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Research Article

A Cross-Sectional Study of Early Identification of Postpartum Depression and Influencing Factors

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Abstract

Objective: To evaluate the prevalence of postpartum depression and influencing factors among women in Maternity of Vlore.

Methodology: The present cross-sectional study was conducted at Maternity of Vlore Regional Hospital during November 2016-February 2017. Data collection involved 150 postpartum women who were randomly selected. Two instruments were used: The first was a form containing characterization data, related to pregnancy, obstetric, and the psycho-social risk factors. The second, the Edinburgh Postpartum Depression Scale (EPDS) has been used as a screening tool for evaluating the risk of developing PPD. All mothers who score 10 or more are identified as "in risk" for PPD. The data was analyzed using the statistical program SAS 9.13 version, with $P < 0.05$ statistically significant.

Results: The risk for PPD is found in 62% of the cases based on the scale of EPDS, while based on scoring, 26% are classified being in "baby blue" with 10 - 12 scores and 36% of women in probable PPD with 13 ≥ scores. The average age of women at risk for PPD is 27.02 years. Employment level of the mothers ($p = 0.0146 < 0.05$), absence of husband ($p = 0.0465$) and family support ($p = 0.0080$), unplanned pregnancy ($p = 0.0003$) and tried to interrupt the pregnancy ($p = 0.0025$) were variables associated significantly with postpartum depression. In relation to the influence of the obstetrical factors, breast problems, delivery complications mainly birth difficulty, were all related significantly to the presence and scale of depression.

Conclusion: The careful follow up of mothers, particularly those in low income families, by means of integrated actions that take into consideration the factors associated with depression, may prevent severe personal and family problems that result from PPD.

Keywords: *Postpartum Depression; Associated Risk Factors; Edinburgh Scale; Early Identification; Maternity of Vlore*

Introduction

During pregnancy and the postpartum period, women face deep physical, emotional, family and social role changes, which are also related to an increased vulnerability to developing mental disorders [1,2]. Puerperal dysphoria, maternity blues or postpartum blues affect about 50% to 80% of postpartum patients, and is the lightest form of psychiatric disorder that can affect women during the postpartum period. The most serious mental disorder that can occur in the postpartum period is puerperal psychosis, with a prevalence ranging from 0.1% to 0.2% of postpartum women [3]. Postpartum depression (PPD) is a mood disorder characteristic from the postpartum that is considered to be a middle state between puerperal dysphoria and puerperal psychosis [3,4]. A meta-analysis of studies mainly based in the developed world found the incidence of postpartum depression to be 12 - 13 % [5]; with higher incidence in developing countries [6,7].

Postpartum depression is an important public health problem, having a significant impact on the mother, the family, mother-infant interaction and on the long term emotional and cognitive development of the baby [8]. A recent review of literature found that the following risks factors are the strongest predictors of postpartum depression: Prenatal depression, self-esteem, child care stress, prenatal anxiety, marital relationship, infant temperament, marital status, low social support, socioeconomic status and unplanned/unwanted pregnancy [9].

Only in the last five years there are approaches to study and review the problem of PPD in women in Albania. The data has shown that even though during screening of the selected sample are identified many mothers that suffer from PPD, the health care centers do not report such a problem [10]. The stigma of finding the PPD is higher in the west European countries too [11-13], because everywhere the society expects mothers to be happy, beautiful and always fit immediately after birth. In Albania, each of the small studies conducted up to now has found similar data to the world statistics of this problem in women, but there are no data in primary care centers, public or private health centers and there are no documented cases for treated women, which shows that Albanian mothers regardless their education, social and economic status, etc., try to hide this problem and do not ask for help to treat PPD [14].

Maternity nurse is one of the health care providers who can detect or/and treat if the signs of illness are present. She can also help in prevention and measurement during preconception, antenatal, post-partum period. Early detection of social, psychological and physiological problems during preconception follow up will help maternity nurse to identify if the mother will go through risky situation that can affect her future plan and her ability to attempt her role [15]. During post-partum period nurse is the only health care providers who can detect, observe mother behavioral and mood changes by daily assessment. That is why the nurse/midwifes should be trained and deliver evidence-based postnatal advice and support, based up on the woman's description of the symptoms [16]. Therefore, a study to detect the risk factors contributing to postpartum depression may provide the information required to plan specific educational programs to overcome some of the factors and identify women at risk [17].

Consequently, it necessary for me to study this phenomenon among women in Maternity of Vlore with the belief that such a study will contribute to the construction of knowledge on the subject, and help to identify the need for care specific to the behavior experienced by mothers. Therefore, this study aimed to identify the women at risk for postpartum depression by using EPDS, to evaluate influencing risk factors and their correlation with PPD among women in Maternity of Vlore.

Methodology

Study design, setting, size and sampling technique

The present cross-sectional study was conducted at Maternity of Vlore Regional Hospital during November 2016 February 2017. Data collection involved 150 postpartum women who were randomly selected and requested to participate in the study.

Data Collection Tool

Two instruments were used according to objective of the study and after extensive literature search this topic having content specific questions: The first was a form containing characterization data, related to pregnancy, obstetric and delivery data, baby information (breastfeeding) and data about the psychosocial risk factors. The second, the Edinburgh Postpartum Depression Scale (EPDS) has been used as a screening tool for evaluating the risk of developing PPD.

Outcome assessment for early identification of PPD using EPDS

From this test, scores between 10 to 12 were used for identifying baby blues (possible PPD), and scores of 13 or more are likely to be suffering from a depressive illness of varying severity (probable depression) [18]. All mothers who score 10 or more are identified as "in risk" for PPD and less that 10 "not in risk" (sensibility 89% and specificity 87%).

Data Analysis

The data was analyzed using the statistical program SAS 9.13 version. For numerical variables, it was used arithmetic average and size dispersion (standard deviation). For categorical variables were reported absolute numbers and percentages respective. We used mainly non-parametric test Kruskal-Wallis to compare the homogeneity of the various groups compared. To assess the associations between categorical variables was used Chi-square statistical test, the preferred test for the evaluation of associations between categorical variables. A P values ≤ 0,05 were accepted as statistically significant.

Ethical Considerations

In order to conduct this study, we asked for permission from the directory of the Regional Hospital of Vlore. We also had permission from the chef of Maternity ward and head nurse. Based on ethical consideration, we informed the participants for purpose of this study, the privacy and confidentiality making sure to state that the questionnaire was anonymous and the data would not be identifiable.

Results

The study included 150 women from 16 to 41 years old. The mean age is 27.1 years old with standard deviation of 4.84. Table 1 shows a prevalence of risk for PPD of 62%, based on the scale of EPDS, while based on scoring, 26% are classified being in "baby blue" or melancholic state, with 10-12 scores, and 36% of women are likely to be suffering from a depressive illness of varying severity with 13 or more scores. According to the German EPDS validation study [19], a cut-off value of 10 or more indicates the presence of a minor and 13 or more the presence of a major depressive disorder. In this study, women obtained a critical score given an EPDS score of 10 or more.

Risk for PPD	Nr. women	%	Min/Max	Mean.	SD
Not at risk	57	38%	1/9 scores	6.09	2.45
At risk	93	62%	10/26 scores	15.2	4.52
10-12 scores, possible PPD	39	26%	10/13 scores	11.37	1.13
13 ≥ scores probable PPD	54	36%	14/26 scores	17.86	3.08
Total	150	100%	1/26 scores	11.8	5.7

Table 1: *The risk evaluation for PPD and distribution according to the level of PPD.*

Table 2 shows that the average age of women at risk for PPD is 27.02 years, the age minimum is 16 years old and age maximum is 39 years old (SD = 5.3). The higher number of women at risk for PPD belong to the age group 20-25 years old. The higher frequency is found in 24-year-old women with 10 cases for PPD. We notice that the most part of women at risk for PPD belong to middle and low level of education (78%). The place of living of women at risk for PPD shows that 24% live in the villages; 22% belong to the low social economic level and 78% to the average social economic level. As for the employment, 77% of women at risk for PPD are unemployed.

Variables	Number	%
Age		
Less than 20 years	8	8.60
20 - 25 years	31	33.33
25 - 30 years	28	30.11
Over 30 years	26	27.96
Civil status		
Married	91	97.85
Divorced	2	2.15
Education level		
Low	35	37.63
Middle	37	39.78
High	21	22.59
Place of living		
City	60	64.52
Village	33	35.48
Employment		
Unemployed	72	77.42
Employed	21	22.58
Economic level		
Average	73	78.49
Low	20	21.51

Table 2: *The distribution of women at risk for PPD according to their social economic factors.*

In table 3 we notice that there is not a significant statistical correlation between the PPD risk and the age of post-partum woman, p = 0.2977 > 0.05. So, the age of the woman does not impact the risk for PPD, but we found that it impacts the scale of depression p = 0.0162 < 0.05. We can state that when the mother at risk is older, the scale of PPD may be higher. This is noticed in the results, 13% of women with possible PPD and 39% with probable PPD are older than 30 years. From the analyses of the correlation that exists between the PPD risk and education level of the mothers, we notice that there is a significant statistical correlation (p = 0.0241 < 0.05), the women with low and average education level are 75%. In relation to the PPD scale we noticed that there is a significant statistical correlation (p = 0.0146 < 0.05) with the employment level, so this is a factor that has influenced the risk for PPD, but not the depression scale (p = 0.6852 > 0.05). By analyzing the correlation between the risk for PPD and women's economic level, we notice that there is a significant statistical correlation (p = 0.0004 < 0.05). This factor also influences the scale of PPD. So, women with possible PPD, 92% belong to average economic level and 8% low level, while in women with probable PPD 69% belong to average level and 31% to low level (p = 0.6100 >0.05).

Variables	At risk	No risk	P Value	Possible PPD	Probable DPP	P Value
Age						
-20 years	8 (5.33)	1 (0.66)		6 (6.45)	2 (2.15)	
20 - 25	31 (20.67)	19 (12.67)		15 (17.20)	15 (16.13)	
25 - 30	28 (18.67)	22 (14.67)	0.2977	12 (12.90)	16 (17.20)	0.0162
Over 30	26 (17.33)	15 (10)		5 (5.38)	21 (22.58)	
Education level						
High	21 (14.00)	26 (17.33)		10 (10.76)	11 (11.83)	
Middle	37 (24.67)	13 (8.67)	0.0241	17 (18.28)	20 (21.50)	0.5045
Low	35 (23.33)	18 (12.00)		12 (12.90)	23 (24.73)	
Employment						
Employed	21 (14.00)	25 (16.67)		8 (8.61)	13 (13.97)	
Unemployed	72 (48.00)	32 (21.33)	0.0146	31 (33.33)	41 (44.09)	0.6852
Economic level						
Low	20 (13.33)	1 (0.67)		3 (3.23)	17 (18.28)	
Average	73 (48.67)	53 (35.33)	0.0004	36 (38.71)	37 (39.78)	0.0059
High	0 (0.00)	3 (2.00)				

Table 3: *The influence of social demographic factors in the risk and PPD scale.*

In table 4 from the analyses of the correlation that exists between the risk for PPD and the number of deliveries of the mother, we noticed that there was no significant statistical correlation p = 0.3442 > 0.05, but this correlation was noticed in the scale of depression where 51% of women with "baby blues" (possible depression) were first time mothers, 49% multi birth mothers. Meanwhile the probable PPD was seen more in multi birth women (78%) and only 22 % in first time mothers (p = 0.0036 < 0.05). The table also shows that the type of delivery was not a factor that influenced the risk for PPD, p = 0.7882 >0.05 and the scale of PPD (p = 0.4193>0.05), so it was the child birth weight. The results showed that the factor "the feeding method" did not influence on the risk for PPD, but the women who had difficulties in feeding the infant or had breast inflammation had higher tendency to manifest signs of PPD risk (p = 0.0061 < 0.05) also, the women who had delivery complications had a higher chance for PPD (p = 0.0017 < 0.05) especially the women who had a difficult delivery (p = 0.0200 < 0.05).

Variables	At risk	No risk	P Value	Possible PPD	Probable PPD	P Value
This is your... delivery:						
First	32 (21.33)	24 (16.00)		20 (21.51)	12 (32.00)	
The second or more	61 (40.67)	33 (22.00)	0.3442	19 (41.94)	42 (45.16)	0.0036
Type of delivery						
Normal	60 (40.00)	38 (25.33)		27 (29.04)	33 (35.48)	
Cesarean	33 (22.00)	19 (12.67)	0.7882	12 (12.90)	21 (22.58)	0.4193
History of any problems/complications during last delivery:						
Yes	21 (14.00)	2 (1.33)		11 (7.33)	10 (6.67)	
No	72 (48.00)	55 (36.66)	0.0017	43 (28.66)	29 (19.33)	0.6548
Type of problems/complications:						
Bleeding during delivery	3 (2.00)	0 (0.00)		2 (1.33)	1 (0.67)	
Difficult delivery (disproportional, stimulated, breach)	18 (12.00)	2 (1.33)	0.0200	11 (7.33)	7 (4.66)	0.0150
Infant weight after delivery						
More than 2500 gr	80 (53.33)	52 (34.67)		35 (37.64)	45 (48.38)	
Less than 2500 gr	13 (8.67)	5 (3.33)	0.3409	4 (4.30)	9 (9.68)	0.3790
Infant feeding:						
Breast	74 (49.33)	51 (34.00)		35 (37.63)	39 (41.94)	
Bottle	7 (4.67)	3 (2.00)	0.2528	0 (0.00)	7 (7.53)	0.0430
Both	12 (8.00)	3 (2.00)		4 (4.30)	8 (8.60)	
Breast inflammation and feeding problems						
Yes	23 (15.33)	4 (2.67)		7 (4.66)	16 (10.66)	
No	70 (46.67)	53 (35.33)	0.0061	32 (21.33)	38 (25.33)	0.0415

Table 4: *The impact of obstetrical factors in the risk and scale of PPD.*

The results of table 5 show that 36% of women at risk for PPD did not plan their pregnancy and only 9 % of women not at risk did not plan the pregnancy. The value of $p = 0.0003 < 0.05$ shows that this correlation is statistically significant. So, we can state that having a planned or non-planned pregnancy is a influencing factor for the risk for PPD, but it does not influence the scale of PPD $p = 0.2125 > 0.05$. Analyzing the relation between the tendency to interrupt the pregnancy risk for PPD we notice that 18% of women at risk for PPD had tried to interrupt their pregnancy, meanwhile in women without any risk only 2% or one woman. The indicator $p = 0.0025 < 0.05$ shows that this correlation is statistically significant. So, we can state that the attempt to interrupt the pregnancy is a factor that has influenced the risk for PPD and also the scale of PPD $p = 0.0053 < 0.05$, where 28% of women with probable depression versus 5% of those with possible depression had tried to interrupt the pregnancy. Other risky factors that have influenced in both the depression and its scale were: the absence of help from family members and husband and the husband's absence during delivery compared with women with no risk for depression. The relation between the risk for depression and child gender preference we see that there is no statistical significant correlation $p = 0.1804 > 0.05$, but we noticed a slight tendency of women at risk for PPD of 41% versus 32% of women not at risk that preferred the child to be a male.

Variables	At risk	No risk	P Value	Possible PPD	Probable PPD	P Value
Unplanned current pregnancy:						
Yes	60 (40.00)	52 (34.67)	0.0003	28 (30.11)	32 (34.41)	0.2125
No	33 (22.00)	5 (3.33)		11 (11.83)	22 (23.65)	
Tried to interrupt pregnancy:						
Yes	17 (11.33)	1 (0.67)	0.0025	2 (2.15)	15 (16.13)	0.0053
No	76 (50.67)	56 (37.33)		37 (39.79)	39 (41.93)	
Did the husband help during delivery						
Yes	11 (7.33)	18 (12.00)	0.0029	9 (9.68)	2 (2.15)	0.0043
No	82 (54.67)	39 (26.00)		30 (32.26)	52 (55.91)	
Preference as to the child's sex:						
Girl	25 (16.67)	12 (8.00)	0.1804	11 (11.83)	14 (15.05)	0.7756
Boy	38 (25.33)	18 (12.00)		17 (18.28)	21 (22.58)	
No preference	30 (20.00)	27 (18.00)		11 (11.83)	19 (20.43)	
Support from the child's father						
Much	38 (25.34)	33 (22.00)	0.0465	19 (20.43)	19 (20.43)	0.0049
Little	29 (19.33)	17 (11.33)		16 (17.20)	13 (13.98)	
None	26 (17.33)	7 (4.67)		4 (4.31)	22 (23.65)	
Did you have help from other family members:						
Much						
Little	44 (29.33)	39 (26.00)	0.0080	26 (27.96)	18 (19.35)	0.0061
None	28 (18.67)	15 (10.00)		8 (8.60)	20 (21.51)	
	21 (14.00)	3 (2.00)		5 (5.38)	16 (17.20)	

Table 5: *The influence of the psycho social factors in the risk and scale of PPD.*

Discussion

In this study, we analyzed the incidence for PPD in women who have delivered in the Maternity of Regional Hospital of Vlore and the possible risk factors which are categorized in socio demographic factors, obstetrical factors and psycho social factors.

In relation to the PPD incidence, this study showed that the risk for PPD is found in 62% of the cases. This again shows that the incidence of PPD in our country is high in women after delivery; this data is similar to the previous studies [17,20-23], and in our study, we even found a higher percentage compared to these other studies. Furthermore, according to the classification of possible and probable PPD, in our study the incidence for each is higher than the studies conducted in Perugia, Italy [24].

Discussing the results for the possible influence of the socio-demographic factors in the presence of PPD risk, the data showed that age group, economic and educational level, and employment of the participants were statistically significant with the present of PDD symptoms which are similar to other studies [17,25]. So, according to our study, the most affected age group is 20 - 25 years old. According to a study conducted in Kampala, the capital city of Uganda [26] it was found that the teenage mothers had higher tendency to manifest PPD risk, while in our study the percentages were much lower. The data for other factors are similar to other studies.

In relation to the influence of the obstetrical factors, our study found that the first time mothers with minor depression and multi time mothers with major depression, breast problems and difficulties in feeding, delivery complications mainly birth difficulty, were all related to the presence and scale of depression in participants, this data were similar to another studies [17,31]. In relation to the number of births, the data is similar to the study conducted in São Paulo [12], who found that having multiple births is related to PPD. In relation to the delivery method, infant feeding and small birth weight our study showed that all these factors did not influence the incidence of PPD,

in contrast to other studies which have considered these factors as associated to PPD. A study conducted in south central Louisiana, the state of USA [23] found that women that delivered with cesarean intervention had more tendencies for PPD. In another study conducted in Pennsylvania [27] was found that the depression state and anxiety was related to the reduction of breast feeding of the infants, meanwhile in other studies this was not statistically significant [12].

Furthermore, in relation to the influence of premature children and PPD the data of our study is similar to another study, which showed that this factor was not related statistically to the PPD presence [22].

Analysis of the most important psycho-social risk factors showed that the increase in the risk of PPD is associated in particular with the absence of husband and family support, unplanned pregnancy and pregnancy termination attempts. According to the literature the psycho-social factors are significant in the presence of PPD [28], but the majority of studies found different range of results than our study. A study conducted in Brazil in 2006 [22] a preference as to the child's sex, support from the father and having thought of terminating the pregnancy were variables significantly associated with PPD, meanwhile as a preference to the child's gender, it was not statistically significant to PPD in our study. Culturally, in male dominated society, included our country Albania [29,30], male children are preferred and this male-bias is deeply rooted. Women who already had a girl child face greater stress because of social and family pressure to give birth to a male child and if the child is a girl again the risk of post-partum depression is greater [5]. In another study [12] conducted in São Paulo in 2015 there was no statistically significant correlation between PPD and the following categories: pregnancy planning, presence of support from baby's father or from family, which is in contrast with the results of our study. In accordance with literature [17], the lack of emotional support from women's partners during birth is another factor that influenced PPD in our study.

Study Limitations and Strengths

Some limitations of this study were the small size of the sample, the analyses of the biological factors, the pregnancy factors and a variety of health problems, anxiety and previous depression or depression during pregnancy. However, this study may serve as a source of information so that strategies and health actions focused on women in the postpartum period based on comprehensive care, continuing care and health promotion.

Conclusions and Recommendations

The results of our study showed a high incidence of PPD in women of the city of Vlore, with dominance of the psycho social factors as influencing factors. All of these potential risk factors can be ascertained during routine pregnancy care; therefore, it is important that antenatal healthcare providers, midwives, public health nurses and women themselves are educated about these risk factors so that early identification of high risk women for closer follow-up and intervention is possible. In particular, we consider the use of EPDS as a screening test important not only for PPD, but also as a diagnostic tool useful for evaluating the presence of Antepartum Depression and Anxiety. The careful follow up of mothers, particularly those in low income families, by means of integrated actions that take into consideration the factors associated with depression, may prevent severe personal and family problems that result from PPD.

Bibliography

1. Pereira PK and Lovisi GM. "Prevalência da depressão gestacional e fatores associados". *Revista de Psiquiatria Clínica* 35.4 (2008): 144.

2. Cabral FB and Oliveira DLLC. "Vulnerabilidade de puérperas na visão de Equipes de Saúde da Família: ênfase em aspectos geracionais e adolescência". *Revista da Escola de Enfermagem da USP* 44.2 (2010): 368-375.

3. Cantilino A., *et al*. "Transtornos psiquiátricos no pós-parto". *Revista de Psiquiatria Clínica* 37.6 (2010): 121-132.

4. Santos Junir HPO., *et al*. "Postpartum depression: the (in) experience of Brazilian primary healthcare professionals". *Journal of Advanced Nursing* 69.6 (2014): 1248-1258.

5. Desai Nimisha D., *et al*. "Study of prevalence and risk factors of postpartum depression". *National Journal of Medical Research* 2.2 (2012).

6. Patel V., *et al*. "Gender, poverty and postnatal depression: A study of mothers in Goa, India". *American Journal of Psychiatry* 159.1 (2002): 43-47.

7. Chandran M., *et al* S. "Post-partum depression in a cohort of women from a rural area of Tamilnadu, India: Incidence and risk factors". *British Journal of Psychiatry* 181 (2002): 499-504.

8. Beck CT. "Postpartum depression: It isn't just the blues". *American Journal of Nursing* 106.5 (2006): 40-50.

9. Beck CT., *et al*. "Postpartum depressive symptomatology: Results from a two-stage U. S. national survey". *Journal of Midwifery and Women's Health* 56.5 (2011): 427-435.

10. Entela Bineri "Depresioni i nënës pas lindjes ndikon në zhvillimin e fëmijës" (2015).

11. Akwa Ashley. "What is the Importance of Educating Women on Postpartum Depression?" Master of Social Work Clinical Research Papers. Paper 420 (2015).

12. Pereira PF., *et al*. "Screening of depressive and anxiety symptoms in postpartum patients: a descriptive study". *Online Brazilian Journal of Nursing* 14.3 (2015): 294-304.

13. Zauderer C. "Postpartum Depression: How Childbirth Educators Can Help Break the Silence". *Journal of Perinatal Education* 18.2 (2009): 23-31.

14. Anxhela Peza. "Depresioni pas lindjes tek nënat". Tirana Observer Journal.

15. M Cynthia and L Marianne H. "Readability: An Important Issue Impacting Healthcare for Women with Postpartum Depression". *MCN: The American Journal of Maternal/Child Nursing* 31.6 (2006): 351-355.

16. Westdahi C Milan., *et al*. "Social Support and Social Conflicts as Predictors of Prenatal Depression". *Obstetrics and Gynecology* 110.1 (2007): 134-140.

17. Nesreen Al-Shami. "Identification of Factors Associated with Postpartum Depression among Saudi Females in Riyadh City". A Thesis submitted in partial fulfillment of the requirements for the Master Degree in the Department of Maternal and Child Health Nursing at the College of Nursing, King Saud University, Riyadh.

18. Cox JL., *et al*. "Detection of postnatal depression: Development of the 10-item Edinburgh Postnatal Depression Scale". *British Journal of Psychiatry* 150 (1987): 782-786.

19. Bergant AM., *et al*. "Deutschsprachige Fassung und Validierung der ''Edinburgh postpartum depression scale'' [German validation of the Edinburgh Postpartum Depression Scale]". *Deutsche Medizinische Wochenschrift* 123.3 (1998): 35-40.

20. Watt., *et al*. "A cross-sectional study of early identification of postpartum depression: Implications for primary care providers from The Ontario Mother & Infant Survey". *BMC Family Practice* 3 (2002): 5.

21. Valerie Ann Kent. "A survey of postpartum depression in Southeastern Montana. A thesis submitted in partial fulfillment of the requirements for the degree of Master of Nursing". Montana State University Bozeman, Montana (2004).

22. Moraes IGS., *et al*. "Prevalence of postpartum depression and associated factors". *Revista de Saúde Pública* 40.1 (2006).

23. Shelton Susan Liipfert. "Postpartum Depressive Symptoms: A Study of Influencing Factors and an Intervention for Improvement". Dissertation, Georgia State University (2015).

24. Sandro Elisei., *et al*. "Perinatal Depression: A study of prevalence and of risk and protective factors". *Psychiatria Danubina* 25.2 (2013): 258-262.

25. Reck C., *et al*. "Prevalence, onset and comorbidity of postpartum anxiety and depressive disorders". *Acta Psychiatrica Scandinavica* 118.6 (2008): 459-468.

26. Juliet EM., *et al*. "Postpartum major depression at six weeks in primary health care: prevalence and associated factors". *African Health Sciences* 6.4 (2006): 207-214.

27. Ian M Paul *et al*. "Postpartum Anxiety and Maternal-Infant Health Outcomes". *Pediatrics* 131.4 (2013): e1218-e1224.

28. Marino M., *et al*. "Fattori di rischio nella Depressione Postpartum". *Rivista di Psichiatria* 47.3 (2012): 187-194.

29. "Raporti i paekuilibruar midis sekseve ne lindje në Shqipëri", i prezantuar nga Ministria e Shëndetësisë, me mbështetjen e organizatave UNFPA dhe World Vision. 19 dhjetor, Tiranë (2012).

30. www.doktoratura.unitir.edu.al/wp-content/.../Doktoratura-Dorina-Xhani_final.pdf

31. Niloufer S Ali., *et al*. "Post-partum anxiety and depression in peri-urban communities of Karachi, Pakistan: a quasi-experimental study". *BMC Public Health* 9 (2009): 384.

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