

REVIEW PAPER

## Depression in Pregnancy and Ways of Dealing

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### Abstract

**Introduction:** In pregnancy information to guide mothers and nursing practitioners for the treatment of depression is limited.

**Purpose:** The purpose of this study was to investigate the responses to treatment of depression during pregnancy, in order to enable nurses to know the pros and cons of treatment for guiding and advising a pregnant woman properly.

**Material and method:** Systematic review of the literature. The tools for the search of the literature were the electronic databases (PUBMED, GOOGLE SCHOLAR and CINAHL). The keywords used were: depression during pregnancy, perinatal depression, treatment, antidepressants during pregnancy.

**Results:** In addition to drug therapy, there are alternative forms of depression treatment such as acupuncture, the use of morning light, individual psychotherapy, cognitive behavioral therapy, counseling and end psychodynamic therapy. But no one can guarantee their effectiveness.

**Conclusions:** It should be further explored the issue of the treatment of pregnancy depression.

**Keywords:** treatment during pregnancy, perinatal depression, antidepressants

### Introduction

One of the serious psychological impact of the changes that may arise during the course of a pregnancy depression (Gold, 1999). Indeed, according to Bledsoe & Grote (2006), in a study with a sample of 1,400 women, 13.5 percent had symptoms of depression during the first 31 weeks of pregnancy, and 9.1 percent eight weeks postpartum. According to the American Psychiatric Association (1994), the depression on the emotional state of intense and persistent sadness, which seriously affects their daily life for a long time.

Depression during pregnancy is not a serious health problem for women only, but also for the unborn. Particular studies show how depression affects the fetus before and after birth (Bledsoe & Grote, 2006). On the one hand, women with

symptoms of depression have higher chances of premature birth (Liu & Odouli, 2008). On the other hand, the depression in pregnancy has been shown to constitute the strongest indicator of depression. Particular, as noted by Oren et al. (2002) experiencing depression during pregnancy is an important risk factor for development of pre-eclampsia, which in turn is a potent marker for postpartum depression. Further, higher levels of anxiety and tension in conjunction with the parent depression have been associated with dysfunction of the hypothalamic pituitary adrenal axis (Sandman et al., 1994), state that has been associated with premature birth, low birth weight (Carter et al., 2004). Also, children of mothers who experience depression during pregnancy exhibit lower than normal neuromotor performance, changes in behavior, physiology and even in their biochemistry (Bledsoe & Grote, 2006).

Despite the importance and extent of the impact of depression during pregnancy, research data on safe and effective pharmaceutical treatment methods are imprecise and limited (Oren et al. 2002). At the same time, the treatment does not include programs psychological empowerment, both during pregnancy and during the postpartum period (Wisner et al., 2009). At the same time studies show that the education of health professionals is not sufficient as to the effective treatment of women who experience symptoms of depression during pregnancy (Gold, 1999).

Timely and accurate treatment of depressive symptoms is crucial for both the mother and the child. In this context, the aim of this study is to investigate how effective treatment for depression during pregnancy.

### **Purpose**

The purpose of this study is to investigate effective ways to cope with depression during pregnancy. In particular, the performance will be investigated based on the quality of life of the participants after the treatments.

### **Material and Method**

A systematic review approach was used for searching the literature. The source for search of the literature was the electronic databases (PUBMED, GOOGLE SCHOLAR and CINAHL). The keywords used were: depression during pregnancy, perinatal depression, treatment, antidepressants during pregnancy. Out of the 984 articles that were retrieved 904 were rejected due to title, after the study of the abstracts 40 articles remain for further consideration, then, twenty of them were excluded because they were not available as full texts. Finally, depending on the purpose of the study 20 articles were used, 3 of them were used as responses.

### **Results**

In the study of Oren et al. (2002) it was investigated the effectiveness of the use of morning light as a treatment for depression. The women who participated in this treatment were diagnosed with major depressive disorder. The clinical diagnosis of the disorder was based on the

criteria of DSM-IV and assessment tools intensity of symptoms used were the Hamilton Depression Rating Scale and Seasonal Affective Disorders Version (SIGH-SAD). Individuals who participated in the study were characterized by recording the prices are higher gear of 16. Also, individuals who have recently completed treatment with drugs or had a history of attempted suicide were excluded from the study.

The investigation dealt with a sample of 16 women. The individuals which followed the treatment of morning light, should be opposite at a distance of 33 cm fluorescent source mechanism, which helps to cover ultraviolet radiation penetrates and leaves only the white light. Participants should be seated, so the light is hitting their heads. The instructions were to apply the treatment at home daily for sixty minutes, ten minutes after the alarm, and for at least three weeks. Researchers to check if followed correctly and systematically treatment gave them a voice in which participants had to report daily to the use of light. The reason that the treatment carryout in bright morning hours was because it is proven evidence that the specific time helps the circadian rhythm of each person as has been associated particularly with the effective treatment of seasonal winter depression. The common characteristics of sixteen persons are age 34 years and gestational week from the start of treatment was 23 weeks. Fourteen of these patients had a history of major depressive disorder before pregnancy. Two of them experienced seasonal winter depression with a score of 8 on a scale global seasonality score that indicates how passed only a mild seasonal depression. For the sixteen patients who were treated for three weeks their scores in SIGH-SAD depression ratings had improved moderately by 49%. For this reason, the researchers increased the period of investigation in five weeks. Then the difference increased by 59% from the initial results.

After the day of birth Fourteen of the sixteen patients answered questionnaires about the effectiveness of the investigation. In 4 women depression symptoms returned after three months after birth were stop treatment, in four other during

pregnancy and after they had stopped treatment and much later in two more patients.

The limitations of the study are given in fact what is the first study that focuses on treating the symptoms unseasonal depression. Based, their data did not produce concrete results associated with the response to light.

The research of Manber et al. (2004) investigated the effectiveness of acupuncture method for treating the symptoms of depression. The researchers used the assessment tool of the intensity of depressive symptoms Beck Depression Inventory, which complemented each week during treatment. Participants were placed in one of the following three groups.

The first group consisted of 20 people with symptoms of depression, which has applied acupuncture. The latter constituted the control group and consisted of 21 subjects without specific symptoms of depression. In this group it was also applied acupuncture. In the third group, which applied relaxing massage, physical contact, relaxation and relief from daily stress, participated 20 women. The expectations of the participants and researchers about the functionality of the treatment were determined after the first and third treatment.

The study revealed that a significantly greater proportion of participants responded positively to acupuncture treatment, in 68.8% the depression symptoms stopped, while in the relaxing massage group (31.6% with  $p = 0.031$ ). The 21.1% of the women who followed the massage continued to have symptoms of depression. The limitations of the study are the small sample size, the homogeneous sample consisted only of educated women with high income western countries, and last limitation is the ecological validity.

The investigation of Bledsoe & Grote (2006) was designed to compare the effectiveness of different interventions for the treatment of symptoms of depression without psychotic features during pregnancy. In this study the measurement tools were, the Edinburgh Postnatal Depression Scale, the Hamilton Rating Scale for Depression and the Profile of Mood States to assess symptoms of depression. Eleven sub-studies describing sixteen

different interventions with 922 participants. Treatments applied was individual psychotherapy, medication combined with cognitive behavioral therapy (CBT), psychodynamic therapy, counseling, educational intervention, medication, group therapy with cognitive behavioral-educational intervention and finally cognitive behavioral therapy.

In order to improve clinical symptoms, the 30 participants who followed medication and CBT had a significant effect size. The 45 participants following only medication, had a similar effect size. Group therapy, which, as mentioned previously include educational and cognitive therapy, followed 30 people that depressive symptoms continued to exist. Individual psychotherapy applied in 181 persons in which the results were not positive, psychodynamic therapy and counseling followed by 95 and 147 people respectively. CBT treatment involved 17 people with small effect size. Finally, educational therapy that included 222 individuals had less effect size.

One of the limitations of this study is the limited number of adequate studies on depression during pregnancy.

### **Discussion**

This study explores effective ways to deal with depression during pregnancy. Through the literature review it was found that patients deal with depression during pregnancy by using some treatment and we are searching about which one treatment found to be the most effective, taking into account the long-term remission of symptoms of depression medication. As depression during pregnancy is a major threat to the health of mothers and increasing evidence suggests that damaging also fetuses and infants, health care professionals should enable better ways to treat depression during pregnancy.

The study used 17 articles. The study of Oren et al. (2002), demonstrate the use of the room light as an effective method for treating depression symptoms. However, although the data from the study initially appeared to support the hypothesis that treatment application during breakfast light, has a soothing effect on pregnant women with

symptoms of depression, then showed that the method was effective primarily in persons with seasonal depression. Overall, the researchers

conclude that for non-seasonal depression during pregnancy more studies are needed to clarify the extent of the effectiveness of the method.

**Table 1: Basic characteristics of studies investigating the effectiveness of therapies for the treatment of symptoms of depression during pregnancy.**

Authors Publication Year	Sample Size Features	Measurement Tool	Purpose	Type of Intervention	Size Effect	P	Results
Manber et al. (2004)	61 women with major depressive disorder. Eighth week of pregnancy.	Beck Depression Inventory	The most effective way of dealing with depression among 20 women NSPEC treatment 21 women Relaxing massage 20 women	<ul style="list-style-type: none"> <li>Acupuncture in people with specific symptoms (SPEC)</li> <li>Acupuncture in people without specific symptoms (NSPEC)</li> <li>Relaxing massage (MSSG)</li> </ul>	9.2(6) 12.2(5) 10.0(4)		68.8% positive response 47.4% positive response 31.6% positive response
Oren et al. (2002)	16 women with scores on the SIGH-SAD > 20. All women were in the 23rd week of gestation.	Seasonal Affective Disorders Version (SIGH-SAD) Hamilton Depression Rating Scale	To show whether the use of morning light can be used as a therapy in the treatment of depression symptoms	Use morning light		P<0.001	In 6 of these 16 patients depressive symptoms reappeared after ceasing treatment of five weeks.
Bledsoe & Grote (2006)	767 pregnant women participated in this study	Edinburgh Postnatal Depression Scale Hamilton Scale for Depression Profile of Mood States.	Evaluation of the effectiveness of treatment methods and comparison between them  181 took part in interpersonal psychotherapy  30 followed medication with CBT  45 people took medication  95 in psychodynamic therapy  147 in counseling  222 in educational  30 in group therapy  17 in cognitive behavioral therapy	interpersonal psychotherapy  medication combined with cognitive behavioral therapy (CBT)  medication  psychodynamic therapy  counseling  educational  group therapy with cognitive-behavioral, educational  Cognitive behavioral therapy	1.260 3.871 3.048 0.526 0.418 0.100 2.046 0.642	P<.001 P<.001 P<.001 P=.014 P=.014 P=.457 P<.001 P<.001	From the eight interventions four were positive reaction sizes between 1,260 and 3.871

The research of Manber et al. (2004) concluded that the effectiveness of acupuncture method was 69 percent success, opposite to the symptoms of depression in pregnant women. This figure should be compared with conventional therapies used to treat depression which have a 50 to 70 percent, Elkin et al. (1989). In contrast, the massage had lower effectiveness rate by 32 percent. Overall, the reduction of symptoms observed in this study are comparable to those observed in the study (Spinelli & Endicott, 2003), after the extension of the study to eight weeks interpersonal psychotherapies for depression during pregnancy. Both studies showed a further reduction of symptoms by an additional 8 weeks of treatment. Similarly, the reduction of depressive symptoms resulted after 8 weeks of specific acupuncture are similar to those observed after 8 weeks of treatment with antidepressants or cognitive therapy (Blackburn & Moore, 1997). Although the pilot study was underpowered, suggests that acupuncture is made specifically for women with symptoms of depression causes a fairly large and clinically significant improvement in depression during pregnancy. Filling forms postpartum, even participants who do not continue to receive treatment, showed substantial therapeutic intent analysis. These analyzes revealed that, despite the fact that the acupuncture treatment in people with depressive symptoms and not significantly different at the end of the acute phase of treatment, a significantly greater proportion of participants in the acupuncture group with specific symptoms of depression were in complete remission during 10 weeks postpartum.

The most important conclusion after studying Manber et al. (2004) was that, regardless of treatment, early treatment of depression during pregnancy offers protection against depression. This finding underlines the importance of treating depression during pregnancy, not only because it can relieve the discomfort experienced by women during pregnancy, but also because it can prevent this high risk group of depression after childbirth.

The investigation of Bledsoe and Grote (2006) aimed to investigate the degree of effectiveness of

various types of therapy to treat symptoms of depression during pregnancy and postpartum. The treatments analyzed in this study were individual psychotherapy, CBT, psychodynamic therapy, counseling, education, treatment group cognitive behavioral therapy, educational programs, medication and medication combined with CBT. Depending on the size of the effect with the exception of CBT, there is a large separation between the individual therapeutic interventions. Finally, it appeared that, pharmacotherapy, group therapy and cognitive-behavioral type had the highest efficiency. These findings are similar to those of the National Institute of Mental Health America (Elkin et al, 1989), suggesting that the treatment of major depression in women during pregnancy or after childbirth and treatment of depression in other moments of life can be similar.

However, physicians may be reluctant to prescribe drugs during pregnancy and for mothers who choose to breastfeed, because the absolute safety has not been established. According to Sharma et al, (2009) treatment during lactation requires minimizing the exposure of infants to drugs in order to minimize adverse effects. Considering the fact that the medication is considered the most effective treatment method, it would be interesting to design further studies to examine the safety of drug therapy for the treatment of depression during pregnancy.

During the investigation of Einarson et al. (2009) showed that there is a small but statistically significant increase in the frequency of spontaneous abortion in women exposed to antidepressants during early pregnancy. However, whether these results are due to the adverse effects of treatment or depression is still unknown, as also is still unknown if these women are at equal risk for miscarriage or if treated with therapeutic doses of antidepressants or not. This conclusion was reached and searched Nakhai et al. (2010) which investigated the relationship between paroxetine and venlafaxine and increased risk of spontaneous abortion. The research of Simon et al. (2002), adds that taking selective serotonin reuptake inhibitors

in any week pregnancy doubles the risk of preterm birth for women. Instead, Vacker et al. (2007) argue that the symptoms of depression remain untreated during pregnancy associated with preterm birth, psychomotor delay fetal preeclampsia and spontaneous abortions.

An earlier survey of Nulman et al. (1997) concluded that exposure of the fetus either tricyclic antidepressants or fluoxetine did not adversely affect the ability of fetal neurodevelopment. The Gold (1999) mentions how health professionals of all disciplines receive little or no formal training in this field of psychopharmacology. It also adds how most prescriptions given in the USA psychotropic treatments although none have been approved for implementation by the American Food and Drug Administration (FDA). However, most doctors and patients ignore this warning which argues that there is no safe consumption of such drugs during pregnancy. Therefore, the use of medical opinion is overrated. Indeed, by the same researcher (Gold, 1999) in the USA, most doctors believe that the placenta provides protection against teratogenic, regardless of the type of medication taken by the mother. However, animal studies show that all psychotropic therapies cross the placenta (Stowe, 1997). Specifically, these researchers found in the umbilical cord blood levels of selective serotonin reuptake inhibitors, anxiolytics and their metabolites in women receiving the same treatment. These data indicate that the matrix absorbs the psychoactive substances (Stowe, 1997). There is incomplete and vague information on the proper and effective medication during pregnancy.

Additionally, according to Carter et al. (2005), women prefer alternative and complementary therapies, despite taking medication for the treatment of major depression during pregnancy and lactation. By implication, the development and improvement of existing non-pharmacological methods of treatment of depression may become necessary. Future research should be conducted with more available measures to address them. Future studies should examine other important variables of interest, such as occupational and

social functioning and social support. Also, it would be appropriate to develop programs to integrate this issue in the direction of mental health. You need to publicize more information about depression during pregnancy, the symptoms, and treatments. Pregnancy is a unique period in which most women are in frequent contact with providers of hospital care. Should provide an opportunity for education about depression, identifying and addressing. We need wider use of screening tools for depression in the setting of prenatal care, and recognition is useless without timely, easy access, women-friendly processing facilities. We must also ensure that, as nursing officers must be aware of the best treatments, such as pharmacological agents, and options in the management of depression, especially depression during pregnancy. And finally, we must continue to advocate for the best research and evidence in order to be able to be able to in the future to give safe advice to pregnant women.

### **Conclusion**

The symptoms of depression during pregnancy threatens the mother's health, infants, and their families. It is a widespread threat to the health of the mother, for infants and their families. According to these studies analyzed, as ways to effectively tackle the symptoms of depression so far, is the use of drug therapy, acupuncture and use light breakfast.

Due to the criticality of the issue, it is necessary that nursing workers are informed about the intervention that will educate pregnant mothers experiencing depressive symptoms. Further studies on the treatment of mental illnesses such as depression during pregnancy show how pharmaceutical agents is not the only option for treatment. For this reason further explore the topic of alternative and complementary therapies.

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