PREDISPOSING FACTORS OF POST-NATAL DEPRESSION

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ABSTRACT
In this research, we study the predisposing factors of post-natal depression. This research is
an applied survey which is done through participation. The data are collected through field
study and by two types of questionnaire: depression questionnaire and demographic and
midwifery questionnaire, the statistical society of this research were all the pregnant women
of Kermanshah who have delivered their babies in summer of 1392 and then have moved to
health care centers of Kermanshah. The sampling method was the cluster sampling and some
clinics were picked from them randomly and then the available samples were collected. Data
analysis was done by SPSS, descriptive statistical indices (frequency, Mean and standard
deviation) and other comprehensive statistical indices (Pearson's correlation coefficient and
independent group T-test).The hypotheses were accepted and we understood that the maternal
midwifery factors (like number of pregnancies, types of deliveries and abortions), neonatal
factors (like gender, nutrition), maternal factors (like age, occupation, and education) are
related to the delivery of infant. All of these factors have many Items that are accepted before
the analysis.

Keywords: Depression, Delivery, Predisposing Factors Of Post-Natal Depression

INTRODUCTION
the pregnancy period is one of the most
important stages of every women life.
Even though this period is very joyful
(Mcke 2001, ashkaripour 1390) but it's one
of the stages with many stress and
physiological and mental changes (Dawns
1990, Cuningham 2005) that make a
woman more sensitive and make identity changes for that person (Bennet 2005, Dawns 1960)

For most of the women having a baby is an stressful factor that can be cause of depression disorders (Robertson 2004). Nowadays, depression is the most prevalent disorder among the adults. (Hosseini Sazi 2005) and based on the ideas of WHO, it’s the fourth biggest health problem around the world. (Akiskal 2005) said that it’s a general issue of life and it had been seen in all countries and cultures, so we can forecast that in 2020 it will be known as the second common disease after cardiovascular disease because its totality includes 15% of all disorders. (Takenchi 1998) said that one out of every 8 people is depressed and its incidence is doubled in women. (Lashkari Pour 1390, Uningham 2005, Akiskal 2005)

The reason why depression happens in women twice than the men is that they are faced many effective factors like low social value, hormonal changes related to pregnancy cycles and many other problems that are caused by pregnancy and delivery (Parry Bl 2001, Gelder2005, Oakely 1995). We can say that the highest level of behavioral disorder in women happens during pregnancy and can cause post-natal depression. (Leung 2002, Cook 1995)

Depression is one of the most mental disorders of post natal period which starts about for weeks after delivery and about 13% of women experience it (Wisner 2002, Williamz 1385)

While many researchers said that the total percentage of this disorder is 33% around the world (Zahra Souki 1387) but in our country it has a wider range from 5 to 42.13% (Sadouk 2005, Jannati 2005, Beck 2001 and Khorami Rad 2010)

In fact, the post-natal period is a transformational condition which the mother faces new roles and relationships in that and she should come up with all of them. (Stocky 2000) On the other hand, since her energy decreases during pregnancy and after delivery and because of the drugs that she takes, because of the delivery duration and because of the other issues like fear of delivery, fear of giving birth to an abnormal baby, fear of attraction loss for the partner, and fear of having disability to taking care of the baby, the depression may happen for the mother in post-natal period. Specially, in the first 6 weeks after delivery, we are facing many mental diseases and emotional problems. Since the post-natal depression occurs for several times and affects mother, baby, family, relationships and social effectiveness, we have to look for effective treatments. So this research is an effective
work that tries to improve the health level of the family.

**Theoretical concept and background:**

Depression: the term "depression", can be used for creation, description, and categorizing the mental disorders. We know a depressed person is an unhappy person. This experience includes: having a feel of sin, non-valuableness, and self-abjection.

Most of researchers are agree about the factors that cause depression and many measures are available for measuring these factors.

Feeling of sadness, failure and depression, loss of interest in doing activities, sleep and energy disorders and concentration problems are some common mental problems among people. 15-20% of people are depressed due to an important event of their life. 2-8% are sad and blame themselves for several months and sometimes for several years (Bir et al. 1996 . Kesher 1994)

**Symptoms of post-natal depression:**

While we don’t count depression as a complete unit of disorder in interests but it has 4 symptoms that are: cognitive, physical, and material but its not necessary for all of those four symptoms to be presented at the same time. But as these symptoms increases we will be sure that the person is depressed. Sadness is one of the symptoms of depression. In this case the person cries and maybe he thinks about suicide. A depressed person loses his intention and interest to family activities and entertainments. Many depressed people say that they lost their interests about things that were interesting for them in the past. The main symptoms of cognitive disorders appear as the negative thoughts. The self-confidence is very low Among these people. They think that they are non-valuable and blame themselves because of their mistakes. They are frustrated about the future and don’t do anything to improve their situations, they also have little intention to participate.

The physical symptoms of depression include: changes in appetite and sleep disorders and fatigue. Depressed people think of themselves and don’t pay attention to their environment and make the small sadnesses bigger than what they really are. (Berahani 1385)

**Types of depression disorders:**

The depression disorders are divided into two groups of unipolar and bipolar disorders. The bipolar disorder appears with the periods of depression and disturbance. The disturbance period can be extended up to several periods or weeks while the depression period can be extended up to 3 times more than the disturbance period.
This kind of disorder happens in both women and men equally but the unipolar depression (sadness) happens in women three times more than in the men. The depressed people feel that they are sinful and worthless. They have low energy and they are not intended to eat food or to have sexual behaviors. They also don’t have regular sleep times (they sleep on time but they get up too early) they have constipation and their salivation decreases (Karlson 1992, from Khoda panahi 1380).

**Factors related to depression:**
Researchers believe that the different biological and environmental factors lead to depression. These factors vary from one person to another. The studies show that the inheritance plays an important rule here. Genes can affect the chemical balance of the brain, and can develop those parts of brain that stop the negative expressions and the hormonal response of the body to stress causes depression also. (Cicchetti and Toth 1998)

Experience can also leads to depression and makes those biological changes. Depression and other mental disorders are more common among the parents of depressed children. While this problem can move from one generation to another, the depressed parents behave maladaptive to their children so they can hurt them and their self-esteem and affect their cognitive and social abilities (Garber Brafladt and Weis 1995)

The depressed people usually accept that their positive results of education and relationships are out of control. So some events like failures, parents’ divorce, and break up in a relationship or a friendship can lead to depression. The disability of depressed adults to imagine a valuable future can destroy their identity improvement (Harrington Rutter 1996).

**Pregnancy:**
Any women can be a mother one day. However this is considered a normal subject but we should know that while its not a small event but it makes deep changes in a woman's life. Some people think that after the birth of the baby, the mother has already passed the recovering period and attend to the newborn only. While the mother has already passed the stressful period of pregnancy and delivery but now she feels more fatigue.

**Puerperium:**
The women in the post-natal period specially in the first month, feel the highest level of depression in their lives. After delivery, the changes of 9 months pregnancy become normal in few weeks immediately after the delivery and their feeling also will change and they may need some accommodation in their personal
relationships so there may still be a risk of depression (Hadizadeh et al. 1384)

The factors that lead to post-natal depression:
There is no agreement about why post-natal depression occurs but there are many factors that can affect it. Hassan Zahraei et al. 1371:

1. Mothers age:
   It seems that as the age increases the accommodation with conditions increases and so the stress and anxiety should decrease but in fact, it increases too. In most of the studies, age is a paradoxical finding. The low age of mothers during pregnancy can increase the anxiety about future, because the insufficient experiences that they have can cause post-natal depression and also in old mothers the importance of the infant and his future cause depression too.

2. Education of parents:
   Newman and Newman 1991: one of the factors that can decrease the post-natal depression is the high level of education and high socio-economic conditions because they make the relationships stronger. In such situation, people can solve their problems easily.
   The results of study by Bani Jamali et al. 1383 showed that there is a meaningful relationship between education and sexual satisfaction. So the high education leads to having a better life. Amir Ahmadi Zadeh et al 1382, said that the education level of parents who want to get divorced is lower than the others so people from lower social levels and with lower educational level are more intended to get divorced because the educated mothers study more and get the important and essential information from sources.

3. Number of delivery:
The number of delivery can change the family due to its effects on the mothers and as the number of children increases, the responsibility and anxiety of parent increases and this can affect the post-natal depression. Sharifi et al. showed that there is no relationship between number of children and depression, while Rahmani has another belief.

4. Infant gender:
There is a meaningful relationship between the expected gender by parents and the post-natal depression and when the gender of infant is not as the same as what they expected it to be, depression occur more obviously. (Lashkari pour et. Al.) Forouzande in Shahrekord and Hosseini in
Kermanshah found out that its because of the cultural issues in different families that make some people think the boys can support their family but Nezal Azh didn’t find any meaningful relationship between them.

Local background:
In the study by Salari et al. 1388, with the title: "the relationship between mother's tiredness and post-natal depression" he showed that there is a meaningful relationship between the mother's age, father's education, shelter, having excuse and rest during pregnancy, sleep disorders in last 3 months of pregnancy, anxiety about body fitness, delivery type, infant behavior: quiet, normal, restless and the past-natal depression but there is no relationship between the mothers education, her job, fathers occupation, the salary of the family per month, the number of pregnancies, the insomnia during delivery, duration of delivery and the gender of infant. Also there is no meaningful relationship between the self-esteem, social support and quality of relationships with the post-natal depression.

Kobra Lashkari pour et al. 1390, in their researched in titled" the post-natal depression and factors related to it" have studied this topic for 4.5 months and found that there is meaningful relationship between the mothers age, her education, delivery type, expected infant gender by parents, depression, background and psychological and depression drugs she took. Also there was no meaningful relationship reported between the wanted or unwanted ness of pregnancies, history of last child's death, mother's occupation, number of children, abortion, nutrition and the post-natal depression.

Kiani et al. (1387) in a study in titled" the effects of demographic variables on post-natal depression and marriage satisfaction among women in Astara" showed that there is no meaningful relationship between the education and depression average so as the education increases, the marriage satisfaction increases and as the age of people increases, their satisfaction of engagement decreases. But there is a meaningful relationship between the occupation and sexual satisfaction and the depression rate but there is no meaningful relationship between this and the women occupation.

It says that there is a meaningful relationship between post-natal depression and the satisfaction with income. While there is a meaningful relationship between the satisfaction of
life and education but such relationship doesn’t exist with depression.

**Foreign background:**

Wong believes that almost all of the infertile couples are depressed due to their beliefs about their generation fall. When these couples visit the clinics they are too depressed and also says that the post-natal depression has a meaningful relationship with mothers education and the amount of her stress while its not related to the infant's gender

Types of delivery:

Dennis believes that there is a meaningful relationship between post-natal depression with disability to responsibility acceptance , mothers stress, wanted or un-wanted ness of pregnancy, economical condition of mother while this relationship doesn’t exist with the gender , education and mothers occupation.

Ver Doux et al. says that there is a meaningful relationship between the mothers education , her illnesses during pregnancy (such as diabetes and blood pressure) and depression.

The study by Beck showed that there is a meaningful relationship between the mothers marriage, her disability to accept the responsibilities, her age, her occupation, and post-natal depression.

The average of depression for infertile women is 8.31 and its 10.5 for fertile women (bahrami 2007)

The studies showed that the negative answer of pregnancy test can increase the depression symptoms (Welegston 2010)

Based on the hypotheses we have:

1. There is a meaningful relationship between the maternal obstetric factors (number of pregnancies, types of deliveries, issues during pregnancy, abortion, wanted or un-wanted ness of pregnancy ant etc.

2. Neonatal factors (gender, nutrition, death) have a meaningful relationship with post-natal depression.

3. Maternal factors (age, education, occupation, fathers education, mothers disorder, her readiness to accept a new role) has a meaningful relationship with post-natal depression.

**RESEARCH METHOD**

This research uses a participating method. The data collection has been done through questionnaires, library sources and websites. The statistical society of the research was all pregnant women in Kermanshah who had delivered their babies in summer of 1392 the samples were collected
through cluster sampling and some schools were chosen randomly then the analysis was done through SPSS and descriptive statistical indices (frequency, standard deviation and comprehensive ones (the pearsons coefficient and independent T-test)

**Materials for data collection:**

1. Demographic and midwifery questionnaire:
   - This questionnaire includes demographic and midwifery info about mother (like number of deliveries, abortion, number of pregnancies, types of delivery, infertility, mothers age, education, occupation, stress, mothers fatigue, mothers illness, her readiness to accept a new role) family factors (economical support, social support, religion, education, husbands job, sexual satisfaction, location, love and support from partner) and newborn factors (infants gender, weights, nutrition, disorders, death) that are accepted by experts.

2. The depression measure of Beck:

3. In this study the Beck’s questionnaire (1961) was used to measure the depression level of samples. The questionnaire at first was used by Aron T. Beck for the assessment of depression and its amount among adults. (1960) and it was corrected in 1971 and published in 1978. This questionnaire has 21 questions and each question has 4 choices and respondents have to circle the choice that is more similar to their attitude. 15 statements are about psychological symptoms and 6 statements are about physical symptoms and the total number is evaluated by the statements and the range is between 0 to 63. In this questionnaire, 0-9 shows no depression, 10-16 shows weak depression, 17-29 shows average depression, and 30< shows intense depression.

4. Its validity was evaluated by Mark, Mandelson and Warbaf in 1979, 1985 and 1986 respectively. Recently in a research of oloom pezeshki university of Tehran, Rouzbeh hospital, the amounts of 70-77% were respond (Kaviani 2009) for answering these questionnaires, were the graded above 30 are for depressed women and below 10 for un-depressed women.

**Research findings:**

Hypothesis 1-1: There is a relationship between wanted or unwanted ness and the depression
Table 1: Kai Do test- relationship between wanted or un-wanted ness and the depression

<table>
<thead>
<tr>
<th></th>
<th>Value</th>
<th>Degree of freedom</th>
<th>Meaningful level</th>
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<tbody>
<tr>
<td>Pearson Kai-do test</td>
<td>124.855</td>
<td>1</td>
<td>.000</td>
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<tr>
<td>Number</td>
<td>400</td>
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</table>

We see that the kai-do Pearson with one degree of freedom is statistically meaningful and the level is less than 5% so the Ho will be rejected based on the relationship between the pregnancy condition and the other hypothesis would be accepted with 95% of accuracy.

Hypothesis 2-1: there is a relationship between abortion and the depression.

Table 2: Kai Do test- relationship between abortion and the depression

<table>
<thead>
<tr>
<th></th>
<th>Value</th>
<th>Degree of freedom</th>
<th>Meaningful level</th>
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<td>Pearson kai-do test</td>
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<td>1</td>
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<tr>
<td>number</td>
<td>400</td>
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</tbody>
</table>

We see that the kai-do Pearson with one degree of freedom is statistically meaningful and the level is less than 0.05 so the Ho will be rejected based on the relationship between abortion and the depression condition and the other hypothesis would be accepted with 95% of accuracy.

Hypothesis 3-1: there is a relationship between mother's physical disorder and the depression.

Table 3: Kai Do test- relationship between physical abortion and the depression

<table>
<thead>
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<th></th>
<th>Value</th>
<th>Degree of freedom</th>
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<td>Pearson kai-do test</td>
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</table>

We see that the kai-do Pearson with one degree of freedom is statistically meaningful and the level is less than 0.05 so the Ho will be rejected based on the relationship between physical disorder and the depression condition and the other hypothesis would be accepted with 95% of accuracy.

Hypothesis 4-1: there is a relationship between delivery type and the depression.

Table 4: Kai Do test- relationship between delivery type and the depression

<table>
<thead>
<tr>
<th></th>
<th>Value</th>
<th>Degree of freedom</th>
<th>Meaningful level</th>
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<tr>
<td>Pearson kai-do test</td>
<td>131.358</td>
<td>2</td>
<td>.000</td>
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<tr>
<td>number</td>
<td>400</td>
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</tbody>
</table>
We see that the kai-do pearson with two
degree of freedom is statistically
meaningful and the level is less than 0.05
so the Ho will be rejected based on the
relationship between delivery type and the
depression condition and the other
hypothesis would be accepted with 95% of
accuracy.

Hypothesis 5-1: there is a relationship
between delivery time and the depression

| Table 5: Kai Do test- relationship between delivery time and the depression |
|-------------------|-------------------|-------------------|
|                   | Degree of         | Meaningful        |
|                   | freedom           | level             |
| Pearson Kai-do    | 87.951            | 3                 | 0.000             |
| number            | 400               |                   |                   |

We see that the kai-do pearson with three
degrees of freedom is statistically
meaningful and the level is less than 0.05
so the Ho will be rejected based on the
relationship between time of delivery and the
depression condition and the other
hypothesis would be accepted with 95% of
accuracy.

Hypothesis 6-1: there is a relationship
between number of children and the depression

| Table 6: Kai Do test- relationship between number of children and the depression |
|-------------------|-------------------|-------------------|
|                   | Degree of         | Meaningful        |
|                   | freedom           | level             |
| Pearson Kai-do    | 87.951            | 3                 | .000              |
| Number            | 400               |                   |                   |

We see that the kai-do pearson with 3
degrees of freedom is statistically
meaningful and the level is less than 0.05
so the Ho will be rejected based on the
relationship between number of children
and the depression condition and the other
hypothesis would be accepted with 95% of
accuracy. Hypothesis 1-2: there is a relationship
between the gender of baby and the depression

| Table 7: Kai Do test- relationship between the baby's gender and the depression |
|-------------------|-------------------|-------------------|
|                   | Degree of         | Meaningful        |
|                   | freedom           | level             |
| Pearson kai-do    | 2.348             | 2                 | .309              |
| Number            | 400               |                   |                   |

We see that the kai-do pearson with two
degrees of freedom is statistically
meaningful and the level is less than 0.05
so the Ho will be rejected based on the
relationship between baby's gender and the
depression condition and the other
hypothesis would be accepted with 95% of
accuracy.

Hypothesis 2-2: there is a relationship
between baby's disorder and the depression

| Table 8: Kai Do test- relationship between baby’s disorder and the depression |
|-------------------|-------------------|-------------------|
|                   | Degree of         | Meaningful        |
|                   | freedom           | level             |
| Number            |                   |                   |                   |
We see that the kai-do pearson with one degree of freedom is statistically meaningful and the level is less than 0.05 so the Ho will be rejected based on the relationship between baby's gender and the depression condition and the other hypothesis would be accepted with 95% of accuracy.

Hypothesis 3-2: there is a relationship between baby's nutrition and the depression

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<tbody>
<tr>
<td>132.619</td>
<td>1</td>
<td>.000</td>
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We see that the kai-do pearson with one degree of freedom is statistically meaningful and the level is less than 0.05 so the Ho will be rejected based on the relationship between baby's nutrition and the depression condition and the other hypothesis would be accepted with 95% of accuracy.

Hypothesis 4-2: there is a relationship between infant's admission and the depression

<table>
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<tr>
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<th>Degree of freedom</th>
<th>Meaningful level</th>
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<td>50.412</td>
<td>1</td>
<td>.000</td>
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We see that the kai-do pearson with one degree of freedom is statistically meaningful and the level is less than 0.05 so the Ho will be rejected based on the relationship between infant's admission and the depression condition and the other hypothesis would be accepted with 95% of accuracy.

Hypothesis 1-3: there is a relationship between age and the post-natal depression

<table>
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<tr>
<th>value</th>
<th>Degree of freedom</th>
<th>Meaningful level</th>
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<tr>
<td>70.84</td>
<td>3</td>
<td>.000</td>
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We see that the kai-do pearson with 3 degrees of freedom is statistically meaningful and the level is less than 0.05 so the Ho will be rejected based on the absence of relationship between age and the depression condition and the other hypothesis would be accepted with 95% of accuracy.
Hypothesis 2-3: there is a relationship between education and post-natal depression condition and the other hypothesis would be accepted with 95% of accuracy.

| Table 12: Kai Do test- relationship between education and the post-natal depression |
|---------------------------------|------------|----------------|-----------------|
| Pearson kai-do                  | 210.7      | Degree of freedom | 4               |
| Number                          | 400        | Meaningful level  | .000            |

We see that the kai-do pearson with 4 degrees of freedom is statistically meaningful and the level is less than 0.05 so the Ho will be rejected based on the relationship between education and the depression condition and the other hypothesis would be accepted with 95% of accuracy.

Hypothesis 3-3: there is a relationship between occupation and the depression condition and the other hypothesis would be accepted with 95% of accuracy.

| Table 13: Kai Do test- relationship between abortion and the depression |
|---------------------------------|------------|----------------|-----------------|
| Pearson Kai-do                  | 75.362     | Degree of freedom | 1               |
| number                          | 400        | Meaningful level  | .000            |

We see that the kai-do pearson with one degree of freedom is statistically meaningful and the level is less than 0.05 so the Ho will be rejected based on the absence of relationship between abortion and the depression condition and the other hypothesis would be accepted with 95% of accuracy.

Hypothesis 4-3: there is a relationship between being a married/single/divorce/widowed and the depression condition and the other hypothesis would be accepted with 95% of accuracy.

| Table 14: Kai Do test- relationship between being a married/single/divorce/widowed and the depression |
|---------------------------------|------------|----------------|-----------------|
| Pearson- Kai do                 | 286.128    | Degree of freedom | 3               |
| number                          | 400        | Meaningful level  | .000            |

The table shows the relationship between marriage and depression so most of the 78 depressed people are divorced and widowed.

We see that the kai-do pearson with 3 degrees of freedom is statistically meaningful and the level is less than 0.05 so the Ho will be rejected based on the absence of a relationship between being a married/single/divorce/widowed and the depression condition and the other hypothesis would be accepted with 95% of accuracy.

Hypothesis 5-3: there is a relationship between partners job and the depression condition and the other hypothesis would be accepted with 95% of accuracy.

| Table 15: Kai Do test- relationship between the partner's occupation and the depression |
|---------------------------------|------------|----------------|-----------------|
| Pearson kai-do                  | 200.259    | Degree of freedom | 3               |
| number                          |            | Meaningful level  | .000            |
We see that the kai-do pearson with 3 degrees of freedom is statistically meaningful and the level is less than 0.05 so the Ho will be rejected based on the absence of a relationship between partners occupation and the depression condition and the other hypothesis would be accepted with 95% of accuracy.

The target of this study is to evaluate the factors that can make post-natal depression which is discussed in 3 hypotheses.

1st hypothesis: the maternal obstetric factors (number of pregnancies, types of delivery, abortion, infertility) have relationship with post-natal depression.

RESULT

Types of delivery:
The results showed that there is a meaningful relationship between Caesarean, emergency caesarean and NVD. So 8% and 11% of these women who had affective or emergency caesarean had post-natal delivery. These results are the same as those by Dolatian, Farzad et al., Rahmani et al. it means that the depression is higher in cesarean patient and that’s why there are many methods for ND without any pain but Pattie showed that there is no relationship between delivery types and post-natal depression and there was also no statistical difference between the depression range in groups of NVD and caesarean.

Wanted or un-wanted pregnancies:
In this study 19.3 from 34.5 of depressed people have un-wanted pregnancy. This is an unexpected event that brings an over power and brings a lot of stress. Researchers show that unwantededness of pregnancy causes depression. It is also the same as findings by Malakooti, Shahidi, Sehati Shaghai, Hassan Zahraei, Hosseini, Ghafari Nejad, Khorami Rad, Lashkari pour.

History of abortion specially in last pregnancy:
In the study by Hassan Zahraei et al. there is no relationship between abortion and post-natal depression and Lashkaripour also rejects it, but Ghafari and Sadr accept this relationship.

In this study we say that there is a meaningful relationship between the history of abortion and doing that a symptom of post-natal depression.

Number of deliveries and its time:
In the study by Beck, there is no relationship between depression and number of deliveries but Abadanian, Sehati and Rahmani are agree with the findings of current researches and say that as the number of children increases the responsibilities of mothers increases so they have less time to rest and the possibility of depression increases. But
Shahidi, and Lashkari didn’t find any relationship between number of children and depression.

2nd: neonatal factors (gender, nutrition, death, disorders) have a meaningful relationship with post-natal depression.

**NEONATAL'S GENDER:**
Shaghaei et al. didn’t find any relationship between depression and pregnancy because the mothers in the study were giving birth to their first child so in the first delivery they think of his/her helth more than the gender will be affected by the 1st experience of being parents but in this study we saw that the mother who give birth to girls are depressed due to social problems. Lashkaripour counts it as a factor of depression

**Nutrition type of new born:**
In this study, we see that there is a meaningful relationship between post-natal depression and the nutrition so breast feeding is more among un-depressed mothers. It seems that breast feeding can leads to accommodation with the role of being a mother so mothers are more satisfied and less stressful and it’s the same as findings by Khadir zadeh, Sehati Shaghaei, Hassan Zahraei, Ghafari Nejad , Kaplan and Sadok. In the studies by Yasemi, there is a meaningful relationship between the way of feeling and the post

**Admission and infant's mortality:**
In studies by Rahmani et al, its said that the admission of infant for some reasons like Jaundice, fever, hearing disorders, and physical problems leads to depression of their mother. The current study also showed that those mothers who gave birth to died infants or their infants were died in 1 month after birth may have more intension to be depressed and that can be because of feeling of sin for the infant's illness.

3rd hypothesis: maternal factors like mothers age, occupation, education, occupation of partner, marital status, mothers sickness, ability to accept new roles have relationship with depression.

Mother's age: in this research, 22% of women are in the high risk groups of less than 20 and more than 30years old. So 10% were less than 20 and 12% were more than 30. And most of them were about 21 to 30 years and the average was 24.7 +3.6.

in this research, of Nickpour and Rahmani et al, there was no meaningful statistical difference between two groups of depressed and un-depressed mothers while in the studies by Khadiv Zadeh there was no meaningful relationship between mothers age and post-natal depression. Recent findings showed that there is a
meaningful relationship between age and post-natal depression so as the age decreases the people are less intended to be depressed which is the same as the results of studies by Sotoodeh in 1379 and also it is against findings by Sehati shaghaei. Occupation and education of parents: In the study by Kiani et al., a meaningful relationship was seen between mothers education and post-natal depression and Sabahan et al. said that there is a relationship between low education and post-natal depression while there is no relationship between mothers job and post-natal depression. Sadr et al., Sotoodeh, Irfan, and Molabagheri found that the depression is more common among housewives. In the study by Rahmani there was a meaningful relationship between mothers education and depression but Abadian showed that the education is not related to depression and Shahidi said that the working mothers are more intended to depression which is against other current findings. In the current study, the relationship between education and post-natal depression is caused from the increase in knowledge of mothers about social rights, personal needs and increase in educational level of partners. More over, Khadir zadeh et al. showed that there is no meaningful statistical relationship between mothers education, job and partners job but the depression has a direct relationship with the partners education but Antwan has said that this relationship is too weak. in this research there is no statistical relationship between partners occupation and post-natal depression. Sehati Shaghaei and Khamseh said that the job satisfaction has no effect on post-natal depression but Shafi Abadi says that the best thing is to have a good job.

**Marital status:**
Dennis believes that the single parents (specially mothers) are more intended to depression and Rahmani et al. also reported a meaningful relationship between marital status and post delivery depression. While in this study there is no statistical difference between depression and marital status.

**Research limitations:**
1. Current study is done on mothers who have passed five weeks after delivery so the effects of some variables like social support before delivery and up to one year after that is evident.
2. This study is based on the ideas of participants and they can be affected by their believes and intention to keep some family secrets.
3. This study is done on rural women who have visited the health care institutions of Kermanshah while the urban women may
have a different depression rate due to their cultural problems.

**PRACTICAL SUGGESTIONS:**

1. Based on the outcomes of post-natal depression we need to learn the problem solving abilities and try to learn about decision making in the field of depression problems with the help of psychiatrists and in the mental health care centers.

2. Increasing the women information about how to improve their life with the help of psychiatrists.

3. Presence of psychiatrists in the depression treatment group to identify the pregnancy based problems and their outcomes.

4. The women should go to health care centers during pregnancy and after delivery to check their psychological condition and be tested and treated if needed.

**REFERENCES**

1. Khadiv Zadeh, the relationship between satisfaction during pregnancy and the post-natal depression- the journal of women in Iran, downloaded from medical sources.

2. Gity Sotoodeh et al. (1386), evaluation of anxiety and depression and their related factors in women and their relationship with Androgen of the blood/ Islamic commerce Journal of Medical Council- 25th period/ number4/ winter of 1386: 482-489

3. Nesal Az et al. the effect of supportive actions during pregnancy on the post-natal depression, Journal of Nursing and Midwifery, Tehran University of Medical Sciences (Hayat), 12th period, number3, fall of 1385, pp73-80.

4. Dolutan, Mahrokh et al. (1385). Relationship between the delivery time and the post- natal depression. Productive and non-productive journal. fall of 85. PP 260-268.

5. HadiZadeh Talasaz et al. comparison of depression after NVD and emergency caesarean in the women who have visited the Bahman 22nd Hospital of Gonabad (1382), scientific journal of Social Science university of Kermanshah, Behbood journal. 8th year. Number40, winter of 1383, pp 21-30.


7. Sehati Shaghaei, Fahimeh. Evaluation of 42 depression samples who have visited the hospitals of Social science university of Tabriz in 1377. Scientific journal of nursing and midwifery of Isfahan. Number13, fall of 1379. Pp 54-58

8. Mola Bageri, Masoumeh et al. the depression symptoms and its effects on the sexual satisfaction of mothers in Toesierkan 1383.

9. Forouzandeh, Nasrin et al. evaluation of predisposing factors of post-natal depression in women who have visited the
health care centers of Shahrekord in 1376, Proceedings of the National Safe Motherhood, the nursing and midwifery university of Tabriz, June of 1387, pp 97-102

10. Forouzandeh, Nasrin et al., evaluation of mental health level during pregnancy and the effective factors in women who have visited the health care centers of Shahrekord in 1380-1381. Productive and non-productive journal. Spring of 1386, 146-155.

11. Hassan Zahraei Roshanak et al. evaluation of the relationship between post-natal depression and other different factors in women who have visited the health care centers of Isfahan in 1376. The journal of nursing and midwifery university of Isfahan. Number 11, winter of 1377, pp 50-57.

12. Hassan Zahraei Roshanak et al. evaluation of the relationship between post-natal depression and other different factors in women who have visited the health care centers of Isfahan in 1376. The summary of different nursing researches about behavioral disorders from prevention to rehabilitation. Tabriz, 1379, pp 188-195.


14. Hosseini Shahidi, Laleh et al. comparison between the depression in wanted and un-wanted pregnancies, the scientific journal of social science and medical welfare university of Gonabad, pp 90-95.

15. Abadian, Sharifabad Mehravar. The evaluation of post-natal depression and its predisposing factors in mothers who have visited the health care centers of Tehran oil company. Social science university of Iran, 1377.

16. Sehati Shaghaei, Fahimeh et al. evaluation of predisposing factors of prenatal depression. The research and science journal of medical science university of Ardabil, 8th period, number 1, spring of 1387, pp 54-61.


20. Rahmani, Farnaz et al. the predisposing factors of post-natal depression. Nursing newspaper of Iran. 24th period, number 72, November of 1390, pp 60-86.
21. Fatemeh Kiani, Negin Madad Zadeh, the effects of demographic factors on the sexual satisfaction and post-natal depression in women of Astara 1387. Woman and health' journal, number2, summer of 1389.pp21-32

22. Salari, Parvin et al. evaluation of the relationship between mothers fatigue and the post natal depression. The journal of mental health principles. 11th year, winter of 1388, number3, pp2-11.