

Postnatal Depression: Midwives' and Nurses' Knowledge and Practices

Postnatal Depresyon: Ebe ve Hemşirelerin Bilgi ve Uygulamaları

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Abstract

Purpose: This was a descriptive investigation to evaluate the information and practice of midwives and nurses working in primary health services regarding post natal depression.

Material and Methods: The sample of the study comprises 302 midwives and nurses employed in health centers in Ankara. The data were collected using a questionnaire. In the evaluation of the data, percentage and Pearson chi square tests were used.

Results: According to the results of the investigation, majority of participants rated their information on post natal depression as moderate or low level. It has been established that the majority of participants do not know the definition of depression (84.4%), risk factors for it (73.4%) and the methods of diagnosing it (72.2%). The majority of the nurses and midwives (75.5%) stated that services for evaluating the psychological state of mothers are not offered in the health centers where they are employed.

Conclusion: The findings of our study demonstrate that the information and practice of nurses and midwives are not at the expected level. It may be recommended that the awareness of the midwives and nurses is enhanced by informing on the subject for diagnosing and suitable intervention on PND in early period.

Key words: **Postnatal depression; Primary health care services; Midwife; Nurse.**

Özet

Amaç: Bu çalışma birinci basamak sağlık hizmetlerinde çalışan ebe ve hemşirelerin doğum sonu depresyon konusunda bilgi ve uygulamalarının değerlendirilmesi amacıyla yapılan tanımlayıcı bir çalışmadır.

Gereç ve Yöntemler: Araştırmanın örneklemini, Ankara ilinde yer alan sağlık ocaklarında görevli 302 ebe ve hemşire oluşturmuştur. Veriler soru formu ile toplanmıştır. Verilerin değerlendirilmesinde yüzdelik ve Pearson ki-kare kullanılmıştır.

Bulgular: Araştırma sonucunda, katılımcıların çoğu doğum sonu depresyon konusundaki bilgilerini orta ve düşük düzeyde değerlendirmişlerdir. Ebe ve hemşirelerin çoğunluğunun doğum sonu depresyon tanımını (%84,4), risk faktörlerini (%73,4) ve doğum sonu depresyonu tanılama yöntemini (%72,2) bilmediği belirlenmiştir. Ebe ve hemşireler çoğunlukla (%75,5) çalıştıkları sağlık ocaklarında annelerin ruhsal durumunu değerlendirmeye yönelik hizmetlerin vermediğini belirtmişlerdir.

Sonuç: Çalışmamızın sonuçlarına bakıldığında ebe ve hemşirelerin PND konusunda bilgi ve uygulamalarının istenik düzeyde olmadığı söylenebilir. PND'un erken dönemde belirlenmesi ve uygun girişimlerin yapılabilmesi için ebe ve hemşirelere bu konuda bilgi verilerek farkındalıklarının artırılması önerilebilir.

Anahtar Sözcükler: **Doğum sonu depresyon; birinci basamak sağlık hizmetleri; ebe; hemşire.**

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Introduction

Postnatal depression (PND) is an important health problem which influences well-being, quality and security of life (1, 2). Depression, which occurs in postnatal period, may cause more serious problems than major depression occurring in normal life periods and displaying similar symptoms. PND has an adverse influence on self esteem, skills, child care, familial responsibilities and roles of the mother (3, 4). In this period, mothers may harm themselves and their babies, influencing the relation of the mother and the baby unfavorably (3-9).

In studies carried out in various countries, the prevalence of PND has been found to be 22.6% in Israel, 17% in Japan, 17.8% in United Arab Emirates, 14% in Iceland, 12.7% in Sweden, and 12% in England (7,10-14). In our country, according to the results of studies performed with limited sample, the prevalence of PND varied between 14-29% (15-20).

The most efficient way of preventing PND is the determination of women at risk. The determination of groups at risk is possible through efficient following before and after birth. According to the data of Turkish Demographic and Health Survey in 2003, 81% of the women in our country utilize prenatal health services and there is no sufficient data on postnatal service (21). In the study of Bilgili and Vural (2006) the rate of mothers attending postnatal control visits has been found to be 18.9% (22). In our country, deliveries usually take place in hospital. Consistent with the preference for early discharge favored recently, discharge is planned in vaginal deliveries in 24 hours or less and in caesarian deliveries in 48 hours or less unless complications develop (23). In our country, according to the statute on health services, nurses and midwives have important responsibilities in pre and postnatal health services, follow up before and after birth are carried out by gynecologists. According to this statute nurse and midwives are supposed to see pregnant women at least six times during pregnancy (until 12th week detection and first follow up, on 24th week, on 28th week, on 32nd week, on 36th week, on 39th week) and after birth nine times in the first year. This is carried out through home visits or by inviting the women to health centers. General health examination of the mother and the baby is made to evaluate health status. Unfortunately, during pregnancy and in postpartum period, mental health is neglected. PND is not given any priority and routine screening is not conducted for it. Although utilization of postnatal health services is not at adequate

level due to lack of referral and inefficient home visit services, nurses and midwives who have contact with mothers in the first year for immunization, health control of the baby and similar reasons have the possibility of evaluating mothers for determining the symptoms of depression and risk factors. It is important for nurses and midwives to know the symptoms of PND and the necessary interventions in the presence of these symptoms in order to fulfill the above mentioned functions (6). It is possible to follow the pregnant women and women in post natal period who are found to have high risk of PND and to evaluate them with scales that can be applied easily (2, 20, 24, 25).

In our country, mostly the prevalence of PND has been investigated and is found to be high (14-29%). However, to our knowledge, there is no study on the information level of nurses, who play a key role in pre and postnatal care, on PND and their responsibilities in this issue. Determining the high risk groups for PND; making preventive studies and recognizing the diagnostic symptoms are among the responsibilities of nurses and midwives. In order to increase the quality of these services, to notice the deficiencies in the conduct of service and to make planning in advance, it is important to know the information and practice of nurses in the issue, as they are expected to assume important roles. Based upon this idea, this study aims to determine the information and activities of nurses and midwives working in primary health care regarding PND.

Materials and Methods

Design and sample. This is a descriptive study aiming to determine the information and practice of nurses and midwives as regards PND. The research universe consists of 1270 midwives and nurses who are serving in 149 Health Centers relating eight Health Group Presidencies within the borders of Metropolitan Municipality of Ankara Province. The sample of the study is calculated by formula used in situations that the investigated event is not known in proportional frequency and the number of individual is known in research population. The number of the individual required is at least 290 by formula. 302 individuals are taken in the research. The number of the health center to be chosen in each district is determined by considering the number of midwife and nurse for sampling choice in the study and then the health centers are chosen by random method. All the midwives and nurses in the chosen health centers are taken in the scope of the study.

Data collection. A questionnaire was used in this study. It questionnaire was developed on the basis of concepts identified in the professional literature. The questionnaire included 24 questions: eight inquired about demographic data and employment details. Five were on knowledge of the subject and 10 were concerned with experiences and opinions regarding PND. Most of the questions had a variety of possible answers. Some questions included the category of 'other' to allow participants to add alternative responses. Interviews lasted between 20-30 minutes.

Construct and content validity of the questionnaire was assessed through review by colleagues, academic supervisor and experts in the field. The pilot study further assessed validity. The last part of the pilot questionnaire asked participants whether the questionnaire was comprehensible and offered them the chance to contact the investigator if they had any questions.

Written permission was obtained from Ankara Province Directorate of Health. Questionnaire was administered by the investigator on three days during work days of the week. Investigator talked with each nurses and midwife in the sample and obtained their verbal consent after explaining the purpose of the study and administered the questionnaire on the same day. Usually, afternoons were preferred for interviews and approximately 12 nurses were contacted every day. Study was carried out between January-March 2007.

Statistical analysis. Data collected were recorded and analyzed using SPSS version 11.0. Participants answered open ended questions at great length and therefore answers to these questions were grouped by the similarity of contents to make the data easier to handle. The primary intention was to conduct a descriptive survey and hence descriptive statistics were produced for all variables and comparison among responses was made with Pearson Chi-square test.

Results

All participants (302) filled the questionnaire form and all were evaluated. The number of nurses and midwives working in health centers is almost the same (Table I). The majority of the participants is between 30-34 and nearly all are married (94%). 61.3% of the participants are Nursing College (2 years) program and the large majority has been working for 10 or more years. 59% of

the nurses and midwives have worked at the health center where they are commissioned for four or less years and in all units of the institution, they work in rotation.

Table I. Demographic characteristic of the midwives and nurses.

	N	%
Profession		
Midwife	162	53.6
Nurse	140	46.4
Age		
<24	6	2.0
25 – 29	45	14.9
30 – 34	117	38.7
35 – 39	90	29.8
40 – 44	34	11.3
>45	10	3.3
Marital status		
Married	284	94.0
Single	18	6.0
Education		
Vocational health high school	84	27.7
Nursing college (2 years)	185	61.3
Bachelor's degree in nursing	9	3.0
Master's in nursing	3	1.0
Other *	21	7.0
Overall duration of work (year)		
<4	10	3.2
5- 9	41	13.3
10- 14	88	29.0
15- 19	112	37.0
20 -24	34	11.0
>25	17	6.5
Duration of work in health centers (year)		
<4	180	59.6
5- 9	63	20.9
10- 14	41	13.5
15- 19	13	4.4
>20	5	1.6

*Public administration, management of health institutions after basic nursing education.

Although 84.4% of the nurse and midwives do not know the definition of PND accurately, 64.1% knows the symptoms correctly. 70.5% of the participants stated that tendency to PND can be noticed in pregnancy. It has also been determined that the majority of participants (73.4%) do not know the risk factors for PND and 72.2% do not know diagnosis method. 47% received information on the subject previously. When the distribution of information

sources is examined, it is seen that 36.0% received information during basic professional training, 19.8% through their own investigations and 27.3% from their own life experiences. Slightly over half of nurse and midwives (56.8%) evaluated their information on PND as moderate, and 31% as low and 74.3% stated that they needed information on the subject (Table II).

Table II. Distribution of the Knowledge of Nurses on PND.

	knows		does not know	
	n	%	n	%
PND definition	50	6.6	252	84.4
PND symptoms	193	4.1	109	5.9
Recognition of PND tendency during pregnancy	212	70.5	90	29.5
PND risk factors	80	26.6	222	73.4
PND diagnosis methods	84	27.8	218	72.2

	n	%
Getting information on PND		
Yes	142	47.0
No	160	53.0
Total	342	
Information sources		
professional education	51	36.0
own investigation	28	19.8
own experiences	39	27.3
In service training	24	18.9
Total	142	
Information levels		
Low	94	31.0
Moderate	171	56.8
High	37	12.2
Total	302	
Willing to receive training on PND		
Yes	223	74.3
No	77	25.7
Total	302	

As the symptoms of PND, nurse and midwives reported the following as first five symptoms: anxiety, sleeplessness, feeling of crying, tiredness and hallucination. It is also interesting that participants thought that hallucination, impairment in vision, hypotension, head ache, anemia, vomiting-nausea, vertigo and tremor, which are not actually

symptoms of PND, were PND symptoms. They considered dissatisfaction with marriage, the stress of caring for the baby, socio economic problems and low education level of mothers as risk factors.

Table III. The Experience of Nurses and Midwives with PND Patients.

		n	%
Encountering an individual with PND (n=302)			
	Yes	86	28.5
	No	216	71.5
Actions taken when encountering a case of PND (n:86)*			
	Referral to psychiatrist	44	51.1
	Talking with the spouse	41	47.6
	Listening and making recommendations	34	39.5
	Referring to gynecologist	11	12.7
	Referring to the physician at health center	8	9.3

*As there was more than one answer, percentage was taken from n

A large majority (71.5%) of the nurse and midwives stated that they did not encounter anyone with PND. Those who have experience with PND cases did the following things:

Firstly, referring to psychiatrist (51.1%), talking with the spouse (47.6%) listening and making recommendations (39.5%). We do not have any information regarding the content of talks and recommendations.

75.5% of the nurses and midwives stated that although it was their responsibility, nursing services for evaluating the psychological health of the mothers were not offered in the unit where they work. Of those, who stated these services were offered, 54% said that the patients were referred to psychologist and 47.2% made some recommendations. They did not specify what the recommendations were.

The reasons why services for evaluating the psychological state of mothers were not offered in health centers were

expressed as follows: lack of personnel (46%), excessive work load (41.2%), lack of suitable environment (39%), and nurses do things outside their duty.

Nurses and midwives stated that it is the spouse who should first notice the symptoms of PND (88.4%) to be followed by family members and friends (57%) and nurse and midwife working in health center (28.8%). As the reason for their choice, they said that spouse and family members are the people closest to the individual and can notice the changes in feelings and behavior best. As to the rank of the nurses and midwives in the list, they stated that PND symptoms may appear after discharge from hospital and at this stage, the first people they can have access to are the nurses and midwives in health center.

No statistically significant relation has been found between the work duration of nurses and midwives and their information on PND diagnosis, symptoms and risk factors ($p>0.05$). However, the relation between their education status and information level is significant ($p<0.05$).

Table IV. The Distribution of the Knowledge of Midwives and Nurses for PND Symptoms, Risk Factors and Diagnosis According to the Demographic Characteristics.

Demographic characteristics	Knowledge of the symptoms				Knowledge of the risk factors				Knowledge of the diagnosis				
	Yes		No		Yes		No		Yes		No		
	n	%*	n	%*	n	%*	n	%*	n	%*	n	%*	
Profession	Midwife	102	63.0	60	37.0	39	24.1	123	75.9	40	24.7	122	75.3
	Nurse	91	65.0	49	35.0	41	29.3	99	70.7	44	31.4	96	68.6
	x^2												1.698
	p												0.193
Education	Vocational health high school	37	44.0	47	56.0	19	22.6	65	77.4	10	11.9	74	88.1
	Nursing college (2 years)	139	75.1	46	24.9	58	31.4	127	68.6	57	30.8	128	69.2
	Bachelor's degree and above	17	51.5	16	48.5	3	9.1	30	90.9	17	51.5	16	48.5
	x^2												20.649
	p												0.000
Work duration	≤ 4 years	100	60.6	71	39.4	50	27.8	130	72.2	54	30.9	123	69.1
	5–9 years	44	69.8	19	30.2	11	27.0	46	73.0	14	22.2	49	77.8
	10–14 years	24	58.5	17	41.5	17	26.8	30	73.2	6	14.6	35	85.4
	≥ 15 years	16	88.9	2	11.1	2	11.1	16	88.9	7	38.9	11	61.1
	x^2												6.470
	p												0.091

*The percentages are percentage for line

Table V. The Distribution of Previous Information of Midwives and Nurses on PND According to the Their Knowledge for PND Symptoms, Risk Factors and Diagnosis.

	previous information on PND						Significance test		
	Yes		No		Total		x ²	p	
	N	%	Nr	%	N	%			
Knowledge of symptoms	Yes	105	73.9	86	54.4	191	63.7	12.31	0.000
	No	37	26.1	72	45.6	109	36.3		
Knowledge of risk factors	Yes	34	23.9	46	29.1	80	26.7	1.022	0.312
	No	108	76.1	112	70.9	220	73.3		
Knowledge of diagnosis	Yes	45	31.7	39	24.7	84	28	1.821	0.177
	No	97	68.3	119	75.3	216	72		
Total		142	47.3	158	57.7	300	100.0		

There was a significant relation between previous information on PND and knowledge of symptoms while the relation between previous information (p<0.05) and

the knowledge of risk factors and diagnosis was not found to be significant (p>0.05)

Table VI. The Distribution of Encountering Status of Midwives and Nurses on a Patient with PND According to the of Their Knowledge for PND Symptoms, Risk Factors and Diagnosis

	The encountering status on a patient with PND						Significance test		
	Yes		No		total		x ²	p	
	n	%	n	%	n	%			
Knowledge of the symptoms	Yes	55	64.0	138	63.9	193	63.9	0.000	0.992
	No	31	36.0	78	36.1	109	36.1		
Knowledge of the risk factors	Yes	22	25.6	58	26.9	80	26.5	0.051	0.821
	No	64	74.4	158	73.1	222	73.5		
Knowledge of the definition	Yes	20	23.3	30	13.9	50	16.6	3.906	0.048
	No	66	76.7	186	86.1	252	83.4		
	total	86	28.5	216	71.5	302	100.0		

The relation between encountering a PND patient before and the knowledge of symptoms and risk factors was not found to be statistically significant (p>0.05), whilst the relation between previous encounter with PND patients and knowledge of the definition of PND was significant (p<0.05).

Discussion

Although our study is not representative of all country, it is important that it reveals the information and practice

of nurse and midwives working in primary health services in the capital of Turkey. Even though it is well known that midwives and nurses have important roles in determining PND and solving the problems associated with it, it is not possible to say that the nurses and midwives participating in our study are really aware of their role.

The midwives and nurses should have enough information in order that they can fulfill their roles regarding PND. Stewart and Hanshaw (2002) suggested that limited information of nurse and midwives on PND may lead

them to lack confidence and disregard the importance of their roles hence (26).

In the present study, it has been established that nurses and midwives are inadequate in determining the basic characteristics of PND and demand training on the subject (Table II). In a study carried out by Skocir and Hundley in Slovenia, similar results were obtained. Namely nurses and midwives were inadequate in determining the basic characteristics of PND; they did not trust their knowledge and 99% of them needed training on the subject (27).

In the present study, it was established that only a small group of nurses and midwives encountered someone with PND and usually referred them to the psychiatrist or psychologist (Table III). PND treatment is usually arranged according to the kind and severity of symptoms. At the onset, support, help and informing the patients are necessary interventions. When symptoms are prolonged or aggravated, professional treatment is required (28). In view of these findings, it may be thought that nurses and midwives are not aware of their responsibilities as regards PND due to the inadequacy of their information on the subject. However, in the onset of PND; they can evaluate the kind and severity of depression symptoms and as stated by Beck and Gable (2001), they can offer council to the mothers experiencing PND, and assume responsibilities in services such as instilling hope in them about the problem, demonstrating empathy and refer them to the psychiatrist when symptoms are continued or aggravated (29). Generally, physicians should play a more dominant role in the management of PND owing to their professional knowledge (26). Yet, a study by Gunn et al (2003) demonstrated that the information level of physicians on PND was not higher than that of midwives (30). In the studies of Dietrich et al and Olson et al similar results were obtained and it is reported that the doctors do not feel themselves confident in the management of PND, which emanates from lack of training on PND (31).

In a study in which 1370 academic members of American Obstetricians and Gynecologists association participated, it can be seen that the majority is not receive any constant training on PND (32) and especially old and male obstetricians have less information on PND , its history and effects (33, 34).

In the present study, nurses and midwives mostly stated that nursing services aiming to evaluate the psychological health of mothers were not offered in the health centers

where they work and attributed this to lack of personnel, excessive work load, lack of suitable physical environment and nurses carrying out many services outside their duty. However, in the guideline on the conduct of health services, it is openly stated that in the pre and postnatal period, in health centers, psychosocial development and interaction of mother a baby should be evaluated and training, counseling and treatment service should be carried out when family is in need of support In the same guideline, it has also been stated that nurses and midwives are obliged to assume duties in preventive psychological health services. Insufficiency of nursing services directed to the evaluation of the psychological health of mothers may stem from the fact that nurses and midwives lack adequate information on the subject and hence are not aware of their roles.

Nurses and midwives, who interact with the new mother many times in the first new year, should have adequate knowledge and skills regarding the interventions in the presence of risk factors and symptoms of PND (35, 36,37). In the present study, nurses and midwives stated that the first person who would notice the symptoms of spouse is the spouse, to be followed by family members and friends and then nurses and midwives. Likewise, in the study of Skocir and Hundley , nurses and midwives stated that the person in the most suitable position to notice the symptoms of PND is the spouse (27). Although spouses are important in the detection of the symptoms of PND, nurse and midwives are expected to be more active in the detection of symptoms as health professionals (3). In the studies, evaluating the information of nurses and midwives on PND and their awareness of it, it has been reported that those who lack adequate information feel less responsible and hence fulfill their roles and responsibilities less (27, 38). Similarly, in our study the fact those participants held the spouse primarily responsible for noticing symptoms may be related to their lack of confidence in their own knowledge and experience. Nurses and midwives should be in close contact with mothers in prenatal and postnatal period with mothers and establish trust in them in order that they can be the first to notice symptoms (3, 38-40).

In the present study, nurses and midwives regarded anxiety, sleeplessness, and feeling like crying as the most important symptoms of PND: Although these are correct (5, 40, 41) some participants also considered hallucination, impairment in vision, hypotension, head ache, anemia, vertigo,

vomiting, nausea and tremor as symptoms of PND even though they are not actually the symptoms of PND: especially, the choice of hallucination, which is a symptom of postnatal psychosis, demonstrates that the symptoms of postnatal diseases are usually confused and screening tests should be used in differential diagnosis (38, 41).

In conclusion, services that will be offered by nurses and midwives working in primary health services are important for early diagnosis and treatment opportunities. It is important for the nurses to feel themselves ready and equipped to offer these services for assuming their roles and responsibilities. Therefore, suitable training programs which nurses and midwives may benefit from should be developed and awareness of the subject should be enhanced. The findings of our study demonstrate that the information and practice of nurses and midwives are not at the expected level. However, they can not be representative of all country. Hence, further studies are required which consider the problem at larger national scale and problem should be addressed from different perspectives.

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