The effect of marital satisfaction and stressful events during pregnancy in the emergence of postpartum depression

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Abstract: Postpartum depression is a serious mood disorder that may appear within a few weeks after the baby is born. The aim of this study is to explore if some specific social factors may affect the emergence of postpartum depression. There're analyzed two factors: couple satisfaction and stressful events during pregnancy. Women in the sample have had approximately the same pregnancy experience concerning health complications and child health. They have all planned pregnancy and that was their first pregnancy. It has been realized as a quasi-experiment at the obstetric-gynecological hospital of Shkodra to find out if there is a correlation between stressful events during pregnancy and couple satisfaction with the symptoms of postpartum depression. It is a 68 women sample (aged from 19-38). Instruments that are used are Couples Satisfaction Inventory and Edinburgh Postnatal Depression Scale. It has been found that women who were unsatisfied with the couple relationship and have experienced stressful events during pregnancy are more likely to have postpartum. If women had experienced stressful events during pregnancy and also had unsatisfied couple relationships, the chances for postpartum depression were even higher. It has been found a significant negative correlation between post-partum depression and couple satisfaction (r= -.698**). There was also a significant correlation between post-partum depression and stressful events during pregnancy (r=.721**).

Keywords: couple satisfaction, Edinburgh Postnatal Depression Scale, postpartum depression, pregnancy.

I. INTRODUCTION

Experiencing of women during pregnancy is associated with mixed sensations because they are getting ready to develop a life within their being. Biological changes, where the mother's body will prepare the appropriate environment for the child to develop are accompanied by various emotional experiences. From a psychological and psychoanalytic perspective (Bondas, 2000; Reid & Garcia, 1989), the woman during pregnancy goes through a crisis, sometimes an easy crisis easier and sometimes more severe [1]. Birth of a child causes very strong emotional feelings, but at the same time so many different ones, from pleasure and joy to fear and anxiety. But these strong emotional changes that most new mothers experience can suddenly turn into postpartum emotional disorders, such as baby blues, postpartum depression, and postpartum psychosis. According to various studies there are several factors that significantly increase the chance of having postpartum depression. Studies realized in different cultures show that post-partum depression is closely related with couple relationship satisfaction and with stressful life events.

In this study we focused on the analysis of two factors, couple satisfaction and stressful events during pregnancy, as predictors of postpartum depression. The consequences of postpartum depression are multidimensional. It can be a threat to the quality of health of the whole family. It has negative impacts in three major areas which are the mother herself, the child and the family. Mothers are more likely to develop poor quality of life (Beck, 1993), recurrence of depressive episodes (Gabbe et al. 2007; Leonard 1998), insecure relationship with child, attachment problems (McMahon, Barnett, Kowalenko & Tennant 2007), interact less, be less functional, have marital problems (Gjerdingen & Yawn, 2007) [2]. Also, children are more likely to have social, cognitive and emotional problems. Studies by other researchers have also linked postpartum depression to an unhealthy maternal interaction with the baby (Daeson & Ashman, 2000; Tronick & Weinberg, 1997) [3]. In a subsequent meta-analysis, C. T. Beck (1999) found a moderate relationship between maternal depression and behavioral problems in children aged 1 to 18 years. Given these multidimensional consequences of postpartum depression as well as the idea that a prevention of the problem is always easier and more fruitful than its treatment, I think that the realization of this study focusing on identifying the factors influencing the occurrence of postpartum depression is very important.

II. Literature review

Postpartum depression refers to the development of a depressive state after childbirth. Postpartum depression is a serious and common mood disorder that appears within a few weeks after birth and poses significant risks to the well-being of mother, baby and family. The onset of depression during this critical time interferes with the ability of mothers to respond to the needs and concerns of infants and complicate the development of the mother-infant relationship (C. T. Beck, 1996) [4]. When postpartum depression is undetected or not treated properly, we can move on to depressive episodes with major negative effects on the whole family (Campbell & Cohn, 1997; Horowitz & Goodman, 2004). Symptoms that typically characterize postpartum depression include despair, sadness, anxiety, fear, negative maladaptation, losses of sexual desire, fatigue, and addiction (Sichel, 2000). Postpartum depression is common and can occur in 10-15% of births, in different countries and cultures worldwide (Kumar and Robson 1984, Stein 1991, Cox et al 1987, Jadresic 1995) [5].

The analysis of various studies shows that mothers who have a satisfactory relationship with their husband and have not experienced high-intensity stressful events during pregnancy are more favored not to be affected by post-partum depression and to establish a healthy relationship with the baby. Poor marital relationship, especially marital satisfaction, is a very important factor. Some aspects of marital relationship such as: Emotional and physical supports, healthy communication, caring for the pregnant woman, harmonious relationship, are very important for the psychological aspect of the pregnant woman. When these do not exist and even more, when the couple is going through a serious marital problem, it affects the woman to feel lonely, to be anxious, to be dissatisfied with the marriage and to affect her psychological state. In a study conducted by Inandi, et al., (2005) women who have supportive family or non-family members are less likely to suffer from postpartum depression. Their study included 1350 women during their first year after giving birth and aimed to identify risk factors for depression. The highest scores were found in women who had poor family support during pregnancy (Beck, 1996a; Menaghann, 1990; Richman et al., 1991; Seguin et al., 1999) [6]. Recent studies have shown that lack of social and marital support is a strong risk factor for symptoms of postpartum depression (Forman et al., 2000; Seguin et al., 1999) [7]. Also another study that includes a meta-analysis of risk factors for postpartum depression, found that lack of social support and poor marital relationship are risk factors for postpartum depression. Stressful events during pregnancy are another indicator of postpartum depression. Job loss, deaths, accidents, divorces, financial crises, change of job / unemployment affect a woman to be anxious, stressed, withdrawn, lose optimism for life, have symptoms of anxiety or depression, leading to depression postpartum. Paykel et al (1980), show that negative life events classified as moderate to severe were associated with increased likelihood of being diagnosed with depressive symptoms. Another study found that high levels of stressful events during pregnancy were associated with higher levels of depressive symptoms and higher chances of being diagnosed with postpartum depression (O'Hara, Rehm, & Campbell, 1982; O'Hara, Rehm, & Campbell, 1983) [8].

III. Methodology

This study has a quantitative methodology. The study aims to realize a descriptive and correlative interpretation of the data. Data were collected through three measuring instruments. The first instrument was used to measure the level of relationship satisfaction in the couple; the second instrument is self-reportable in terms of stressful events experienced during pregnancy, and the third to measure the symptoms of postpartum depression. This section allows us to collect data for a large number of study participants and perform statistical analysis of this data. This guarantees us high levels of reliability and we can generalize the results of the study. In a randomly selected sample, we measured the level of marital satisfaction and the intensity of stressful events during pregnancy at 35-38 weeks of gestation. We then measured the symptoms of postpartum depression 3-4 weeks after the baby was born. The descriptive-correlation method we used in this study allows us to measure the prevalence of post-partum depression and to understand the relationship between it and the two predictor variables.

3.1 Research question

Is there a link between low marital satisfaction and stressful events during pregnancy, with symptoms of postpartum depression?

This research question consists of the following research tasks:
- Measuring marital satisfaction and stressful events during pregnancy

- Measurement of postpartum depression symptoms.
- Descriptive analysis.
- Correlation analysis between marital satisfaction and the intensity of postpartum depression symptoms.
- Correlation analysis between stressful events during pregnancy and the intensity of postpartum depression symptoms.
- Comparison of mean of postpartum depression symptoms depending on different stressful events during pregnancy.

3.2 Measuring instruments

Two measuring instruments and a self-report instrument are used to realize this study.

3.2.1 Couple Satisfaction Inventory (CSI-16).

Couples Sattisfaction Inventory (CSI) is a 32-item instrument designed to measure individual satisfaction in a relationship. The units of this instrument are not uniform. They are of different formats, types of alternatives and scoring scales. The results of this instrument have a high correlation with other instruments that measure relationship satisfaction in the couple (Funk & Rogge, 2007). Based on the conducted studies, the reliability of this instrument is high, with an average alpha coefficient of 0.940. Alternatives to each statement / question are scored from 0 to 6 (for the first statement) and 0 to 5 for all other statements. The minimum score obtained is 0 and the maximum is 161. Depending on the needs and time of the researchers, the authors have also created two short forms of this instrument that can be used, one with 16 units and the other with 4 units. The instrument with 16 units is constructed from units 1, 5, 9, 11, 12, 17, 19, 20, 21, 22, 26, 27, 28, 30, 31, 32 (the minimum number of points obtained is 0 and the maximum 81). The 4-unit instrument is constructed from units 1, 12, 19, 22 (the minimum number of points obtained is 0 and the maximum is 21). The interpretation of points is done in such a way that the higher the sum of points collected, the higher the satisfaction of the relationship in the couple. Due to the fact that all participants in the study are pregnant women, this instrument will be developed in the version with 16 units, ie the shortened version. In CSI-16, a score lower than 51.5 indicate the onset of dissatisfaction in the couple.

3.2.2 Measuring the intensity of stressful events during pregnancy.

Measuring the intensity of stressful events experienced by pregnant women during pregnancy is accomplished through self-report. Women are presented with a list of the 10 most common stressful events, starting with changing jobs, losing a job until the death of a loved one. The women checked the stressful events they experienced, having the alternative also to add events they experienced as stressful and that was not listed in the list of 10 events. Consistent with the purpose of this study events are reported only as numbers in the subsequent analysis.

3.2.3 Edingburgh Postnatal Depression Scale (EPDS).

The Edinburgh Postnatal Depression Scale (EPDS) was created in 1980 by John Cox, Jeni Holden and Ruth Sagovsky. It is a valuable measuring instrument to identify women who are at risk of having postpartum depression. Analyzing different studies on this topic, we found that this is the most widely used instrument for assessing postpartum depression, but it is not a diagnostic tool, which means it assesses the presence and severity of postpartum depression symptoms but careful clinical evaluation is needed to confirm the diagnosis. It consists of 10 units, where the mother has to choose the alternative that shows how she has felt during the last week. Many studies have been conducted and provided data on the reliability and validity of this instrument in different populations and cultures. The internal consistency (alpha coefficient) for EPDS in different studies varies from 0.72 to 0.86. The alternatives to each statement / question are scored from 0 to 3, increasing with the severity of the symptoms. Some items have reverse punctuation to increase internal credibility and retain the respondent's attention. The minimum score obtained is 0 and the maximum is 30. A test score of 10 points or higher indicates the presence of symptoms of postpartum depression. Further, the higher the scores, the more numerous and severe the symptoms of postpartum depression. Question 10 (thoughts about murder or suicide) should be taken into consideration because even if the woman scores less than 10 points but questions 10 is scored with one or more points, an appropriate assessment and referral should be made.

3.3 The sample

The sample taken in this study consists of pregnant women who are in the 35-38th week of pregnancy. To get this sample we have contacted 10 women consultants located in Shkodra and we have reviewed the registers of pregnant mothers. We agreed that any pregnant woman who presented to the clinic with a gestational age of 35-38 weeks in one month would be asked if they wanted to be part of the study. The number of pregnant women with such a gestational age who presented themselves during one month (we will not say the month for reasons of confidentiality) of 2017, was 74. In 74 registered cases, 72 agreed to be part of the study. After the purpose of this study was well explained, out of 74 registered cases, we received confirmation from 72 farms. This measure of 72 individuals was performed with two measuring instruments: Couples Satisfaction Inventory (16) and Stressful Events self-report. After taking the measurements, they were asked that after the birth, specifically during the third and fourth week after the birth, they will be contacted to take another measurement. Almost all mothers have been cooperative. To perform the second measurement, ie for the presence of symptoms of postpartum depression, a total of 68 cases were presented. Other cases (4 cases) are no longer part of the study for various reasons (reluctance to continue - 2 cases, loss of pregnancy - 1 case and loss of contact - 1 case). In the end, the women's champion has a minimum age of 19 and a maximum of 38, the average age M = 27.8235. (Std. Deviation = 4.30876).

IV. Results

4.1 Descriptive analysis

As shown in Figure 1, mothers who do not show symptoms of postpartum depression are 64.7%, mothers who show low symptoms of postpartum depression are 30.8%, while mothers who show high and risky symptoms of postpartum depression are 4.4%.
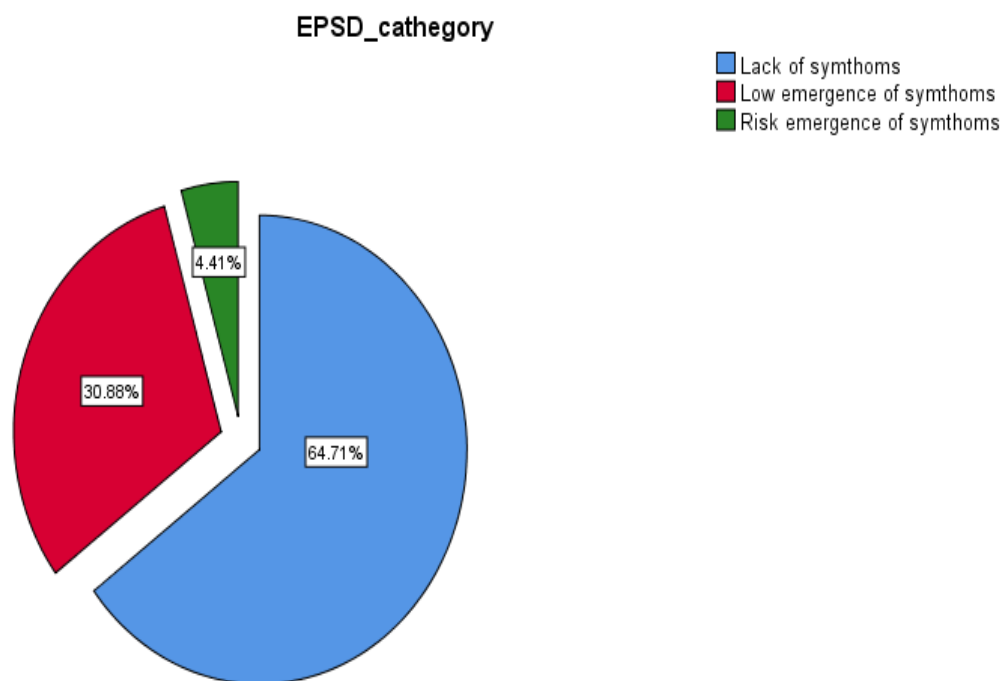
EPSD_cathegory

Legend:
- Lack of symthoms
- Low emergence of symthoms
- Risk emergence of symthoms

Pie chart values: 4.41%, 30.88%, 64.71%

Chart 1. Description of the postpartum depression symptoms.

4.2 Correlation analyses

		EPDS	Stressful_Events	Cuople_Satisfaction
EPDS	Pearson Correlation	1	.720**	-.698**
	Sig. (2-tailed)		.000	.000
	N	68	68	68
Stressful_Events	Pearson Correlation	.720**	1	-.788**
	Sig. (2-tailed)	.000		.000
	N	68	68	68
Cuople_Satisfaction	Pearson Correlation	-.698**	-.788**	1
	Sig. (2-tailed)	.000	.000	
	N	68	68	68

**. Correlation is significant at the 0.01 level (2-tailed).

Table1. Correlations.

From the analysis of the table above we see that there is a significant negative correlation relationship between post-partum depression and the satisfaction that the woman receives in the life of the couple, r = -.698 (p = 0.000), which means that the lack of support and satisfaction that women taking cwft correlates with high symptoms of post-partum depression.

There is also a significant correlation between post-partum depression and the stressful events experienced during pregnancy, r = .720 (p = .000), which means that experiencing as many stressful events during pregnancy as possible affects the onset of multiple pregnancies. symptoms of postpartum depression.
It is worth noting that there is also a result that shows that stressful events during pregnancy have a strong negative correlation with the satisfaction experienced by the couple, r = -. 788 (p = .000).

4.2 Mean analyses

Group Statistics

	Stressful_Events	N	Mean	Std. Deviation	Std. Error Mean
EPDS	Less than 3 Events	41	4.4146	4.79570	.74896
	More than 3 events	27	12.7037	5.66918	1.09103

		F	Sig.	t	Df	Sig. (2-tailed)
EPDS	Equal variances assumed	1.143	.289	-6.485	66	.000
	Equal variances not assumed			-6.264	49.180	.000

Table 2. Independent t-test.

As can be seen from the table above, the average points of postpartum depression were analyzed according to the categories of experience of stressful events that mothers had during pregnancy. The result is quite interesting because we have a difference of 8.3 points more in women who have experienced more than 3 stressful events during pregnancy. Exactly we have: F (1.143) = -6.485, sig = .289, which means that there is a variance between the groups, they are comparable and the difference is 8.3 points more in women who experience more than 3 stressful events during pregnancy.

V. Conclusions

At the end of this study, the presented results adhere to a rigorous scientific procedure, presenting all the steps in reaching the conclusions deriving from the analyzed results. This study has its limits, because the women who participated in the study were not financially rewarded for their contribution. Also, this study was conducted only in one city of Albania and does not allow generalizations to be made for the whole of Albania and beyond. Another conclusion reached by this study is that increasing the satisfaction of intercourse in the couple during pregnancy significantly reduces the possibility of involving mothers in postpartum depression.

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