infant and the mother is scared of hurting her baby or herself (NIMH, 2005).

There are various screening tools that are effective and can be used to detect postpartum depression. These tools can be used during the prenatal or postnatal time of pregnancy. Common instruments that are used are the Edinburgh Postnatal Depression Scale (Cox, Holden, & Sagovsky, 1987), Beck Depression Inventory II (Beck, Steer, & Brown, 1996), Center for Epidemiological Studies Depression Scale (Radloff 1977), Postpartum Depression Prediction Inventory (Beck, 1998), and Postpartum Depression Screening Scale (Beck & Gable, 2000). The

Edinburgh Postnatal Depression Scale is an inexpensive instrument designed to detect depression in the postnatal period. It is a 10 item questionnaire that is suggested to be used before discharge from the hospital and at pediatric visits (Luskin & Misri, 2008). The Cooper Survey is used during pregnancy as an effective measure to detect PPD risk. An instrument that evaluates depressive symptoms and their severity during the prenatal period is the Beck Depression Inventory II. In order to access this instrument, the Postpartum Depression Screening Scale, as well as some others (but not the EPDS), the healthcare provider is required to apply and purchase them. When screening the mother for PPD, it is important to also evaluate and screen for diabetes, anemia, thyroid disease, and the use of hormonal contraception (Horowitz & Goodman, 2004).

Postpartum depression not only affects the mother, but also the infant and family. PPD can interfere with the mother's ability to function and respond to her infant's needs to provide appropriate care. PPD is a cyclic disease; it first affects the bond between the mother and infant, which influences the infant's development, and then contributes to the mother's guilt. In turn, this child now has a higher risk of anxiety disorders, behavioral and attachment problems, along with developmental problems in social, cognitive, and emotional aspects (APA, 2008). PPD can lead the mother to withdrawal from her family and friends and lose interest and pleasure in life. The role adjustments of new mothers can cause problems with infant care, spousal and family relationships, and work roles. The infant may become withdrawn or inconsolable and may have an increased risk of depression in childhood and adolescence. The father may become depressed himself and/or unsatisfied with his marriage and life after the birth of the infant (APA, 2008).

Treatment of PPD needs to be approached from a holistic, family-centered viewpoint by a professional interdisciplinary team. Holistic care includes educating women about the disorder

and treatment options and promoting thoughts and actions that improves their mental and physical health. Helping women strategize to have adequate sleep and exercise, partake of a healthy diet, and avoid alcohol and caffeine are all ways they can improve physically and mentally (Horowitz & Goodman, 2004). Help with household work and time away from work may decrease stress and increase time spent in recovery. Nurses should help with finding support services and social networks available to these women (Horowitz & Goodman, 2004).

Postpartum depression can be treated through psychotherapy, prescription drugs, and/or alternative therapy. For mild to moderate symptoms of depression, the initial approach is through psychosocial therapy (Horowitz & Goodman, 2004). The types of psychotherapy are interpersonal psychotherapy (IPT), cognitive-behavioral therapy (CBT), group therapy, supportive counseling, and family and marital therapy. IPT focuses on relationships and allows for flexibility of scheduling and care on a personal level. CBT concentrates on thinking about how a person feels and behaves. The goal of CBT is to learn how to replace distorted thoughts of the world and self with those that lead to a pleasing reaction (Horowitz & Goodman, 2004). Women, who feel isolated socially, may benefit in attending group therapy to increase their support networks. This therapy includes a combination of the other therapies (Luskin & Misri, 2008). Supportive counseling is a way women can deal with problems in their daily life instead of treating the cause of the problem (Horowitz & Goodman, 2004). Family and marital therapy helps to stabilize relationships and therefore provide a more supportive environment (Luskin & Misri, 2008).

When depressive symptoms are more severe, the use of pharmacotherapy is suggested along with psychosocial therapy (Luskin & Misri, 2008). There are few randomized placebo controlled trials concerning the effectiveness of anti-depressants in postpartum women.

However, evidence used from the general population suggests its efficacy in reducing the symptoms (Horowitz & Goodman, 2004). Medications should be initiated slowly, at half the recommended dose, since women who have recently delivered are more sensitive to side effects of medications. Then, to improve efficacy the dosage can be slowly increased (Wisner, Parry, & Piontek, 2002).

Selective serotonin reuptake inhibitors (SSRIs) antidepressants affect the neurotransmitters dopamine and norepinephrine and are used as the first choice of treatment in primary care because the side effects are less severe; they have low toxicity and are easy to administer (Luskin & Misri, 2008). Other medications that are effective but may have increased side effects are tricyclics and monoamine oxidase inhibitors (MAOIs) (NIMH, 2005). Tricyclics have shown adverse effects of respiratory depression and sedation when taken with doxepin (Wisner, Parry, & Piontek 2002). When given prescribed antidepressants, the woman's health provider must discuss side effects and other drug interactions. If treatment is inadequate women are at risk for relapse, so the same dosage should be taken for 6 to 12 months after remission. Women who have experienced complete remission are at risk for chronic depression if they are inadequately treated (APA, 2008).

When selecting medications to treat PPD, a major issue is if the woman is breastfeeding. If she is not, her pharmacotherapy can be based on the same criteria that are used for nonpuerperal depression (Luskin & Misri, 2008). Antidepressants are secreted in the breast milk, however, and so for breastfeeding mothers, the lowest effective dose should be prescribed. Clinicians observe the infant's typical behavior to effectively judge the potential drug-related effects of the antidepressant on the infant. For the smallest amount of risk in breastfeeding mothers, the SSRI, sertraline, is the first-line treatment of PPD. Since child caretaking is

compromised by depression, the risks and benefits of breastfeeding by a depressed mother who is hesitant to take anti-depressants should be considered (Wisner, Parry, & Piontek, 2002).

Caring for women with PPD and their families requires current, neutral information and insightful counseling about the possible effects of antidepressants on infants who are breastfeeding (Horowitz & Goodman, 2004).

For some women, no prescribed medicine is acceptable, and instead many may choose alternative therapies. Women often choose alternative therapy because they want a treatment with the fewest adverse effects and want to attempt every option available (Weier & Beal, 2004). They feel alternative therapy is less authoritarian and allows them to take control of their own healthcare. Women who have PPD and use alternative therapy are found to be higher educated and have a below average health status (Weier & Beal, 2004). A main reason women seek alternative therapy is because they are concerned about the negative effects pharmacological treatment will have on lactation. Alternative therapy to treat postpartum depression includes light therapy, massage therapy, and herbal therapy (Weier & Beal, 2004).

Light therapy may be considered an alternative therapy for PPD because it acts on the brain's dysfunction of 5-hydroxy-tryptophan (Corral, Wardrop, Zhang, Grewal, & Patton, 2007). It is proven to be an effective, attractive treatment not only for seasonal affective disorder, but also for nonseasonal depression although its true efficacy for postpartum patients is unknown. Patients subjectively report positive changes in mood, that they tolerate the therapy well, and that they have no unfavorable effects during the light therapy (Corral, Kuan, & Kostaras, 2000). In the Corral et al. (2007) study of light therapy, one of their limitations was the competition of time used for therapy and the time needed to care for the infant, creating a small sample size. Unfortunately, due to the sample sizes, design problems, and inconsistent dose and time of

therapy, little is known about the true efficacy of light therapy in postpartum women (Luskin & Misri, 2008).

The use of massage therapy for postpartum depression has shown to relax muscles, reduce pain perception, decrease stress and anxiety, and aid in digestion, circulation, and excretion (Weier & Beal, 2004). Relaxation, effleurage, and deep tissue massage are different types of therapeutic massage (Weier & Beal, 2004). In Field, Grizzle, Scafidi, & Schanberg's (1996) study of 32 depressed adolescent mothers, they compared the use of massage and relaxation therapies. Some outcomes they measured were depression and anxiety scores, cortisol levels, and specific behavior measures before and after the mother's sessions. Their results showed that across the study, only the massage therapy group had a significant decrease in stress and depression (measured by urinary cortisol levels and depression scores). It is suggested that stress and mood improve in short-range through massage therapy (Field et al, 1996).

Aromatherapy is sometimes used as an adjunctive with massage therapy. This type of therapy uses essential oils such as lavender, rose, bergamot, jasmine, ylang-ylang, and sandalwood to enhance relaxation and sedation. The oils are from plants that have been distilled and highly concentrated. Lavender is reported to depress the central nervous system resulting in improved sleeping patterns, decreased aggression and anxiety, and improved state of alertness and well-being (Weier & Beal, 2004). Aromatherapy is mainly used to relieve symptoms of general depression because there is no reported data that proves its effectiveness for postpartum depression (Weier & Beal, 2004).

Another alternative therapy used to treat PPD is acupuncture. Acupuncture appears to work by simulating and influencing the flow of energy through insertion of hair-thin needles at certain points to correct the imbalance or lack of energy. Two benefits to acupuncture are that

there are no contraindications to treatment and that it will not interfere with breastfeeding. A proposed side effect of acupuncture is that a patient may enter a state of deep relaxation. This could also be a benefit for women with PPD who express symptoms of lack of sleep (Weier & Beal, 2004). The complimentary therapies listed above are all without known side effects except perhaps pain or infection at acupuncture site. However, there are specific side effects with herbal therapy, as discussed below.

Herbal Therapy

Herbal therapy is the original system of medicine used by human cultures and is from what pharmacology stemmed (Weier & Beal, 2004). Herbs are natural products and their composition of chemicals varies depending on the type; therefore, the effects of herbs vary from person to person and from batch to batch. The concentration of chemicals can vary according to the species, chemotypes used, part of the plant used, humidity, type of soil, sun, and storage. However, much of the public still believes that these natural products are innately safe and that herbal medicine will not negatively affect them. Two herbal remedies used to treat depression in the general population and its symptoms are St. John's wort and Kava (Weier & Beal, 2004).

In Germany, St. John's wort (*Hypericum perforatum*) is used more than any other antidepressant to treat depression (Linde, Ramirez, Mulrow, Pauls, Weidenhammer, & Melchart, 1996). St. John's wort is found in the summer and is a beautiful, low-growing, bushy plant covered with yellow flowers (NIMH, 2005). Several studies involving non-pregnant, non-postpartum populations, however, have shown that St. John's wort is not effective for treating major or moderately severe depression (Weier & Beal, 2004). The National Institute of Health (NIH) conducted a study and found that in treating major depression, St. John's wort was no more effective than placebo (NIMH, 2005). Now, the NIH is looking at minor depression and

the effectiveness of using this herb (NIMH, 2005). None of the studies reviewed, specifically targeted postpartum depression and the use of St. John's wort.

Although its efficacy in treating depression is in question, there is clear evidence that St. John's wort does have significant drug interactions and side effects. A Public Health Advisory was issued by the Food and Drug Administration stating that important drug metabolic pathways are affected by St. John's wort. One reason for this interaction is that St. John's wort induces cytochrome P450 3A4, an enzyme in the liver that metabolizes many different drugs (McIntyre, 2000). Among drugs known to be affected are those used to treat depression, seizures, some cancers, heart disease, and transplant rejections. Drugs that are contraindicated to be used in conjunction with St. John's wort include, but are not limited to: cyclosporine, warfarin, digoxin, and theophylline (McIntyre, 2000). SSRIs and MAOIs are also contraindicated with St. John's wort due to toxicity (McIntyre, 2000). The NIH stressed that herbal medicines should only be consumed after consulting with a healthcare provider (NIMH, 2005). Knowingly though, this herb has still been used to treat mild to moderately severe depression because of its perceived fewer side effects than antidepressants. Interestingly, some side effects of St. John's wort that have been reported are fatigue, digestive symptoms, and most commonly reported photosensitization (Linde, Ramirez, Mulrow, Pauls, Weidenhammer, & Melchart, 1996). Currently, there are no studies evaluating the effects of this herb in lactation.

Kava (*Piper methysticum*) is another herb that is used to treat the symptoms of depression, mainly anxiety and insomnia (Kinzler, Kromer, & Lehmann, 1991). It has been suggested to improve physiologic reaction time and increase relaxation. Kava is being suggested to replace benzodiazepine, a sedative, hypnotic, anticonvulsant, muscle relaxant, in some patients (Malsch & Keiser, 2001). It is thought to have a greater effect and produce no withdrawal

symptoms at the end of treatment, unlike benzodiazepine which could cause physical dependence. Taken in recommended doses, kava has been shown to be well tolerated. However, higher doses place the woman at risk for unsteadiness, skin changes, extreme fatigue, and appearance of intoxication (Connor, Davidson, & Churchill, 2001). Women with a history of liver disease are not to be taking kava because of a suspected link between kava and liver failure (Dragull, Yoshida, & Tang, 2003). Kava should not be taken if the woman is breastfeeding or using barbiturates, alcohol, or benzodiazepines (Connor, Davidson, & Churchill, 2001). The studies reviewed did not specifically target the use of kava in postpartum women with depression.

Postpartum women who use herbal therapy may be unaware of possible side effects and interactions with other drugs that may occur. They may think that since an herb is a plant, it will not interfere with their prescribed drugs. In spite of concerns about these drugs, however, there are a few authors who have suggested that St. John's wort and kava might be considered for use in postpartum depression. There is limited evidence-based information, however, supporting their efficacy. In addition, the physical and mental contraindications for taking these or other herbal therapies in pregnant or postpartum women have not been well explored. As a result, many studies recommend pregnant or postpartum women to not use this type of therapy because of the unknown adverse effects. No studies were identified that addressed the percentage of pregnant and postpartum women who use herbals for depression or if women are taking other drugs along with herbals, that may be contraindicated. Also, it is unclear if women understand herbals and their side effects and if they inform their healthcare providers. Thus, the following pilot study seeks to explore the knowledge extent and use of herbal therapy by postpartum women with depression. We will also ask the question of whether women who do use herbals

are telling their health care provider and whether they are taking additional prescription drugs at the same time.

III. Methods

The aims of this pilot study were fourfold. The first was to explore the knowledge extent and use of herbal therapy by postpartum women with depression. The second was to compare their knowledge with what is known to determine the accuracy of their perceptions. Third, this pilot study aimed to explore whether postpartum women with depression are disclosing the use of herbal therapy or other alternative modalities to their healthcare provider. Lastly we aimed to determine if these women were taking prescription drugs or using alternative therapies in conjunction with the herbal therapy.

Design

This pilot study used survey techniques to gather information from postpartum women with depression. The sample groups compared were those who were versus those who were not using herbal or other alternative therapy.

Participants

The sample was comprised of women 18 years or older, diagnosed or reporting postpartum depression within twelve calendar months plus or minus two weeks of childbirth. Participants were required to be able to read and write English. This sample was recruited through an email listserv of the members of the Perinatal Outreach Encouragement for Moms (POEM) support group. This is a support group of women in the community who self-described themselves as suffering PPD.

Instruments

The instrument used was a survey comprised of 11 items designed by the student researcher in conjunction with expert researchers and nurses working with women with postpartum depression. It included demographic information such as age, ethnicity, education, and socioeconomic status and questions about the use of herbal therapy, prescription drugs, and alternative therapy. The participants were asked about their knowledge of the therapies or drug side effects and if they had informed their healthcare provider of their alternative usage. Finally, participants were asked if they knew of any drug interactions between herbal and prescribed medications.

Human Subjects

The Ohio State Institutional Review Board approval was obtained in order to survey the human subjects in this study.

Procedure

Potential participants were recruited by voluntary participation through email to the POEM group. The survey was attached in this email and all subjects who chose to participate completed the survey online. Filling out the survey and returning it, gave the researchers the participants' informed consent. The survey was emailed a total of 4 times in the fall of 2008. The first time was on October 18 to 67 recipients, 4 of whom opened the survey link. The second time was on October 24 to 54 recipients, 3 of whom opened the survey link. The third time was on November 5 to 58 recipients, 9 of whom opened the survey link. Lastly, the email was sent out on November 24 to 64 recipients, 1 of whom opened the survey link. A number of the recipients were not within the 1st postpartum year because this is not a requirement of membership to POEM. Also, many recipients are likely to have received the survey more than

once if they continued to remain on the list serve; however, each woman only answered the survey once. The survey was available until December 10th.

Data Analysis

Descriptive statistics were used to describe the sample demographically and the prevalence of herbal or medical drug usage or other alternative modalities. Tables and descriptive data were used to describe the education, age, socioeconomic status, and ethnicity between women who reported using herbal therapy compared to those who do not use herbal therapy, prescribed therapy, or other alternative modalities.

IV. Results

Overall Demographics

The demographic characteristics of the entire sample are shown in Table 1. Thirteen women responded to the survey. Age range of respondents included 4 (31%) between 22-30, 7 (54%) between 31-35, and 2 (15%) who were 36 and over. Of the 13 participants, all were Caucasian. For the highest level of education achieved, 8 (62%) had a college degree, and 5 (38%) had completed post graduate work. One participant (8%) was the recipient of Medicaid or other government sponsored insurance, and 11 (85%) had private insurance. Listed below are the compiled demographic results of the survey (Table 1).

Table 1. *Demographics.*

| | CHILD'S BIRTH | AGE | ETHNICITY | EDUCATION | INSURANCE |
|----------------|---------------|---------|-----------|----------------|-----------------|
| Participant 1 | 03/03/2008 | 22-30 | Caucasian | College degree | Private |
| Participant 2 | 01/10/2008 | 31-35 | Caucasian | College degree | Private |
| Participant 3 | 06/17/2008 | 22-30 | Caucasian | College degree | Private |
| Participant 4 | 10/02/2008 | 31-35 | Caucasian | College degree | Private |
| Participant 5 | 03/28/2008 | 22-30 | Caucasian | College degree | Private |
| Participant 6 | 11/07/2007 | 31-35 | Caucasian | Post grad work | Private |
| Participant 7 | 09/30/2007 | 31-35 | Caucasian | College degree | Private |
| Participant 8 | 06/13/2008 | 36 or > | Caucasian | Post grad work | Private |
| Participant 9 | 04/01/2008 | 31-35 | Caucasian | College degree | Medicaid or gov |
| Participant 10 | 01/02/2008 | 31-35 | Caucasian | Post grad work | Private |
| Participant 11 | 02/12/2008 | 36 or > | Caucasian | Post grad work | Private |
| Participant 12 | 01/02/2008 | 31-35 | Caucasian | Post grad work | Private |
| Participant 13 | 11/27/2007 | 22-30 | Caucasian | College degree | Private |

Use and Side Effects of Therapies

Of the 13 participants, 12 (92%) took medicine prescribed by their doctor or midwife for their PPD, 5 (42 %) used alternative modalities other than herbs to relieve their PPD, and 3 (23%) used herbs for their PPD (Table 2).

Table 2. *Participants’ Knowledge and Use of Treatment Modalities*

| | USES HERBS | SIDE EFFECTS OF HERBS | USES PRESCRIBED MEDICINE | SIDE EFFECTS OF PRESCRIBED MEDICINE | INTERACTIONS BTW PRESCRIBED MEDICINE AND HERBS | HERBS PROVIDE RELIEF SOUGHT | PRESCRIBED MEDICINE PROVIDE RELIEF SOUGHT | NOTIFIED HEALTHCARE PROVIDER OF HERB | USES ALTERNATIVE MODALITIES |
|----------------|------------|-----------------------|--------------------------|-------------------------------------|--|-----------------------------|---|--------------------------------------|-----------------------------|
| Participant 1 | No | N/A | Yes | Yes | N/A | N/A | No | N/A | No |
| Participant 2 | No | N/A | Yes | Yes | N/A | N/A | Yes | N/A | No |
| Participant 3 | No | N/A | Yes | Yes | N/A | N/A | Yes | N/A | No |
| Participant 4 | No | N/A | Yes | Yes | N/A | N/A | No | N/A | No |
| Participant 5 | No | N/A | Yes | No | N/A | N/A | No | N/A | No |
| Participant 6 | No | N/A | Yes | Yes | N/A | N/A | Yes | N/A | No |
| Participant 7 | Yes | No | Yes | Yes | No | No | No | No | No |
| Participant 8 | Yes | No | Yes | Yes | No | No | Yes | Yes | No |
| Participant 9 | Yes | No | Yes | Yes | No | Yes | Yes | No | Yes |
| Participant 10 | No | N/A | Yes | Yes | N/A | N/A | Yes | N/A | Yes |
| Participant 11 | No | N/A | No | N/A | N/A | N/A | N/A | N/A | Yes |
| Participant 12 | No | N/A | Yes | Yes | N/A | N/A | Yes | N/A | Yes |
| Participant 13 | No | N/A | Yes | Yes | N/A | N/A | No | N/A | Yes |

Prescribed Therapy Results

The survey showed that 92% of the sample used prescribe therapy (Table 2). Out of those participants who used prescribed therapy, the majority (58%) were between ages 31-35, 67% had a college degree and 33% had completed post grad work, 92% had private insurance and 8% had Medicaid or government insurance. One third of those participants who used prescribed therapy used other alternative modalities not including herbals as well. One fourth of

the participants who used prescribed therapy used herbal therapy in conjunction. Of the 12 participants used prescribed therapy, 11 indicated they knew side effects of the prescribed medication and listed the specific side effects of which they were informed (see Table 3). Of those who used prescribed medicine, 58% stated that it provided the relief they were seeking and 42% stated prescribed medicine did not provide the relief sought.

Table 3. *Side Effects of Prescribed Medicine Listed by Participants.*

| | LISTED SIDE EFFECTS OF PRESCRIBED MEDICINE |
|----------------|--|
| Participant 1 | “Possible sleepiness or trouble sleeping, possible sexual side effects” |
| Participant 2 | None listed |
| Participant 3 | “There is a possibility that it can be transferred in breast milk. I believe drowsiness can be a side effect. There were several on the packaging, which I kept, but I don’t remember them all.” |
| Participant 4 | “insomnia, nausea” |
| Participant 5 | None listed |
| Participant 6 | “fatigue, low sex drive” |
| Participant 7 | “weight gain, drowsy, irritable” |
| Participant 8 | “the typical SSRI side effects” |
| Participant 9 | “weight gain, sex drive loss, dizziness” |
| Participant 10 | “Both medicines I am on are rated Category B medicines, which could be transferred through breast milk. But they are generally thought to be safe.” |
| Participant 11 | N/A |
| Participant 12 | “drowsiness, constipation” |
| Participant 13 | “decreased libido” |

Alternative Modalities Results

Five (42%) of the 13 participants stated that they use alternative therapy not including herbals, to relieve their postpartum depression. One of the participants was between 22-30, three were between 31-35, and one was 36 or older. Two (40%) had a college degree and 3 (60%) had accomplished some post graduate work. The only participant who reported she had Medicaid or other government insurance used alternative therapy and the other 4 had private insurance. Of the 5 who used alternative modalities, one (Participant 9) used herbal therapy and prescribed therapy as well. Four of the five used prescribed therapy only (i.e., not herbal) with the

alternative therapy. Participant 9, who used prescribed therapy, herbal therapy and alternative therapy, indicated that she did not know of any interactions between herbal and prescribed therapy.

Table 4. *Alternative Modalities Responses.*

| | LISTED ALTERNATIVE MODALITIES USED |
|----------------|---|
| Participant 1 | N/A |
| Participant 2 | N/A |
| Participant 3 | N/A |
| Participant 4 | N/A |
| Participant 5 | N/A |
| Participant 6 | N/A |
| Participant 7 | N/A |
| Participant 8 | N/A |
| Participant 9 | “sometimes SAD light therapy in the winter” |
| Participant 10 | “I have used acupuncture for various things for the past 4 years.” |
| Participant 11 | “I use vitamin B complex supplements and 2000 mg/day fish oil/omega 3.” |
| Participant 12 | “acupuncture” |
| Participant 13 | “message and music” |

Herbal Therapy Results

After analyzing the data, it was found that 3 (23 %) of the thirteen participants used herbal therapy alone or in combination with prescribed or alternative modalities, for their postpartum depression. Two of the 3 were between ages 31-35 and one was 36 or older. Results show that 2 participants who used herbal therapy had a college degree and one participant who used herbal therapy had accomplished some post graduate work. The only participant in the survey who had Medicaid or other government insurance used herbal therapy along with two others who had private insurance. Results show that none of the participants who used herbal therapy reported knowledge of any side effects to the herbs they were using.

All of the participants, who took herbs for postpartum depression, were also taking medicine prescribed by their doctor or midwife for their postpartum depression. One of the three

was also using alternative therapy in conjunction. This participant happened to also be the only one who received Medicaid or other government sponsored insurance. When she was asked if she had knowledge of side effects, she answered “No”. She responded that the herb she was taking was fish oil.

Of those who used herbals, one participant stated that it provided the relief she was seeking and two participants stated herbal therapy was not providing the relief sought. Of the participants who used herbs, one had notified her health provider and two participants had not. The one participant stated that the reason for why she had not told her healthcare provider was because she “(hadn’t) had (an) appointment yet- and she (meaning the healthcare provider) probably wouldn’t ask”. This participant went on to state that she had “researched online- no known side effects anyway”. Of the three participants who used both herbal and prescribed therapies, none indicated that they were aware of drug interactions between the two therapies.

V. Discussion

In this pilot study, although nearly all of the women used some sort of therapy for their PPD, only a minority used herbal therapy. The women who did use herbal therapy showed that they had a basic knowledge believing that the herbal therapy may help their symptoms of PPD, however, none knew of side effects (or stated there were none) or other drug interactions. Two of these 3 women also did not notify their healthcare provider of their use of herbal therapy which could be harmful if the healthcare provider prescribes a drug that with which herbals interact.

Of the women who used herbal therapy all used prescription drugs in conjunction and one of the three who used herbal and prescription used alternative therapy as well. These women were all aware and could list possible side effects of the prescription drugs but none knew of

drug interactions between herbal and prescribed therapy. This lack of knowledge could lead to inadvertent miss-use of the two therapies and may cause a negative effect to the woman suffering symptoms of PPD.

Over half of the women using prescribed therapy stated they felt relief from their symptoms while only one of the women using herbal therapy felt the relief sought. From this data of perceived beliefs, it shows that prescribed therapy had more of the effect that these women were seeking than herbal therapy.

The results showed that women suffering symptoms of PPD may not be disclosing the use of herbal therapy to their healthcare provider. One even stated that she did not feel it necessary to disclose her use of herbal therapy to her healthcare provider. She used the internet to search for side effects and found that there were none listed. It is unclear whether she searched for interactions as well. In addition, the internet should be used in caution because not every site is a reliable source. Just because a therapy may not have had a direct side effect, does not mean that it will not interact with another therapy.

Limitations

There were several limitations found from this pilot study in addition to its small sample size. One such additional is that it was an online survey. With online surveys, honesty is expected, but cannot be guaranteed. Also, since it was online, no reward could be offered for the time each participant spent. As evident by the demographic data collected, the POEMs group is clearly skewed in many ways. Racially, all the participants were Caucasian. Also, the socioeconomic status of the participants using insurance as the factor was skewed because all had insurance. Age was another factor that was not equally dispersed because it was found that there were no participants who were under the age of 22. Another limitation to this pilot study

was that the four groups the survey was emailed to may have consisted of some of the same people. There was no way to prevent resending the survey to those who were on the listserve because then it would have disclosed their identity. However, by evaluating the information provided, no participant appeared to have answered the survey twice.

Future Research

Since this is a pilot study, future research is needed to provide additional data from a less skewed, broader, and larger sample to more accurately focus on the four aims of this study. The future researcher may consider using a paper and pencil form of the survey. This might increase the likelihood of participation of those with a lower socioeconomic or educational status. Offering compensation for the participants' time would still be difficult if the researcher used both types of surveys. An additional question that could be added to the survey is if the participant has tried herbs in the past (not just the present, as asked in the current survey). This would possibly generate more responses and thoughts about using herbal therapy. From the data, it shows that a significant part (42%) of the sample used alternative modalities. A question could be added to inquire about notifying their healthcare provider about their use of alternative modalities, not just herbals. Another question to ask would be if there are other remedies that the participant has tried to relieve their postpartum depression. This question could possibly spark a new study about a specific therapy used for PPD that is currently unknown.

Nursing Implications

Healthcare providers are responsible for a patient's health and safety; as a result, best practice requires that healthcare providers encourage their patients to inform them concerning their use of any additional therapies, most especially herbals. Healthcare providers could supply, in a non-judgmental manner, focused education about possible interactions between herbal and

prescribed therapies, as well as side effects from using herbal, alternative, and prescribed therapy. Healthcare providers may consider making pamphlets available in the waiting rooms of common herbs and their side effects and interactions. Posters could be designed and placed in common, populated areas educating on the advantages and disadvantages of using herbal therapy and even alternative therapy.

Summary

The information gathered from this pilot survey showed that there was an inconsistency between women using herbals and their knowledge about prescribed therapy interactions and strengthens the need for future development of this survey. It could be used as a basic tool for healthcare providers to gather more awareness about their postpartum patient's use and knowledge of side effects and interactions of herbal and alternative therapy while reporting symptoms of depression. As more information is collected about the use of herbal and alternative therapy, healthcare providers will be able to provide greater holistic care for their patients. They may even be able to suggest specific remedies that other patients used for particular benefits for postpartum depression. This survey has potential to provide the researcher with vital information about their population. This is especially true if their sample size is larger and more diverse.

This current study showed that 2 of the 3 participants using herbal therapy failed to disclose their use to their healthcare providers. While these women knew of the possible side effects of their prescribed therapy, they did not identify any for herbal therapy. As discussed, this could potentially have a negative effect on the health of postpartum women. Because postpartum depression is so common and carries such serious and lifelong consequences, it is essential that healthcare providers evaluate all postpartum patients under their care, to detect

depression and, if identified, to treat it appropriately. It is also essential that health care providers stay abreast of the alternative therapies women may be using on their own to alleviate their symptoms. Assisting the postpartum mother to cope with her depression in an informed, effective, safe, and holistic manner could greatly improve not only her quality of life, but also the health and development of her infant and well-being of the rest of her family.

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