

# KNOWLEDGE OF HEALTH PERSONNEL IN RELATION TO POSTPARTUM BLUES<sup>1</sup>

## Sağlık Personelinin Annelik Hüznü İle İlgili Bilgileri

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### ABSTRACT

This study aimed to explore the actual postpartum blues (PB) knowledge status among health personnel who care for postpartum women. The descriptive, cross-sectional study was conducted among 125 health personnel working at the primary health care centers and childbirth and pediatric clinics of secondary health care centers, and serving mothers within first 14 postpartum days in Söke district of Aydın. Following the verbal/written approval of volunteers, self-reported data were collected via a questionnaire prepared by researchers, and analyzed by descriptive statistics, Chi-square test and Fisher's exact test. Samples' average age was  $39.78 \pm 7.31$ , 81.6% were women, and 44.8% were bachelors. Only 56% of participants told that they were aware of PB. Of these, however, 61.4% defined PB correctly, and 54.3% were aware of its days of onset. Stress (58.6%) was marked as a risk factor and postpartum hormonal changes (51.4%) as a cause, while frequent crying (87.1%), depressive feelings (71.4%) and anxiety (67.1%) were the most rated symptoms. Especially, positive symptoms (e.g. happiness/joyfulness: 17.1%), diagnosing methods (e.g. screening scales: 21.2%), complications (e.g. postpartum psychosis: 17.7%) and treatment methods were little known. Nurses/midwives, and those working in population health centers and pediatric clinics had insufficient knowledge ( $p=0.003$ ). Although 72.9% found their knowledge sufficient, 76% wanted information. In conclusion, health personnel who care for postpartum women has insufficient knowledge regarding PB. Therefore, their PB-awareness should be increased by planned and continued educations.

**Key Words:** Maternity Blues, Postpartum Blues, Knowledge, Health Personnel

### ÖZET

Araştırma, sağlık personelinin annelik hüznü (AH) ile ilgili bilgilerini belirlemek amacıyla yapıldı. Tanımlayıcı-kesitsel türdeki çalışma, 1. ve 2. basamak sağlık kurumlarında çalışan 125 sağlık personelinde gerçekleştirildi. Veriler soru formu ile öz bildirimine göre toplandı, Ki-Kare ve Fisher Kesin Ki-Kare testi ile değerlendirildi. Ortalama  $39.78 \pm 7.31$  yaşında olan katılımcıların %56'sı AH'yi bildiğini belirtti. Bunların %61,4'ü AH'yi doğru tanımladı, %54,3'ü görüldüğü günleri bildi. En çok bilinen risk faktörü stres (%58,6), etyoloji hormonal değişiklikler (%51,4), semptomlar ise depresif duygular (%71,4) ve anksiyete (%67,1) idi. AH'nin pozitif semptomları (ör. mutluluk/sevinç: %17,1), tanı yöntemleri (ör. tarama ölçekleri: %21,2), komplikasyonları (ör. postpartum psikoz: %17,7) ve önleme/tedavi yöntemleri az biliniyordu. Hemşireler/ebeler ile Toplum Sağlığı Merkezi ve çocuk kliniklerinde çalışanların bilgileri yetersizdi ( $p=0.003$ ). Postpartum dönemde annelere bakım veren sağlık personeli AH ile ilgili yetersiz bilgiye sahiptir. Bu nedenle planlı ve sürekli eğitimlerle AH'ye yönelik farkındalıkları artırılmalıdır.

**Anahtar Kelimeler:** Annelik Hüznü, Postpartum Hüzün, Bilgi, Sağlık Personeli

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## 1. INTRODUCTION

The arrival of every new baby brings usually a lot of positive expectations, joy and excitement for women and their families. However, due to the challenges new mother face, the postpartum period is also very sensitive time characterized by a variety of bio-psycho-social changes. Therefore, it requires significant personal and interpersonal adaptations necessitating physiological and emotional balances, especially in case of primigravida. Women in this period can be vulnerable to a range of mental disorders such as anxiety, blues, and if these are not managed successfully, depression, and psychosis. Perinatal mental health problems are largely underdiagnosed and when not treated or resolved spontaneously, they can have significant and far-reaching ramifications for mother, infants and families. *Ad modum* Rai et al., (2015) 'early screening, diagnosis, and management are very important and must be considered as mandatory part of postpartum care'.

Postpartum blues (PB), also known as "baby blues" and "maternity blues", is the most prevalent health problem in early puerperium with rates reaching up to 85% (Akbarzadeh et al., 2015; Buttner et al., 2012, Maliszewska et al., 2016). Its course is more moderate when compared with other mental disorders, and it limits itself without any intervention within a short period, in general (Akbarzadeh et al., 2015). However, a substantial part of mothers cannot cope with the situation successfully. Due to its close relationship with social stigma, it is often kept secret, and women try to overcome this problem silently (McLoughlin, 2013). Hence, it is often ignored, ignored also by both health personnel and relatives, adequate social and professional supports are not received. In this case, the mood worsening progresses, and anxiety, postpartum depression (PPD) or psychosis develops with consequent detrimental effects among children and families in later life (Cristescu et al., 2015; Youn and Jeong, 2013).

Indeed, recent early hospital discharge practices and high PB incidences in Türkiye require that health personnel do serve mothers in compliance with the holistic health philosophy more than ever. This would contribute positively to the quality of postpartum care. Recently, postnatal care management guideline published by the Turkish Ministry of Health (2014) made a request that all health professionals should be integrated into the mental health services and requisites that the care must be started at the first day and be preventive. It prescribes that health personnel should give information to new mothers, especially about mood swings (e.g., being anxious, restless) within the 2-5 days and its spontaneous resolution within 10-14 days, and asking a consultation in case of psychological problems continue. However, there is no information about whether and in which extent these are actually done. Despite health personnel consider the routine postpartum mental health screening as a part of holistic health, mothers' mental conditions are not adequately addressed (Buist et al., 2007). Possibly, lack of knowledge of health professionals regarding mood disorders often plays an important role in this issue (Buist et al., 2007; Jones et al., 2012).

Since the training backgrounds of healthcare professionals who care the women during postnatal period varying considerable, it is highly also likely that there may be some differences in knowledge and practices among them. To date, there is no study available about their awareness regarding PB. This study aimed to determine the current PB knowledge status and needs of health personnel serving postpartum mothers in order to develop precautions in the early postpartum period.

## 2. MATERIAL and METHODS

### 2.1. Research design

Descriptive and cross-sectional study performed in Söke, Aydın which is a small city located in the Southwestern region of Türkiye with a population over 135.000 (2017 census). The study was conducted at all primary (14 Family Health Centers [FHCs] + 1 Population Health Center [PHC]) and secondary (Obstetrics & Gynecology and Pediatric Clinics of State and Private Hospital) health care centers.

### 2.2. Population and sample

Purposeful sampling method was used. Sample size required for the study was estimated to be 156 when Type I and Type II errors were set as 0.05 and 0.20 (power 80.0%) in the G\*Power statistical program, respectively. However, there were 15 primary and two secondary health care centers in Söke, and the total number of health personnel was 147 in all health care centers. For this reason, we had planned to include all of the health personnel in the sample. Therefore, the study population included 147 health personnel (54 midwives, 42 nurses, 4 family physicians, 35 general practitioner, 6 obstetricians and 6 pediatricians)

serving mothers within first 14 postpartum days. The sample included 125 health personnel (43 midwives, 39 nurses, 2 family physicians, 29 general practitioner, 4 obstetricians and 6 pediatricians), and remaining 22 refused to participate in the study.

### 2.3. Data collection tools

There is no standard instrument to measure PB's knowledge. Data were collected by a questionnaire prepared in light of a comprehensive literature review. Symptoms were taken from Buttner et al (2012). The questionnaire consisted of 23 questions in two sections: the first section included sociodemographic characteristics (8 questions), and the second section evaluated participants' PB knowledge (15 questions). In this section six questions about PB knowledge were closed-ended generally with three Likert type choices with yes, no, don't know (e.g., Do you know PB?), listed options with yes/no answers (e.g., Which are PB symptoms?) or Likert scale (1–5) (e.g., How often is PB seen?). Also, this section contained nine open-ended questions (the definition, risk factors, days of onset, reasons, complications, prevention, treatment, how to identify early and who do determine, e.g., What is PB?).

The questionnaire's content validity was assessed by five obstetrics and gynecologic nurse lecturers, and was over 0.80. Thereafter, it was pilot tested on twenty clinical experts in postpartum care, including obstetricians, pediatricians, and midwives and nurses that working in Aydın Obstetrics and Pediatrics Hospital. They checked whether the questionnaire was understandable and pragmatic. These were not included in the study.

### 2.4. Data collection and Procedures

Data were collected during January-February 2014 in a predetermined period by visiting health professionals in the institutions where they work. Initially, all attendants were informed about the study. After oral and written informed consents had been obtained, volunteers were given the questionnaires to fill out.

### 2.5. Statistical analysis

The Statistical Package for Social Sciences, version 18.0 (SPSS Inc., Chicago, IL, USA), was used for statistical analysis. Sociodemographic data of participants and some knowledge questions (hearing, knowing, and being aware of PB, information resources and self-assessment on the PB knowledge) were assessed by descriptive statistics (frequencies and percentages). Responses to all close-ended and open-ended knowledge questions were coded as "true, false and don't know" according to the literature. After descriptive analysis, knowledge responses were dichotomized as 'Know' (included true answers) and 'Don't Know (included false answers and I don't know)' and showed as frequencies in Table 2. The Cronbach's alpha coefficient for symptoms was found to be 0.77 (variance 17.88, SD = 4.22).

The relationships between the states of hearing/knowing PB and some independent variables (education, profession, unit/clinic, marital status, children) were assessed by chi-square test or Fisher's exact test. A two-tailed  $p$ -value of  $p < 0.05$  was considered statistically significant.

### 2.6. The ethical aspects of research

This study was approved by the Medical Faculty Non-Interventional Clinical Research Ethics Committee of the relevant university (Protocol No: 2013/287), and permissions were taken from public health directorate and hospital authorities. Participants were informed regarding the study aims and the freedom to withdrawal. Confidentiality and autonomy of participants were assured. Informed consent was obtained from the participants. The study was also conducted in accordance with the Helsinki Declaration.

## 3. RESULTS

### 3.1. Sample's characteristics

The participants were in average 39.78 years old (SD = 7.31). They were mainly women (81.6%), married (56%), had completed a bachelor's degree (44.8%), and had one child (SD = 0.99). The majority of health personnel was nurses/midwives (65.6%). They were working at primary care centers (67.2%), and had been working in average for 17.40 years in the current institutions (SD = 7.81) and for 6.21 years (SD = 6.50) in the current units.

### 3.2. Sample's PB knowledge

Of the sample, 77.6% told that they heard about PB, and 56% (70 persons) told that they knew PB as a concept. The knowledge resources of those who said that they knew PB were professional education (67.1%), colleagues (28.6%), media (27.1%), in-service trainings (20%) and courses (11.4%). Among all attendants, the physicians ( $p=0.004$ ), and those who work at obstetrics clinics and FHCs ( $X^2 = 14.159$ ,  $p=0.003$ ), have higher education levels ( $X^2 = 16.070$ ,  $p=0.000$ ), married ( $X^2 = 13.442$ ,  $p=0.001$ ) and have children ( $p=0.006$ ) knew more information about PB than others. Table 1 summarizes their knowledge of PB.

Among health personnel who stated that they knew PB, much known incidence (88.6%), definition (61.4%), some detection methods (e.g. early *via* observations 84.6%), some negative symptoms (e.g. crying 87.1%, depressive feelings 71.4%, restlessness - tension 67.1%), some treatments (e.g. psychotherapy 73.3%) and some prevention methods (e.g. nutrition 100.0%, social support 67.9%, antenatal education 60.7%). However, days of its onset (54.3%), risk factors (e.g. stress 58.6%), causes (e.g. postpartum hormonal changes 51.4%), a few positive symptoms (e.g. happiness/Joyfulness 17.1%), complications (e.g. PPD 58.1%), and diagnosis methods (e.g. screening scales 21.2%) were less known (Table 2). Among the health personnel who stated that they knew PB, 72.9% considered their knowledge as good. However, 76% of all attendants wanted education on PB.

### 4. DISCUSSION

The findings of this study indicated that health personnel's PB knowledge were insufficient. Especially, the inadequacy of their knowledge on days of onset, risk factors, causes, positive symptoms, complications and diagnosis methods is noteworthy. Lower levels of knowledge were recorded on singles, childless and low-educated personnel. Unexpectedly, PB knowledge levels of nurses/midwives, and those working at PHC and pediatric clinics were notably lower than others. Because of these professionals provide regular check-ups for also psychological health during pregnancy and postpartum periods in Türkiye, they are more likely to encounter PB. However, our results indicate that especially midwives and nurses, and those working in PHC and pediatric clinics warrants further attention for PB. If they are well equipped with information and skills required, they should be helpful for an advisory basis for those women who are at greater risk of PB and, more importantly, that of the PPD or PP. For this reason, it is expected that they would be better informed and knowledgeable. Consequently, this study offered an opportunity to see that health professionals need appropriate education and training to realize these expectations. There is no relevant study to compare the findings. However, studies suggest that health personnel generally have low-to-moderate levels of knowledge, and they also do not provide services on evaluating of mental health issues of mothers (Jones et al., 2012; Işık ve Bilgili, 2010). AWHONN (2015), ACOG (2015), Ministry of Health (2014), Legere et al., (2017) and Santos Junior et al., (2012) have also advocated the necessity of education of all health personnel on women's mental health care. Furthermore, education needs of all health personnel in contact with mothers in the field of mental health was emphasized.

In reality, PB occasionally requires no medical treatment. A woman suffering from PB needs being informed, educated, counseled, supported and having confidence (Akbarzadeh et al., 2015; AWHONN, 2015; ACOG, 2015). Therefore, health personnel can lead to an emphasis on compliance and that mothers can enjoy postpartum time as an exciting and joyous period (Youn and Jeong, 2013; ACOG, 2015; WHO, 2014). This is a very important task giving great responsibilities to all postpartum health care givers, because of the social structure in Türkiye has two faces. It is a mixture of modern Western European and traditional Anatolian, and there is a weak support from men to their wives. Since mothers can not realize that they have postpartum mental problems (McLoughlin, 2013), it is inevitable that all postpartum caregivers should be knowledgeable and skillful in screening methods and in the recognition of postpartum mood swings, their symptoms and managements so that mothers have a safe motherhood (Jones et al., 2012; ACOG, 2015). Consequently, PPD could be prevented in one out of about every five childbearing women (Youn and Jeong, 2013; Ishikawa et al., 2011).

The findings from this study will likely be helpful to both curriculum and health care decision makers to develop a more practice oriented, comprehensive and effective mental health care training and service.

## 5. LIMITATIONS

Taken together; besides being the first, this study has also some limitations: the study 1) was carried out only in one district (Söke) of Aydın in Southwestern Türkiye, 2) was performed with a small number of health personnel at primary and secondary health care centers (especially with small numbers of obstetricians, pediatricians and male personnel), and 3) gathered data on the basis of attendants' self-reports. However, although these limitations, to our best knowledge, these findings are preliminary in this area, and unique as they suggest a lack of health personnel's knowledge of and/or interest in PB. Further studies with larger sample sizes and from different areas of the Türkiye and from other countries need to be performed.

## 6. CONCLUSION

In conclusion, health personnel who care for postpartum women knowledge on PB -a pioneering sign of PPD- was insufficient. Therefore, to deliver effective preventive services regarding PB, they should be educated and trained regularly in self-effectiveness and to update knowledge of best practice treatments to help new mothers in the early postnatal period and prevent PB and its adverse effects.

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Table 1: Characteristic of Participants According to Their PB Knowledge (N=125)

Variables	Postpartum Blues				Statistical Test *
	Know		Don't Know		
	n	%	n	%	
<b>Education</b>					
≤ Associate's Degree	19	35.8	34	64.2	X <sup>2</sup> =16.070 p=0.000
Bachelor's Degree	38	67.9	18	32.1	
MSc and Specialist	13	81.3	3	18.8	
<b>Profession</b>					
Midwife, Nurse	38	46.3	44	53.7	p=0.004
Physician	32	74.4	11	25.6	
<b>Unit/Clinic</b>					
Obstetrics & Gynecology	16	72.7	6	27.3	X <sup>2</sup> =14.159 p=0.003
Pediatric	8	42.1	11	57.9	
FHCs	37	67.3	18	32.7	
PHC	9	31.0	20	69.0	
<b>Marital status</b>					
Married	49	70.0	21	30.0	X <sup>2</sup> =13.442 p=0.001
Single	11	33.3	22	66.7	
Widowed/Divorced	10	45.5	12	54.5	
<b>Child(ren)</b>					
Yes	50	66.7	25	33.3	p=0.006
No	20	40.0	30	60.0	

\* Chi-square test.

\*\* Fisher's exact chi-square test

Table 2: Responses to PB Knowledge Questions of Health Personnel Who Stated Knowing PB (N=70)

Responses	n	%
<b>What is PB?</b>		
Know	43	61.4
Don't know	27	38.6
<b>How often is PB seen?</b>		
Know (most and some mothers)	62	88.6
Don't know (every mother and rarely)	8	11.4
<b>On what postpartum days PB is seen?</b>		
Know (first 10-14 days)	38	54.3
Don't know (15 <sup>th</sup> day and thereafter)	32	42.7
<b>What are the three important risk factors? *</b>		
Stress	41	58.6
Early -or late- age deliveries	27	38.6
Poor social support	20	28.6
<b>What causes PB?*</b>		
Postpartum hormonal changes	36	51.4
Psychosocial factors	29	41.4
Postpartum physical changes	15	21.4
<b>What are the negative symptoms of PB? *</b>		
Frequent crying	61	87.1
Depressive feelings	50	71.4
Anxiety	47	67.1
Loss of appetite	39	55.7
Alertness	37	52.9
Loneliness	36	51.4
Poor concentration	33	47.1
Worrying	32	45.7
Unhappiness	32	45.7
Insomnia	32	45.7
Weakness	31	44.3
Despair	31	44.3
Anger	26	37.1
Guilt	25	35.7
Mood swings	25	
<b>What are the positive symptoms of PB? *</b>		
Happiness/Joyfulness	12	17.1
Sensitive/Concerned	11	15.7
<b>What are the diagnostic methods of PB?</b>		
Observing symptoms	44	84.6
Complaints	18	34.6
Screening scales	11	21.2
<b>How PB is prevented?</b>		
Balanced diet	56	100.0
Social support	38	67.9
Antenatal education	34	60.7
<b>How PB is treated?</b>		
Psychotherapy	44	73.3
Social support	27	45.0
Treatment with medicaments	24	40.0
Home visits and postpartum care	8	13.3
<b>What are there complications of PB?</b>		
Postpartum depression	32	58.1
Early termination of breastfeeding	15	24.2
Postpartum psychosis	11	17.7

\* More than one option was mark.