

**ORIGINAL PAPER****Postpartum depression in Cypriot New Mothers****Martha Moraitou, Ph.D**

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**ABSTRACT**

Postpartum depression is a complex phenomenon affecting many women immediately following childbirth. The present study examined the incidence of postpartum depression in a sample of 226 new mothers in Cyprus in relevance to specific socio-economic and psychological background variables. Participants completed the Edinburgh Postpartum Depression Scale (EPDS) and the Beck Depression Inventory (BDI) on the 4<sup>th</sup> day after delivery. The results showed that 21.3% of the participants experienced depression according to the BDI, and 13.7% were at risk of developing postpartum depression as indicated by the EPDS. These results were found to relate to psychopathology existing prior to childbirth, whilst variables such as age, profession and educational level did not relate to postpartum depression.

**Key words:** Pregnancy, Postpartum Depression, EPDS.

**Introduction**

Depression is a pathological condition ranking high in recent times, with a prevalence rate of 10-25% within the global population (Kleftaras, 1998). As such, almost all individuals have experienced some degree of depression during their lifetime (Bloomfield & McWilliams, 2001; Kleftaras, 1998). Among the symptomatology is the significant reduction of perceived self worth, and the gradual debilitation of intellectual, psychokinetic, and organic

functions (Kleftaras, 1998). Despite being classified a disorder, depression manifests as a characteristic of human nature, and ranges in severity from acute desolation to strong feelings of helplessness and hopelessness (Papastylianou & Polychronopoulos, 2007), with consequences that incur increasing detriments to society (Alevizos, 1999). Taking also into consideration the effects of depression on immediate others (friends, family or colleagues of the sufferer) the financial and other expenses increase exponentially.

Research has found that women experience a greater amount of depressive symptoms than men (Bebbington, 1998. Kleftaras, 1998) and to a greater degree of severity throughout their reproductive lives (25-44 years; Wisner, Gelenberg, Leonard, Zarin, & Frank, 1999). This may be due to gender differences in the manifestation of the disorder, whereby women are more inclined to express emotional exhaustion, and coping difficulties compared to their male counterparts (Meagher & Murray, 1997). Furthermore, it is claimed that factors that may contribute to depression amongst women include isolation from activities (direct and indirect), reduced opportunities for decision making and realisation, responsibilities in the upbringing and intellectual stimulation of children, juggling work and home obligations, a lack of authority in personal, professional and political relationships, and a variety of psychologically demanding situations (Papastyliou & Polychronopoulos, 2007), such as pregnancy, and the care of others and the elderly (Moraitou, 2004a). Alternatively, depressive symptoms specifically after delivery are attributed to the social role that women must fulfil during this period of their lives (O' Hara, Stuart, Gorman, & Wenzel, 2000), and to their increased accountability across multiple domains such as housekeeping, career and social responsibilities, and motherhood (Moraitou, 2004a; Papastyliou & Polychronopoulos, 2007).

Symptoms of depression persist as women progress into motherhood: pregnancy and childbirth alone are considered stressful life events that could be adequate to naturally elicit depressive reactions (Areias, Kumar, Barros, & Figueiredo, 1996). Postnatal depression, or post partum depression, is the clinical term used to classify depressive symptoms experienced by women immediately after giving birth (Evins, Theofrastous, & Galvin, 2000). According to the DSM-IV (Diagnostic Statistical Manual – fourth edition) of the American Psychological Association (APA, 1994) Postnatal depression is a significant episode that occurs within four weeks from delivery, so much so that the symptomatology is likened to that of Major Depressive Disorder (Stamouli, 2000). As such, postnatal depression is a common and serious illness that could place the mother's and the infant's lives in danger. What's more is that

postnatal depression tends to be under diagnosed, as patients rarely seek psychological support during this time of vulnerability. For this reason, it is extremely important that health professionals who come into contact with new mothers (including midwives, gynaecologists, paediatricians, etc.) are able to recognise this condition with the aim of its prevention or its early treatment (Moraitou, 2004b; Stamouli, 2000).

Postpartum depression was first conclusively recognised in light of the research work of Pitt (1968). Pitt observed that 10% of mothers who had given birth in a London Hospital experienced depression in the first 6 weeks from delivery, with the absence of previous symptoms. Following this study, Dalton (1971) referred to a prevalence of 34% of mild or temporary depression amongst his sample of new mothers. Overall, frequency rates of postpartum depression have been documented as ranging from 10-53% amongst new mothers (Drago – Carabotta, Panagopoulos, Laganara, Maggino & Alessi, 1997, Mpergiannaki, 2000), with the risks of onset doubling in first time mothers compared to mothers with multiple previous births (Harris, Deaty, Harris, Lees, & Wilson, 1996). Such frequency rates are said to depend on sample demographics, the type of delivery, the degree of symptom severity; mild, medium, or severe depression, historical accounts of depression in the sample, the amount of time after delivery, the quality and response style of the measurement scale used, including psychometric properties (Drago – Carabotta, Panagopoulos, Laganara, Maggino & Alessi, 1997, Mpergiannaki, 2000).

Since the 1980s the measurement of postpartum depression has utilized reliable and valid tools, enabling greater accuracy in appraisal (Gotlib, Whiffen, Wallace, & Mouht, 1991. O' Hara, Rehm, & Campbell, 1983; Hobfoll, Ritter, Lavin, Hulsizer, & Cameron, 1995). In most studies, the Beck Depression Inventory (BDI; Beck, Ward, & Medelson, 1961) is used as a measure of depression, whilst the Edinburgh Postpartum Depression Scale (EPDS; Cox, Holden, & Sagovsky, 1987) is used to measure risk in developing postpartum depression. Furthermore, the combination of these tools has yielded strong convergent validity (Moraitou & Galanakis, 2006).

In Greece, the study of postpartum depression was initiated by Dragona (1989), however, subsequent research has yielded mixed findings. For instance, one study found that within the first week after giving birth more than 50% of new mothers exhibited symptoms of the depression (Kritikou, Morogianni & Loli, 1996), whilst others purport that the prevalence amounts to 32.40% (Rammou, Papaligoura & Kioseoglou, 2004). Moraitou (2002) concluded that 38.69% of new mothers experience some form of the condition (mild; 24.10%, medium; 9.24%, and severe; 5.52%). From this sample, 47.42% of those experiencing some degree of the condition are first time mothers, of which 50% present with severe depression (Moraitou, 2002). Alternatively, Moraitou and Stalikas (2004) found that within the first week after delivery, first time mothers with postnatal depression symptoms were a total of 44%, whilst two weeks after delivery the proportion dropped to 36%, and to below 30% after the first 6 months. Similarly, Moraitou and Galanakis (2006) conclude that 22.41% of women exhibited depression according to the BDI, whilst 37.93% according to the EPDS. Interestingly, Hobfoll et. al. (1995) found that new mothers living in urban areas and earning a low income yielded higher degrees of depression during pregnancy and after childbirth. Low socio-economic status has a direct effect on the lives of women, contributing to economic hardship or unemployment, and to other arduous life experiences, that coupled with pregnancy, exacerbate the manifestation of depression (Kitamura Shima, Sugawara & Toda 1996). Moraitou and Stalikas (2004), however, found no significant interaction between the financial affluence of the family and of women, and repeated measures of depression.

Another variable of interest concerns the ease of delivery, and the emergence of complications that is considered a determining factor on the development of postpartum depression (O'Hara, 1985; 1986), despite opposing previous research (Paykel et. al., 1969; 1981). Alternatively, first time mothers, or mothers who undertake a caesarean section or the aid of forceps during delivery had no greater chances of developing postnatal depression than other new mothers (Cox, Connor, and Kentell, 1982). Similarly, neither prearranged nor emergency

caesarean sections are related to postnatal depression (Nielsen, Hedegaard, Dalby Salvig, and Secher, 2000). Once again, Moraitou and Stalikas (2004) found no statistically significant interaction between repeated measures of depression and child birth type.

Likewise, the same research found no significant interaction between depression and the gender of the new born, nor whether the pregnancy was planned or not (Moraitou & Stalikas, 2004). Despite this, Warner et. al.'s (1996) study revealed that an unplanned pregnancy was amongst the first risk factors accompanying post partum psychopathological morbidity. In a similar study, women responded as to whether their pregnancy was unexpected or whether it came at a bad time, with the latter group yielding double the chances of experiencing depression, although women claiming that their pregnancy was unwanted had four times the chances of experiencing depression.

Recent years has seen a growth of interest in the study of postnatal depression in Cyprus with a hope to ascertain prevalence rates, as well as gain insight into the possible contributing factors to manifestation, in comparison to the Greek morbidity and international literature.

Therefore, the aims of the present study are to determine:

a) the proportion of new mothers in Cyprus who have increased chances of experiencing postpartum depression symptoms, and

b) the relationship between postpartum depression symptoms and socio-economic or psychological factors.

## Method

### *Participants*

The sample of participants in the current study consists of 226 women who were hospitalized after giving birth at the Private Maternity Clinic of Nicosia. Participants volunteered to take part in the study, after fulfilling the prerequisite of having at least a minimum level of Greek language skills. Of the 226 women, 97.70% (N=220) were Greek Cypriot, whilst 2.30% (N=6) were of other nationalities.

### Tools

A questionnaire was created in paper-pencil form, and consisted of demographic questions similar to those used in previous Greek studies. Amongst others, such as social and economical variables, the questionnaire examined patients' medical history, both general and pregnancy related. In particular the questionnaire measured age, education level, occupation, number of children in the family, whether the pregnancy was planned or not, the pre-existence of serious health problems, the level of partner support, the level of external support from friends and family, the pre-existence of psychological distress before or during the pregnancy, complications during pregnancy, the type of delivery (natural or caesarean), and the gender of the newborn. Comprising the questionnaire set were Greek versions of the Edinburgh Postpartum Depression Scale (EPDS) and the Beck Depression Inventory (BDI) as measures of depression.

*The Edinburgh Postpartum Depression Scale (EPDS):* A self report scale designed to measure depressive symptoms amongst women after giving child birth (Cox, et al, 1996). The 10-item version of the scale consists of statements that describe symptoms related to postnatal depression, with a response format of four alternative answers. Each of the four answers to the statements are rated by participants according to severity and persistence. Each statement is scored between 0-3, with final test scores ranging between 0-30. Scores equal to or greater than 12 represent a risk towards developing postnatal depression. The scale's developers attest a sensitivity score of 0.86, and a specificity score of 0.78, whilst reliability (Cronbach's alpha) measures yield a coefficient of 0.87 (Cox et al., 1987). The official standardisation data of the Greek version of the scale has yet to be published, but has been kindly provided by the authors (Moraitou, Galanakis, Stalikas, in preparation).

*The Beck Depression Inventory (BDI):* The BDI was developed with the aim of measuring clinical depression (Gotlib, & Hammen, 1992), across 21 symptoms and attitudes. The scoring of the BDI is calculated by the sum of participant responses across each of the multiple choice items, which consist of four response options each. Each option is rated

between 0-3 inclusive, with a maximum score of 63. Participants who score between 0 and 9 are considered as having a low disposition for depression; scores between 10-16 as exhibiting mild depression; and between 17-29 as exhibiting an intermediate level of depression. Scores between 30-63 are considered to represent individuals experiencing severe depression. According to nine studies conducted by Beck, Steer, & Garbin (1988), the BDI's reliability amongst non clinical patients was between 0.60 and 0.90. The current study used the Greek version of the scale that has been standardised by Ntonia and Demertzi (1983), and adjusted by Anagnostopoulou (2002). The authors assert that the Greek version of the BDI presents adequate construct validity, and satisfactory internal consistency ( $\alpha = 0.84$ ). Within the current study, the revised edition (Anagnostopoulou, 2002) was used with the exception of item 19, which pertained to weight loss: a characteristic natural of women immediately after childbirth.

### Procedure

The questionnaire sets were administered to the new mothers within the first week after delivery, on the 4<sup>th</sup> or 5<sup>th</sup> day, whilst still being hospitalized. The mothers responded to the inventories individually in the afternoon prior to the clinic's visiting hours, and were provided with clarifications when needed. Data was collected between March 2008 and February 2009.

### Results

The data collected were analysed using the statistical package SPSS v.14. Table 1. displays the descriptive statistics of participants' scores on the EPDS.

In relation to the first research question, the study's results indicated that 13.70% of the sample scored more than 12 on the EPDS, and therefore presented with a risk of developing postnatal depression. The sample's mean score was  $M=7.70$  ( $SD= 4.54$ ), in that the majority of women tended towards an absence of depressive symptoms. Alternatively, participants' scores on the BDI are displayed in Table 2.

The results of the BDI indicated that 21.30% of the sample displays mild to medium prevalence of depressive symptomatology, with a mean sample score  $M=6.41$  ( $SD=4.52$ ).

**Table 1. Distribution of sample's EPDS scores across the 3 levels of risk for postpartum depression.**

	N	%
No Depression (scores 0-11)	193	85.40
Risk of Postnatal Depression (scores 12-19)	28	12.40
High risk of Postnatal Depression (scores 20-30)	3	1.30
Missing data	2	0.90
Total	226	100.00

**Table 2. Distribution of sample's BDI scores across 4 levels of depression severity.**

	N	%
Absence of symptoms of Depression (scores 0-9)	177	78.30
Mild prevalence of Depression (scores 10-16)	42	18.60
Medium prevalence of Depression (scores 17-32)	6	2.70
Strong prevalence of Depression (scores 33-63)	0	0.00
Missing data	1	0.40
Total	226	100.00

With reference to the study's second research question, correlations between the risk of postpartum depression with the following factors was assessed; age, education level,

occupation, number of children in the family, whether the pregnancy was planned or not, the pre-existence of serious health problems, the level of partner support, the level of external support from friends and family, the pre-existence of psychological distress before or during the pregnancy, complications during pregnancy, the type of delivery (natural or caesarean), and the gender of the newborn. The results of the correlations between risk for postpartum depression according to the EPDS and age ( $r=0.01$ ), partner support ( $r=-0.08$ ), and external support of friends and family ( $r=-0.09$ ) were found non-significant at  $p<0.01$ .

ANOVAs were conducted to establish differences between groups of socio-economic variables and the mean risk of postpartum depression. Tables 3, and 4. display the results across two groups; the existence, or not, of prior psychological condition before pregnancy, and during pregnancy.

**Table 3. One-way ANOVA results for the mean risk for postpartum depression between those with and those without psychological distress prior to pregnancy.**

	Sum of Squares	Df	Mean Square	F	Sig.
Between groups	214.24	1	214.24	10.83	0.001
Within groups	4411.59	223	19.78		
Total	4625.84	224			

The results in Tables 3. and 4. indicate that the risk for developing postpartum depression is affected by the prior existence of psychological distress of the mother, either before or during pregnancy.

In contrast, no other demographic and socio-economic factors yielded differences in the prevalence of postpartum depression risk amongst mothers, including gender of infant ( $F_{1,223}= .000$ ,  $p = 0.993$ ), existence of pregnancy complications ( $F_{1,223}= 1.57$ ,  $p= 0.212$ ), type of delivery ( $F_{1,223} = .867$ ,  $p = 0.353$ ), existence of chronic health problems ( $F_{1,223}= .871$ ,  $p = 0.352$ ), whether pregnancy was planned or not ( $F_{1,223}= .391$ ,  $p = 0.760$ ),

level of mother's education ( $F_{1,223} = .000, p = 0.993$ ), and occupation of mother ( $F_{1,223} = 2.147, p = 0.061$ ).

**Table 4. One-way ANOVA results for the mean risk for postpartum depression (EPDS) between those with and those without psychological distress during pregnancy.**

	Sum of Squares	Df	Mean Square	F	Sig.
Between groups	156.53	1	156.53	7.81	0.005
Within groups	4469.30	223	20.04		
Total	4625.84	224			

## Discussion

The aim of the present study was to approach a distinct understanding of postpartum depression prevalence for a Cypriot population, and assist in understanding the distribution of condition severity, and the specific socio-economic and other maternity variables that are implicated.

The results showed that the proportion of new mothers with postpartum depression symptomatology was 13.70% according to the EPDS, and 21.30% according to the BDI. Although low, in comparison to analogous Greek studies (Kritikou, Morogianni, & Loli, 1996; Moraitou, 2002; Moraitou & Galanakis, 2006; Moraitou & Stalikas, 2004; Rammou, Papaligoura & Kiosseoglou, 2004), these rates are consistent with past literature, which states that a proportion between 10% and 53% of women experience depressive symptoms after childbirth.

Such differences in the prevalence of postpartum depression amongst the present sample could purely reflect differences in its manifestation within this population. Alternatively, the low rate observed could be attributed to the sample size and method of participant recruitment. Future studies should attempt to gather a larger pool of participants, which will be simultaneously representative of the population, in order to confirm or disprove the present results.

With regard to the relationship between postpartum depression and specific socio-economic and maternity related variables, it appears that symptoms are influenced by the prior existence of psychopathology of the mother, and not by factors such as the newborn's gender, the mother's education level, the degree of social support received, other health related problems, the planning/unexpectedness of the pregnancy, and the type of delivery. In addition, such were the results of selected international literature (Areias et al., 1996; Kitamura et al., 1996; Nielsen et al., 2000).

The lack of a relationship between postpartum depression symptomatology and the provision of support from the woman's partner and immediate environment was an unexpected finding that disputes the known value of social support in the treatment of depression. The interpretation proposed in this case concerns the possibility that Cypriot women are influenced by specific socio-economic and cultural conditions that enable them to consider others as external onlookers rather than direct participants. In addition, the sample was hospitalized in a private clinic, where social support received by these women may be relatively stable with limited variability due to high economic status, and possibly a factor considered guaranteed by these women.

Future research of postnatal depression could focus on investigating new variables that may play a determining role, such as heredity, historical accounts of postnatal depression in the mother of the new mother, the existence of psychopathology in the close family environment, smoking, physical exercise, and psychological coping levels.

## References

- Alevizos, B. (1999). Depression Therapy. *Medicine Today*, 26, 11-19.
- Areias, M.E.G., Kumar, R., Barros, H., & Figueiredo E. (1996). Correlates of postnatal Depression in Mothers and Fathers. *British Journal of Psychiatry*, 169, 36-41.
- Bebbington, P.R. (1998). Age and sex influence on depression symptoms frequency: Results from a national study. *Psychological Medicine*, 28, 9-19.

- Beck, A.T., Ward, C.H. & Medelson, M. (1961). An inventory for measuring depression. *Arch. Gen. Psychiatry*, 4, 308-312.
- Bloomfield, H.H., & McWilliams, P. (2001). *Curing Depression*. Athens: Thimari. 3<sup>rd</sup> edition.
- Cox, J.L., Connor, Y., & Kentell, R.E. (1982). Prospective Study of the Psychiatric Disorders of Childbirth. *British journal of Psychiatry*, 140, 111-117.
- Cox, J.L., Holden, J.M., & Sagovsky, R. (1987). Detection of postnatal depression of the 10-item Edinburgh Postnatal Depression Scale. *British Journal of Psychiatry*, 150, 782-786.
- Dalton, K. (1971). Prospective Study into Puerperal Depression. *British Journal of Psychiatry*, 118, 689-692.
- Drago – Carabotta, D., Panagopoulos, P., Laganara, R., Maggino, T., & Alessi, C. (1997). Representations and notions of women during pregnancy. *Greek midwifery and gynecology*, 9, 2, 155-162.
- Dragona, T. (1989). Depression after child delivery. The socioeconomic dimensions. *Psychological issues*, 2, 1,33-47.
- Evins, G.G., Theofrastous, J.P., & Galvin, S.L. (2000). Postpartum depression: A comparison of screening and routine clinical evaluation. *Journal of Obstetrics and Gynaecology*, 182, 5, 1080-2000.
- Gilbert, P. (1999). *Moving over Depression*. Athens: Ellinika Grammata.
- Gotlib. I.H., Whiffen, V.E., Wallace, P.M., & Mouht, J.H. (1991). Depression and General Psychopathology in University Students. *Journal of Abnormal Psychology*, 93, 19-30.
- Harris, N.D., Deaty, I.J., Harris, M.B., Lees, M.M., & Wilson, J.A. (1997). Peripartal cognitive impairment: Secondary to depression? *British Journal of Health psychology*, 1, 127-136.
- Hobfoll, S.E., Ritter, C., Lavin, J., Hulsizer, M.R., & Cameron, R. (1995). Depression Prevalence and Incidence Among Inner – City Women. *Journal of Consulting and Clinical Psychology*, 63, 3, 445-453.
- Kitamura, T., Shima, S., Sugawara, M., & Toda M.A. (1996). Clinical and Psychosocial Correlates of Antenatal Depression: A Review. *Psychotherapy and Psychosomatics*, 65, 117-123.
- Kleftaras, G. (1998). *Depression Today: Description, Diagnosis, Theories and Research data*. Athens. Ellinika Grammata.
- Kritikou, M., Morogiannis, F., & Lolis, D. (1996). Short term Postpartum Melancholy. Minutes of the 7<sup>th</sup> National Midwifery Conference, Chania, Greece.
- Meagher, D., & Murray, D. (1997). Woman Depression. *Lancet*, 349, 117-120.
- Mpergiannaki, I. D. (2000) Psychological and psychiatric disorders related to pregnancy. In Christodoulou, G. N. *Psychiatry*. Athens, Greece. Vita Medical Publications.
- Moraitou, M. (2002). Postpartum depression study in Greece. *Eleytho*, 7, 1, 34-36.
- Moraitou, M. (2004a). Postpartum depression during women reproductive period. *Focus*, 9, 8, 39-44.
- Moraitou, M. (2004b). *The experience of maternity*. Athens, Greece. Vita Medical Publications.
- Moraitou, M. & Galanakis, M. (2006). Comparison between EPDS & BDI results in greek women. *Greek Journal of Midwifery and Gynecology*, 4, 4251-253.
- Moraitou, M. & Stalikas, A. (2004). Depression frequency during pregnancy. *Asclepius Step*, 3, 2, 67-70.
- Nielsen Forman, D., Videbech, P., Hedegaard, M., Dalby Salvig, J. & Secher, N.J. (2000) Postpartum depression: identification of women at risk. *British Journal of Obstetrics and Gynaecology*, 107, 1210-1217
- O'Hara, M. W. (1985). Depression and marital adjustment during pregnancy and after delivery. *American Journal of Family Therapy* 13: 49-55..
- O'Hara, M. W. (1986) Social support, life events, and depression during pregnancy and the puerperium. *Archives of General Psychiatry* 43: 569-573.
- O' Hara, M., Rehm, L., & Campbell, S. (1983). Postpartum Depression. A role for Social Network and Life Stress Variables. *Journal of Nervous and Mental Disease*, 6, 336-342.
- O' Hara, M., Stuart, S., Gorman, L., & Wenzel, A. (2000). Efficacy of Interpersonal Psychotherapy for Postpartum Depression. *Arch. Gen. Psychiatry*, 57, 1039-1045.
- Orr, Suzanne T. and C. Arden Miller. 1995. Maternal depressive symptoms and the risk of poor pregnancy outcome. *Epidemiologic Reviews* 17: 165-71.
- Paykel E S. (1979) Recent life events in the development of the depressive disorders. (Depue R A, ed.) *The psychobiology of the depressive disorders: implications for the effects of stress*. New York: AcademicPress.. p. 245-62.
- Paykel E S, Myers J K, Dineen M N, Klerman G L, Lindenthal J J & Pepper M P. (1969) Life events and depression: a controlled study. *Arch. Gen. Psychiat.* 21:753-60,. [Depts. Psychiatry and Sociology, Yale University, New Haven, CT]
- Pit, B. (1968) Atypical depression following childbirth. *British Journal of Psychiatry*, 114, 1325-1335.
- Papastilianou, A. & Polychronopoulos, M. (2007). Burnout, depression, role conflict and ambiguity in teachers. *Psychology*, 14 (4), 367-391.
- Rammou, S., Papaligoura, Z., & Kioseoglou, G. (2005). Postpartum depression in Greek mothers.

- Minutes of the 3<sup>rd</sup> Scientific Meeting “Research and new data in Midwifery”, Thessalonica, Greece.
- Stamouli, S. S. (2000). Postpartum Depression. In Christodoulou, G. N., Kontaksakis, V., & Oikonomou, M. Preventive Psychiatry. Athens, Greece, Vita Medical Publications.
- Terry, D.J., Mayocchi, L., & Hynes, G.J.(1996) Depressive Symptomatology in New Mothers: A Stress and Coping Perspective. *Journal of Abnormal Psychology*, 105, 2, 220-231.
- Warner, R., Appleby, L., Whitton, A., & Faragher, B. (1996). Demographic and obstetric risk factors for postnatal psychiatric morbidity. *The British Journal of Psychiatry* 168: 607-611
- Wisner, K.L., Gelenberg, A.J., Leonard, H., Zarin D., & Frank, E. (1999). Pharmacologic Treatment of Depression During Pregnancy. *Journal of American Medical Association*, 283,13,1264-1269.