PERINATAL JOURNAL

Clinical Research Article

Perinatal Journal 2015;23(1):26–29

Factors affecting postpartum depression in Diyarbakır

Ali Emre Tahaoğlu[1], Cihan Toğrul[1], Mehmet İrfan Külahçıoğlu[1], Beşire Aydın Öztürk[1], Deniz Balsak[1], Hanifi Bademkıran[1], Erdoğan Gül[1], Ümit Görkem[2], Tayfun Güngör[2]

[1]Gynecology & Obstetrics Clinic, Diyarbakır Maternity and Pediatrics Hospital, Diyarbakır, Turkey
[2]Department of Gynecology & Obstetrics, Hitit University, Çorum, Turkey

Abstract

Objective: The aim of this study is to investigate the factors affecting postpartum depression (PPD) according to age groups in Diyarbakır city located on the southeastern part of Turkey.

Methods: The questions of Edinburgh postpartum depression scale (EPDS) were asked to 495 women who referred to our clinic at their postpartum periods. A separate statistical analysis was carried out for 51 adolescent women (below 18-year-old) and 72 puerperant women over 35-year-old. Score 13 according to EPDS score result was determined as cut-off value.

Results: In 101 out of 495 (20.4%) patients, EPDS score was 13 and above. This rate was 27.4% in adolescent puerperant women, and 19.4% in puerperant women over 35-year-old. It was found that depression history was a significant variable affecting postpartum depression ($p<0.005$).

Conclusion: Postpartum depression is a significant disease possible to overlook which affects the health of mother and baby. This is risky especially during adolescent period. Depression history is an important variable in the etiology of postpartum depression. This period can be screened for postpartum depression. The greatest factor limiting postpartum depression in Southeastern Anatolia Region which has the highest reproduction rate in Turkey can be the support provided to the puerperant women by relatives and friends during puerperal period.

Keywords: Postpartum period, postpartum depression.

Özet: Diyarbakır'da postpartum depresyonu etkileyen faktörler

Amaç: Bu çalışmanın amacı Türkiye'nin güneydoğusunda yer alan Diyarbakır ilinde postpartum depresyonu (PPD) etkileyen faktörleri yaş gruplarına göre incelemektir.

Yöntem: Kliniğimize başvuran 495 postpartum dönemdeki kadına Edinburgh postpartum depresyon skoru (EPDS) anket soruları soruldu. Elli bir adölesan (18 yaş altı) ve 35 yaş üstü olan 72 lohusa için ayrı istatistiksel inceleme yapıldı. EPDS skor sonucuna göre 13 puan *cut-off* değer olarak belirlendi.

Bulgular: Toplam 495 hastanın 101'inde (%20.4) EPDS skoru 13 ve üzerinde idi. Adölesan lohusalarda bu oran %27.4, 35 yaş üstü lohusalarda ise %19.4 idi. Geçirilmiş depresyon öyküsünün postpartum depresyonu etkileyen anlamlı bir değişken olduğu bulundu ($p<0.005$).

Sonuç: Postpartum depresyon anne ve çocuk sağlığını etkileyen önemli ve gözden kaçırılması olası bir hastalıktır. Bu durum özellikle adölesan çağda risklidir. Geçirilmiş depresyon hikayesi postpartum depresyon etyolojisinde en önemli değişkendir. Postpartum depresyon için bu dönemde tarama yapılabilir. Türkiye'nin en yüksek üreme hızına sahip olan Güneydoğu Anadolu bölgesinde postpartum depresyonu sınırlayan en büyük etken akraba ve arkadaş çevresinin puerperal dönemde lohusalara verdiği destek olabilir.

Anahtar sözcükler: Postpartum dönem, postpartum depresyon.

Introduction

Gestation is a period when a woman has her physiological, psychological and social changes. Prenatal and postnatal changes, newborn care, breast feeding problems, new environment, and changes in social status may cause the health of pregnant woman to deteriorate. A peak in

Correspondence: Ali Emre Tahaoğlu, MD. Diyarbakır Kadın Doğum ve Çocuk Hastalıkları Hastanesi Kadın Hast. ve Doğum Kliniği, Diyarbakır, Turkey. e-mail: alyemre@yahoo.com

Received: April 23, 2014; **Accepted:** January 5, 2015

Please cite this article as: Tahaoğlu AE, Toğrul C, Külahçıoğlu Mİ, Aydın Öztürk B, Balsak D, Bademkıran H, Gül E, Görkem Ü, Güngör T. Factors affecting postpartum depression in Diyarbakır. Perinatal Journal 2015;23(1):26–29.

Available online at:
www.perinataljournal.com/20150231006
doi:10.2399/prn.15.0231006
QR (Quick Response) Code:

deomed

the depression rate was reported at postpartum fourth and eighth weeks.[1] In a meta-analysis, it was reported that postpartum depression rate in the first three postpartum months was 14.5%, and major depression criteria were satisfactorily met in 6.5% of postpartum women, and this was at higher levels especially in nullipara population.[1] Changes during pregnancy may bring along many problems and cause stress.[2] The period after pregnancy is 3–4 times more risky in terms of mental illnesses than gestational period.[3] Therefore, possible postpartum depression may constitute a significant health problem.

According to Diagnostic and Statistical Manual of Mental Disorders (DSM), having 5 or more of the criteria for at least two weeks is defined as postpartum depression (PPD). These are insomnia-hypersomnia, psychomotor agitation or retardation, fatigue, unhappiness or sense of guilt, decreased concentration, changes in appetite and suicide ideation. These episodes begin within postpartum four weeks and ends within 1 year. According to DSM, PPD is described as non-psychotic major depression.[4]

Identifying and preventing postpartum depression in advance is significant in terms of the health of baby and mother. Edinburgh Postpartum Depression Scale (EPDS) can be used to investigate postpartum depression.[5] Although this scale is not diagnostic, sensitivity of PPD is 61.5% and specificity of PPD is 77.4% for those scoring 13 and above.[6]

Methods

Our study was carried out on 495 puerperant women who referred to Diyarbakır Maternity and Pediatrics Hospital between September 2012 and May 2013. The approval of the Ethics Committee of Okmeydanı Training and Research Hospital was obtained. Patient consent forms were received from all participants. Women who delivered term babies (at 37 weeks and above) were included in the study. The exclusion criteria included multiple pregnancy, pregnancy by assisted reproductive techniques, history of mental disease diagnosis, antenatal fetal anomaly and mother or baby being in the intense care unit.

All puerperant women included in the study on postpartum 8 weeks were asked EPDS questions and factors that may affect postpartum depression. EPDS is a questionnaire with 10 items, each having 4 options where each option is scored between 0 and 3 and maximum total score is 30.[6]

The study was separated into 3 groups according to the age groups which are adolescents, puerperant women who are over 35-year-old and all puerperant women. Statistical analysis was performed by SPSS 15.0 (SPSS Inc., Chicago, IL, USA) and definitive statistics and chi-square test were used.

Results

The factors affecting postpartum depression were investigated by categorizing 495 puerperant women in the study according to their age groups, which were adolescent puerperant women and puerperant women over 35-year-old. As risk factors, their ages, number of their living children, financial status, educational status, delivery type, if they had any emesis problem, gender of baby, depression history and if the pregnancy was intended were asked. Among all the age groups, it was found that only depression history affected PPD ($p<0.001$).

In 101 out of 495 (20.4%) patients, EPDS score was 13 and above. In the factors investigated, it was found that only the depression history was a significant factor affecting postpartum depression in puerperant women (**Table 1**).

Table 1. Statistical analysis of 495 patients.

	No depression (n=394)	Depression exists (n=101)	p value
Age Mean: 26.7±6.6 (14–52)	26.7±6.5	26.5±7.1	0.7540
Number of living children	2.2 (0–10)	3.8 (0–11)	0.115
Financial status			
600 TL and below	78.4	72.3	0.162
600–1500 TL	19.3	22.8	
1500–5000 TL	2.3	5	
Educational level			
Illiterate	36.3	35.6	0.718
Literate	23.4	23.8	
Primary school	23.9	19.8	
Secondary school	7.1	9.9	
High school	6.6	5.9	
University	2.8	5	
Delivery type (C/S)	207	54	0.602
Emesis (present)	64	17	0.887
Depression history (exists)	6	16	**<0.001**
Gender of baby (male)	198	55	0.452
Planned pregnancy (exists)	41	14	0.325

It was seen in 495 patients who were analyzed that age, number of living children, educational status, financial status, delivery type, emesis problem, if the pregnancy was intended or not and gender of baby were not significant factors in terms of postpartum depression.

Postpartum depression was identified in 51 patients, of which 14 cases (27.4%) were adolescent puerperant women below 18-year-old (**Table 2**). None of the factors analyzed had a significant effect on postpartum depression.

Postpartum depression was identified in 14 (19.4%) out of 72 patients who were puerperant women above 35-year-old (**Table 3**). None of the factors had any effect on postpartum depression.

Table 2. Statistical analysis of puerperant women below 18-year-old.

	No depression (n=37)	Depression exists (n=14)	p value
Number of living children	1	1	0.079
Financial status			
600 TL and below	64.9	50	0.337
600–1500 TL	35.1	50	
1500–5000 TL	-	-	
Educational level			
Illiterate	35.1	28.6	0.871
Literate	16.2	28.6	
Primary school	16.2	14.3	
Secondary school	16.2	21.4	
High school	13.5	7.1	
University	2.2	-	
Delivery type (C/S)	26	7	0.176
Emesis (present)	5	1	1.000
Depression history (exists)	1	0	1.000
Gender of baby (male)	20	8	0.843
Planned pregnancy (exists)	1	2	0.179

Discussion

Even though the pregnancy and delivery are physiological, they may affect the health of mother and baby in a negative way. While most of the women can adapted to physiological, psychological and social changes occurring during pregnancy and delivery, some women may suffer mental illnesses at different levels.[7] It has been shown that PPD constitutes a risk in mother-infant relationship, and affects cognitive and emotional development of baby.[8] Verbal and visual communication problems of baby and disorders in emotional, cognitive, verbal and social abilities are the negative effects of PPD.[9]

In our study, we found that number of living children, financial status, educational level, delivery type, presence of emesis during pregnancy, whether pregnancy being intended or not and gender of baby did not affect postpartum depression. It was observed that only depression history affected postpartum depression. It has been already shown in many studies that depression history is a significant factor affecting postpartum depression.[10,11]

In our study, we found that the rate of postpartum depression at postpartum 8 weeks in Diyarbakır city and nearby regions was 20.4% (according to EPDS, cut-off was 13 and above). The study carried out in Trabzon found PPD rate as 28.1%.[12] However, other studies performed in Turkey found PPD rate as 14.0%, 16.8% and 14.0%, respectively.[11,13,14] We found PPD rate during adolescent period as 27.4% which was the highest result among the age groups. There are contradictory results among age groups for PPD. Some studies found that being below 25-year-old is a significant factor for PPD.[15,16] Some other studies showed that postpartum depression presented no difference among age groups.[17]

The prevalence of postpartum depression during the test period may differ according to population size,

Table 3. Statistical analysis of puerperant women above 35-year-old.

	No depression (n=58)	Depression exists (n=14)	p value
Number of living children	5 (0–10)	5 (0–11)	0.835
Financial status			
600 TL and below	77.6	78.6	0.969
600–1500 TL	17.2	14.3	
1500–5000 TL	5.2	7.1	
Educational level			
Illiterate	44.8	50	0.460
Literate	10.3	14.3	
Primary school	20.7	28.6	
Secondary school	12.1	-	
High school	5.2	-	
University	6.9	7.1	
Delivery type (C/S)	20	3	0.525
Emesis (present)	7	4	0.207
Depression history (exists)	2	2	0.168
Gender of baby (male)	34	11	0.166
Planned pregnancy (exists)	3	0	1.000

study design, test type and cut-off value. Mostly, the negative results of this situation which cannot be detected by healthcare professionals on health of mother and baby should be known and it should be on the alert against this mood disorder in puerperant women especially with depression history.

Routine screening is performed for postpartum depression diagnosis in some countries such as Australia and the USA.[18] Such screening procedures may also be helpful in Turkey to detect such a complicated condition for baby and mother.

The depression rate is correlated with other regions in Anatolia region which has the highest fertility rate in Turkey, and in Diyarbakır which on the 10th rank for fertility rate.[19] The reason for this situation can be explained with the support from relatives and friends during postpartum period.

Conclusion

Although postpartum depression is usually overlooked, it is a significant mood disorder, which should be diagnosed and treated, and it affects maternal health and development of baby.

Conflicts of Interest: No conflicts declared.

References

1. Gavin NI, Gaynes BN, Lohr KN, Meltzer-Brody S, Gartlehner G, Swinson T. Perinatal depression: a systematic review of prevalence and incidence. Obstet Gynecol 2005; 106:1071–83.
2. Okanlı A, Tortumoğlu G, Kırpınar İ. Gebe kadınların ailelerinden algıladıkları sosyal destek ile problem çözme becerileri arasındaki ilişki. Anadolu Psikiyatri Dergisi 2003; 4:98–105.
3. Deveci, A. Postpartum psikiyatrik bozukluklar. Birinci Basamak için Psikiyatri 2003;2:42–6.
4. American Psychological Association. Diagnostic and Statistical Manual of Mental Disorders. DSM-IV-tr. 4th ed. Washington DC: American Psychiatric Association; 2000.
5. Cox JL, Holden JM, Sagovsky R. Detection of postnatal depression. Development of the 10-item Edinburgh Postnatal Depression Scale. Br J Psychiatry 1987;150:782–6.
6. Aydin N, Inandi T, Yigit A, Hodoglugil NN. Validation of the Turkish version of the Edinburgh Postnatal Depression Scale among women within their first postpartum year. Soc Psychiatry Psychiatr Epidemiol 2004;39:483–6.
7. Gülseren L. Doğum sonrası depresyon: Bir gözden geçirme. Turk Psikiyatri Derg 1999;10:58–67.
8. Murray L, Cooper PJ. Effects of postnatal depression on infant development. Arch Dis Child 1997;77:99–101.
9. Brand SR, Brennan PA. Impact of antenatal and postpartum maternal mental illness: how are the children? Clin Obstet Gynecol 2009;52:441–55.
10. Gonidakis F, Rabavilas AD, Varsou E, Kreatsas G, Christodoulou GN. A 6-month study of postpartum depression and related factors in Athens Greece. Compr Psychiatry 2008;49:275–82.
11. Kirpinar I, Gözüm S, Pasinlioğlu T. Prospective study of postpartum depression in eastern Turkey prevalence, sociodemographic and obstetric correlates, prenatal anxiety and early awareness. J Clin Nurs 2010;19:422–31.
12. Ayvaz S, Hocaoğlu C, Tiryaki A, Ak I. Incidence of postpartum depression in Trabzon province and risk factors at gestation. [Article in Turkish] Turk Psikiyatri Derg 2006;17: 243–51.
13. Danaci EA, Dinç G, Deveci A, Sen FS, Içelli I. Postnatal depression in Turkey: epidemiological and cultural aspects. Soc Psychiatry Psychiatr Epidemiol 2002;37:125–9.
14. Gulseren L, Erol A, Gulseren S, Kuey L, Kilic B, Ergor G. From antepartum to postpartum: a prospective study on the prevalence of peripartum depression in a semiurban Turkish community. J Reprod Med 2006;51:955–60.
15. Lanes A, Kuk JL, Tamim H. Prevalence and characteristics of postpartum depression symptomatology among Canadian women: a cross-sectional study. BMC Public Health 2011;11:302.
16. Inandi T, Elci OC, Ozturk A, Egri M, Polat A, Sahin TK. Risk factors for depression in postnatal first year, in eastern Turkey. Inter J Epidemiol 2002;31:1201–7.
17. Goker A, Yanıkkerem E, Demet MM, Dikayak S, Yildirim Y, Koyuncu FM. Postpartum depression: is mode of delivery a risk factor? ISRN Obstet Gynecol 2012;2012:616759.
18. Hübner-Liebermann B, Hausner H, Wittmann M. Recognizing and treating peripartum depression. Dtsch Arztebl Int 2012;109:419–24.
19. Türkiye İstatistik Kurumu (TÜİK). Doğum İstatistikleri, 2012. Ankara: TÜİK; 2013; Nr. 13618.