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# The study of relationship between depression with the type of pregnancy (wanted and unwanted) in Tamine Ejtemaee Hospital in Iran

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#### Abstract

In this study 200 pregnant women were invited to answer the questionnaire of Edinburgh Postnatal Depression Scale to be completed in a period of 29-32 weeks of pregnancy. The scale a score above 12 is widely used to indicate the probable depressive disorder. The mean of least depression score in wanted and unwanted group was for question 10. The highest depression score was for question 3 and 6, respectively. There wasn't any significant correlation between the methods of pregnancy depression score .So, there wasn't any correlation between depression score and unwanted pregnancy.

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#### 1. Introduction

The reduction of unintended pregnancy is a prominent reproductive health objective for Healthy People 2010 — a National set of goals aimed at decreasing significant preventable health threats (Department of Health and Human Services).

Epidemiologic studies indicate that the possibility of enduring depression by women is twice men during their life (Csatordai et al., 2007). Pregnancy is one of the biggest stressful factors in life, which may reveal depression or makes it worse. Marital difficulties, unplanned pregnancy, personal or family life history of depression and low-social-economy, increase possibility of being depressed (Gary et al., 2001).

Depression prevalence during pregnancy is ten percent and seven percent after giving birth. Depression has a link with preterm delivery, low birth weight, and not receiving proper care while pregnant (Cooper et al., 1988; Ohara et al., 1990).

In standard demographic usage, pregnancy is classified as intended if it was wanted at the time or sooner, and as unintended if it was not wanted at the time of conception, irrespective of contraceptive use at the time of conception(Brown & Eisenberg, 1995; Abma et al.,1997).

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Among unintended pregnancies, a distinction is made between mistimed and unwanted. Conception that was wanted eventually but not until a later time is defined as mistimed, and that which was not wanted at anytime as unwanted

Unintended pregnancy is viewed as a health risk that leads to acute and long-term physical, psychological, and social consequences for women and their children. When unintended pregnancy is carried to term, it is associated with adverse prenatal behavior, such as late recognition of pregnancy, late initiation of prenatal care, and smoking during pregnancy (Kost, Landry, & Darroch, 1998; Hellerstedt et al., 1998).

It is also associated with depression of mothers during pregnancy and postpartum, and with lower birth weight and neonatal death for babies (Kitamura et al.,1996; Cartwright, 1988; Bustan & Coker, 1994). The long-term effects of unwanted pregnancy include: higher risks of mental retardation, cerebral palsy and lower social competence of the child, difficult family relations, child abuse, worse performance at school, and more psychosomatic symptoms (Rantakallio & Myhrman, 1990;; Blomberg, 1980).

Apparently the amount of hormones and their changes has a role in this issue. Estrogens and progesterone levels are often higher before delivery among women who are depressed after giving birth, and there is a more drop in such hormones among these women subsequent to delivery. In addition to mentioned causes, we can have stress during pregnancy, pain and discomfort, exhaustion due to lack of sleep and so on (Csatordai et al., 2007).

Our research shows that the pregnancy depressions have been representative and predictive of post-delivery depressions (Ohara et al., 1984; Green, 1990).

In a research, Watson and his colleague concluded that twenty-seven percent of post-delivery depressions had been started from pregnancy (Watson et al., 1984).

In Evants study, maximum rate of depression was in the thirty-second's week of pregnancy and depression prevalence was more than post-delivery period (Evants et al., 2001).

According to mental health importance, particularly among pregnant women and investigating of its connection with unwanted pregnancy and also as there has not been a research done on this subject, this research is going to analyze this crucial issue with the aim of comparing depression in planned and unplanned pregnancies. With the hope that it's results manage to contribute to promote women's health.

#### 2. Method

This study is a descriptive study, which was conducted in Tamin Ejtemai hospital in Hamadan, which is a city located in western part of Iran. And individuals' qualifications entailed females to have singletons not twins or something. Besides, they had not to have complications concerned with pregnancy such as firstly, high blood pressure in the meanwhile which is called Pre-eclampsia and eclampsia, then Poly hydramnious, placental abruption \_i.e. separation of placenta\_, not to be placenta previa and other similar considerations.

In the research of 200 pregnant women, 129 were wanted and 71 were unwanted pregnant, who they had gone to Tamin Ejtemaie hospital for caring in the period of pregnant, were interviewed via random and in the special questioner which is called "Edinburgh Postnatal Depression Scale" was registered. These questioners include 10 questions and every question has 4 parts as a answers. Also has been considered 0 (as a lowest score) and 3 (as a highest score) and eventually we consider higher than 13 as a sign of depression.

We used average and standard deviation way for analyzing information and for comparing scores, SPSS (SPSS Inc., Chicago IL) statistical software was used for data analysis. All hypothesis tests were two-sided and P-values<.05 were considered statistically significant. We used Chi Square and fisher exact tests exam in two groups.

#### 3. Results

In this research %3.9 of applicants who are under the age of 18 and %3.9 of them who are over the age of 30 were pregnant. The majority of applicants (approximately %60) were experiencing their first child. Moreover the most percent of candidates (%37) had elementary education and the low percent of them (%0.8) was illiterate.

Table 1: the connection between pregnant and depression Score

13 and higher		Under 13		Total		Depression SCOTE
Number percent	Number	percent	percent	Number	Pregnant	
63	64.3	63	64	63.6	126	wanted
35	35.7	36	36	36.4	71	unwanted
98	100	99	100	100	197	total

#### \*3 Unknown

Table 1 shows that according to Fisher's exact test with depression score between the type of pregnancy there is no meaningful relationship (p=1.0).

Table 2: Average score s of each question in the wanted pregnancy group (Highest score for each question is 3)

Question Nur	mber Average score s	
1	0.9	
2	1.45	
3	1.80	
4	1.60	
5	1.47	
6	1.41	
7	1.76	
8	1.13	
9	0.92	
10	0.08	

Second table shows that the least depression score concerns with question 10 and highest score is the third one. In mean score s analysis for each question in wanted and unwanted groups which conducted by Evans in UK the maximum depression score in the 32<sup>nd</sup> week of pregnancy goes back to 6<sup>th</sup> question which was 1.25 and the minimum depression score goes back to question 10 which was 0.08.

In this study minimum depression score is of  $10^{th}$  question and maximum depression score is of  $3^{rd}$  question in the wanted pregnancy group and minimum depression score is of  $10^{th}$  and the highest is of  $6^{th}$  in unwanted group, that the study results in the specifically in unwanted group matches well with the above research.

#### 4. Discussion

A study conducted in Maltese women reported that the prevalence of depression was 15.5% in the third trimester (Felice et al., 2004). Symptoms of depression have been found in 30% of pregnant women in Finland (Kurki et al., 2000), 25% in Canada (Da Costa et al., 2000) and 21% in the USA (Kelly et al., 2001). In a US study, depressive symptoms were found in 26% of low-income African-American pregnant women (Chung et al., 2004). These findings show that the prevalence of prenatal depression may vary in women with different cultural backgrounds. In this study, the prevalence of prenatal depression is 50%.

In this study "the connection between depression score and the kind of pregnancy "due to much prevalence of pregnancy depression in this region, there is not an individual relation between kind of pregnancy and depression. According to some researches in Turkey there was a special relation between depression in pregnancy period and the kind of pregnancy (wanted and unwanted) (Karacam and Ancel, 2007). The cause of lack of concept in this research probably is high prevalence of depression and a few numbers of examples.

Pregnancy with maternal and neonatal result which this result depends on mutual reaction between maternal causes and neonatal and environmental causes and because this is one of the effective reasons in this field is mental health pregnancy, and it is essential to progress official classes in health center and enough education held for women in the field of mental health.

Suggest that this research do in other regions and with more examples.

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