

SOME PSYCHOSOCIAL CORRELATES of POSTPARTUM
DEPRESSION: A LONGITUDINAL STUDY

ÖZLEM TOKER ERDOĞAN
107629007

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HALE BOLAK BORATAV
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Some Psychosocial Correlates of Post Partum Depression:

A Longitudinal Study

Postpartum Depresyon ile İlişkili Bazı Psikososyal Etkenler:
Uzun Dönemli Bir Çalışma

Özlem Toker Erdoğan
107629007

Assoc. Prof. Dr. Hale Bolak Boratav :

Assoc. Prof. Dr. Levent Küey :

Assist. Prof. Dr. Serra Müderrisoğlu :

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- 1)Prepartum Depression
- 2)Postpartum Depression
- 3)Spousal Support
- 4)Attachment Style
- 5)Family Support

Thesis Abstract

Pregnancy is a special period in women's life that introduces various immunological, psychological, sociological changes. Biological and social aspects of pregnancy, birth and the transition to motherhood bring a radical alteration in life circumstances, lifestyle, relationships with significant others, career as well as a women's sense of self. On the other hand postpartum period constitutes a window of risk in terms of psychological disturbances; particularly depressive symptoms might increase among women in this period. Post partum depression (PPD) is a form of depression defined as a serious public health problem which women suffer from soon after having a baby. Post partum depression affects the mothers' social life, professional abilities and relationship with the baby in a negative way. Therefore the present study aims to investigate the possible risk factors for depression in the prepartum and postpartum periods. The study explores the relations between pre partum and post partum depression as well as marital adjustment, prepartum depression, support from family, and attachment patterns the individuals construct in their close relationships. In the first phase 128 pregnant women who applied to The Okmeydanı State Hospital for regular control between January 2009 and 2010 were included the study. In the second phase participants were 87 women who participated in the first phase of the study. The results indicate that depressed mood in the last trimester of pregnancy, family support, care and support from spouse, previous depression history and unplanned baby are significant risk factors for develop post partum depression. Health care

providers should be more sensitive to this problem, which creates a serious threat and appropriate intervention should be applied in time. Another recommendation we'd like to make is that screening tools like EPDS be used in the course of routine pregnancy controls. It can be suggested that women with EPDS scores higher than 12/13 be referred to further clinical examination.

Tez Özeti

Gebelik fizyolojik, psikolojik ve sosyal deęişimlerin yoğun yaşandıęı özel bir dönemdir. Gebelięin psikolojik ve sosyal yönleri, doğum ve annelięe geçiş, yaşam şartları ve biçimi, ilişkiler, kariyer ve kadının kendine bakışında radikal deęişiklikleri beraberinde getirir. Doğum sonrası dönem, psikolojik açıdan birtakım riskleri barındırır. Depresyon doğum sonrası en sık görülen psikolojik sorundur. Doğum sonrası depresyon doğum sonrası görülen ciddi bir halk saęlığı problemi olarak tanımlanmaktadır. Post-partum depresyon annenin iş yaşamını, sosyal ilişkilerini ve bebekle kurduęu baęı olumsuz yönde etkilemektedir. Bu nedenle, bu çalışmada hamilelik dönemi depresyonu ile doğum sonrası depresyon ilişkisi ve buna neden olan risk faktörlerinin araştırılmasını hedeflemektedir. Özellikle doğum öncesi depresyon, evlilik ilişkisi, aile desteęi ve yakın ilişkilerdeki bağlanma modeli ile doğum sonrası depresyonun ilişkisi incelenmektedir. Çalışmanın ilk aşamasına Ocak 2009 – 2010 tarihleri arasında Okmeydanı Eęitim hastanesine periyodik kontrolleri için gelen 128 hamile kadın dâhil edildi. Çalışmanın ikinci aşamasına ise ilk faza da katıla 87 kadın katıldı. Sonuçlar hamilelik döneminin son trimestırdaki depresif duygu durumu, aile desteęi, eş yardım ve desteęi, önceki depresyon öyküsü ve istenmeyen hamilelięin doğum sonrası depresyon için önemli risk faktörleri olduęunu gösterdi. Saęlık çalışanları, ciddi bir tehdit oluşturan ve zamanında müdahale gerektiren bu probleme karşı hassas olmalıdır. EPDS ölçeęinin rutin hamilelik kontrollerinde uygulanması da risk taraması için yararlı

olacaktır. EPDS sonucu 12/13'ün üstünde olanların ileri klinik inceleme için yönlendirilmesi önerilmektedir.

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INTRODUCTION

Becoming a mother changes a woman's life. Pregnancy is a special period in women's life that introduces various hormonal, immunological and psychological changes (Aydemir, Yılmaz & Parlak, 2008). Many of these changes are positive for most women. At the same time, however, the birth of a baby is one of the most stressful and challenging transition periods that many parents deal with (Heinricke, 1995; cited by Simpson & Rholes, Wilson, Campbell, 2003). One of the earliest feminist psychologists, Hollingworth, (1916) argued that "The bearing and rearing of children is painful, dangerous to life, and involves long years of exacting labor and self sacrifice" (cited in Crawford and Unger 2000, p. 351).

Biological and social aspects of pregnancy, birth and the transition to motherhood bring a radical alteration in life circumstances, lifestyle, relationships with significant others, career as well as a women's sense of self (Crawford & Unger 2000). Also, postpartum period constitutes a window of risk in terms of psychological disturbances; particularly depressive symptoms might increase among women in this period. (O'Hara & Swain, 1996; cited by Simpson et al., 2003; Deveci, 2003; cited by Aydemir, 2007). Post partum depression affects the mothers' social life, professional abilities and relationship with the baby in a negative way. Chrisler & Robledo (2002) argue that post partum depression must be taken into account and treated in terms of biological, psychological and social aspects.

Post partum depression (PPD) is a form of depression defined as a serious public health problem which women suffer from soon after having a baby (McCoy & Beal, Shipman & Payton & Watson & 2006). The researchers list the symptoms of post partum depression as sadness, crying, self-blame, loss of control, irritability, anxiety, tension, and sleep difficulties. Women who suffer from post partum depression may have these feelings at any time in the first year after giving birth. Aydemir (2007) points out that this condition might cause the mother, the infant or the family to have various difficulties and prevent the mother from learning parenting skills. Post partum depression may affect the life quality of the mother and the development of the infant.

Kendell et al (1987) underlined that 12.5 % of all kinds of psychiatric hospitalization of all women occur in the post partum period.. In the literature, many studies report different rate of post partum depression ranging from 5 to % 25 % (Chaudron, Klein, Remington, Palta, Allen & Essex 2001; Barnes & Balber 2007; Taylor 1996; Page & Wilhelm 2007). Likewise, postpartum studies in Turkey report various prevalence rates. Some of them found incidence rates of 14 %, 19, 4 % and 28 % (Nur, Çetinkaya, Bakır, & Demirel, 2004; Kocabaşoğlu & Başer, 2008; Aydemir, 2007). Danacı, Dinç, Deveci, Şen and İçelli (2002) assert that post partum depression is not systematically studied in terms of its prevalence and risk factors in Turkey. Eren (2007) argues that large scale studies about post partum depression must be carried out in Turkey to determine prevalence rates and local risk factors.

The present study aims to investigate the possible risk factors for depression in the prepartum and postpartum periods. The main goal of this study is to identify the associated factors and prevalence of post partum depression in a sample of Turkish mothers. The study explores the relations between post partum depression and marital adjustment, prepartum depression, support from family, and attachment patterns the individuals construct in their close relationships. Furthermore, there is an attempt to assess the strongest predictors of the liability to post partum depression.

REVIEW OF THE LITERATURE

2.1 Postpartum Period as a Window of Risk for Depression

Psychological problems and particularly depression in the postpartum period have received a growing attention in the past 20 years by researchers and health care providers (Zinga, Phillips & Born, 2005, Soliday, McCluskey-Fawcett & O'brien, 1999). Pregnancy is thought to be a phase in women's life where positive feelings are dominant. But studies show that frequency of psychiatric disorders doesn't decrease, but actually increases in this period (Akdeniz & Aldemir, 2009; Barnes & Balber, 2007, Soliday et al., 1999, Chrisler & Robledo 2002, Deveci, 2003, Simpson et al., 2003). Baby blues, post-partum psychosis and post-partum depression are three major problems in this period (Akdeniz & Aldemir, 2009; Aydemir, 2007; Irfan & Badar, 2003). Post partum depression is the most common serious illness during the postpartum period that threatens mothers' and babies' health and should be given serious attention. According to Irfan and Badar (2003), early identification of women at risk for post partum depression is possible. With these mind it is easy to say that studying risk factors for post partum depression is crucial for social health policies.

Women become more susceptible to mental disturbances in the reproductive periods when they have a great deal of changes in their reproductive hormone levels. These changes become more and more effective in the late luteal phase of menstrual period and in pregnancy (Akdeniz & Aldemir 2009). Retrospective epidemiological screenings

show that postpartum period is three or four times as risky as pregnancy in terms of development of serious psychological diseases. (Deveci, 2003; Aydemir, 2007). The first three months after birth are regarded to be the most risky period for development of depression; Mother's stress also affects fetus's development; also, psychological disorders in the postpartum period give rise to maternal disability and disturbed mother-infant relationships (Irfan & Badar 2003). So assessment and treatment of these disorders is very important for the health of both baby and mother.

Women might be disturbed mentally in the postpartum period even if no complications about pregnancy and birth appear. Though most women accommodate to physiological, psychological and social changes after birth, some women have mild or sometimes severe mental disorders (Karaçam & Kitiş, 2007). In the literature, there are many studies that try to explain the role of the cultural and social factors on postpartum period (O'Hara, Neunaber, Zekoski, 1984; Whiffen and Gotlib, 1993; Barnes & Balber, 2007; Aydemir 2007). According to Aydemir (2007), 14.5% of women experience major or minor depression in the 3-month-period following birth.

2.2 Psychiatric Disorders in Postpartum Period

In the DSM-IV, postpartum psychotic disorders are examined under three main titles: baby blues, post partum depression and postpartum psychosis (APA, 2000, Kocabaşoğlu & Başer, 2008). Aydemir (2007) states that “both psychotic and non-psychotic major depression and mania with an onset after delivery are classified under the title “mood disorders”

in DSM-IV whereas, in International Statistical Classification of Diseases and Related Health Problems ICD-10, post partum depression is classified under the part titled ‘mild mental and behavioral disorders associated with the puerperium, not elsewhere classified’ and in order to be specified as postpartum, it must begin to be seen in four weeks after delivery” (p. 17-18). Similarly, the researchers introduce such psychiatric postpartum disorders of three types (post partum depression, Baby Blues and Postpartum Psychosis) as whose borders have not yet been strictly determined or clarified (Akdeniz & Aldemir, 2009; Aydemir, 2007; Irfan & Badar, 2003; Nur, et al., 2004).

The first one is the baby blues that has a prevalence of 50-80 % and is manifested with irritability, anxiety and tearfulness, considered as natural reactions after birth. The second type is post-partum psychosis which is the most severe form with a prevalence of 0.1-0.2 %, described as lack of ability to perceive reality and hallucinations and delusions regarding the baby. The last one is post partum depression that is characterized with less prevalence (3-17 %) and more severity than baby blues that mostly appears within the period of 4 weeks to 6 months following birth. Additionally, post partum depression is known to be recognized in all three types. The researchers list the possible characteristic features of post partum depression as crying, varying mental states, pessimism, insufficient baby care, accusing oneself of insufficient motherhood and symptoms like fatigue, inability to concentrate, irritability, anxiety or forgetfulness (Nur et al., 2004 Erdem & Bez, 2009).

2.2.1. Baby Blues

Barnes and Balber (2007) consider “baby blues” as a mild form of post partum depression and define it as a normal part of postpartum period with prevalence of 75%. In Turkey, baby blues has been reported to affect 50-80 % of mothers in the post partum period (Kocabaşoğlu & Başer, 2008). Researchers describe some typical symptoms as anxiety, sadness or irritability, fatigue, insomnia, lack of energy and appetite, lack of the interest that the child needs to be shown, emotional liability, thoughts about harming oneself /and or the baby describe the disorder (Aydemir 2007; Barnes & Balber, 2007). Chrisler & Robledo (2002) describe that the baby blues were considered as “milk fever” in the 19th century due to its simultaneous appearance with breastfeeding. The symptoms of baby blues show up on the third or fourth day after delivery and tend to disappear within two weeks.

Despite its frequency, there are no available diagnostic criteria or assessment tools accepted among researchers. This condition, whose major risk factors are known to be weak familial and/or marital bonds and mood disorders before or during pregnancy, is not defined in DSM-IV or International Classification of Diseases (ICD-10) (Chrisler & Robledo 2002). Despite the studies indicating post partum depression among the 20 % of the women with baby blues, there has been no clear consensus for whether there is a straight correlation between baby blues and developing post partum depression (Akdeniz & Aldemir 2009).

The pathophysiology of baby blues has not yet been fully grasped although it is thought that sudden decline in hormonal levels in the postpartum period might be the reason. Results of progesterone and estrogen studies turn out to be discrepant and results of several other studies on prolactin, tryptophan and cortisol are hard to assess due to differences in design. Baby blues does not require treatment since the symptoms are mild and temporary, which brings the need to raise the consciousness about the condition, especially that it is frequently a temporary condition. On the condition that symptoms last more than two weeks, doctor examination should be recommended (Akdeniz & Aldemir 2009).

2.2.2. Postpartum Psychosis

Postpartum psychosis is the severest form of the psychiatric disorders appearing after delivery (Okanlı, 2003; cited by Aydemir, 2007) with symptoms such as insomnia, unrest, exhaustion, mental breakdown, headache, mood liability, confusion, delusion and hallucinations (Brockington et al., 1981; Herzog and Detre, 1976; Protheroe, 1969, cited by Troutman & Cutrona, 1990). Predominant mood states include shame due to feeling of inefficiency in baby care, desperation and depression. Although most postpartum psychosis cases appear after the third week after delivery, the disorder has been reported to be experienced for varying intervals from 3-14 days up to 1 year (Aydemir, 2007).

2.2.3. Post partum depression

Post partum depression is a mood disorder and can be described in terms of feelings of sadness, loss, anger, or frustration that interfere with everyday life (Karaçam & Kitiş, 2007). Barnes and Balber (2007) explain symptoms of post partum depression as sadness, anger, changes in appetite and sleep patterns, extreme fatigue as well as lack of interest or pleasure in activities, and guilt, especially about the baby. Additionally, new mothers who suffer from post partum depression are likely to have suicidal thoughts, feel inadequate, especially as a mother, and not think clearly.

2.3. Post partum depression

2.3.1. Definition of Post partum depression in DSM-IV

According to the Diagnostic and Statistical Manual of Mental Disorders (DSM-IV, American Psychiatric Association, 2000) post partum depression is a form of major depression that appears in the 4 weeks following childbirth. In other words the DSM-IV criteria for diagnosing major depression include the diagnosis of post partum depression as well. Symptoms of post partum depression can be listed as depressed mood, feelings of worthlessness or inappropriate guilt, lack of pleasure or interest, frequent thoughts of death or suicide and agitation or retardation. Additionally some other symptoms that can be confused with normal conditions of childbirth include weight loss, sleep disturbance, loss of energy and diminished concentration (Epperson, 1999). Researchers also point out that the similarities between symptoms of depression and the normal experience of childbirth often make difficult the diagnosis of post partum depression.

Chrisler & Robledo (2002) complain that despite the long history of the awareness of post partum depression going as far as to Ancient Greece, to Hippocrates, political paradigms have distorted the conscience regarding the disease. Barnes and Balber (2007) in their book *The Journey to Parenthood* argue that although it has a high ratio of occurrence, public awareness about post partum depression is very recent. It was only in 1994 that American Psychiatric Association has included post partum depression in the Diagnostics and Statistical Manual of Mental Disorders (DSM); the following year was to witness the breakdown of the royal marriage of Princess Diana who spoke to a journalist not only about the breakdown, but also about her struggle with post partum depression, thereby popularizing it for the first time (Barnes & Balber 2007).

Barnes & Balber (2007) highlight the fact that since Hippocrates who first classified postpartum disturbances 2400 years ago, it is just a matter of recent few years that the scholars began to understand the issue. Chrisler & Robledo (2002) trace the scientific background regarding post partum depression to Marcé, a French philosopher who published one of the first articles about postpartum emotional reactions. They marked a very interesting event for the mothers with postpartum emotional disorders in Britain in 1939, when the British Parliament adopted the Infanticide Act, which allowed mothers who killed their children within the first 12 months to be submitted to a psychiatric institution instead of being charged with murder.

2.3.2. Theories Regarding the Development of Post partum depression

There are different theories about post partum depression. According to Atkinson and Rickel (1984) there are two theories to define post partum depression one of which is social stress theory and the other, behaviorist theory. The former conceptualizes the birth and joining of the baby to the family as an “acute social event” which is a stress making factor that obstructs the parents’ patterns of life and requires them to form new patterns of behavior. (Gordon, Kapostins & Gordon, 1965) Many researchers (Gordon et al., 1965; Shereshefsy and Yarrow, 1973; Yalom, Lunde, Moos & Hamburg, 1968) put forward that such an obstruction increases the likelihood of women to develop emotional disorders. According to social stress theorists, as the stress experienced increases, the possibility of functionality and disordered behavior gets higher. (Dohrenwend & Dohrenwend, 1974) they explain that the determinants of post partum depression for most women are not the internal physiological variables, but the external ones related to factors like childcare cast obstructions to the old patterns of behavior. Behaviorist theory hypothesizes that a sudden and deep change (like the one in peripartum period) in the environment surrounding the individual causes a decrease in the rewarding and positive activities, whence appears the decline of positive reinforcement as a key prerequisite for depression onset. (Lewinsohn, Youngren and Grosscup, 1979, cited by Atkinson and Rickel, 1984).

Both of the viewpoints mentioned above put forward that possibility of post partum depression increases as obstructions to normal patterns of life arise in the postpartum period. In their research, Atkinson and Rickel (1984)

evaluated the extent of distortion and depression the first-time parents went through in this theoretical framework. According to the results, both among women and men, the most effective predictor of depression was the level of depression before giving birth. When the depression level before birth was checked, post partum depression was strongly related to low levels of pleasant feelings about the event of birth for women before birth, whereas it was connected with the degree of positive perception of the infant's behavior for the fathers. (Atkinson & Rickel, 1984).

Post partum depression has also been approached from the psychoanalytic perspective. Blum (2007) takes back the cause of post partum depression to an anecdote that involved Freud who confronted a young woman with loss of appetite, vomiting, insomnia and anxiety that had difficulty looking after the baby after her first delivery. The baby was given to another woman for breastfeeding for a while, however, on giving birth to the second baby three years later, she had the same problems appeared in which point Freud was called to visit her. After a couple of sessions of hypnosis, Freud's approach would be towards the mother's own need for care from her environment, which led to suppressed anger. Blum (2007) suggests that Freud, though unaware of physiological changes, recognized the anger with the lack of care that the mother needed after giving birth.

Blum (2007) cites Helene Deutsch (1945), the first analyst to write about motherhood, who argued that mothers should have enough care from their mothers back in their childhood in order to give loving and

affectionate care to their own babies. Blum (2007) identified three emotional conflicts surrounding post partum depression: dependency, motherhood and aggression. To explain dependency, he cites the case by Halberstadt-Freud (1993) of a young woman who expressed feelings of rage towards her mother; Halberstadt-Freud (1993) argued that the woman's unresolved symbiotic illusion was the underlying psychodynamic factor for Post partum depression. Psychodynamic viewpoint suggests that every individual has dependency wishes and needs. Mother's unconscious needs might be triggered when the baby is born, which provokes the feelings of envy because of the advantaged position of the loved and cared for baby. The mother must manage her own such negative emotional reactions towards baby. So, according to the studies across psychoanalytic literature, the mother can be free from psychopathology at pregnancy or after birth, only if she manages to deal with such negative tendencies Blum (2007).

Blum (2007) named 'motherhood conflict' the second distinctive emotional conflict that he thinks builds up a postpartum depressive period. Based on the argument that the mother needs a positive role model to accomplish the role of mothering, the author explains that some women have little or no positive model for mothering and report problematic relationships with their mothers and get inadequate interest from them or are unwilling to care for them. Thinking they were not satisfied by the relationship with their mothers prevents those women from having

affectionate feelings towards their babies, and makes motherhood a conflicted and difficult task.

The third emotional conflict is aggression. Many women with postpartum depression have difficulties in managing their anger. Indeed they have difficulties in expressing their anger, in result of social constrains about motherhood. Dramatic changes in mother's life and difficulties makes new mothers deprived and put them under stress. If they haven't got enough coping methods, this stress would turn into anger heading towards the baby as the source of stress. Giving care to a baby is a difficult and compelling job, so there must be significant assistance from the father, other family members and friends in baby care. Night shifts and irregular sleeping patterns increases mother's stress level. Many mothers reported about their anger towards the baby, and their fantasies about getting rid of the baby. This double edged situation, because on the one hand they feel a strong anger towards the baby, while on the other hand they feel guilty because of their feelings. Blum (2007) gives the example of many mothers reporting their fear of giving harm to the baby.

Among the few studies that deal with psychoanalytic matters in postpartum depression is Menos and Wilson (1998), which includes a hypothesis that women suffering from PPD have affect tolerance, affect expression, and sense of personal agency according to the measures on the Epigenetic Assessment Rating Scale. The researchers in this study established that among the three groups –the first consisting of women with postpartum depression, the second, of non-depressed women, and the third

being the control group- women with PPD showed tendency of affect tolerance, affect expression and personal agency, which were observed less on the individuals in control group. As a result of the study Menos and Wilson come to conclude that the postpartum state causes a regressive trend. On the other hand a healthy person holds adaptive flexibility while the regressive trends are reversible.

2.3.3. Differences from Major Depression and Baby Blues

Barnes and Balber (2007) note that people often mix up blues with post partum depression due to same symptoms. Nur et al. (2004) state that the symptoms of post partum depression are the same as the ones seen in depressed women who have not given birth, and stress that it might be hard to differentiate post partum depression from baby blues, but, they go on to say that feelings of dislike towards family or negative feelings towards the baby are more visible in the case of post partum depression. Main distinctions between the two are that post partum depression is more severe, has a longer duration, and generally appears at any time during the first year after the delivery.

There have been four arguments maintaining that post partum depression is qualitatively different from the non-postpartum depression types (Whiffen & Gotlib, 1993). The first is that postpartum depression cases are more common than the depression occurring in non-postpartum periods. Whiffen and Gotlib (1993) claimed, by a comparison of the results of etiological studies, that depression, specifically minor depression, appeared after child delivery and this would be suitable with the idea of

diagnosing it as a separate depression type. Another argument maintains that if the depression cases after childbearing need to be seen separately, then these have to be related with a variable, such as giving birth, that is not seen in the course of development of non-postpartum depression. The third theorized differentiation is that postpartum depression has a different clinical aspect from non-postpartum depression, and that post partum depression is rather mild compared to typical depression seen among psychiatry patients. The same study notes that postpartum cases don't involve the usual symptoms like thoughts of self-destruction or terminal insomnia, and the patients frequently suffer from high levels of anxiety and irritability. If post partum depression is not severe, the episodes are expected to disappear more rapidly than those of non-postpartum depression. In a study about the course of post partum depression (Kumar and Robson, 1984) it was reported that half of the participants who showed depressive signs in the third month after delivery were still depressive in the sixth month, but not after one year, which shows that post partum depression is not as permanent as typical depression (Whiffen & Gotlib, 1993). The last way to differentiate post partum depression from typical depression is to look at the psychiatric history. A lot of professionals believe that post partum depression appears among women who are emotionally balanced before giving birth.

2.3.4. Studies of Prevalence and Incidence of Post partum depression

Chrisler & Robledo (2002) point out that for several reasons; the studies carried out regarding the topic have not been able to get an

agreement on assessment for post partum depression, which makes it difficult to make definitions or to have reliable prevalence rates. The researchers note that the women who participate in these kind of studies are mostly European-American, middle-class or married women, and that the women from the lower income groups are not generally represented in the mentioned studies. Baker and Oswalt (2008) cite from Herrick (2000) that half of the post partum cases go undetected. One reason why post partum depression often goes easily unnoticed is that the symptoms appear later than expected dates on the psychiatric calendars. Early assessment results in underestimating prevalence rates and false diagnosis of post partum depression. Another important reason is the fact that mothers usually hide their symptoms and do not report their emotional conditions truly when they are asked to express themselves in the self report scales,. Generally because they think they should be happy about the event of having children while they might actually be feeling unhappy, which leads them to feelings of guilt. The process of having a baby is often regarded as the most challenging and stressful life transition for many parents. On the other hand because there is such a wide agreement that having a child is such a nice experience, mothers feel guilty to express their psychological difficulties including depression in the post partum period (Barnes and Balber , 2007).

Many studies report that prevalence rates of post partum depression among women vary from 5% to 25% (Chaudron et al., 2001; Barnes & Balber 2007; Page & Wilhelm 2007). Wissart, Parshad, Kulkarni (2005) found higher depression rates, such as 56% in prepartum and 34% in

postpartum in Jamaica. The authors point out that women having ante partum depression have more risk of having post partum depression. Research also finds that depressive condition of these women tends to recur by 30-50 % when they give birth again (Aydemir 2007). Baker and Oswalt (2008) state that prevalence rates vary greatly between different studies ranging between 10-15 %, while baby blues has a higher prevalence of 70%. The researchers used a new scale for detecting post partum depression called the Post partum depression Screening Scale (PDSS) developed by Beck and Gamble (2002), and found a prevalence rate of 22.5% in minority women in USA.

Some studies carried out in Turkey have shown that prevalence rates for post partum depression are between 14 % and 29 %. (Nur et al., 2004, Kocabaşoğlu & Başer, 2008, Aydemir, 2007). In one research, post partum depression incidence was not found as being any higher in the postpartum period than the rates found among the women in the general population (Nur et al., 2004). Durat and Kutlu (2010) reported the incidence of postpartum depression in Sakarya among 126 women as 23.8% while Dündar (2002) found % 36, 9 rates in Manisa. Comparatively, Eren (2007) found, the prevalence of post partum depression among 103 pregnant women who had applied to the gynecology clinic of a state hospital in İstanbul to be 17.5%.

Gülseren L, Erol A, Gülseren S, Küey L, Kılıç B, Ergör G. (2006) conducted a study to investigate the prevalence of depression in the last trimester of pregnancy and within the first 6 months postpartum.

Additionally they examined an association between ante partum and postpartum depression while examined the risk factors of Turkish women. The authors measured depression at 36-38 weeks ante partum and then again at 5-8, 10-14 and 20-26 weeks postpartum using the Edinburgh Postpartum Depression Scale. They found that the prevalence of depression was highest in pregnancy (21.6%) and decrease in the follow-up period (16.8%, 14.4% and 9.6%). Gülseren et al. (2006) concluded that ante partum depression was a statistically significant risk factor in the postpartum period. Furthermore the authors stated that past history of mental illness, history of mental illness in first-degree relatives and adverse life events were associated with ante partum depression while low income, adverse life events and a poor relationship with the husband were associated with postpartum depression. Gülseren et al. (2006) proposed that making assessments in the last trimester of pregnancy will be very helpful in diagnosing and preventing depression in women at high risk.

Ayvaz, Hocaoglu, Tiryaki and Ak (2006) conducted a study aiming to demonstrate the prevalence rates and risk factors for post partum depression among a sample of 132 women randomly selected from various healthcare service provider foundations in Trabzon city center; 6-8 weeks and six months after delivery, they applied Edinburgh Postpartum Depression Scale (EPDS), and as average found the prevalence rate to be 28.1%. The researchers list the restrictions of their own study as such factors like a small sample group of women from just one city center, which, they think, brings about a great deal of problems to the possibility of

generalization of the results. Another restriction was that the women in the sample group were not thoroughly and properly examined and diagnosed with post partum depression; on the contrary, their condition is measured only by way of scales. But they think that despite these restrictions, their study is of great importance in that it is the first one to explore the incidence of post partum depression in Turkey, using a tool prepared to be made use of in this field. Ayvaz et al. (2006) call for further field studies of epidemiological kind that use samples from different locations. Studies carried out in Turkey are reported in Table 1.

Table 1. Studies carried out in Turkey

| Reference | Sample Characteristics | Measures | Prevalence | Cut-off points | Other Outcomes |
|---|---|---|--|----------------|---|
| Alkar Ö.Y., Gençöz T. (2005) | 151 postpartum women | Edinburgh Postpartum Depression Scale (EPDS), The Dyadic Adjustment Scale and labor related questions | Women who perceived their labor as difficult and/or those who had marital problems during their immediate postpartum period, constituted the risk group for developing postpartum depressive symptomatology. | ≥ 12 | After controlling for the variance accounted for by age and number of children, negative affect and marital maladjustment measures were found to be significantly associated with postpartum depression. |
| Aydemir, N (2007) | 211 postpartum women having babies between 0-1 years age | Edinburgh Postpartum Depression Scale (EPDS) Sociodemographic form | 30.6% | ≥ 13 | There's a need for a clinical assessment in the post partum period. |
| Ayvaz, S. , Hocaoğlu, Ç. , Tiryaki, | 242 mothers in the postpartum | Edinburgh Postpartum Depression Scale (EPDS) | 19.4% | ≥ 13 | Major risk factor for PPD was found to be low monthly income. |

| | | | | | |
|---|--|--|--|-------|--|
| A. , Ak, İ. (2006) | period between 2-6 months | Sociodemographic form | | | |
| Buğdaycı R., Şaşmaz C.T., Tezcan H., Kurt A.Ö., Öner, S. (2004) | 1447 women | Edinburgh Postpartum Depression Scale (EPDS) | 29.0% in months 0–2 after delivery, 36.6% in months 3–6 after delivery, 36.0% in months 7–12 after delivery, 42.7% in months 13 plus after delivery. | >= 12 | In this population, PPD prevalence was substantial at all time points. The prevalence was at its lowest level before the second postpartum month and increased with time. The decrease in the intensive social and physical support given to the mother immediately after delivery may explain this trend. |
| Danacı, A. E., Dinç, G., Deveci, A., Şen, F. S., & İçelli, İ. (2002) | 257 women participated | Edinburgh Postpartum Depression Scale (EPDS) Sociodemographic form | 14% | >= 12 | The negative impact of bad relations of the mother with her family-in-law on postpartum depression seems to be a distinguishing aspect of Turkish culture. |
| Ekuklu, G., Tokuç, B., Eskiocak, M., Berbero ğlu, U., Saltık, A. (2004) | 210 mothers participated, 178 of them were included in the analyses | Edinburgh Postpartum Depression Scale (EPDS) | 40.4% | >= 12 | Although the risk factors were similar to those in other studies, other family members' mention of wanting a son may have caused depression in the mothers. |

| | | | | | |
|---|--|---|--|-------|---|
| Gülseren L, Erol A, Gülseren S, Kuey L, Kılıç, B, Ergör G. (2006) | 125 women at 36-38 weeks antepartum and then again at 5-8, 10-14 and 20-26 weeks postpartum. | Edinburgh Postpartum Depression Scale (EPDS) sociodemographic form | 21.6% in pregnancy and declined gradually in the follow-up period (16.8%, 14.4% and 9.6% respectively). | >= 12 | Antepartum depression was a statistically significant risk factor during the postpartum period. |
| İnandı T., Buğdaycı R., Dündar P., Sümer H., Saşmaz T. (2005) | 1350 women participated | A structured questionnaire and Edinburgh Postpartum Depression Scale (EPDS) | 31.1% | >= 12 | The prevalence of EPDS-based depression among women in the postpartum the period was high, and was associated with several social, economic and demographical factors. |
| Karaçam Z. & Ançel, G. (2009) | 1039 women participated | Edinburgh Postpartum Depression Scale (EPDS) | 27.9% | >= 12 | Many factors influenced the development of depression and anxiety in pregnancy, and a positive correlation was found between depression and anxiety. |
| Karaçam Z., Önel K., Gerçek E., Aydın (2000) | 314 women participated | Edinburgh Postpartum Depression Scale (EPDS) | Mean scores on Edinburgh Postpartum Depression Scale: 14.86+/-6.08 vs. 7.28+/-4.85; p<0.001 for women with | | Unplanned pregnancy had a negative impact on the development of positive behavior concerning self-care, physical well-being, labour experience, pain in labour and psychological status in the early postpartum period. |

| | | | unplanned pregnancy vs. planned pregnancy | | |
|--|---------------------------|--|--|-------|---|
| Nur, N. , Çetinkaya, S. Bakır, D.A.& Demirel, Y. (2004) | 750 women participated | Edinburgh Postpartum Depression Scale (EPDS) | 28% | >= 12 | Excessive risk of depression was associated with several factors including unemployment, low education, poverty, poor family relations and maternal health problems. |
| Sabuncuoğlu, O., & Berkem, M. (2006) | 80 women participated | A sociodemographic data sheet, Edinburgh Postpartum Depression Scale (EPDS) and Adult Attachment Style Questionnaire (AAQ) | 30% | >= 11 | Maternal insecure attachment behavior, stimulated by the close relationship with the infant may have contributed to the factors that may give rise to symptoms of depression. |
| Taşdemir, S., Kaplan, S., Bahar, A. (2006) | 101 women participated | A sociodemographic data sheet, Beck Depression Scale | 21.8% | >= 12 | The relationship between the health status of the newborn and postpartum depression was considered important. |
| Vural, G., & Akkuzu, G. (1999) | 90 women participated | A sociodemographic data sheet, Beck Depression Scale | 21.2% | >= 12 | Likelihood of being depressed was higher for mothers who had difficulties in caring for their babies and themselves. |

Researchers explain this wide range of diversity of the results achieved across the related literature by such factors like typical features of the society researched (economic conditions, health conditions in the society in the given period, etc.), the choice and size of the sample group, methods of defining depression and differences in diagnostic criteria and assessment tools (Ayvaz et. al, 2006; Doğan, 2000; Karaçam & Kitiş, 2007). Nur et. al.(2004) found the incidence of post partum depression diagnosis among their study sample to be 28 %, which they say to be far higher than the average rate of the past research studies conducted in Turkey. They explain this discrepancy with the rapid social, demographic and economic changes taking place recently.

It is also hard to have an accurate assessment of the incidence and prevalence of post partum depression, when one considers the variability of scaling tools and scaling times (Chaudron et al., 2001). The studies carried out in the American and European societies using the clinical assessment show prevalence rates between 3.5 %-17% (Bashiri & Spielvogel 1999; Evins & Theofrastous 1997) whereas the studies using the self report scales give rates between 3%- 42 % (Cantwell and Cox 2003, Chandran, Tharyan, Muliylil, & Abraham, 2002; Chaudron, Klein, Remington, Patla, Allen, & Essex, 2001; Dennis 2004; Georgiopoulos, Bryan, Yawn, Houston, Rummans, & Therneau, 1999), whereas the rates are seen to decrease on assessment with structured interview techniques. In Turkey, studies using self report scales exhibit the frequency of depression after giving birth between 21.2 and 54.2 % (Ayvaz et. al, 2006; Buğdaycı and et al., 2004;

Büyükkoca 2001; Ekuklu, Tokuc, Eskiocak, Berberoğlu, Saltık, 2004, İnandı et al., 2002),

Most of the research on the prevalence of post partum depression is based on screening tools that measure severity of depressive symptoms rather than clinical or diagnostic assessment of depression. Indeed focusing only symptoms of post partum depression can lead to problems. O'Hara et al. (1984) pointed out that many symptoms of depression are similar to physiological changes of pregnancy including loss of sexual interest, appetite changes and fatigue. It is important to differentiate between pathological state and the usual outcomes of giving birth. It can be said that the higher prevalence rates obtained through the scales applied might be related with the difficulty of differentiation. In addition, depression measures have not been standardized for pregnant and puerperal women, which may lead to overestimation of prevalence and severity of depression in prepartum and post partum period (O'Hara et al., 1984).

Another problem arises relates to the presence of a cutoff score on the self-report screening tools. Women with scores over the cutoff score cannot always be diagnosed with post partum depression; rather, they should be assessed with clinical interviews and other diagnostic criteria altogether. Depue & Monroe (1978) put forward that evaluation through a fixed cutoff score cannot be accepted because, they explain, there is no correlation between the clinical aspects and measured severity of depression. Women with scores above cutoff point should be considered to be at risk for Post partum depression.

There are very few studies that rely on diagnostic criteria and clinical assessment together. Cutrona (1983), who used DSM-III as the diagnostic criteria, for example, reached a prevalence rate of 3, 5 % among women in their third trimester of pregnancy and 8,1 % in the first two months postpartum period. These rates seem to be lower than usual and Cutrona (1983) explain these results with the fact that the prevalence rates reached with self report tools might be confused with the normal physiological changes in the period around birth.

Clearly, studies on depression epidemiology should be done using comparable methodology and in different societies.

2.3.5. Subthreshold of Post partum depression

Lifelong prevalence of subthreshold depression in the society is estimated to be between 11, 8 % and 23, 4 % according to related literature (Broadhead et al., 1990; Johnson et al., 1992; Judd, Rapaport, Paulus & Brown, 1994; cited by Weinberg et al., 2001).

There is little knowledge about subthreshold depression in the postpartum period (Weinberg, Tronick, Beeghly, Olson, Kernan & Riley, 2001). Weinberg et al (2001) claim that individuals with subthreshold depression do not exhibit the diagnostic criteria in DSM-III and DSM-IV for major depression, nor do they suffer from required number of depressive symptoms to get diagnosed with major depression. These cases neither involve a symptom for more than two weeks nor meet the criteria of depressive mood/ anhedonia in DSM-III for two weeks or of clear distortion of functionality described in DSM-IV and they do not get diagnosed with major depression. It seems that variety and variability about the definition of post partum depression is caused by the ambiguity of the criteria used for major depression and subthreshold depression. The idea discussed in some studies, is that depressive symptoms take place in a process and that major depression and subthreshold depression are not different syndromes but represents two different points of intensity, is a clear reflection of this matter (Chaudron, et al., 2001; Weinberg et al., 2001).

The hypothesis put forward in the study by Weinberg et al. (2001) was that women with subthreshold depression would be weaker than the control group, and that they would exhibit better functionality than the

major depression group in peripartum period. This study involved 124 women in the third month after birth in order to determine the influence of subthreshold depression and major depression on psychosocial functionality. The researches reported that compared to the controls, mothers with subthreshold depression had higher depressive symptomatology. As expected they also experienced more anxiety and psychiatric symptoms. In final consideration, the researchers concluded that in general population subthreshold depression is associated with psychosocial dysfunctions. Conversely, Campbell and Cohn (1991) who compared 4 groups of women with and without chronic, subthreshold and recovered depression in respect to their levels of social functionality in the postpartum period found that only chronic depression jeopardized the mother's functionality.

2.4. Etiology of post partum depression: Risk Factors

2.4.1. Biological Susceptibility

Etiology of post partum depression has not been able to be fully explicated; however, it is regarded as multifactorial, with biological, social and cultural factors interacting (Payne, Palmer and Joffe, 2009). There are many reasons for this, including hormonal transitions, previous psychological problems, unplanned and unwanted pregnancy, difficult birth operations, adolescent pregnancy, domestic conflicts, previous depression history, financial problems, lack of social support, lack of support from birth team and stressful life style (Taşdemir, Kaplan & Bahar, 2006, Vural & Akkuzu, 1999).

Most women experience hormonal fluctuations during premenstrual, postpartum and perimenopausal periods, when they are affectively more vulnerable. Hormonal fluctuations can cause mild depressions in general population; while in some women can result in severe symptoms. According to Payne et al. (2009) women having severe symptoms mostly have had mood disorders beforehand.

Payne et al. (2009) uses the term “reproductive depression” for depression disorders that occur as a biological response to hormonal changes, such as premenstrual dysphoric disorder (PMDD), post partum depression (post partum depression), and perimenopausal depression. Rapid changes in estradiol and progesterone levels in brain regions are suspected to be responsible for mood changes. The researchers mention studies showing that the sudden decrease in the progesterone, estrogen and cortisol levels and elevated thyroid function disorder in postpartum period are correlated with post partum depression: “It’s hypothesized that women with reproductiverelated depressive disorders have abnormalities within the gonadal steroid system” (Payne et. al., 2009, p. 76). For these reason they argued that estrogen treatment is effective in preventing and treatment of post partum depression. In a trial of randomized, double-blind and placebo-controlled group of 61 women, it was found that 80% of patients getting estrogen treatment had a significant decrease in depression symptoms compared to 31% of women in control group. They argued that findings support the hypothesis that reproductive depression stems from biological vulnerability to normal fluctuation of reproductive hormones. Doğan (2000)

points out the association between high depression incidence in the postpartum period and common hormonal and mood changes, (cited in Boyd and Wiessman, 1989). Wissart et al. (2005) also found that high thyroid levels, especially TT4 increases depression risk. On the other hand, no correlation has been found with prolactin levels (Akdeniz & Aldemir 2009). Chrisler & Robledo (2002) describe some etiological data which can be formulated as follows: the hormonal changes are crucial to the prognosis of post partum depression, but the correlation between the hormonal changes and psychological issues is not always predictable.

Blum's (2007) cites from Robertson et al. (2004) the prevalence of post partum depression is higher among the women with history of depression during pregnancy or in non-postpartum periods. The author also underlines, with a citation from Harris (2002), the fact that no matter how strong the relationship between dramatic change in levels of a number of hormones released and giving birth, it has not yet been fully established in any study that developing mood disorders such as major depression has a direct correlation with hormone changes.

Payne et al. (2009) proposed that post partum depression has a genetic basis. Sullivan, Neale & Kendler (2000) found that both environmental and genetic factors had role in depression risk, and that there may be 31% to 42% role for heredity. Another study about heritability of depression was conducted by Hamet and Tremblay (2005). They found that people whose first degree relatives had a depression history were twice to

third more likely to have depression, than those who did not have any family members with depression history.

2.4.2. Prepartum Depression

Another factor to increase the chances of post partum depression has been found to be depression in the prepartum period (Wissart, Parshad, Kulkarni, 2005). Chapman, Murray, Johnson and Cox (2000) argue that depression in the prepartum period is more prevalent than is thought and that it is neglected or go unnoticed. Bowen and Muhajarine (2006) argue that incidence of depressed pregnant mothers is around 20 % and besides having negative effects on the mothers and babies, it makes them susceptible to post partum depression. Kitamura Shima, Sugawara and Toda (1996) underline the contrast between wide range of research on post partum depression and limited attention paid to depression during pregnancy and includes a list of studies which tried to meet this need. They refer to controlled studies indicating significantly higher rates of depression among antepartum women than non-pregnant women. Their report points to incidence rates of 4%-29% for antepartum depression. These studies show the seriousness of antepartum depression and suggest that health care-providers should consider applying some scales like EPDS during the pregnancy controls to assess possible occurrence of post partum depression, so that the consequences can be avoided.

The causes of peripartum depression have been reported to be obstetric factors (e.g. pregnancy or giving birth to the first baby and history of abortion), early unpleasant experience (e.g. loss of significant others),

personality (e.g. susceptibility to mental disorders), attitudes to pregnancy (e.g. view of the husband about the event of pregnancy), negative expectations about accommodation after birth or decrease of intimacy with husband. The researchers call for further research on distinctive features of antepartum depression, particularly on the possible correlation between antepartum depression and hormonal variables.

2.4.3. Previous Depression History

In one study, it was shown that post partum depression occurred among 33,3 % of women with depression history, whereas 91,8% of those without depression anamnesis did not have the condition. In another study carried out in Denmark on 5091 women, depression risk was observed to increase among the women with depression history before pregnancy. Similarly a meta-analysis based on 59 studies concluded past psychiatric or psychological problems as clear-cut predictors of depression in the first months following delivery.

A prospective cohort study with 1662 participants in the US marked recovered depression anamnesis as the strongest risk factor and concluded that it caused depressive symptoms up to four times compared to the cases without depression anamnesis. Likewise, another study accepted recovered depression history as a predictor for post partum depression. A study on a sample of 259 women in Sweden showed that 46 % of the women with depression history before pregnancy developed post partum depression in the first 6-8 weeks and /or 6 months. In a study carried out on 622 women

in Canada, the women who reported depression anamnesis were detected to have four times as more risk to have depressive symptoms.

2.4.4. Attachment Styles

Within psychoanalytic literature, there has been a growing emphasis on early relationship processes in understanding psychopathology. Early childhood experiences as well as mother-infant relationship are central themes of the attachment theory. Attachment theory is one of the theories that inform the study of a broad view of normal and pathological developmental processes (Fonagy, 2001). Bowlby (1973) argued that childhood relationships with the parents' result in internal representations of the self and others named also as a working models. Early interactions with the caregiver influences the formation of mental representations of others in terms of their availabilities, a self-image in terms of worthiness, and an ability to use closeness as a soothing mechanism in time of distress (Milkulincer, 2002).

Sperling & Berman (1994) proposed that adult attachment is the persistent style that the individuals' relate to others with an urge to establish physical and emotional security. Hazan and Shaver (1987) were the first ones to create a self-report measure to adapt the previously formulated infant attachment categories to the adults. The researchers formed a new measure for the three attachment categories (secure, anxious/ambivalent, avoidant) and verified that attachment patterns persist throughout the adulthood.

More recently, Griffin and Bartholomew (1994) also studied adult attachment patterns. They categorized adult attachment into four patterns, based on two main dimensions; view of the self and view of the other. In the model image of the self corresponds to the worthiness of love and care while on contrary image of the others corresponds to seeing others trustworthy or not. According to their formulations, people who have a positive image of the self and the other can be listed under secure attachment category whereas people with a negative view of the self and other can be listed under the fearful attachment category. People who have a negative view of the self and positive view of the other represents the preoccupied group on the other hand people with positive view of the self and negative view of the other points to the dismissing attachment style. Different adult attachment styles have different levels of avoidance and dependence. Securely attached adults view themselves worthy of love and care and see others as trustworthy. As a result they show low avoidance and low dependence on their relations, while fearfully attached adults show high avoidance and high dependence on their relations. Also, according to Griffin and Bartholomew's (1994) model, every individual can show tendencies more or less in each of these four domains.

Research makes it evident that there is a relation between adult attachment patterns and psychological well being (e.g. Bifulco, Moran, Ball, & Lillie, 2002). Bifulco et al. (2002) found that insecurely attached individuals are more likely to have a negative view of self and have less support from others. Some research found high depression risk in insecurely

attached people, especially people with fearful attachment patterns (Carnelley, Pietromonaco and Jaffe, 1994; Murphy & Bates, 1997). Dozier, Stevenson, Lee and Velligan (1991) proposed that insecure attachment has correlation with diagnosed mood disorders, especially among obsessed people. Pianta, Egeland & Adam (1996) suggested that correlation between insecure attachment and psychiatric symptoms could be caused by high levels of anxiety. Sabuncuoğlu and Berkem (2006) also point to the evidence in several studies indicating the negative role of insecure attachment in many serious mental problems like major depression, social anxiety disorder, obsessive-compulsive disorder, and chronic pain disorders.

Sabuncuoğlu and Berkem (2006) conducted the first study on attachment style as a risk factor for post partum depression among a sample of 80 mothers in Turkey. The mothers, who scored over the threshold on EPDS, were seen to have developed insecure attachment relationships; the researchers argue that their study showed sufficient correlation of postpartum depressive symptoms with insecure attachment style, supporting the findings of previous studies on the subject. However, they accept that their tool for identifying attachment styles, Adult Attachment Style Questionnaire (AAQ), might be insufficient or inconsistent, partly because of its original limitations and partly because it might be incompatible with non-western, traditional cultural context of this study.

Postpartum depressive symptoms might be affected by the attachment style of mother, stimulated by the birth of the infant as well by

several demographic factors (Sabuncuoğlu ve Berkem, 2006). In the postpartum period when a specific kind of attachment between mother and the baby is being formed, mother's own attachment history with her own mother might influence the way she thinks and feels, as well as the relationship between her and her baby. For example, Adam, Gunnar and Tanaka (2004) reported that people with secure attachment patterns tend to give warmer, more consistent and more engaged parenting to their infants. Insecurely attached women may be more vulnerable to developing post partum depression.

2.4.5. Psychosocial factors

Psychosocial factors are also important predictors of post partum depression. Chrisler and Robledo (2002) focus on the correlations of post partum depression with personality, psychopathology, stress and coping style. They cite from Pfof et al. (1989) that women with higher scores on femininity scales tend to exhibit lower depressive moods during pregnancy as well as in the postpartum period. The reason is that these women had already adopted a gender role which is not in conflict with motherhood. Women with a history of depression or other psychiatric disorders are more likely to develop post partum depression than other women. In addition, neuroticism has been shown to be an important signifier in predicting post partum depression and baby blues. Above all, Henshaw et. al. (2004; cited in Baker and Oswald, 2008) point that postpartum blues is one of the risk factors of post partum depression.

Based on an evaluation of multiple risk factors, McCoy et al. (2006) list three combinations of variables that increase the risk of post partum depression. Accordingly, the participants who fed their children with formula and had a history of depression, who both smoked and did not breastfeed their babies, and who smoked and had a history of depression were more likely to develop post partum depression.

Chaudron, Klein, Remington, Palta, Allen and Essex (2001) tried to find out whether somatic complaints, subsyndromal depressive symptoms or birth related concerns were predictive in post partum depression. The risk factors were found to be “maternal age, depression during pregnancy, thoughts of death and dying at 1 month postpartum and difficulty falling asleep at 4 month postpartum” (page 103).

In addition to psychological factors, low educational and economical status (Dearing et al., 2004; cited in Baker and Oswald, 2008) and age are among other risk factors. Chen (1996) reported that the incidence of post partum depression is higher for teenage or adolescent mothers and decreases with age. Older women and women with high school education are more likely to seek help in case of post partum depression (Baker and Oswald, 2008). McCoy, Beal, Shipman, Payton and Watson (2006) investigated the connection between prevalence rates of post partum depression and variables such as age, breastfeeding, tobacco use, marital status, depressive encounter, and the method of giving birth as risk factors of post partum depression. This study age showed no relation to possible post partum depression. On the other hand the study by Sabuncuoğlu & Berkem (2006)

in Turkey did not reveal any significant difference about parent age, infant age, duration of marriage, relative marriage, unexpected pregnancy, method of delivery, having the first baby, infant's gender, duration of breastfeeding, or loss of a previous baby in terms of their effect on occurrence of post partum depression.

Low educational and economical status, lack of partner support, low marital adjustment, personal and familial (especially postpartum) depression history, weak social support, negative life experiences, unexpected pregnancy and medical problems like hyperemesis at pregnancy (Ayvaz and et al., 2006), health problems of the baby, premenstrual dysphoria, baby blues, antepartum anxiety and depression (Aydemir, 2007) have been identified as risk factors for post partum depression in Turkey. (Nur et. al, 2004). Nur and colleagues mention other studies carried out in late 1980's and 1990's which the fact that women who report not being able to receive sufficient support from their environments and not having a stable marriage are more likely to have depression symptoms in the postpartum period; sufficient support, on the other hand, has a positive impact on the mother's well-being. Ayvaz et al. (2006) state the importance of understanding the relationship between post partum depression and the changing marital affairs, new responsibilities, possible economic problems which are in a way concerned with the coming of the new member of the family and bring about a great burden and stress.

Alkar Ö.Y. and Gençgöz T. (2005) conducted a study to examine the associated factors of the early post partum depression, in a Turkish

sample of 151 postpartum women. The study revealed a significant association between age, number of children, marital maladjustment and post partum depression. Eren (2007) conducted a study with 103 pregnant women to find prevalence of post partum depression, and risk factors in one of the biggest hospitals in İstanbul. This study aimed to examine the factors associated with post partum depression taking into account the Turkish sociocultural context as well as relational patterns of the new mothers. She marked low educational level, chronic illness, previous depressions and smoking as risk factors for development of post partum depression.

2.5. Spousal and Family Support

Spousal and family support is maybe the most important sources of help for new mothers. Single mothers were found to be at higher risk of depression (Wissart et al. (2005). Marital conflicts and associated stress has been associated with post partum depression. There is an obvious association between quality of partners' relationship and woman's postpartum psychological conditions (Beck, 2001; Nur et. al, 2006; O'Hara & Swain, 1996; Sabuncuoğlu & Berkem, 2006). For example, Page and Wilhelm (2007) found a strong negative correlation between relationship quality between spouses, especially relationship depth, and post partum depression and identified this as a good area for prevention and intervention Boyce & Hickey, (2005) found that if the way the couples communicate carries some problematic aspects, the possibility of postpartum increase them. Some research has shown that in addition to past history of psychopathology and psychological disturbance during pregnancy, poor

marital relationship, low social support, and stressful life events are the strongest predictors of post partum depression.

Miligrom, Martin & Negri (1999) emphasizes on crucial positive impact of family support after delivery. They declared that women are more likely to turn to family and friends for support in the first postpartum month. Specifically Schweitzer, Logan, Strasberg (1992) proposed that mothers, who had marriages characterized by low levels of support and care, as well as high levels of control by their husbands, are at greater risk of developing post partum depression. Likewise, Taylor (1989) found that for mothers getting family support, incidence of post partum depression decreases to 20% at sixth weeks postpartum, compared to 38% for mothers without family support. In the adaptation study of EPDS in Turkey, psychiatric illness history, intense anxiety about the health of the baby, bad relations with the partner or the mother-in-law and insufficient social support were determined to be risk factors increasing depression levels (Engindeniz, Küey and Kültür, 1997).

On the other hand, Baker and Oswald (2008) cite from McKee et al. (2004) that social support decreases depression risk at last trimester but does not have an influence after postpartum.

2.6. Unplanned Pregnancy

Unplanned pregnancy is very common and is another risk for post partum depression. According to World Health Organization (2005), it is estimated that approximately 87 million unplanned pregnancies occur each year, and that 41 million unplanned pregnancies result in labor each year.

According to the findings of Population Health Survey in Turkey in 2003, Ünalán and Yavuz (2004) reported that 34% of all pregnancies that resulted in birth or ongoing in the last 5 years were unplanned pregnancies.

Özkan and Mete (2010) found that unplanned pregnancy affects antepartum health behavior. They reported that women with unwanted or unplanned pregnancy tend to take less recommended vitamins and smoke more. Different studies show that unplanned pregnancy increases risk of maternal and child death (Crosby, Diclemente, Wingood, 2003; Dunkey, 2000; Shapiro-Mendoza, Selwyn, Smith & Sanderson, 2005). In Turkey, Karaçam, Önel and Gerçek (2009) compared women with planned and unplanned pregnancy, and found that women with unplanned pregnancy had significantly more physical problems and lower scores for adaptive behaviors, lower hemoglobin levels as well as they more severe pain and negative feelings during labor. More importantly, the authors found that women with unplanned pregnancy were at high risk of depression in the early postpartum period. They found mean scores on Edinburg scale to be $14,86 \pm 6,08$ for mothers with unplanned baby and $7,28 \pm 4,85$ for mothers with planned baby. In different studies, unplanned and unwilling pregnancy has been found to be related to the depression at pregnancy and after giving birth (Robbins, Chao, Frost & Fonseca, 2005, Karaçam & Ançel, 2005).

Unplanned pregnancy has been found to not only affect pregnant woman but also other family members as well in physical, emotional and financial ways (Dunkley, 2000; Barrett and Wellings, 2002). These findings

indicate that unplanned pregnancy has a negative impact on maternal behaviors, physical well-being, labour experience and psychological state.

2.7. Social Construction of Gender Roles and Motherhood

Life-long risk of major depression for women has been reported as between 20-25 % which is around as twice as the percentage (7-12%) seen among men (Aydemir 2007; Payne et al. 2009). In addition to biological and psychological differences, social constructions should be taken into account when considering these results. Concerned with women's place in society, Nancy Chodorow attempts to explain ties between women, child care work and the nurturing process. In her book "*The reproduction of mothering*", Chodorow (1978) proposes that masculine-feminine identities and roles are not biologically determined, but that they are reproduced in every generation. She claims that development of gender identity and gender differences occur in the context of the nurturing process in the first two years of life. She views the female practice of mothering as the source of not only gendered personalities but also of division of labor in society.

From a feminist point of view Crawford and Unger (2000) describe motherhood as an institution which contains biological processes of reproduction, surrounded by many customs, traditions, beliefs, attitudes, rules and laws. Taylor (1996) discusses the social construction of post partum depression and gender issues through the eyes of the patients, physicians, and psychiatrists, focusing on the post partum depression support group. She regards post partum depression as a chance to explore women's mental health in sociopolitical context. She focuses on the

connection between social requirements of motherhood and experience of post partum depression. Similarly, Chrisler & Robledo (2002) argue that “gendered ‘psychopathologies’ cannot be understood outside the political, historical and cultural contexts that shape the expression of the disease” (p.175). In socio-cultural perspective, the authors propose that the socially constructed gender roles imply a “good mother” or “good woman” as a nurturing, receptive and kind person with a soft attitude and patience. When confronted with postpartum psychopathology, they are regarded “problematic” by the community, as well as by themselves.

Chrisler & Robledo (2002) refer to some popular cultural representations of marriage and parenthood (in films, on TV, at the newspapers or magazines, etc.) which lead to an over-optimistic conception of family as a source of happiness and goodness. The authors cited from a study by Molina, Johnston-Robledo (2000) which analyzed a series of photographs in parenting magazines and concluded that these kinds of magazines misrepresent motherhood as only a state of happiness and stability. As a result, the mothers, who feel stressed and frustrated feel alone, which makes it more difficult to cope with this stressful situations. Additionally, Chrisler & Robledo (2002) mention a study by Genevieve & Marguiles (1987) attempting to understand the impact of these kind of idealized images on the mothers. Women who adopted these images as their expectations towards motherhood were found to be more likely to develop negative feelings than the more realistic mothers. Another study using content analysis of a wide variety of magazines published for the 18

years between 1980 and 1998 in North America concluded that of all the analyzed publications, only 19 articles were on post partum depression and 8 on baby blues (Martinez, Johnston-Robledo, Ullsh & Chrisler, 2000). Studies in Turkey also show that feelings of guilt and shame lead mothers to hide their negative feelings and thoughts, which, as a result, keeps postpartum undiagnosed (Nur et al., 2004).

2.8. Effects of Post partum depression

Based on its duration and severity, post partum depression can affect the marital relationship, the mother's attachment style to the infant, and the father's sensitivity to depression (Burke 2003). It can cause the mother, the infant and the family to experience various difficulties and might affect the relationship between the mother and her baby and the effectiveness of mother's parenting skills (Nur, et. al, 2004). Most of the depression cases among mothers cannot be diagnosed, therefore their condition goes unnoticed, which brings about several problems such as problematic marriage relationships, loss of labor force, child abuse, or child negligence. Symptoms are seen to be destructive, describe Beck and Gable (2001), among these symptoms are feeling of loneliness, lack of appetite, emotional liability as well as thoughts of harming oneself or the infant.

Depressed mothers are at as much as ten times as greater risk of having troublesome mother-child relationships and their children known to have three times as risk of developing emotional problems compared to those of non-depressed mothers (Aydemir, 2007). These problems can be associated with psychological effects like depressed mother's inability to

perform face to face, eye-to-eye communication, delayed or atypical reactions to the stimuli from child, and increased negative affective reactions. Aydemir (2007), underlines the fact that the mother's introverted, uncommunicative, unresponsive or negative behaviors affect the mother-infant relation and result in children of similar personalities and that these babies use less positive gestures compared to the children of non-depressed mothers. Children of depressed mothers are more likely to have delayed motor, psychological, cognitive and neurological development, and they are at great risk to have avoidance and sadness behaviors.

2.9. Treatment of post partum depression

Spinelli (1998) suggests that education is a significant instrument in the treatment of the postpartum mood disorders like baby blues, post partum depression and postpartum psychosis. Barnes & Balber (2007) suggest that the couples and obstetricians be aware of the risk factors that lead to such devastating conditions so that the early detection and thereby the proper action can be made. In order to achieve this target, the researchers offer a plan including seeing a therapist, evaluating the medication options, hiring a person to make housework easier, and attending support groups of women who suffer from the same disturbances. They emphasize that recruiting friends, family members and professionals in helping with baby care and other housework has a great effect on coping with post partum depression. Giving some time to the mother to go outside or sleep decreases depression risk. Helping in housework or in cooking ease the stress the mother suffers. The authors discuss the possible treatments

for post partum depression. They demonstrate the main importance of antidepressants, short-term psychotherapy as well as support groups. They argue that the most effective treatment method is using anti-depressants. They spotlight the controversy around whether to prescribe medication or not, further study is needed for understanding the effects of using anti-depressants on the baby during the breastfeeding period.

Having a plan does not guarantee eliminating post partum depression. On the other hand, if begun from the prepartum period, these kinds of supporting approaches decrease the severity and duration of symptoms of post partum depression. The critical point is early notification so that the women who can get sufficient support can prevent the depression from becoming chronic and can be cured. According to the researchers, this also might help the mother to build a more effective coping strategy to deal with the distress of post partum depression.

PURPOSE

The main goal of this study is to identify the associated factors and prevalence of post partum depression in a sample of Turkish mothers. The present study attempts to explore the relationship between post partum depression and marital adjustment, prepartum depression history, support from family and attachment patterns the individuals construct in their close relationships, and to understand which of the study variables the strongest predictors of post partum depression are. The study is expected to have important implications for prevention.

3.1. Variables and Hypothesis of the study

The variables of the study are outlined below.

Dependent Variable

Post partum depression risk (assessed by Edinburgh Postpartum Depression Scale - EPDS)

Independent Variables

- 1) Demographic variables (assessed by demographic information form including questions outlined below)
 - a. Previous depression history of the mother
 - b. Planning of the baby (planned or unplanned)
 - c. Age of the mother
 - d. Educational Level of the mother
 - e. Health problems
- 2) Spouse support (assessed by The Marital Satisfaction Scale - MSS)

3) Family support (assessed by Multidimensional Scale of Perceived Social Support - MSPSS)

4) Attachment patterns (assessed by Relationship Scales Questionnaire - RSQ)

Hypothesis of the study are:

1. Prepartum and post partum EPDS scores of women with a previous depression history will be significantly higher than the EPDS scores of women without a previous depression history.
2. There will be a positive relationship between prepartum and post partum EPDS scores.
3. Compared to women who had been planning to have a baby, those who had not planned to have a baby are expected to have higher prepartum and post partum EPDS scores.
4. Post-partum EPDS scores will relate negatively to the levels of spousal care and support both during pregnancy and in the post partum period. Pre-partum EPDS scores will relate negatively to the level of spousal care and support during pregnancy.
5. Post-partum EPDS scores will relate positively to the levels of spousal abuse and aggression both during pregnancy and in the post partum period. Pre-partum EPDS scores will relate positively to the level of spousal abuse and aggression during pregnancy.
6. Level of family support to the woman during the post partum period will relate negatively to post partum EPDS score.

7. Women's scores on preoccupied and fearful attachment styles will be related positively whereas their scores on secure attachment style will be related negatively to their post partum and pre partum EPDS scores.
8. Age will correlate negatively with post partum EPDS scores.
9. The presence of women's own health problems or complications with pregnancy will correlate positively with prepartum EPDS scores.

METHOD

4.1. Participants

The study was designed as longitudinal and the data were collected in two phases. Participants in the first phase of the study were 128 women who were pregnant and visiting Sağlık Bakanlığı Okmeydanı Eğitim ve Araştırma Hospital for regular controls between January 2009 and 2010. In the second phase of the study 90 (70.3%) participants were reached again during the period between three to six months after delivery. Participants' ages ranged from 19 to 40 ($M= 29.30$, $SD = 4.30$). The mean duration of the marriage was found to be 4.52 years ($SD= 3.53$) in the sample. 34.4% of the women had completed their undergraduate degree and 10.9% had completed their graduate degrees and the rest were high school or below. The current baby was the first child for 61.4% of the sample. 46.1% of the sample was expecting girls and the rest were expecting boys. Table 2 presents detailed descriptive data on the participating women.

Of the women interviewed, 61.7% were working and 38.3% of women were not employed. In terms of socioeconomic status, 92.2% of the sample reported to have middle socioeconomic status, whereas 5.5% low and 2.3% high socioeconomic status. 89.1% of the participants were living in a nuclear family and the rest were living in extended families. Demographic data are presented in Table 2.

Table 2. Demographic characteristics of the original sample (N= 128)

| | <i>Minimum</i> | <i>Maximum</i> |
|------------------------------|----------------|----------------|
| Age | 29.28 | 4.30 |
| Duration of marriage (years) | 4.52 | 3.54 |
| | <i>Percent</i> | |
| Current child's sex | | |
| Boy | 53.9 | |
| Girl | 46.1 | |
| Other child | | |
| Yes | 38.6 | |
| No | 61.4 | |
| Socio-economic status | | |
| Low | 5.5 | |
| Middle | 92.2 | |
| High | 2.3 | |
| Education Status | | |
| Primary school | 10.9 | |
| High-school | 32.8 | |
| 2-year college | 3.9 | |
| University (4-year) | 34.4 | |
| Other | 7.0 | |
| Living With | | |
| Nuclear family | 89,1 | |
| Spouse's family | 10,9 | |
| Socio Economic Status | | |
| Low | 5,5 | |
| Middle | 92,2 | |
| Upper | 2,3 | |
| Working Status | | |
| Employed | 61,7 | |
| Not employed | 38,3 | |

4.2. Procedure

This study was approved by the chief of gynecology service of Okmeydani Hospital. Data collection took place between January 2009 and January 2010. In the first phase, pregnant women who visited the gynecology service for regular controls were informed about the purpose of the study, and about its two phases. They were assured about confidentiality of their private information and that the collected information would be used as a whole for a scientific study. All research participants were distributed an individual Informed Consent Form to sign. Then, they were asked to fill out some questionnaires including personal information, moods, marital situations, relationship with others and family support. In the first phase 128 women participated in the study by filling out questionnaires composed of demographic information form, Edinburgh Postpartum Depression Scale (EPDS), the Marital Satisfaction Scale (MQS) and the Relationship Scales Questionnaire (RSQ).

For the second phase of the study, participants were reached by phone call and an appointment was arranged for them. This appointment was arranged according to the doctor appointments of either mothers or their babies. Among 128 participants, 87 of them were reached and came to the hospital to fill the questionnaires. In the second phase, participants filled out EPDS, MQS, and a Family Support Questionnaire. Table 3 shows the different measures used in the two phases of the study.

Table 3.Measures used in the study

| | | |
|--------------|------------------------|---|
| First Phase | 128 women participated | Socio-demographic Data Sheet, Edinburgh Postpartum Depression Scale (EPDS), Marital Satisfaction Scale (MQS), Relationship Scales Questionnaire (RSQ) |
| Second Phase | 87 women participated | Edinburgh Postpartum Depression Scale (EPDS), Marital Satisfaction Scale (MQS), Family Support Questionnaire |

4.3. Measures

Demographic Form: The participants were asked to fill out a questionnaire that included questions about their age, education, marital status (single, married, how many years of marriage), number of children, socioeconomic status, if the baby was planned or not, and its gender, and clinical characteristics. (health problems of their own or with the pregnancy, previous depression history, and drug use).

4.3.1. Edinburgh Postpartum Depression Scale (EPDS):

Edinburgh Postpartum Depression Scale (EPDS) is a self-administered, 10-question scale used to assess depression levels and is the most commonly used test determines risk for clinical post partum depression. Originally, EPDS was developed by Cox, Holden and Sagovsky (1987), and the Turkish form of EPDS was tested for reliability and validity by Engindeniz, Küey and Kültür (1997) on a sample of 76 individuals living in Izmir. Researchers found the Turkish scale to be reliable and valid (correlation with General Health Inventory was $r=.70$, $(p<0.0001)$, and recommended its use with wide sample groups for determining the

psychosocial risk factors in Turkey. In this study EPDS cut-off score was taken as 12.

4.3.2. The Marital Satisfaction Scale

Marriage Quality Scale (hereinafter, MQS) (Baydar & Yumbul, 2004) consists of 20 items. In the course of application, the participant mothers evaluated firstly whether a specific trouble making behavior is present in their own marriage on a three-level Likert scale, then how much this behavior worried them on a four-level Likert scale. The scale has two subscales, one measuring lack of care and support (e.g. “My husband does not appreciate what I achieve”), and the other measuring abuse and aggression (e.g. “My husband sometimes insults me”). Internal reliability coefficients for these subscales are respectively 0,88 and 0,91 (Baydar, N., Küntay, A., Gökşen, F., Yağmurlu, B. & Cemalcılar, Z., 2008).

MQS is used also to develop “problem” scales, where the point of every item is weighted by the extent to which the behavior is worrying to the participant; 1 point being the mother does not regard the inquired behavior worrying at all and 4 points being she regards it as extremely worrying. Scores on the scale based on the existence of the behavior and the ones on the problem scale are highly correlated. (Correlation coefficients are 0. 79 for care and support and 0. 97 for abuse and aggression (Baydar et al, 2008).

4.3.3. Relationship Scales Questionnaire (RSQ):

The Relationship Scales Questionnaire (RSQ) is a 30-item scale developed by Griffin and Bartholomew (1994) to assess the adult attachment styles. RSQ is an indirect measure of four attachment prototypes of secure, fearful, preoccupied and dismissing (Backstrom and Holmes, 2001). This scale contains statements about close relationships which subjects answer by using a 7-point Likert scale ranging from I don't agree at all (1) to I totally agree (7). Each item in this measure corresponds to an adult attachment category (secure, fearful, preoccupied and dismissing). Participants get a dimensional score for each of the categories by dividing the sum of the specific items that correspond to that category by the number of items for that category. After they get a score from 1 to 7 for each of the categories participants are classified under the category for which they have the highest score.

RSQ's standardization for the Turkish sample was done by Sumer and Gungor (1999), and was translated to Turkish as İlişki Ölçekleri Anketi (İÖA). The alpha levels for subscales of RSQ were found to be low in studies (Griffin & Bartholomew, 1994; Sümer, 2006). Griffin and Bartholomew (1994) attributed this weakness to low number of items in each category and reported relatively high construct validity and test-retest reliability.

4.3.4. Inventory of Family Support to Mother

The original version of Multidimensional Scale of Perceived Social Support [Hereinafter, MSPSS; Zimet, Dahlem, Zimet & Farley 1988] is

used in order to measure the social support perception of the participant. The original MSPSS form consists of 12 items, on which the participants state how much they agree with the statements on a scale of seven-level Likert items. MSPSS has been adapted to Turkish for the purpose of measuring the support from the family to the mother (Baydar et al, 2008). Inventory of Family Support to Mother includes nine items and aims to measure the mother's perception of support from family members apart from husband and children. (e.g. "A family member cares about my emotions"). The items in the Inventory are evaluated by the participant on a five-level Likert scale that specifies how true or how false, to the participant, the items are. High scores indicate higher perceived support. Internal reliability coefficient of this scale has been determined to be 0,97 (Baydar et al, 2008). Construct validity coefficient of the Inventory of Family Support to Mother was attained through a calculation of a correlation coefficient with similar test; total score of Family Support to Mother has been detected to be moderately correlated with that of Depression subscale on Short Symptom Inventory ($r = -.30, p < .05$)

RESULTS

5.1. Descriptive Statistics of the Study Variables

Table 4 presents post partum depression prevalence found in first and second phases of the study. For the purposes of the study, 12 was taken as the cut-off point for detection of risk for clinical depression as measured by EPDS. Based on this cut-off score, 30.5% was found to be at risk for clinical depression in the third trimester of pregnancy. In the second phase of the study, 48,3% of the new mothers were found to be at risk for clinical depression.

Table 4. Prevalence of risk for clinical depression in the third trimester of pregnancy and in 3-6 months after delivery

| | Above cut-off point | | Below cut-off point | | Total |
|------------|-------------------------|---------|-------------------------|---------|-------|
| | for clinical depression | | for clinical depression | | |
| | N | Percent | N | Percent | |
| Prepartum | 39 | 30.5 | 89 | 69.5 | 128 |
| Postpartum | 42 | 48.3 | 45 | 51.7 | 87 |

In the second phase of the study 87 women were included. Table 5 presents detailed demographic data on these women as a function of whether their scores on EPDS were above or below the cutoff point (12) for the risk of post partum depression.

Table 5. The distribution of demographic characteristics for the participants who scored below and above the cut off point for post-partum depression (N = 87)

| | Above cut-off point for post partum depression (N = 42, 48.3 %) | | Below cut-off point for post partum depression (N = 45, 51.7 %) | |
|------------------------------|---|---------|--|---------|
| | N | Percent | N | Percent |
| Current child's sex | | | | |
| Boy | 21 | 50 | 24 | 53.3 |
| Girl | 21 | 50 | 20 | 44.4 |
| Socio-economic status | | | | |
| Low | 6 | 14.3 | 0 | 0 |
| Middle | 35 | 83.3 | 44 | 97.8 |
| High | 1 | 2.4 | 1 | 2.2 |
| Education Status | | | | |
| Primary school | 5 | 11.9 | 5 | 11.1 |
| High-school | 13 | 31.0 | 13 | 28.9 |
| 2-year college | 2 | 4.8 | 2 | 4.4 |
| University (4- year) | 16 | 38.1 | 13 | 28.9 |
| Doctorate | 3 | 7.1 | 7 | 15.6 |
| Other | 3 | 7.1 | 5 | 11.1 |

Table 6 presents descriptive data on study variables collected in the two phases of the project. Of the original sample (N=128), 21.9% reported that they had been diagnosed with depression earlier; 28.9% of these women had used psychiatric medication. Only 68% of the mothers had planned to have a baby. Women who had problems with their own health or with their pregnancy constituted 20.3% of the sample.

Table 6. Descriptive data on study variables collected in the first (N=128) and second phase (N= 87) of the project

| | <i>N</i> | <i>Mean</i> | <i>SD</i> |
|--|----------|-------------|-----------|
| Secure attachment | 128 | 4.62 | 1.05 |
| Fearful attachment | 128 | 3.81 | 1.20 |
| Preoccupied attachment | 128 | 4.04 | .84 |
| Dismissing attachment | 128 | 4.23 | .96 |
| SS-Care and Support (<i>Pre</i>) | 128 | 4.14 | .65 |
| SS-Abuse and Aggression (<i>Pre</i>) | 128 | 2.06 | .74 |
| EPDS (<i>Pre</i>) | 128 | 9.17 | 5.58 |
| EPDS (<i>Post</i>) | 87 | 11.75 | 6.10 |
| SS- Care and Support (<i>Post</i>) | 87 | 3.88 | .76 |
| SS- Abuse and Aggression (<i>Post</i>) | 87 | 2.13 | .79 |
| Family support | 87 | 34.11 | 5.99 |

| | <i>N</i> | <i>Percent</i> |
|---------------------------------------|----------|----------------|
| Previous depression | 128 | |
| Yes | 28 | 21.9 |
| No | 100 | 78.1 |
| Medication use in previous depression | 76 | |
| Yes | 22 | 28.9 |
| No | 54 | 71.1 |
| Planned baby | 128 | |
| Yes | 87 | 68.0 |
| No | 41 | 32.0 |
| Health Problems | 128 | |
| Yes | 26 | 20.3 |
| No | 102 | 79.7 |

Table 7. The distribution of scores on study variables for the participants who scored below and above the cut off point for post-partum depression (N = 87)

| | Above cut-off point (12) for post partum depression (N = 42) | | Below cut-off point (12) for post partum depression (N = 45) | |
|-----------------------------------|---|------|---|------|
| | Mean | SD | Mean | SD |
| Secure attachment | 4,09 | 1,15 | 4,62 | 0,83 |
| Fearful attachment | 4,13 | 0,87 | 3,93 | 1,36 |
| Preoccupied attachment | 4,15 | 0,86 | 3,82 | 1,06 |
| Dismissing attachment | 4,30 | 1,01 | 4,47 | 1,11 |
| SS- Care and Support (Pre) | 3,62 | 0,83 | 4,27 | 0,65 |
| SS-Abuse and Aggression (Pre) | 2,18 | 0,88 | 1,93 | 0,66 |
| EDPS Score (Pre) | 12,98 | 6,26 | 6,69 | 4,09 |
| Family support | 30,38 | 5,88 | 37,60 | 3,49 |
| SS-Care and Support (Post) | 3,62 | 0,83 | 4,13 | 0,61 |
| SS-Abuse and Aggression (Post) | 2,41 | 0,83 | 1,88 | 0,67 |
| EDPS Score (Post) | 17,19 | 3,46 | 6,67 | 2,63 |

| Table 7. (Cont.) The distribution of scores on study variables for the participants who scored below and above the cut off point for post-partum depression (N = 87) | | | | |
|--|----|---------|----|---------|
| Previous depression history | N | Percent | N | Percent |
| Yes | 19 | 45,2 | 4 | 8,9 |
| No | 23 | 54,8 | 41 | 91,1 |
| Planned baby | N | Percent | N | Percent |
| Yes | 14 | 33,3 | 40 | 88,9 |
| No | 28 | 66,7 | 5 | 11,1 |

Next, the participants in the second phase of the study were divided into four groups, based on whether their EPDS scores in the pre and post partum periods were above or below the cut-off point. With participants not depressed in both study phases (N=37), following results are found. 10.8 percent of them are primary school graduates, and the rest are high school or above education levels. 70.3% of participants reported that it's their first child, and 78.4% of them reported having no health problems. Additionally, 94.6% of them did not have a previous depression history and 91.9% reported that it was a planned baby. Participants' ages vary between 22 and 40 with a mean of 30.49 and 4.28 standard deviation. Spousal support scores in pre-partum phase are between 2.20 and 5.00 (M=4.32, SD= 0.66). Abuse and Aggression scores for the same phase are between 1.00 and 3.20 (M=1.85, SD=0.55). Spousal support in post-partum period

varied between 2.20 and 5.00 (M= 4.14, SD= 0.63). Abuse and Aggression in post-partum period varied between 1.00 and 3.30 (M= 1.82, SD= 0.57). Family support in post-partum period varied between 27 and 45, (M= 37.46, SD= 3.70).

With participants not depressed in the pre-partum period but depressed in post-partum period (N=16), following results are found. 31.3 of them are primary school graduates, 56.3% are having their first child, 87.5% have no health problems, 43.8 don't have a previous depression history, and only 25% have a planned baby. Participants' ages are between 27 and 37, (M= 31.56, SD= 2.94). Spousal support scores in pre-partum phase are between 2.80 and 5.00 (M= 4.21, SD= 0.64). Abuse and Aggression scores in pre-partum phase were between 2.80 and 5.00 (M=4.21, SD= 0.64). Spousal support in the post-partum period varies between 2.50 and 4.6, (M= 3.72, SD= 0.62). Abuse and Aggression in the post-partum period varies between 1.10 and 3.70 (M=2.31, SD= 0.72). Family support in post-partum period varies between 25 and 40, (M= 29.50, SD= 3.98).

In the group of participants depressed in the pre-partum period, but not depressed in the post-partum depression (N=8), following results are found. Only 12.5% of them are primary school graduates, 85.7% report having their first child, 62.5% don't have any health problems, 75% don't have previous depression history, and 75% have a planned baby. Age varies between 20 and 38 (M=27.13, SD= 5.99). Spousal support scores in the pre-partum phase are between 3.10 and 4.80, (M= 4.05, SD= 0.59). Abuse and Aggression scores in pre-partum phase are between 1.00 and 4.10 with

2.31 mean score and 0.99 standard deviation. Spousal support in post-partum period varies between 3.50 and 5.00 (M= 4.09, SD= 0.53). Abuse and Aggression in post-partum period varies between 1.00 and 4.10 (M=with 2.12, SD= 1.01. Family support in the post-partum period varies between 33 and 40 (M= 38.25, SD= 2.38).

In the group of participants depressed both in pre-partum and post-partum depression (N=26), following results are found. Only 19.2% are primary school graduates, 53.8% are having their first child, 61.5% have no health problems, 61.5% don't have a previous depression history, and 38.5% have a planned baby. Age varies between 19 and 35 (M= 27.72, SD= 4.23). Spousal support scores in pre-partum phase are between 1.80 and 5.00 (M= 3.83, SD= 0.89). Abuse and Aggression scores in the pre-partum phase are between 1.00 and 4.00 (M=2.18, SD= 0.90). Spousal support in post-partum period varies between 1.80 and 5.00 (M=3.55, SD= 0.94). Abuse and Aggression in post-partum period varies between 1.00 and 4.00, (M=2.47, SD= 0.90). Family support in post-partum period varies between 21 and 44 (M=30.92, SD=6.81). Characteristics of these four groups (low in pre, low in post; low in pre, high in post; high in pre, low in post; high in pre, high in post) are displayed in Table 8 and Table 9.

Table 8. Clinical Status in the Post-Partum Period

| | | Not Dep | | Depressed | | | |
|--|----------------|-------------|---------------------|----------------|-------------|------|------|
| | | Freq. | % | Freq. | % | | |
| Clinical Status in the Pre-Partum Period | Not Depressed | N= 37 | | N= 16 | | | |
| | | Education | | | Education | | |
| | | Primary | 4 | 10,8 | Primary | 5 | 31,3 |
| | | High School | 10 | 27 | High School | 1 | 6,3 |
| | | University | 11 | 29,7 | University | 9 | 56,3 |
| | | M.A. | 7 | 18,9 | M.A. | 1 | 6,3 |
| | Other | 5 | 13,5 | Other | 0 | 0 | |
| | Other Children | | | Other Children | | | |
| | Yes | 11 | 29,7 | Yes | 7 | 43,8 | |
| | No | 26 | 70,3 | No | 9 | 56,3 | |
| | Health Problem | | | Health Problem | | | |
| | Yes | 8 | 21,6 | Yes | 2 | 12,5 | |
| No | 29 | 78,4 | No | 14 | 87,5 | | |
| Previous Depression | | | Previous Depression | | | | |
| Yes | 2 | 5,4 | Yes | 9 | 56,3 | | |
| No | 35 | 94,6 | No | 7 | 43,8 | | |
| Planned baby | | | Planned baby | | | | |
| Yes | 34 | 91,9 | Yes | 4 | 25 | | |
| No | 3 | 8,1 | No | 12 | 75 | | |
| Depressed | Depressed | N= 8 | | N= 26 | | | |
| | | Education | | | Education | | |
| | | Primary | 1 | 12,5 | Primary | 5 | 19,2 |
| | | High School | 3 | 37,5 | High School | 9 | 34,6 |
| | | University | 2 | 25 | University | 7 | 26,9 |
| | | M.A. | 2 | 25 | M.A. | 2 | 7,7 |
| | Other | 0 | 0 | Other | 3 | 11,5 | |
| | Other Children | | | Other Children | | | |
| | Yes | 1 | 14,3 | Yes | 12 | 46,2 | |
| | No | 6 | 85,7 | No | 14 | 53,8 | |
| | Health Problem | | | Health Problem | | | |
| | Yes | 3 | 37,5 | Yes | 10 | 38,5 | |
| No | 5 | 62,5 | No | 16 | 61,5 | | |
| Previous Depression | | | Previous Depression | | | | |
| Yes | 2 | 25 | Yes | 10 | 38,5 | | |
| No | 6 | 75 | No | 16 | 61,5 | | |
| Planned baby | | | Planned baby | | | | |
| Yes | 6 | 75 | Yes | 10 | 38,5 | | |
| No | 2 | 25 | No | 16 | 61,5 | | |

Table 9: Clinical Status in the Post-Partum Period

| | | Not Depressed | | | | Depressed | | | |
|---|----------------|-------------------------------------|-----------|----------------|-------------------------------------|-------------------------------------|-----------|-------|------|
| | | N= 37 | Min.-Max. | Mean | SD | N= 16 | Min.-Max. | Mean | SD |
| Clinical Status in the Post-Partum Period | Not Depressed | Age | 22-40 | 30,49 | 4,28 | Age | 27-37 | 31,56 | 2,94 |
| | | Spousal Support in pre-partum | 2,20-5,00 | 4,32 | 0,66 | Spousal Support in pre-partum | 2,80-5,00 | 4,21 | 0,64 |
| | | Abuse and Aggression in pre-partum | 1,0-3,2 | 1,85 | 0,55 | Abuse and Aggression in pre-partum | 1,0-3,5 | 2,18 | 0,85 |
| | | Spousal Support in post-partum | 2,20-5,00 | 4,14 | 0,63 | Spousal Support in post-partum | 2,50-4,60 | 3,72 | 0,62 |
| | | Abuse and Aggression in post-partum | 1,0-3,3 | 1,82 | 0,57 | Abuse and Aggression in post-partum | 1,10-3,70 | 2,31 | 0,72 |
| | Family Support | 27-45 | 37,46 | 3,70 | Family Support | 25-40 | 29,50 | 3,98 | |
| | Depressed | N= 8 | Min.-Max. | Mean | SD | N= 26 | Min.-Max. | Mean | SD |
| | | Age | 20-38 | 27,13 | 5,99 | Age | 19-35 | 27,72 | 4,23 |
| | | Spousal Support in pre-partum | 3,10-4,80 | 4,05 | 0,59 | Spousal Support in pre-partum | 1,80-5,00 | 3,83 | 0,89 |
| | | Abuse and Aggression in pre-partum | 1,0-4,1 | 2,31 | 0,99 | Abuse and Aggression in pre-partum | 1,0-4,0 | 2,18 | 0,90 |
| Spousal Support in post-partum | | 3,50-5,00 | 4,09 | 0,53 | Spousal Support in post-partum | 1,80-5,00 | 3,55 | 0,94 | |
| Abuse and Aggression in post-partum | | 1,0-4,1 | 2,12 | 1,01 | Abuse and Aggression in post-partum | 1,0-4,0 | 2,47 | 0,90 | |
| Family Support | 33-40 | 38,25 | 2,38 | Family Support | 21-44 | 30,92 | 6,81 | | |

5.2. Results related to the hypotheses of the study

Unless otherwise specified, the analyses were done with the 87 women who participated in both phases of the study.

1. Prepartum and post partum EPDS scores of women with a previous depression history will be significantly higher than the EPDS scores of women without a previous depression history.

An independent groups t-test compared the mean EPDS scores during pregnancy of those with previous depression history ($M= 12.68$, $SD= 6.73$) with the EPDS scores of those without a previous depression history ($M= 8.19$, $SD= 4.81$). The EPDS scores for women with previous depression history was found to be significantly higher during pregnancy; $t(126)= -3.97$, $p< .001$. The 95% of confidence interval for the mean difference was -6.72 to -2.25 . A second independent groups t-test compared the mean post-partum EPDS scores of women with previous depression history ($M= 10.14$, $SD= 5.42$) with the EPDS scores of those without a previous depression history ($M= 4.81$, $SD= 6.73$). The post-partum EPDS scores of women with a previous depression history were found to be significantly higher; $t(85) = -4.54$, $p< .001$. The 95% of confidence interval for the mean difference was -8.74 to -3.42 .

2. There will be a positive relationship between prepartum and post partum EPDS scores.

The bivariate Pearson correlation analysis revealed a statistically significant and strong positive correlation between EPDS scores during

pregnancy and in the post-partum period; $r(86) = .68, p < .001$. Correlational analyses are reported in Table 10.

Table 10. Bivariate correlations Edinburgh post testing scores in the second phase of the study (N=87)

| Variables | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 |
|-----------------------------------|----|---------|---------|-------|---------|-------|---------|---------|---------|----------|----------|----------|---------|----------|--------|
| 1. Age | -- | .441*** | .259* | .012 | -.122 | -.078 | -.002 | -.114 | .163 | -.135 | .021 | -.129 | -.313** | -.117 | .104 |
| 2. Duration of marriage | | -- | .621*** | -.050 | .257* | -.075 | .021 | .128 | -.070 | .066 | -.086 | .100 | -.018 | .028 | -.067 |
| 3. Number of other children | | | -- | .123 | .106 | .074 | -.059 | .069 | -.304** | .277* | -.255* | .220* | .215 | .255 | -.252* |
| 4. Secure attachment | | | | -- | -.285** | .172 | -.223* | -.208 | .041 | -.074 | .048 | .020 | -.032 | -.119 | .107 |
| 5. Fearful attachment | | | | | -- | -.104 | .501*** | .828*** | .014 | .088 | .010 | .061 | .070 | .086 | -.105 |
| 6. Preoccupied attachment | | | | | | -- | -.363** | .246* | -.224* | .294** | -.218* | .238* | .241* | .186 | -.205 |
| 7. Dismissing attachment | | | | | | | -- | .674*** | .140 | -.033 | .209 | -.137 | -.142 | -.138 | .043 |
| 8. Insecure attachment | | | | | | | | -- | -.027 | .185 | .011 | .082 | .086 | .070 | -.144 |
| 9. SS-Care and Support (Pre) | | | | | | | | | -- | -.628*** | .800*** | -.556*** | -.322** | -.295** | .200 |
| 10. SS-Abuse and Aggression (Pre) | | | | | | | | | | -- | -.552*** | .795*** | .263* | .237* | -.268* |
| 11. SS-Care and Support (Post) | | | | | | | | | | | -- | -.698*** | -.311** | -.468*** | .313** |

Table 10. Bivariate correlations Edinburgh post testing scores in the second phase of the study (N=87)

| Variables | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 |
|------------------------------------|---|---|---|---|---|---|---|---|---|----|----|----|--------|---------|----------|
| 12. SS-Abuse and Aggression (Post) | | | | | | | | | | | | -- | .314** | .429*** | .312** |
| 13. Edinburgh Scores (Pre) | | | | | | | | | | | | | -- | .681*** | -.323** |
| 14. Edinburgh Scores (Post) | | | | | | | | | | | | | | -- | -.607*** |
| 15. Family support | | | | | | | | | | | | | | | -- |

Note. * p < .05, ** p < .01, *** p < .0

3. Compared to women who had been planning to have a baby, those who had not planned to have a baby are expected to have higher prepartum and post partum EPDS scores.

An independent group's t-test compared the mean EPDS scores during pregnancy of those who had planned to have a baby with those who had not. Women who had not planned to have a baby had significantly higher EPDS scores during the pregnancy ($M= 12.05$, $SD= 5.98$) than the women who had planned to have a baby in the same period ($M= 7.82$, $SD= 4.85$), $t(126) = 4.27$, $p<.05$. Second independent groups t-test compared the mean post partum EPDS scores of those who had planned to have a baby with those who had not. Women who had not planned to have a baby had significantly higher EPDS scores ($M= 15.24$, $SD= 5.04$) in the postpartum period than the women who had planned to have a baby ($M= 9.61$, $SD= 5.73$), $t(85) = 4.65$, $p<.001$.

4. Post-partum EPDS scores will relate negatively to the level of spousal care and support both during pregnancy and in the post partum period. Pre-partum EPDS scores will relate negatively to the level of spousal care and support during pregnancy.

The bivariate Pearson correlation analysis revealed that post partum EPDS scores had a significant and negative correlation with care and support received in the pre partum period ($r= -.29$, $p< .001$) and in the post partum period ($r= .47$, $p< .000$). Pre partum EPDS scores also had a significant and negative correlation with the level of care and support from the spouse during pregnancy ($r= -.32$, $p< .001$).

5. Post-partum EPDS scores will relate positively to the level of spousal abuse and aggression both during pregnancy and in the post partum period. Pre-partum EPDS scores will relate positively to the level of spousal care and support during pregnancy.

Bivariate Pearson correlation analysis revealed that post partum EPDS scores had a significant and positive correlation with spousal abuse and aggression in the pre partum period ($r = .24, p < .05$) and in the post partum period ($r = .43, p < .001$). Pre partum EPDS scores also had a significant and positive correlation with spousal abuse and aggression during pregnancy ($r = .26, p < .05$).

6. Level of family support to the woman during the post partum period will relate negatively to post partum EPDS score.

Bivariate Pearson correlation analysis revealed a statistically significant negative correlation between family support and post partum EPDS scores ($r = -.61, p < .001$).

7. Women's scores on preoccupied and fearful attachment styles will relate positively whereas their scores on secure attachment style will relate negatively with their post partum and pre partum EPDS scores.

Bivariate Pearson correlation analysis found a positive correlation between post partum EPDS scores and scores on preoccupied attachment style ($r = .19, n.s$) and fearful attachment style ($r = .09, n.s$), that did not reach significance; the predicted negative correlation between post partum EPDS scores and scores on secure attachment style ($r = -.12$) also did not reach significance.

Bivariate Pearson correlation analysis found a positive and significant correlation between pre partum EPDS scores and scores on preoccupied attachment style ($r=.24$, $p<.05$) and a positive correlation with fearful attachment style ($r=.07$, n.s), that did not reach significance; the predicted negative correlation between pre partum EPDS scores and scores on secure attachment style ($r=-.03$) also did not reach significance.

8. Age will correlate negatively with post partum EPDS scores.

The bivariate Pearson correlation analyses revealed a negative correlation between age and the post partum EPDS scores which did not reach significance.

9. Women who experienced health problems of their own or complications with pregnancy will have higher prepartum EPDS scores.

An independent groups t-test compared the mean EPDS scores during pregnancy of women who experienced personal health problems or complications with pregnancy ($M= 12.50$, $SD= 5.16$) with those who had neither ($M= 8.32$, $SD= 5.30$). Women who experienced either of these problems had significantly higher pre-partum EPDS scores than those who experienced neither of them, $t(126) = -3.56$, $p< .01$.

Regression Analyses

In order to clarify the relative effects of different predictors to the risk of post partum depression, a stepwise multiple regression analyses was performed for the whole sample of women reached in the second phase of the study ($N=87$). Based on the findings of these simple analyses, a total of six predictors including prepartum EPDS score, family support, post-partum

spousal care and support, post-partum abuse and aggression and previous depression history (yes/no) and planned baby (yes/no) were entered into a regression regression analysis. The alpha level was set at .05. The variables that predicted post-partum depression are displayed in Table 11.

Table 11. Multiple regression analysis summary for independent variables predicting depression scores using EPDS in the post-partum phase (N=87).

| Predictor | <u>B</u> | <u>SE</u> | β | ΔR^2 | t |
|------------------------|----------|-----------|---------|--------------|----------|
| EPDS score (Pre) | .46 | .07 | .46 | .46 | 6.84*** |
| Family support | -.32 | .07 | -.31 | -.17 | -2.86*** |
| SS-Care/Support (Post) | -1.18 | .54 | -.15 | .03 | -2.21* |
| Previous Depression | 2.08 | .90 | .15 | .02 | 2.31* |
| Planned baby | -1.79 | .84 | -.14 | .02 | -2.12* |

Note. Stepwise regression was used. $R^2 = .70$ ***

$p < .05$ * , $p < .01$ ** , $p < .001$ ***

The five factors entered into the regression analysis predicted 70% of the total variance in post EPDS scores, $R^2 = .70$, $F(5,81) = 38.27$, $p < .001$. Prepartum EPDS score was found to be the most significant predictor of post-partum depression risk, explaining 46% of the variance, and indicating that mothers who were in depression during the third trimester of pregnancy are at severe risk of post-partum depression. Second most important predictor of post partum depression was lack of family support, explaining 17% of the variance. Third important factor was lack of spouse care and

support explaining 3%, followed by previous depression history explaining 2% and unplanned baby explaining 2% of the variance.

Based on the analysis revealing pre partum EPDS scores as the strongest predictor of postpartum EPDS scores, a second regression analysis was conducted for the original sample (N=128) in order to clarify the relative effects of different predictors to the risk of pre partum depression. Based on the findings of these simple analyses, a total of four predictors including, pre partum spousal care and support, prepartum abuse and aggression, previous depression history (yes/no) and planned baby (yes/no) were entered into a stepwise multiple regression analysis. The alpha level was set at .05. The variables that predicted post-partum depression are displayed in Table 12.

Table 12. Multiple regression analysis summary for independent variables predicting depression scores using EPDS in the pre-partum phase (N=128) .

| Predictor | <u>B</u> | <u>SE</u> | β | ΔR^2 | t |
|-----------------------|----------|-----------|---------|--------------|---------|
| Planned baby | -2.92 | .98 | -.25 | .13 | .2.98** |
| SS-Care/Support (Pre) | -2.16 | .68 | -.25 | .08 | -3.17** |
| Previous Depression | 2.92 | 1.10 | .22 | .04 | 2.64** |

Note. Stepwise regression was used. $R^2 = .25^{***}$

$p < .05$ * , $p < .01$ ** , $p < .001$ ***

Out of the four factors entered into the regression analysis, whether the baby was planned or not, pre-partum spousal care and support, and incidence of previous depression history predicted 25% of the variance in pre EPDS scores, $R^2 = .25$, $F(3,124)=13.50$, $p<.001$. Whether the baby was planned or not made the most contribution, explaining 13% of the variance; pre-partum spousal care and support explained 8% of the variance, followed by previous depression history explaining 4% of the variance. Contribution of pre-partum aggression and abuse was excluded from the regression equation.

The last set of analyses were carried out on the data from the second phase of the study to further explore the variation in scores on some major study variables including spousal care and support pre and post partum, spousal abuse and aggression pre and post partum, support from the family post partum, planned baby, and previous depression history, as a function of membership in one of the four groups created based on pre and post EPDS scores: (low, low,; low, high; high, low; high, high).

A one-way ANOVA conducted with pre-partum spousal support and care as dependent variable and group membership (2 X 2) as independent variable yielded a non-significant result. A second one-way ANOVA conducted with post-partum spousal support and care as dependent variable and group membership (2 X 2) as independent variable yielded a significant result, $F(3, 83) = 3.72$; $p < .05$. Post-hoc tests showed that the difference between low-low and the high-high groups was statistically significant, suggesting that those women who were likely to be at risk for

clinical depression in the pre and post partum periods received much less spousal care and support than women who were not likely to be at risk for clinical depression in the pre and post partum periods. A third one-way ANOVA conducted with pre-partum spousal abuse and aggression as dependent variable and group membership (2 X 2) as independent variable yielded a non-significant result. A fourth one-way ANOVA conducted with post-partum spousal abuse and aggression as dependent variable and group membership (2 X 2) as independent variable yielded a significant result, $F(3, 83) = 4.20; p < .01$. Post-hoc tests showed the difference between the low-low group and the high-high group to be significant, suggesting that those women who were likely to be at risk for clinical depression in the pre and post partum periods received much more spousal abuse and aggression than women who were not likely to be at risk for clinical depression in the pre and post partum periods. A fifth one-way ANOVA with family support as dependent variable and group membership (2 X 2) as independent variable yielded a significant result : $F(3, 83) = 16.59; p < .000$. Post-hoc tests showed that all groups were significantly different from one another.

Next, two Chi-Square analyses were conducted to test the independence of the history of previous depression history and planned baby from membership in four groups based on pre and post partum EPDS scores. The analysis for previous depression history was significant $\chi^2(1, N = 87) = 17.67, p = .001$, revealing a relationship between group membership and the presence of previous depression history. Most strikingly, an overwhelming majority of the women who scored below the cut-off point

for clinical depression did not have a previous depression history (35 out of 37). The analysis for planned baby was also significant $\chi^2(1, N = 87) = 30.04, p = .001$, revealing a relationship between group membership and whether this was or not a planned pregnancy. The majority of the women who scored below the cut-off point for clinical depression in both the pre and post partum periods had a planned baby (34 out of 37).

DISCUSSION

Giving birth is a special event that affects a woman's life, and for many reasons, the period after delivery can be a stressful and challenging transition period. The aim of this thesis was to examine the factors that predict post partum depression. There may be many reasons for post partum depression, such as hormonal transitions, previous psychological problems, unplanned and unwanted pregnancy, difficult birth operations, adolescent pregnancy, domestic conflicts, previous depression history, financial problems, lack of social support, lack of support from birth team and stressful life style (Taşdemir, et. al., 2006; Vural & Akkuzu, 1999). Our study focused on psychosocial conditions including family, spouse support and attachment patterns of new mothers as well as the history of previous depression, health problems and unplanned pregnancy as possible risk factors in the development of post partum depression. The findings of this study support the findings of previous studies that giving birth may lead to psychological difficulties in the postpartum period. The results showed that previous depression history as well as depression in pregnancy, lack of family support and care and support from spouse and unplanned baby is significant factors that affect tendency to develop post partum depression, with depression in pregnancy as the strongest predictor.

In different studies, the cut-off point used to detect risk for clinical depression using Edinburgh post partum depression scale mostly varies between 11 and 13. The current study, using the cut-off point as 12 and above, found 30.5% of the whole sample (N= 128) to be at risk for clinical

depression according to the Edinburgh post partum depression scale. In the second phase of the study, the prevalence rate was found to be 48.3 % (N= 87). In the present study, post partum depression scores are quite high, compared to the studies in the related literature. Although this result shows a high prevalence rate, similar studies in Turkey using self report scales report the frequency of depression after giving birth between 21.2 and 54.2 % (Ayvaz et. al, 2006; Buğdaycı and et al., 2004; Büyükkoca 2001; Ekuklu et. al. 2004, İnandı et al., 2002). But, this should not be interpreted as meaning that these subjects are clinically depressed; rather, these women should be referred to a clinical interview process for more detailed examination. Therefore we suggest that it is very important to regard the participants with higher scores on self-report tools in such studies as merely a risk group, who should be recommended to consult with a clinician for further assessment.

Various factors can have influence on high prevalence rate found. Some authors argued that post partum depression are higher in Middle East countries (Eren, 2007; Irfan & Badar, 2003; Ayvaz et. al., 2006). Ayvaz et al. (2006) regard their findings in Trabzon to be generally comparable to the studies conducted in other Middle Eastern countries, and especially in rural areas where traditional patriarchal order is dominant. So it is not surprising to find higher prevalence rates in Istanbul where the sample was recruited from Okmeydanı State Hospital, to which mostly settlers from the eastern part of the country and people from working class apply. In fact, that the majority of the women in the sample were settlers from other cities,

had traditional backgrounds and low socioeconomic conditions, and were not fully able to adapt to the city life.

Socio-economic status has been examined as a variable in our study and was found insignificant, though very close to be significant, to relate to postpartum depression. The reason for this might be that our study sample included only two participants who had high income. Related literature has proven in numerous occasions that there is a correlation between lower income and postpartum depression. A study with a larger sample might give a more significant result. In Aydemir (2007) this variable were found significantly correlated and the number of participants with postpartum depression and who were lower-paid was two times more than the people with higher income; and more recent studies showed that this rate was three times among unemployed city dwellers and two times among the poor. Income levels of the sample, in the present study were obtained through a question on self-report asking in which economic income group they regard themselves, which brought the conclusion that most of the women were seen to be of middle socioeconomic level. This factor might as well be taken into examination in more detail, under different titles such as household rent, employment status of the individual and husband, monthly income, etc. Eren (2007) reported that prevalence rate goes up to 38.2% for women who have had their first babies. Eren (2007) also cited from Klein & Essex (1995) that with first babies, up to 70% women can experience depressive symptoms surrounding delivery, but that 10-16% meet post partum depression criteria. New mothers can be reporting

symptoms of baby blues which is higher with the first babies (Chrisler & Robledo, 2002). Most of the women attending this study were having their first babies (61.4% for first phase, 64% for second phase). When these facts are taken into account, it can be asserted that new mothers may be more likely to report baby blues symptoms.

It is also possible that social surroundings of the participants might affect them negatively. The present study was carried out in a period full of news and comments about the economic crisis and swine flu. Many of the mothers in the sample group interviewed in the second phase of the present study expressed their feelings that they were anxious about the future, the baby and themselves. We observed an intense anxiety among mothers about swine flu, which may be another reason for their developing depressive states. Moreover, mothers stated that their being in the hospital for regular controls or vaccinations made them restless and anxious. Anxiety increases possibility of depression, and should be measured in future studies. Additionally, the prevalence rates are expected to decrease on assessment with structured interview techniques.

The related literature have presented a whole body of data that is congruent with the results of the present study with respect to the negative effect of having depression and/or mood disorder history on the likelihood of developing post partum depression (Aydemir, 2007; Eren, 2007, Nur et. al., 2004). O'Hara and Swain (1996) reported the strongest predictors of postpartum depression were past history of psychopathology and psychological disturbance during pregnancy. The authors have mentioned

that depression is likely to recur, and become chronic, that there is a recurrence rate of 75- 80 % among depression cases. The pressure to be a good mother and conflicts with the role of parenting might drift her to a depressive mood. According to Eren (2007), the rate of post partum depression occurrence among the mothers who had depression history was 33.3 % while this rate was 8.2 among women without depression anamnesis.

The first hypothesis of the study proposed that women who have a previous depression history will be more likely to be at risk for clinical depression both in the pregnancy and after the delivery. Women with a previous depression record were shown to suffer more from depression during pregnancy and post partum depression compared to those without depression history. Prepartum and post partum EPDS scores of women with a previous depression history were significantly higher than the EPDS scores of women without a previous depression history. Of the total sample, 21.9 % had depressive symptoms before pregnancy, and 30.5 % were depressed during pregnancy. Therefore the sample group had a great deal of risk in terms of developing post partum depression. Our findings overlap with the findings of previous research, and suggest that the post partum regular appointments can be a good opportunity to screen women especially with history of previous depression for recognizing and intervening at an early stage.

Pre partum depression is identified as one the most important risk factors of post partum depression (Wiser et. al., 2005; Chapman et. al.,

2000; Bowen & Muhajarine, 2006). So it's easy to say that prepartum depression is a serious issue that must be considered. Kitamura et. al. (1996) emphasizes the fact that there has been a growing attention on post partum depression compared to the limited attention paid to depression during pregnancy. The second hypothesis stated that women's depression scores in the last trimester of the pregnancy would be positively correlated with their depression scores measured after delivery. Findings also supported this hypothesis. Edinburgh scores of previous and post partum tests were found to be positively correlated.

Postpartum depression doesn't appear suddenly, but takes you in its hands gradually. Women who are depressed in the third trimester of their pregnancy generally don't have treatment. This results in depression mood to resume in postpartum. As the researchers indicate, after delivery, the baby is at the center of attention, so mothers' need for support and care can be neglected; women may receive more prepartum health services compared to postpartum care (Karaçam & Ançel, 2005; Özkan & Mete, 2010). In the postpartum period, the baby is privileged to be taken care of, which might cause the mother to feel bad. Moreover, as Blum (2007) stated, women with post partum depression can't cope with regressive states efficiently. All these facts may negatively affect the mothers who have suffered from depressive mood in pregnancy. Therefore prepartum depression continues and symptoms tend to increase after birth. To prevent postpartum depression, pregnant women must be monitored at the third trimester and directed to treatment, if necessary.

Unplanned pregnancy is another risk factor for clinical depression. There are many studies indicating that unplanned and unwanted pregnancy increases risk of depression during antepartum and postpartum periods (Robbins, Chao, Frost & Fonseca, 2005, Karaçam & Ançel, 2005). The third hypothesis predicted unplanned pregnancy to be related to the risk for clinical depression during pregnancy and in the post partum period. Results provided support for this expectation. Of the total sample, 32 % o reported unplanned pregnancy, which means that the family was not ready or even possibly did not want the baby. Unplanned pregnancy may sign lack of preparedness for motherhood and lack of consensus in the family regarding having a baby. Moreover Karaçam et. al. (2009) stated that women having an unplanned baby may be more likely to have physical problems, less adaptive behaviors, depression at the early postpartum period.

According to several studies, there is a significant relation between the quality of marital relationship and post partum psychological state (Beck, 2001; Page and Wilhelm, 2007; Nur et. al, 2004; O'Hara & Swain, 1996; Sabuncuoğlu & Berkem, 2006; Schweitzer et. al., 1992). Not surprisingly, poor and problematic marital relationship and lack of spousal support increase the risk of post partum depression. Care and support from spouse can be regarded vital at both pregnancy and postpartum as it decreases the rates of post partum depression. Lack of support seems to have a great effect on the likelihood of developing a depressive state as involvement and contribution of two people rather than mother's own efforts ease the consequences of postpartum situation. Absence of husband

support might lead the mother not to be able to share the responsibilities with husband as well as having stress. The fourth hypothesis of the thesis was about spouse support, and proposed that pregnant women with less spouse support would be more likely to be at risk for depression in the pre partum as well as in the post partum phase. Findings supported this hypothesis. Care and support from spouse had a significant negative correlation with depression scores, both in pregnancy and in the postpartum period. This result is consistent with the findings of a study of who found that mothers who had marriages characterized by low levels of support and care, as well as high levels of control by their husbands, were at greater risk of developing post partum depression.

Being exposed to abuse and aggression might indicate marital problems, unhappiness with the marriage or bad communication with the husband. The fifth hypothesis predicted that abuse and aggression from spouse (lack of consensus or satisfaction) would be related to the risk of clinical depression during pregnancy and in the post partum period. Findings supported this hypothesis, and the relationship was stronger for post partum depression. One can suggest that such experiences can be tolerated at pregnancy, but support seeking is quite common in postpartum period. These findings are in line with the results of the previous studies by Aydemir (2007) and Eren (2007) in Turkey.

Various studies show that women seek family support in post partum period (Taylor, 1989; Miligrom et. al., 1999). To the researchers, there seems to be less chance for the women who get enough family

support in postpartum period to experience postpartum depression. The sixth hypothesis indicated that mothers who get more family support would be expected to be at less risk for clinical depression after delivery. This findings support this hypothesis. A meaningful relation is found between family support and post partum depression risk. It can be claimed that family support helps mothers feel comfortable and secure while reducing the feeling of loneliness. It is comforting to have family members around who understand the mother and the baby and satisfy their needs. Tradition of our society not to leave mother lonely for 40 days and to share experiences with family members, especially mothers have a positive effect on mother's psychological situation after birth.

Some previous research found a relationship between attachment styles and the clinical depression. For example, Sabuncuoğlu and Berkem (2006) found a correlation between insecure attachment and post partum depression. The seventh hypothesis argued that preoccupied and fearful attachment styles of mothers would be positively correlated with depression scores both in pregnancy and in the post partum period and that secure attachment style would be negatively correlated with depression in both two phases. There was only support for a low but significant positive correlation between scores on preoccupied attachment style and risk for clinical depression in the pre-partum period.

One of the other questions to ask is why fearful and secure attachment style scores were not correlated with depression scores. This might connected with the methodology of the study. In other words, during

the application of the scales, participants found the tools complex, complained about the repetitive items on the scales and on being asked whether the form is complicated, they confirmed. It is possible, as Sabuncuoğlu & Berkem (2006) argued, that the present tool for identifying attachment styles, the Relationship Styles Questionnaire (RSQ), though the most popular scale used to study attachment, might be inadequate due to its original limitations and its incompatibility with non-western societies. Another reason for this difference from the related literature might be the fact that the participants were disturbed by the questions about their relationships, which they avoided answering and tended to keep their distance.

According to the eighth hypothesis, it was expected that younger mothers would be more likely to be at risk for clinical depression in the postpartum period. But findings don't suggest any significant relationship between age of mothers and post partum depression risk. This study does not find being younger as a risk factor for postpartum depression. In the literature, postpartum depression rates are higher for adolescence pregnancy. One explanation may be that participants in the study are generally older, and that the age range is not very wide.

Eren (2007) argues that there are very few studies that explore the connection between postpartum depression and the physical condition of the mother and the fetus. Physical disorders during pregnancy might increase the anxiety about the self and the baby. The ninth hypothesis proposed that pregnant women who experienced health problems with

themselves or with the pregnancy would be more likely to be at risk for clinical depression in pregnancy. In the sample there were few health problems in pregnancy, but women who experienced either of these problems had significantly higher pre-partum EPDS scores than those who experienced neither of them. It might be useful and important to evaluate the new mothers with depression in terms of having physical problems, and to refer them to required treatment.

In order to clarify the relative effects of different predictors to the risk of post partum depression a stepwise multiple regression analyses was performed for the whole sample of women reached in second phase of the study. As a results of this analyses, a total of five predictors including prepartum Edinburgh Postpartum Depression Scale (EPDS) score, family support, prepartum spousal care and support, previous depression history (yes/no) and planned baby (yes/no) were entered into a stepwise regression analysis, and predicted a very significant proportion of the variance (70%). Prepartum EPDS score was found to be the most significant predictor of post-partum depression risk, explaining 46% of the variance, and indicating that mothers who were in depression at third trimester of pregnancy are at severe risk of post-partum depression. Second most important predictor of post partum depression was lack of family support, explaining 17% of the variance.

A second regression analysis was done using unplanned baby, prepartum spousal care and support, pre partum spousal abuse and aggression and incidence of previous depression history as predictors of pre partum

depression. Spousal abuse and aggression was not a significant factor in the equation. The other three factors predicted 25% of the variance in pre EPDS scores, with unplanned baby explaining 13% of the variance. One reason why the abuser and aggression subscale did not work may be that several of the items appeared to be double barreled, making it difficult to get accurate responses to such items as such the following: “The fact that my husband uses swear words bothers me a lot.”

The last set of analyses were carried out on the data from the second phase of the study to further explore the variation in scores on some major study variables including spousal care and support pre and post partum, spousal abuse and aggression pre and post partum, support from the family post partum, planned baby, and previous depression history, as a function of membership in one of the four groups created based on pre and post EPDS scores: (low, low; low, high; high, low; high, high).

It appeared that women who were likely to be at risk for clinical depression in the pre and post partum periods received much less spousal care and support compared to women who were not likely to be at risk for clinical depression in the pre and post partum periods. It also appeared that those women who were likely to be at risk for clinical depression in the pre and post partum periods received much more spousal abuse and aggression than women who were not likely to be at risk for clinical depression in the pre and post partum periods. Analyses also showed family support to be an important factor in differentiating between the groups of women who were lower or higher in the risk for clinical depression in both the pre partum and

post partum periods, and are in line with previous research in Turkey that show the importance of family support (Nur et. al, 2004) Finally, an overwhelming majority of the women who scored below the cut-off point for clinical depression in the pre partum and post partum periods were found to not have a previous depression history, and to have planned their pregnancies, indicating the importance of vulnerability to depression and lack of preparedness for a new child as important risk factors for clinical depression.

6. 1. STRENGTHS, LIMITATIONS AND FUTURE

RESEARCH RECOMMENDATIONS

The findings of this study have important implications. This is one of the few longitudinal studies in Turkey on post partum depression. In this study, previous depression history, depressed mood in pregnancy, lack of family support, lack of care and support from spouse as well as unplanned baby emerge as significant risk factors for developing post partum depression.

There are several limitations of this study that need to be mentioned. One limitation is that the present study utilized self-report instruments rather than clinical interviews. The fact that this study relies on self-reports of the mothers rather than clinical assessment can be seen as a limitation. Future studies could observe mothers diagnosed with postpartum depression based on clinical assessment. In the reverse direction, it is also possible to examine sub threshold postpartum depression in new mothers and mothers not diagnosed with postpartum depression. It is also important to further understand the different meanings and functions that are attributed to being mother.

Another limitation of this study was that it did not study the view of the fathers in on pregnancy and birth issues. Additionally we believe that studies on postpartum depression should also include mothers of participants. Inclusion of critical family members would provide a more thorough understanding of the family environment, and would be beneficial to clinicians working with new mothers.

Maybe the most major limitation has to do with the nature of the sample. This is heavily middle to upper middle class sample, composed of women who actually applied to the clinic seeking help, some of whom were health care workers themselves. We recommend that future studies be carried out on more heterogeneous samples drawn from the population, including on women who can neither maintain their own customs and cultural practices in the urban centers, nor are able to have access to the available support systems in the city.

CONCLUSIONS

In light of the findings, it is easy to say that postpartum depression is a serious health problem that health care providers should pay more close attention to as a serious health threat. The present study aimed to investigate the possible risk factors for depression in the pre-partum and post-partum periods. The results indicate that previous depression history, depressed mood in pregnancy, family support, care and support from spouse as well as unplanned baby are significant factors for develop post partum depression.

The number of studies on postpartum depression in our country is obviously inadequate although they are on the increase. Risk factors peculiar to Turkish society might be detected more precisely through examination of more women from different centers both in prepartum and postpartum periods. Both work aimed at preventing women from developing post-partum depression and supporting women during and after pregnancy should receive higher priority. Another recommendation we would like to make is that screening tools like EPDS be used in the course of routine pregnancy controls. Women with EPDS scores higher than 12/13 are recommended for referral by a clinician. Particularly, women whose symptoms are mild or bland and who lack family and spousal support, and who have a previous depression history should be evaluated and provided with appropriate support.

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Appendix A: Consent Form

BİLGİLENDİRME VE ONAY FORMU

Araştırmamamıza gösterdiğiniz ilgi nedeniyle teşekkür ederiz. Öncelikle lütfen aşağıdaki açıklamayı dikkatle okuyunuz ve araştırmamıza katılmaya karar verirseniz diğer sayfalara geçiniz.

Elinizdeki ölçekler İstanbul Bilgi Üniversitesi Klinik Psikoloji yüksek lisans öğrencisi Özlem Toker Erdoğan 'nın uzmanlık tezi çalışmasına yardımcı olmanız amacı ile size verilmiştir. Bu çalışmada gebeliğin 6-9 ve doğum sonrası 3-6 aylık dönemdeki annelerde doğum sonrası depresyon belirtilerinin sosyodemografik özellikler, eş ve aile desteğinin yanı sıra yetişkin bağlanma biçemi ile ilişkisini belirlemek amaçlanmaktadır.

Uygulamada bir demografik form ve üç ölçek doldurulacaktır ve formu doldurmak yaklaşık 30 dakika sürmektedir. Anket formundaki kişisel bilgilere (isim, telefon) size doğum sonrasında ulaşabilmek için yer verilmiştir. Anketi dolduranın kişisel bilgileri başka amaçla kullanılmayacaktır.

Araştırmamıza katılmayı kabul ediyorsanız, lütfen bir sonraki sayfaya geçip formu doldurmaya başlayınız. Her açıklamayı okuyarak ve soruları sırasıyla ve atlamadan cevaplayınız.

Appendix B: The Demographic Form

DEMOGRAFİK BİLGİ FORMU

Lütfen aşağıdaki soruları cevaplayınız.

Verdiğiniz bilgiler gizli tutulacak ve sadece çalışmaya katılan kişilerin genel profilini oluşturma amacıyla kullanılacaktır.

Adı

Adınız ve

Soyadınız:

Gebelik haftası:

Bebeğinizin cinsiyeti:

Ev telefonu:

Cep telefonu:

Uygulama Tarihi:

1. Yaşınız: _____

2. Doğum tarihiniz (gün/ay/ yıl) :

3. **Eğitim seviyeniz** (Eğitiminize devam ediyorsanız, içinde bulunduğunuz eğitim seviyesini işaretleyiniz.)

a. ilköğretim

b. lise

c.

meslek okulu

d. üniversite -lisans e. üniversite - yüksek lisans/doktora f.
diğer _____

4. **Medeni Durumunuz:** Bekâr () Evli() Boşanmış ()
Dul ()

5. **Kaç yıldır evlisiniz :** _____

6. **Çocuğunuz var mı?** Evet () Hayır ()

7. **Evetse kaç çocuğunuz var?**

8. **Çocuğunuzun yaşı ve cinsiyeti**.....

9. **Kiminle yaşıyorsunuz?**

a. çekirdek aileyle

b. geniş aileyle (Kimler olduğunu belirtiniz:

.....)

c. diğer:

10. **Çalışma Durumunuz:**

a. Çalışmıyor

b. Çalışıyor: _____ Meslek: _____

11. **Eğer bir işte çalışıyorsanız, haftada ortalama kaç saat çalıştığınızı belirtiniz.**

- a. < 20 saat b. 20-35 saat c. 35-50 saat
d. > 50 saat

12.Kendinizi aşağıdaki gelir seviyelerinden hangisinin içinde görüyorsunuz?

- a. alt b. orta c. Üst

13.Sizinle ve bebeğinizle ilgili herhangi bir sağlık sorunu var mı? Evet

() Hayır()

Evetse lütfen ne olduğunu yazınız.

Sizin sağlık durumunuz

Bebeğin sağlık durumu

14. Daha önce depresyon tanısı almış mıydınız? Evet ()

Hayır()

15.Evetse ne zaman

almıştınız?.....

16.O dönemde ilaç kullanmış mıydınız? Evet ()

Hayır ()

17. Evetse ne kadar kullanmıştınız?

.....

**18.Aşağıda sıralanan etkinliklerden katılmış ya da katılmakta
olduklarınızı işaretleyiniz.**

Süresi

Hala devam ediyor mu?

() Yoga

() Evet

() Hayır

() Psikolojik destek (psikoterapi)

()

Evet () Hayır

() Yaşam koçluğu

(

) Evet () Hayır

Appendix C: Edinburgh Postpartum Depression Scale (EPDS)

Edinburgh Doğum Sonrası Depresyon Ölçeği

Adınız ve Soyadınız:

Yakın zamanlarda bebeğiniz olacak. Sizin son hafta içindeki duygularınızı öğrenmek istiyoruz. Lütfen, yalnızca bugün değil son 7 gün içinde, kendinizi nasıl hissettiğinizi en iyi tanımlayan ifadeyi işaretleyiniz.

Örnek:

Kendimi mutlu hissediyorum

Evet, her zaman

Evet, çoğu zaman

Hayır, çok sık değil

Hayır, hiçbir zaman

Bu, son hafta boyunca "Çoğu zaman kendimi mutlu hissediyorum" anlamına gelmektedir.

Lütfen aşağıdaki soruları örnekte gösterildiği biçimde yanıtlayınız.

Son 7 gündür;

1. Gülebiliyor ve olayların komik tarafını görebiliyorum.

Her zaman olduğu kadar

- Artık pek o kadar değil
- Artık kesinlikle o kadar değil
- Artık hiç değil

Son 7 gündür;

2. Geleceğe hevesle bakıyorum.

- Her zaman olduğu kadar
- Her zamankinden biraz daha az
- Her zamankinden kesinlikle daha az
- Hemen hemen hiç

Son 7 gündür;

3. Bir şeyler kötü gittiğinde gereksiz yere kendimi suçluyorum.

- Evet, çoğu zaman
- Evet, bazen
- Çok sık değil
- Hayır, hiçbir zaman

Son 7 gündür;

4. Nedensiz yere kendimi sıkıntılı ya da endişeli hissediyorum.

- Hayır, hiçbir zaman
- Çok seyrek
- Evet, bazen
- Evet, çoğu zaman

Son 7 gündür;

5. İyi bir nedeni olmadığı halde, korkuyor ya da panikliyorum.

- Evet, çoğu zaman
- Evet, bazen
- Hayır, çok değil
- Hayır, hiçbir zaman

Son 7 gündür;

6. Herşey giderek sırtıma yükleniyor.

- Evet, çoğu zaman hiç başa çıkamıyorum
- Evet, bazen eskisi gibi başa çıkamıyorum
- Hayır, çoğu zaman oldukça iyi başa çıkıyorum
- Hayır, her zamanki gibi başa çıkabiliyorum

Son 7 gündür;

7. Öylesine mutsuzum ki uyumakta zorluk çekiyorum.

- Evet, çoğu zaman
- Evet, bazen
- Çok sık değil
- Hayır, hiçbir zaman

Son 7 gündür;

8. Kendimi üzüntülü ya da çökkün hissediyorum.

- Evet, çoğu zaman
- Evet, oldukça sık
- Çok sık değil
- Hayır, hiçbir zaman

Son 7 gündür;

9. Öyle mutsuzum ki ağlıyorum.

- Evet, çoğu zaman
- Evet, oldukça sık
- Çok seyrek
- Hayır, asla

Son 7 gündür;

10. Kendime zarar verme düşüncesinin aklıma geldiği oldu.

- Evet, oldukça sık
- Bazen
- Hemen hemen hiç
- Asla

Appendix D: The Marital Satisfaction Scale

EVLİLİKTE DOYUM ÖLÇEĞİ

| | | | | | |
|---|-------------------------|---------------------|-------------------|--------------------|----------------------------|
| Adı ve Soyadı: | | | | | |
| Evlilik tarihi: | | | | | |
| Bu anket sizi daha iyi anlamamıza yardımcı olacak. Annelerin evlilikleri hakkında bazı olumlu ve olumsuz duyguları olabilir. Aşağıdaki cümleler bu duyguları ifade etmektedir. Lütfen her cümle için o cümleye ne kadar katıldığınızı belirtin. Hiç katılmıyor olabilirsiniz, katılmıyor olabilirsiniz, kararsız olabilirsiniz, katılıyor olabilirsiniz, ya da tamamen katılıyor olabilirsiniz. | | | | | |
| | Hiç Katılmıyorum | Katılmıyorum | Kararsızım | Katılıyorum | Tamamen Katılıyorum |
| 1. Eşim beni sevdiğini yeterli derecede belli ediyor. | | | | | |
| 2. Eşimin evde küfürlü konuşması beni rahatsız ediyor. | | | | | |
| 3. Eşimin başardığım işleri takdir etmesinden memnunum. | | | | | |
| 4. Eşimin zorlayıcı tavırları evliliğimizi kötü etkiliyor. | | | | | |
| 5. Bana düşen sorumlulukları | | | | | |

| | | | | | |
|--|-------------------------|---------------------|-------------------|--------------------|----------------------------|
| yapamadığımda eşim anlayış gösteriyor. | | | | | |
| | Hiç Katılmıyorum | Katılmıyorum | Kararsızım | Katılıyorum | Tamamen Katılıyorum |
| 6. Evle ilgili büyük kararları (boya badana, eşya alımı, eşyaların düzeni gibi) ortaklaşa almamızdan memnunum. | | | | | |
| 7. Eşimin baskıcı kişiliği yaşantımızı zorlaştırıyor. | | | | | |
| 8. Eşim ev işlerine (yemek ve temizlik gibi) beni memnun edecek kadar katkıda bulunuyor. | | | | | |
| 10. Eşim başkalarının yanında fikirlerimi savunmamı yeteri kadar destekler. | | | | | |
| 11. Konuşurken eşimin kullandığı ses tonundan memnunum. | | | | | |
| 12. Eşimin benim uyku, yemek gibi ihtiyaçlarıma özen göstermesi beni mutlu ediyor. | | | | | |
| 13. Eşimin başkalarının yanında | | | | | |

| | | | | | |
|--|-------------------------|---------------------|-------------------|--------------------|----------------------------|
| beni takdir ettiğini düşünüyorum. | | | | | |
| | Hiç Katılmıyorum | Katılmıyorum | Kararsızım | Katılıyorum | Tamamen Katılıyorum |
| 14. İhtiyacım olduğunda eşimin benim eve ait sorumluluklarımı paylaşmasından memnunum. | | | | | |
| 15. Tartışmalarımız sırasında eşimin hakaretleri evliliğimizi zora sokuyor. | | | | | |
| 16. Problemlerimizi tartışırken eşimin kullandığı ses tonu beni rahatsız ediyor. | | | | | |
| 17. Eşimin kendim hakkında verdiğim kararları desteklemesi beni memnun ediyor. | | | | | |
| 18. Evin günlük ihtiyaçları için verilen kararlarda eşim yeterli katkıda bulunuyor. | | | | | |
| 19. Eşimin bana hakaret etmesi beni üzüyor. | | | | | |
| 20. Eşimin beni cinsel ilişkiye zorlamasından rahatsızım. | | | | | |

Appendix E: The Relationship Scale Questionnaire (RSQ)

İLİŞKİ ÖLÇEKLERİ ANKETİ

Aşağıdaki maddeler romantik ilişkileriniz dahil olmak üzere yakın ilişkilerinizde (arkadaşlık, dostluk gibi) hissettiğiniz duygulara ilişkindir. Sizden genel olarak yakın ilişkilerinizde yaşadıklarınızı dikkate alarak aşağıdaki ifadeleri değerlendirmeniz istenmektedir. Aşağıdaki maddeleri yakın ilişki içinde olduğunuz kişileri düşünerek cevaplandırınız. Her bir maddenin ilişkilerinizdeki duygu ve düşüncelerinizi ne oranda yansıttığını karşılardaki 7 aralıklı ölçek üzerinde ilgili rakam üzerine çarpı (X) koyarak gösteriniz.

1-----2-----3-----4-----5-----6-----7

Hiç Kararsızım/ Tamamen
katılmıyorum fikrim yok katılıyorum

| | (1) | (2) | (3) | (4) | (5) | (6) | (7) |
|---|-----|-----|-----|-----|-----|-----|-----|
| 1. Başkalarına kolaylıkla güvenmem. | | | | | | | |
| 2. Kendimi bağımsız hissetmem benim için çok önemli. | | | | | | | |
| 3. Başkalarıyla kolaylıkla duygusal yakınlık kurarım. | | | | | | | |

| | | | | | | | |
|--|-----|-----|-----|-----|-----|-----|-----|
| 4. Bir başka kişiyle tam anlamıyla kaynaşıp bütünleşmek isterim. | | | | | | | |
| | (1) | (2) | (3) | (4) | (5) | (6) | (7) |
| 5. Başkalarıyla çok yakınlaşırsam incitileceğimden korkuyorum. | | | | | | | |
| 6. Başkalarıyla yakın duygusal ilişkim olmadığı sürece oldukça rahatım. | | | | | | | |
| 7. İhtiyaç duyduğumda yardıma koşacakları konusunda başkalarına her zaman güvenebileceğimden emin değilim. | | | | | | | |
| 8. Başkalarıyla tam anlamıyla duygusal yakınlık kurmak isterim. | | | | | | | |
| 9. Yalnız kalmaktan korkarım. | | | | | | | |
| 10. Başkalarına rahatlıkla güvenip bağlanabilirim. | | | | | | | |
| 11. Çoğu zaman romantik ilişkide olduğum insanların beni gerçekten sevmediği konusunda endişelenirim. | | | | | | | |
| 12. Başkalarına tamamıyla güvenmekte zorlanırım. | | | | | | | |
| 13. Başkalarının bana çok yaklaşması beni endişelendiriyor. | | | | | | | |

| | | | | | | | |
|---|-----|-----|-----|-----|-----|-----|-----|
| 14. Duygusal yönden yakın ilişkilerim olsun isterim. | | | | | | | |
| | (1) | (2) | (3) | (4) | (5) | (6) | (7) |
| 15. Başkalarının bana dayanıp bel bağlaması konusunda oldukça rahatımdır. | | | | | | | |
| 16. Başkalarının bana benim onlara verdiğim kadar değer vermediğinden kaygılanırım. | | | | | | | |
| 17. İhtiyacınız olduğunda hiç kimseyi yanınızda bulamazsınız. | | | | | | | |
| 18. Başkalarıyla tam olarak kaynaşıp bütünleşme arzum bazen onları ürkütüp benden uzaklaştırıyor. | | | | | | | |
| 19. Kendi kendime yettiğimi hissetmem benim için çok önemli. | | | | | | | |
| 22. Başkalarının bana bağlanmamalarını tercih ederim. | | | | | | | |
| 23. terk edilmekten korkarım. | | | | | | | |
| 24. Başkalarına yakın olmak beni rahatsız eder. | | | | | | | |
| 25. Başkalarının bana benim istediğim | | | | | | | |

| | | | | | | | |
|--|-----|-----|-----|-----|-----|-----|-----|
| kadar yakınlaşmakta gönülsüz olduklarını düşünüyorum. | | | | | | | |
| 26. Başkalarına bağlanmamayı tercih ederim. | | | | | | | |
| | (1) | (2) | (3) | (4) | (5) | (6) | (7) |
| 27. İhtiyacım olduğunda insanları yanımda bulacağımı biliyorum. | | | | | | | |
| 28. Başkaları beni kabul etmeyecek diye korkarım. | | | | | | | |
| 29. Romantik ilişkilerimde insanlar genellikle onlarla benim kendimi rahat hissettiğimden daha yakın olmamı ister. | | | | | | | |
| 30. Başkaları ile yakınlaşmayı nispeten kolay bulurum. | | | | | | | |

Appendix F. Family Support Scale

Aileden Anneye Gelen Destek Envanteri

Bazı anneler ailelerinden çok destek alırlar ama bazı anneler pek destek almazlar. Size şimdi okuyacağım cümleler bu tür destek konusunda. Bu cümlelerde “aileden birisi” dediğimiz zaman eşiniz ve çocuklarınız dışında sizin ya da eşinizin ailesinden herhangi bir kişiden söz ediyoruz. Bu cümlelerin her birisi için “Çok doğru”, “Doğru”, “Emin değilim”, “Yanlış” veya “Tamamen yanlış” şıklarından birini lütfen seçin. Bu şıkları şu kartta da görebilirsiniz.

| | Yanlış | Yanlış | Değilim | Doğru | Çok Doğru |
|---|--------|--------|---------|-------|-----------|
| 1. İhtiyacım olduğunda aileden birisi yanımda olur. | 1 | 2 | 3 | 4 | 5 |
| 2. Aileden birisiyle sevinçlerimi ve üzüntülerimi paylaşabilirim. | 1 | 2 | 3 | 4 | 5 |
| 3. Aileden birisi gerçekten bana yardımcı olmaya çalışır. | 1 | 2 | 3 | 4 | 5 |
| 4. Canım sıkkın olduğunda aileden birisinden destek alabilirim. | 1 | 2 | 3 | 4 | 5 |
| 5. Dertlerim olduğunda aileden birisi beni teselli eder. | 1 | 2 | 3 | 4 | 5 |

| | | | | | |
|---|---|---|---|---|---|
| 6. . Bařım dertte olduđunda aileden birisine gvenebilirim. | 1 | 2 | 3 | 4 | 5 |
| 7. . Sorunlarım hakkında aileden birisiyle konuřabilirim. | 1 | 2 | 3 | 4 | 5 |
| 8. . Aileden birisi benim duygularımı önemser. | 1 | 2 | 3 | 4 | 5 |
| 9. Bir karar verirken aileden birisi bana yardımcı olur | 1 | 2 | 3 | 4 | 5 |