Determination of the Anxiety Level of Pregnant Inpatients Diagnosed with Abortus

Sultan Uçuk¹, Özlem Duran Aksoy², Fatma Özer Çetin³, Dilek Şencan⁴

¹(MidwiferyDepartmant / Cumhuriyet University Faculty of Health Sciences,Research Assistant Msc. Turkey) ²(Midwifery Departmant / Cumhuriyet University Faculty of Health Sciences,Assist. Prof., PhD.Turkey) ³(Midwifery/Balıkesir/Bandırma/Turkey) ⁴(Midwifery Ağrı/Turkey)

Abstract: The present study was carried out as a descriptive research to determine the anxiety level of pregnant inpatients diagnosed with abortus. The sample population of the research consists of a total of 366 pregnant inpatients diagnosed with abortus within the recent year in the city hospitals of Sivas. The number of samples was calculated by taking into account the incidence rate of abortus among pregnant patients, and accordingly a sample of 154 patients was determined, the inpatients diagnosed with abortus and consented to participate in the research were included in the study. The data, belonging to 154 pregnant patients, were evaluated using SPSS 16.0 (Statistical Package For Social Sciences) software package. After the analysis of the research data, pregnant women's state anxiety mean score was found as 41.00 ± 5.8 and trait anxiety mean score was found as 47.22±7.0. According to the conducted analyses, pregnant women without civil marriage had a state anxiety mean score of 46.50, whereas the ones with civil marriage had a state anxiety mean score of 40.86, which indicates a statistically significant difference (p<0.05). Pregnant women that have undergone three or more abortus cases had a trait anxiety mean score of 52.22, indicating a statistically significant difference when compared with the other groups. The women experiencing their first pregnancy had a state anxiety mean score of 42.17, which is higher than the mean score of pregnant women with children, with a statistically significant difference (p < 0.05). Pregnant women should be aided in coping with anxiety, as indicated by the obtained research data, overall marital status of pregnant inpatients, their previous abortus experience and high anxiety scores of the women undergoing their first pregnancy. Additionally, healthcare professionals should be advised to actively inform the pregnant inpatients diagnosed with abortus, of each application that they undergo, and of their and their baby's condition, as a means to help the patients cope with anxiety. **Keywords** - Pregnant, Abortus, Anxiety

I. Introduction

The first sign of pregnancy is the late menstrual cycle. The diagnosis of pregnancy is based on the detection of Chorionic Gonadotropin Hormone (HCG) in blood or urine. At the initial stages, an increase in the level of this hormone can be detected even 8 days after ovulation. A hormone level higher than 25IU/L is an indication of pregnancy. Pregnancy is a maternal situation in which fetal development occurs within the body. During the development period, fetus is referred to as embryo as from the fertilization until the eighth gestational week, and it is referred to as fetus from the eighth week until delivery. The period of pregnancy is defined based on the gestational age for obstetric purposes. The estimated age of a fetus is evaluated as from the first day of the last menstrual period (LMP) considering that a menstrual cycle is 28 days. A normal gestational period is 40 weeks or 280 days; or 10 gestational weeks (28 lunar months), starting from the first day of the last menstrual period (Taşkın L 2003; WHO,1995)).

Pregnant women should receive a proper prenatal care to undergo a healthy and normal gestational period. Today, a proper prenatal care involves risk assessment, medical care, social services, diet consultancy, patient education and psychological support.

Additionally, a woman with a desire to have a child, should undergo a medical evaluation before becoming pregnant. This way, it can be evaluated whether the individual is ready for pregnancy based on the medical record, physical examination and laboratory data. Additionally, pregnancy is a physiological event and the health of the mother and fetus deteriorates due to complications in 5-20% of the cases (Taşkın L 2003, Erez 1997,10).

One of the major challenges encountered in developing countries is preventable maternal mortality. The causes of maternal mortality vary especially in recent years. Main causes of previous maternal mortality were classified as: obstetric hemorrhage, sepsis and toxemia causes of maternal mortality; whereas today these causes are defined as: embolism, gestational hypertension, obstetric hemorrhage, ectopic pregnancy, tocolytic agent complication, and acute fulminant hepatitis (Tümerdem Y.1992, Taşkın L WHO.(1995).

During the first trimester of pregnancy, the causes of obstetric hemorrhage are abortus cases, ectopic pregnancy and hydatidiform mole. Abortus cases have adverse physiological and psychological effects on expectant mothers. Abortus increases the anxiety level of women, and in turn, high anxiety levels provoke abortus.

In this regard, it is possible to prevent a probable abortus case by determining the anxiety level of the pregnant patient under the risk of abortus with a proper midwifery approach. For this reason, determination of the anxiety level of a pregnant patient under the risk of abortus, becomes essential in provision of health care.

II. Method

The present study was carried out as a descriptive research to determine the anxiety level of pregnant inpatients diagnosed with abortus. The target population of the study comprises a total of 366 pregnant inpatients diagnosed with abortus in the city hospitals of Sivas Province within the recent year. Evaluations were made in consideration of the incidence rate of abortus cases and accordingly 154 samples were obtained. The research was conducted with the inpatients who were diagnosed with abortus, and consented to participate in the study. Research data were gathered by face to face interview method using "Introductory Information Form" and "State-Trait Anxiety Inventory" which include the information for evaluation of socio-demographic properties of pregnant inpatients diagnosed with abortus.

Introductory Information Form:

This form, prepared in light of similar previous studies on this issue, consists of 22 questions regarding the socio-demographic properties (age, educational status, professional status and income status) of the inpatient; pregnancy related questions (number of pregnancies, her experience as an inpatient, companion, systemic diseases, etc.) and diagnosis-related questions.

Assessment of State-Trait Anxiety Inventory

In the state-anxiety scale, the alternatives "none", "a bit", "quite", "completely" for the expressions comprising 20 items were straightly scored as 1,2,3,4 for the items no 3,4,6,7,9,12,13,14,17,18 and reversely scored as 4,3,2,1 for the items no 1,2,5,8,10,11,15,16,19,20. The total weighted score obtained from reverse-scored expressions was subtracted from the one obtained from straight-scored expressions, the constant predefined number of 50 was added to the resulting number, and accordingly the state anxiety score was obtained. In the trait-anxiety scale, the alternatives "none", "a bit", "quite", "completely" for the expressions comprising 20 items were straightly scored as 1,2,3,4 for the items no 22,23,24,25,28,29,31,32,34,35,37,38,40 and reversely scored as 4,3,2,1 for the items no 21,26,27,30,33,36,39. The total weighted score obtained from reverse-scored expressions was subtracted from the one obtained from straight-scored expressions, the constant predefined number of 35 was added to the resulting number, and accordingly the trait anxiety score was obtained.

The obtained scores were evaluated by the researchers upon completion of State-Trait Anxiety Scale by the pregnant inpatients diagnosed with abortus.

The data of 154 pregnant inpatients, as samples of the study, were evaluated using SPSS 14.0 software package in the digital media (Aksakoğlu 2001, Özdamar 2001).

III. Discussion

The socio-demographic data of pregnant inpatients indicate date 79.9% is within the age group of 18-32, 1.9% is illiterate, 42.2% is primary school graduate, %97.4 is married and 89% is unemployed. 57% of the sample has previously stayed in a maternity hospital, 87% of these has no companion, 87.7% has no systemic disease and %63.6 lives in elementary family.

42.9% of pregnant inpatients underwent 3 or more pregnancies, 68.8% has never undergone abortus, 54.1% of the ones with an abortus experience underwent only 1 abortus. % 54.5 of the pregnant inpatients has no children, 91.6% of the ones with a child has no congenital anomaly. 49.4% of the sample reported to have used no contra-septive method. 69.2% of the ones, that have used a contra-septive method, quit the method to become pregnant. 72.1% of the pregnant inpatients underwent their first abortus experience.

77.9% of the pregnant inpatients never used a drug during their gestation, 11.7 of the ones who used a drug received iron and vitamin supplement. 90.9% of the sample reported to have never smoked during their gestation. 50.6% has no delivery experience, 1.3% delivered with a interval less than 2 years, and 48.1% delivered with an interval more than 2 years.

68.2% of the inpatients in the research sample are diagnosed with abortus imminens, 13% with missed abortus, 8.4% with therapeutic abortus, 5.8% with incomplete abortus, 3.2% with habitual abortus and 1.3% with elective abortus. 87,0% of the inpatients desire and 13,0% do not desire pregnancy. 90.9% of the pregnant inpatients diagnosed with abortus were found to have no psychological problems.

Table 1: State and Trait Anxiety Mean Score Distribution of the Pregnant Inpatients Diagnosed with Abortus

	General Score ± SD
Trait Anxiety Mean Score	41.00 ± 5.80
State Anxiety Mean Score	47.22 ± 7.03

The trait anxiety mean score of the inpatients was found as $41,00\pm0,46$, and their state anxiety mean score was found as $47,22\pm0,56$. In their study, Gerçek S, Can H, Güler H (2004) found the trait anxiety mean score as 51.55 ± 1.96 and state anxiety mean score as 48.55 ± 2.32 . Among these results, trait anxiety mean score is in agreement and state anxiety mean score is not in good agreement with the results of the present study.

Buldukoğlu and Terakye(1990) reported the trait anxiety mean score as 47.09 and state anxiety mean score as 46.18. Among these results, state anxiety mean score is in agreement with the findings of the present research.

Table 2: Distribution of Trait and State Anxiety Mean Score of Pregnant Inpatients Diagnosed with Abortus,
Based on Various Situations (n: 154).

	Number of	%	Trait Anxiety Mean Score General Score ± SD		State Anxiety Mean Score	
A	samples		General Score ± SD		General Score ± SD	
Age	3	1.0	47.00 + 2.64	VXV 4.07	10.66 + 1.04	VW 410
15-17 age group		1.9	47.00 ± 2.64	KW = 4.07 p>0.05	40.66 ±4.04	KW = 4.16 p>0.05
18-22 age group	34	22.1	49.11 ± 7.28		42.58 ± 5.74	
23-27 age group	48	31.2	46.16 ± 6.95		40.27 ± 4.29	
28-32 age group	41	26.6	46.65 ± 6.81		40.53 ± 6.49	
33-37 age group	17	11.0	48.35 ± 7.39		40.11 ± 6.94	
38 and higher	11	7.1	46.45 ± 7.65		42.54 ± 7.44	
age group						
Marital Status						
Married	150	97.4	47.19±7.06	MWU=	40.86±5.80	MWU= 122.50 p<0.05
Single	4	2.6	48.50±6.40	272.00 p>0.05	46.50±2.64	
Intention for Preg	manev	1		p>0.05		p<0.02
The ones who	134	87.0	47.25 ± 6.73	MWU=	40.74 ± 5.56	MWU=
desire	107	07.0	17.20 ± 0.10	1231.50	10.71 ± 5.50	$1109.00 \\ p>0.05$
The ones who	20	3.0	47.05 ± 9.02	p >0.05	42.75 ± 7.16	
do not desire	20	5.0	47.03 ± 9.02	protoc	42.75 ± 7.10	p> 0.02
do not desire						
Number of						
gestations						
1.gestation	59	38.3	48.35 ± 7.02	KW = 2.07	42. 15 ± 5.03	KW = 5.44 p>0.05
2.gestation	29	18.8	46.65 ± 7.45	p>0.05	41.27 ± 6.05	
3.and more	66	42.9	46.46 ± 6.83	-	39.86 ± 6.20	
gestations						
Number of						
living children						
The ones with	84	54.5	47.86 ± 6.99	KW =	42.17 ± 5.15	KW = 2.66 p>0.05
no children				11.18		
The ones with	27	17.5	46.22 ± 6.39	p<0.05	39.29 ± 5.22	
single child				-		
The ones with 2	29	18.8	45.86 ± 6.97		38.75 ± 6.85	
children						
The ones with 3	14	9.1	48.14 ± 8.59		41.92 ± 6.66	
or more						
children						
Medication Durin	g Gestation					
The ones using	18	11.7	43.77 ± 7.66	KW =	38.55 ± 3.32	KW = 3.28 p>0.05
iron and vitamin				12.72		
The ones using	5	3.2	45.60 ± 6.58	p<0.05	40.20 ± 3.27	
folic acid						
Analgesics	1	0.7	39.00		41.00	-
Other drugs	10	6.5	48.14 ± 6.91	-	41.33 ± 6.15	
No medication	120	77.9	44.10 ± 4.95		41.90 ± 5.70	
The Last						
Gestational						
Period						
First Gestation	78	50.6	48.07 ± 7.16	KW = 2.67 p>0.05	42.15 ± 5.39	KW = 6.12 p<0.05
Interval less	2	1.3	45.50 ± 12.02		38.00 ± 7.07	
than 2 years		-		-		
Interval more	74	48.1	46.37 ± 6.78		39.87 ± 6.02	
than 2 years						
Type of				1		1

abortus						
Abortus	105	68.2	47.96 ± 6.81	KW = 9.94	41.89 ± 5.66	KW
Imminens				p>0.05		=16.04
Missed Abortus	20	13.0	47.15 ± 7.63		40.30 ± 5.84	p<0.05
Habitual	5	3.2	48.60 ± 5.77		40.60 ± 4.39	
Abortus						
Therapeutic	13	8.4	42.07 ± 5.55		35.38 ± 3.50	
Abortus						
Elective	2	1.3	47.00 ± 9.89		43.00 ± 8.48	
Abortus						
Incomplete	9	5.8	45.55 ± 8.64		40.11 ± 6.67	
Abortus						

The state anxiety mean score of single pregnant inpatients against that of married pregnant inpatients was found to be statistically significant (p<0.05). Accordingly, it is essential to provide the single pregnant inpatients with proper midwifery applications to help them in coping with anxiety.

The trait anxiety mean score of the pregnant inpatients, based on the number of their living children was found to be statistically significant (p<0.05). In this regard, inpatients with more than 3 children were found to have a higher trait anxiety mean score. Therefore, midwives should be advised to spare more time for women with 3 or more children and inform them regarding the applications intended to reduce their anxiety.

The trait anxiety mean score of the inpatients, based on their medication history during gestation, was found to be statistically significant (p<0.05). In this regard, trait anxiety mean score of inpatients, that have undergone no medication, was found to be higher. According to this result, it is highly important for midwives to promote the use of iron, vitamin and folic acid by inpatients receiving their prenatal care.

The state anxiety mean score of the inpatients based on their last gestational period was found to be statistically significant (p<0.05). State anxiety mean score of the inpatients, having their first pregnancy, was found to be higher than the ones that have delivered a child with more and less than 2 year interval. Accordingly, midwives should attach more importance to the gestational trainings of the inpatients having their first pregnancy.

The state anxiety mean score of the inpatients, based on the type of abortus diagnosis, was found to be statistically significant (p<0.05). In this regard, the state anxiety mean score of inpatients, undergoing elective abortus, was found to be higher than the inpatients diagnosed with other types of abortus. Accordingly, midwives should provide the women, at the age of pregnancy, with effective education regarding family planning, and they should be able to provide them with proper care in case of undesired pregnancy.

IV. Conclusion

In the present study, state anxiety mean score of the single pregnant inpatients was found to be statistically significant when compared with that of the married inpatients (p<0.05). Midwives should provide single pregnant inpatients diagnosed with abortus with proper education towards coping with anxiety and they should conduct effective midwifery interference.

The trait anxiety mean score of pregnant inpatients, based on the number of their living children, was found to be statistically significant. Women with 3 or more children were found to have a higher trait anxiety mean score (p<0.05). Midwives should be advised to spare more time for inpatients with 3 or more children, and they should provide them with proper care towards reducing their anxiety.

The trait anxiety mean score of the pregnant inpatients, based on medication history during gestation, was found to be statistically significant (p<0.05). Midwives should promote the use of iron, vitamin and folic acid by all pregnant inpatients under their prenatal care, and they should ensure easy access for these drugs.

The state anxiety mean score of the pregnant inpatients, based on their last gestational period, was found to be statistically significant. The state anxiety mean score of the inpatients having their first pregnancy had a higher state anxiety mean score than that of the inpatients that delivered a child with more or less than 2 years interval (p<0.05). Midwives should attach more importance to the gestational educations intended for pregnant inpatients having their first pregnancy.

The state anxiety mean score of the pregnant inpatients, based on their abortus diagnosis, was found to be statistically significant. The state anxiety mean score of inpatients, undergoing elective abortus, was found to be higher than those of other inpatients (p<0.05). Midwives should be advised to provide the women at the age of pregnancy with effective education on family planning methods, and they should be able to provide proper care in case of undesired pregnancies.

References

- Aksakoğlu, G.Sağlıkta Araştırma Teknikleri ve Analiz Yöntemleri. Dokuz Eylül Üniversitesi. Rektörlük Matbaası. İzmir. 2001, [1] 214-280.
- [2] Buldukoğlu K. Terakye G. Fiziksel yönden riskli gebelerin ruhsal yönden risk durumlarının belirlenmesi, II.Ulusal Hemşirelik Bildirileri Kitabı,1990. İzmir s.708-716.
- Coşkun, A. Doğum ve Kadın Hastalıkları Hemşireliği El Kitabı. 2002, 54-56 [3]
- Çiçek, N.ve ark. Kadın Hastalıkları ve Doğum Bilgisi Güneş Kitapevi ikinci basım. 2006, s. 627-636. [4]
- [5]
- Erez, S. Donforth Obstetric ve Jinekoloji.İstanbul, Yüce Yayınevi. 1997, s. 67-104, 177, 178. Gerçek S, Can H, Güler H "Sağlık Bakanlığı Sivas Doğum ve Çocuk Bakımevi Hastanesine Abortus İmminens Tanısı ile Yatan [6] Gebelerin Anksiyete Düzeylerinin Belirlenmesi" IX. Halk Sağlığı Kongre Kitabı. 2004, Ankara.
- Gilbert, E. Harmon, J. Taşkın, L. Yüksek Riskli Gebelik ve Doğum El Kitabı, Ankara Palme Yayıncılık. 2002, s. 348-374. [7]
- Özdamar K. SPSS ile Biyoistatistik. Kaan Kitabevi. Eskişehir. 2001; p:315-368. [8]
- [9] Taşkın, L.Doğum ve Kadın Sağlığı Hemşireliği ,dördüncü basım, Ankara, Sistem ofset matbaacılık. 2003, s. 160-162
- Tümerdem Y. Halk Sağlığı I (Toplum Hekimliği), İstanbul, İstanbul Üniversitesi Basımevi. 1992, 69,73. [10]
- WHO.Complications of Abortion, England matbaacılık, ABD. 1995, s.11-17, 32-39. [11]