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THE RELATIONSHIP BETWEEN IMMIGRANTS' PRIMARY LANGUAGE LEARNING, ANXIETY LEVELS AND POSTPARTUM RECOVERY

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ABSTRACT

This study was carried out to investigate the relationship between the Turkish proficiency of immigrant women and their postpartum physical complaints, well-being and anxiety levels. A total of 202 people who applied to a private hospital in Istanbul due to birth were included in the study. 56 (28%) of these participants were immigrants and 54 (26%) gave birth naturally. Participants were asked to evaluate physical well-being, complaints, general health, state and trait anxiety, as well as demographic questions, through Turkish and Arabic questionnaires. Obtained findings; it shows that the Turkish language proficiency in terms of immigrants does not cause a difference in the research variables, the variable that causes the difference between the research variables is physical complaints, and this variable is affected by ethnicity and educational status. In addition, it is among the findings obtained as a result of the research that the factors affecting the general health status are state anxiety level and physical well-being.

Key Words: Childbirth, migrant woman, anesthesia, health care.

1. INTRODUCTION

Migrations have become the subject of research in many disciplines, even though they are handled more culturally due to both their causes and consequences [1]. For example, immigrants try to adapt to their new lives with the rituals they bring from the geography they migrated. One of these rituals is related to the birth process and constitutes an important part or turning point of life [1, 2]. The main motivation of this research is whether the stress factors of living in a foreign country without knowing the language of that country affect the postpartum recovery process.

Birth is seen as an important event in almost all cultures, as the herald of a new life. Continuing anxiety of the expectant mother in the hospital environment may increase by being affected by situations such as encountering people she does not know, sound, light, enema, induction, monitoring, being bedridden and birth interventions. It is thought that the feeling of being alone and unsupported by expectant mothers during the birth process may increase this anxiety [3]. It becomes important to make legal arrangements regarding the access of especially mothers and their children to health services among immigrants [2]. Cultural adjustment-incompatibility, marginalization, shock, assimilation, acculturation etc. processes are among the issues

that all immigrants are affected by [1]. In this context, it is thought that problems related to being an immigrant such as financial inadequacy, language problems, health policies of the migrated country regarding immigrants, lack of social support, inability to perform cultural practices and loneliness may affect the health of mothers and babies [2]. Finding evidence that being a migrant may increase anxiety as a risk factor in expectant mothers also strengthens this argument [4].

Anxiety is defined as an individual response to environmental stressors [5] While state anxiety mostly expresses daily and instant anxiety level; trait anxiety manifests itself as a person constantly feeling in danger or not feeling safe in the situation he is in [6, 7]. In the face of anxiety, some biochemical reactions are also given. Anxiety can cause a decrease in the self-confidence of the pregnant woman and feel inadequate during pregnancy [8]. Anxiety during childbirth can affect later processes it has been shown that the risk of clinically significant psychiatric symptoms increases twice after a cesarean section performed under emergency conditions [9]. This study aims to evaluate the relationship between the anxiety levels of immigrants and postpartum recovery and knowing country language where they are living in. It is believed that the evaluation of the negative emotional states that the immigrants, who had to continue their life and generation in an environment different from the environmental conditions in which they lived before, may experience in this process and revealing the effect on the general well-being after birth will contribute to the literature.

2. MATERIALS AND METHODS

The research was conducted with the scanning model and was carried out with a total of 202 participants in a private hospital in Istanbul. In the first part, demographic data were included, and in the second part, the participants were asked to evaluate their physical well-being and general health status. In the other two sections of the questionnaire, there are STA-I and STA-II Scales, which are used to evaluate the state and trait anxiety levels of the participants [6, 7]. The use of STA-I and STA-II in Arabic has been confirmed by previous studies [10]. The language proficiency levels of the participants in reading, comprehension and speaking were also evaluated with five different questions. The questionnaire form was presented to the participants in Turkish and Arabic languages separately. To determine the level of state and trait anxiety, the participants were asked to answer the statements in the inventory on a seven-point Likert scale (definitely wrong, wrong, partially wrong, undecided, partially right, right, definitely right). After transforming all the reverse items, the analysis was started. For the physical complaint, the average of the scores made from 10 for four complaints (pain, nausea-vomiting, dizziness, and tremor) was taken. For this purpose, the Postpartum Recovery Quality Scale (ObsQoR-10) was used. ObsQoR-10 is obtained by shortening the QoR-40 questionnaire, used to evaluate the quality of postoperative recovery and the health status of patients in the early postoperative stages [11, 12, 13]. Responses to six statements about being able to act independently after birth were averaged out of ten according to the scoring made in the same way, and it was named as "physical well-being". The participants were also asked about their general health score with a single statement and they were asked to score out of 10.

Reverse expressions for state and trait anxiety were transformed and the average of all expressions was taken. Language proficiency was evaluated between 1 and 5 by the participants, and the average of the five questions asked was taken. General knowledge of Turkish was also noted among the foreign participants, and those between 1 and 4 over the categorization average values were classified as those who did not know the language adequately, and those between 4-5 as those who knew the language well.

The data obtained from the questionnaires were coded and analyzed in the SPSS 25.0 Program to

reach the findings. Analyzes made; frequency, reliability, intergroup comparisons (t-Test and ANOVA), correlation and regression analyses.

3. RESULT AND DISCUSSION

28% of the total 202 participants are immigrants. It was evaluated by taking the average of the answers given by immigrant women out of five points regarding the level of knowing Turkish, and the average of the answers received from 50 participants was 3.37 (±1.2). Participants are predominantly from host country (72%), and the birthplace of locals is generally Istanbul (42%). It is seen that the immigrants are predominantly Arab (57%) and Syrian-born (78%). The mean age of the participants was 29.1 (±5.9). All of the participants stated that they were married and 131 (65%) were housewives. When evaluated in terms of mothers' occupation, 148 (73%) of the participants stated that their mothers were 'housewives' (Table 1).

Table 1. Demographic Findings

Status	**N**	**%**	**Educational Status*** **	**N**	**%**
Host Country Participants	146	72	Primary Education and Literacy	100	49.5
Immigrant	56	28	High School	32	15.8
Nationality			University and Above	58	28.7
Arab	32	15.8	**Mothers Educational Status*** **		
East Asian (Afghan. Kyrgyz. Turkmen. Uyghur)*	24	11.8	Primary Education and Literacy	161	85.2
Republic of Turkey	146	72.2	High School	16	8.5
Age Groups**			University and Above	12	6.3
17-26 years	71	35.1	**Fathers Educational Status*** **		
27-35 years	103	51.0	Primary Education and Literacy	150	82.9
36-46 years	27	13.4	High School	18	9.9
Number of children			University and Above	13	7.2
0	77	38.5	**Number of siblings**		
1	26	12.8	0-2 sibling	50	25.2
2	42	20.7	3-4 sibling	74	37.4
3	38	18.8	>5 sibling	74	37.4
≥4	18	9.2			
Duration of Residence in Istanbul			**Sibling Order**		
≤1 yıl	27	13.4	1.	49	25.4
1-3 yıl	20	9.9	2.	55	28.5
3-5 yıl	21	10.4	3-4.	52	26.9
5-10 yıl	28	13.9	>5.	37	19.2
>10 yıl	106	52.5			
Family Average Monthly Income					
1.000-1.500 TL	11	5.6	3.501-5.000 TL	65	33.3
1.501-2.500 TL	29	14.9	5.001-10.000 TL	26	13.3
2.501-3.500 TL	62	31.8	>10.000 TL	2	1.1

* The rate of Uyghur Turks among all the participants is 7.9% and they constitute the weighted participants in this group. The rate of participants from other ethnic origins (Afghan. Kyrgyz. Turkmen) is between 0.5-2% in the total group.
** Age groups were categorized according to the responses received from the participants.
***In the categorization made for educational status. literate and primary-secondary education graduates were included in the 'Primary Education and Literacy' category. while associate. undergraduate. and graduate graduates were included in the 'University and Above' category. The answers given while creating the categories are grouped under the specified headings.

Two of the participants are 17, five are 19, and four are 20 years old. This should be considered due to the low maternal age. Participants aged 20 and under constitute 5.5% of all participants. In terms of older mothers, it is seen that one of the participants is 41, two of them 43, and two of them 46 years old. Participants aged 40 and over constitute 6% of the sample. 38.5% of the participants state that they are mothers for the first time (primipar). The proportion of participants with a child is 12.8%; the rate of participants with two children is 20.7%; the rate of participants with three children is 18.8% and the rate of participants with four or more children is 9.2%. Two of the participants who have four or more children have six children and one have seven children.

When evaluated in terms of family income, it is seen that 52% of the participants have an income of 3,500 TL or less, and 86% of the participants have an income of 5,000 TL or less. Participants mainly reside in Bahçelievler (31%), Bağcılar (16%), Güngören (13%) and Zeytinburnu (10%), respectively. 40% of the participants stated that they reside outside the specified districts of Istanbul.

When the reliability analyses for the research variables are evaluated, it is seen that the reliability values obtained from the host country participants are generally higher. It is thought that this situation may be related to the fact that the questionnaire forms were designed in Turkish and Arabic. Although expert opinion was taken from the Arabic questionnaire, it is thought that possible translation errors may cause this difference. Another reason for this difference may be the differentiation of the cultural equivalents of the concepts. It is clearly seen from the table that the obtained reliability values are within acceptable ranges under all conditions (Table 2).

It is seen that the participants mostly gave birth to their babies by cesarean section and neuraxial anesthesia was used (Table 3).

A moderate and negative relationship exists between the state anxiety level and general health score. In addition, it is seen that the level of state anxiety is positively related to a low level of physical complaints and negatively related to physical well-being.

Table 2. Reliability Values (Cronbach alpha)

	Physical Complaining (4 items)	**Physical Well-being (6 items)**	**State Anxiety* (STA-1/20 items)**	**Trait Anxiety* (STA-2/20 items)**
Host Country Participants	0.66	0.89	0.84	0.81
Immigrant	0.75	0.90	0.77	0.70
*The reverse statements were transformed before performing the reliability analysis.				

Table 3. Type of Birth and Anesthesia Method *

Type of Birth	**Anesthesia Method**	**N**	**%**	**N**	**%**
Caesarean	Neuraxial*	136	67.3	148	73.3
	General Anesthesia	12	5.9		
Natural Childbirth	No Anesthesia	49	24.3	54	26.7
	Neuraxial*	5	2.5		

*All of the patients who underwent Epidural. Spinal and Combined spinal epidural anesthesia as the anesthesia method were evaluated in one group as "Neuroaxial Anesthesia".

Table 4. Correlations Between Variables

	Age	Number of Children	Physical Complaining	Physical Well-being	General Health Score	State Anxiety	Trait Anxiety
Number of Children	0.504***						
Physical Complaining	−0.043	−0.190**					
Physical Well-being	0.006	0.223**	−0.426***				
General Health Score	−0.109	0.123	−0.408***	0.554***			
State Anxiety	0.141	−0.028	0.323***	−0.366***	−0.528***		
Trait Anxiety	0.078	−0.033	0.234**	−0.359***	−0.283***	0.433***	
Language Proficiency Level [1]	−0.182	−0.045	0.224	0.008	−0.010	−0.029	−0.239

*:p<0.05; **: p<0.01; ***: p<0.001.
1: For this variable. only the group of immigrants was included in the analysis. The level of language proficiency was evaluated as the level of knowing the mother tongue (Turkish) of health care providers of immigrants.

It is seen that there is no relationship between language proficiency levels and research variables (Table 4). It was seen that 15.7% of the participants in the group who did not know the language adequately in the categories created with the mean values for language proficiency. It was seen that the research variables did not differ in the pairwise comparisons made between the bilingual and non-linguistic groups.

According to the t-Test results made comparisons between groups, it is seen that mothers who gave birth to their first child are more physically complaining and have less physical well-being. It is observed that the levels of state and trait anxiety are also significantly higher in women who have experienced motherhood for the first time (Table 5). According to nationalities, it is seen that east Asian women score lower than Turkish and Arab in the physical complaining dimension. In the same dimension, the group that included literate and primary school graduates had lower physical complaining scores than those with a university or higher education status. According to the residence period of the migrant women, there was no significant difference in terms of physical complaints, well-being dimensions and state and

Table 5. Average (X̄) and Standard Deviation (SD) Values of Research Variables by Demographic Variables and Sub-categories

		Physical Complaining		Physical Well-being		General Health Score		State Anxiety		Trait Anxiety	
		X̄	**SS**	**X̄**	**SS**	**X̄**	**SS**	**X̄**	**SS**	**X̄**	**SS**
Having Children	**Yes**	**3.06[1]**	1.83	**6.52[2]**	2.39	**65[3]**	20	**2.64[4]**	1.04	**3.17[5]**	0.80
	No	**3.61[1]**	2.22	**5.40[2]**	2.72	**61[3]**	24	**2.78[4]**	0.95	**3.22[5]**	0.72
Type of Birth	**Caesarean Section**	**3.48[6]**	1.96	5.61	2.49	61	21	2.87	1.05	3.29	0.77
	Normal Birth	**2.70[6]**	2.02	7.43	2.31	69	23	2.20	0.66	2.91	0.69

1: ***F***=0.02. ***t***=2.45; ***p***=0.015; **2:** ***F***=0.14. ***t***=-4.60; ***p***<0.001; **3:** ***F***=0.65. ***t***=-2.25; ***p***=0.025;

4: ***F***=8.14. ***t***= 5.10; ***p***<0.001; **5:** ***F***=1.04. ***t***= 3.08; ***p***=0.002; **6:** ***F***=1.82. ***t***=3.02; ***p***=0.003.

trait anxiety levels.

When evaluated in terms of knowing Turkish, little or no command of the language; in terms of research variables, migrant women do not differ significantly between groups (Table 6).

In the model created for the research variables, the general health score was considered as the dependent variable, state and trait anxiety states, physical well-being and complaint were evaluated as independent variables. As a result of the regression analysis, it was seen that the state anxiety level had a negative effect on the general health score, while the physical well-being state had a positive effect. State anxiety and physical well-being cause a total of 46% change in the general health score ($F(4,168)$= 35,89; $R2$=0,46; SE=15,78; $p<0,001$). Trait Anxiety status and Physical Complaining did not have a significant effect on the general health score

Table 6. Average (X̄) and Standard Deviation (SD) Values of Research Variables by Demographic Variables and Sub-categories

		Physical Complaining		Physical Well-being		General Health Score		State Anxiety		Trait Anxiety	
		X̄	SS	X̄	SS	X̄	SS	X̄	SS	X̄	SS
Nationality	Turkish	**3.32**[1]	1.87	6	2.44	63	21	2.65	0.94	3.15	0.79
	Arabic	**3.84**[2]	2.32	5.83	2.94	61	26	2.61	1.12	3.18	0.66
	East Asia	**2.33**[1,2]	2.05	6.96	2.8	71	22	3.04	1.2	3.5	0.63
Age Groups	17-26 age	3.32	2.35	5.97	2.87	65	24	2.62	0.92	3.11	0.67
	27-35 age	3.2	1.8	6.23	2.46	64	20	2.65	0.97	3.18	0.82
	36-46 age	3.54	1.78	5.91	2.25	56	20	3.07	1.29	3.44	0.73
Level of Education	Literate-Primary Education	**2.90**[3]	2.07	6.56	2.58	66	23	2.64	1.06	3.2	0.77
	High School	3.68	2.1	6.09	2.5	62	17	2.62	0.88	3.21	0.88
	University and Above	**3.53**[3]	1.63	5.18	2.46	59	20	2.74	0.98	3.22	0.72
Monthly Income Status (Monthly)	1.000-1.500 TL	2.97	2.19	5.6	1.88	60	21	2.59	0.86	3.58	0.65
	1.501-2.500 TL	2.65	1.79	7.27	2.26	64	23	2.52	0.83	3.2	0.7
	2.501-3.500 TL	3.3	1.9	6.13	2.57	65	21	2.6	0.9	3.27	0.87
	3.501-5.000 TL	3.39	2.09	5.87	2.8	63	22	2.85	1.15	3.12	0.69
	5.001-10.000 TL	3.59	1.74	5.75	2.25	60	21	2.65	1.1	3.02	0.77
	>10.001 TL	5.88	1.24	4.17	5.89	40	28	3.35	1.2	2.9	1.56
Number of Children	0	3.61	2.23	5.43	2.73	61	24	2.79	0.95	3.22	0.72
	1	3.5	1.92	6.15	2.62	61	20	2.55	0.79	3.14	0.82
	2	3.02	1.9	6.53	2.36	67	18	2.64	1.01	3.18	0.82
	3	3.01	1.52	6.61	2.11	66	21	2.59	0.99	3.22	0.78
	>3	2.67	2.12	6.85	2.75	65	25	2.87	1.48	3.09	0.8
Anesthesia Method	Neuraxial Anesthesia	3.43	2.00	5.65	2.52	62	22	2.87	1.06	3.28	0.76
	General	3.63	1.74	5.88	2.14	66	16	2.57	0.70	3.30	0.83
	No Anesthesia	2.73	2.00	7.45	2.36	68	23	2.20	0.68	2.92	0.70

1: $F_{(195;2)}$=4,17; ***SH***=0,43; ***p***=0,05; **2:** $F_{(195;2)}$=4,17; ***SH***=0,53; ***p***=0,014; **3:** $F_{(183;2)}$=5,48; ***SH***=0,42; ***p***=0,003.

Table 7. Effect of Physical Status and Anxiety Level on General Health Score

Model	Unstandardized Coefficients		Standardized Coefficients	*t*	*p*
	B	*Std. Error*	*Beta*		
(Constant)	64.09	8.40		7.63	0.00
Physical Complaining	-1.21	0.72	-0.11	-1.69	0.09
Physical Well-being	3.51	0.60	0.41	5.88	0.00
State Anxiety	-6.86	1.42	-0.33	-4.84	0.00
Trait Anxiety	0.24	1.83	0.01	0.13	0.90

$F_{(4,168)}$= 35,89; R^2=0,46; *SE*=15,78; $p<0,001$; *VIF*≤1,5

(Table 7). There is no multicollinearity (VIF≤1,5).

The literature shows that there are few studies on the situation of migrant women during pregnancy and childbirth. Important finding obtained in the study is related to the effect of physical well-being and anxiety levels on the general health score. The findings obtained in this study show that there is no difference in terms of state and trait anxiety level, physical well-being and general health score (ObsQoR-10) between immigrant and host country participants women who have given birth. In the literature, it is seen that there are findings that can be considered different from each other on the subject. It is seen that immigrant women score higher anxiety than the women of the country they live in [4], and the group of women living in an environment where their mother tongue is not spoken in New Zealand reported lower quality of recovery following cesarean section deliveries [14]. The lack of similar findings in our study may be related to geographical differences, possible cultural similarities and/or migration patterns. In addition, since Turkey is a country that has been receiving heavy migration due to the war in Syria for a long time, the systematic arrangements for immigrants in the health system can be considered as a factor affecting this situation.

The findings obtained as a result of the study of Ustun et al. (2013) show that there is no differentiation between the groups in terms of anxiety levels at the pregnancy level according to age group and income status [15]. The same study shows that pregnant women with lower education levels experience significantly higher anxiety. On the other hand, Mete et al. (2016) emphasize that the high number of participants with low education levels in the sample may affect the research findings [16]. This situation was interpreted as increasing awareness as the level of education increased may have decreased anxiety.

In our study, we found that there was no relationship between language proficiency levels and physical well-being and complaint scores and anxiety levels. In a study conducted in a cardiovascular surgery center in Saudi Arabia, it was shown that the anxiety levels of patients who underwent cardiovascular surgery increased when there was a language barrier that could affect the quality of care between nurses and patients [17]. It is thought that this situation may be related to the fact that the interpreting service is effective in the hospital where this study was conducted and that the processes in the provision of health services may be regulated differently. It is thought that having an interpreter in the hospital may cause patients not to feel anxiety about knowing the language.

The study of Ustun et al. (2013) reveals that the level of anxiety during pregnancy differs significantly according to the number of pregnancies [15]. As a result of the study conducted with the Visual Analogue Scale (VAS), which is used to measure the severity of pain in the patient and to evaluate labor pain, it is stated that there is no relationship between labor pain and anxiety score in both nulliparous and multiparous women [16]. In addition, many factors, including medical, obstetric, anesthetic and psychosocial factors, are likely to be involved in addition to the mode of delivery in terms of the quality of recovery and anxiety level of women who have given birth. It is known that even the intervention during childbirth is effective in later birth decisions. For example, three years after an invasive vaginal delivery, 50% of the women questioned did not plan to have more children, and fear of childbirth was reported as the main reason for avoiding pregnancy in almost half of these women [18]. In another study, it was shown that recovery on the first day postpartum in women who gave birth spontaneously was better than vaginal delivery with the intervention [13]. The finding in this study that there was no difference in terms of anxiety levels according to the mode of delivery seems to support the findings of Donmez et al [19]. The same study basically shows that birth is an element of anxiety and the mode of delivery does not make a difference in terms of anxiety levels.

During pregnancy, women's state anxiety level is

higher than non-pregnant women, and this situation continues for a while after delivery [20]. It is clear that the thought of having surgery also causes a certain amount of anxiety in the patient. In the literature, some studies investigate the relationship between anxiety and surgery. For example, one of these studies was conducted by Lui et al. (1994) and provides evidence that state and anxiety levels are not associated with postoperative recovery [21]. However, in the same study, it was found that there was a low level of positive correlation between the pain felt after the operation and the level of state anxiety, and there was no correlation with the level of trait anxiety. The findings obtained in our study show that the level of state anxiety is associated with physical complaining at a low level. The fact that the relationship between trait anxiety status and physical complaining is significant, but lower, seems to support the study by Lui et al. (1994) [21]. It was observed that the preoperative state anxiety level had a low but significant effect on health-related quality of life in patients who underwent local anesthesia [22]. Another study conducted in gynecology patients shows that the level of state anxiety before surgery does not linearly affect processes such as postoperative pain and recovery [23]. In this context, the significant effect of the state anxiety level on the postpartum general health score in our study supports the study of Pearson et al. (2005), but not the study of Wallace (1986) [22,23].

The migration process emerges as an important phenomenon in terms of its scope and the factors it affects. For people who are separated from the lands where they were born and raised, adapting to a new life is challenging, especially in more fragile processes such as birth and death. While being a woman, child and the old person is associated with being disadvantaged in social life, it should not be forgotten that this situation should be considered as a disadvantage in the migration process. In particular, these groups need to be supported psycho-socially. It is important for immigrant women to receive regular care from family health centers during pregnancy and childbirth. For this, it is important to create training programs for immigrant mothers and to produce projects that will bring immigrant mothers together and provide peer support[2].

4. CONCLUSION

The findings obtained in this study show that women differ in terms of ethnicity only in the physical complaining dimension. It was considered a significant finding that Asian women felt less physical complaining. In addition, as a result of the research, it was seen that trait anxiety status and physical complaining did not affect the general health status, but physical well-being status and state anxiety level affected the general health score. This suggests that physical complaining is perceived as a normal state that occurs as a result of birth. Therefore, physical complaining may not have an effect on the overall health score. Since the trait anxiety situation occurs for a long time, it may have been normalized by the patient and coping strategies may have been developed by the patient. Therefore, it is thought that it does not affect the general health score. However, the more difficult it is to formulate a strategy for dealing with state anxiety, the more it may affect overall well-being.

Although being a migrant does not make any difference in terms of these research variables, it should be considered as a fragile process in general. It should not be forgotten that it is important to support immigrant women, especially in situations considered as turning points such as childbirth.

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REFERENCES

1) Karaman, K. (2016). Beliefs and rituals related to birth, marriage, and death in the ımmigrant uyghur community of Kayseri. Zeitschrift für die Welt der Türken/Journal of World of Turks, 8(3), 103-114.

2) Aydın, R., Korukcu, O., & Kabukcuoğlu, K. (2017). Transitioning to motherhood as an immigrant: risks and barriers. Current Approaches in Psychiatry, 9(3), 250-262.

3) Mete S., (2013). The relationship between stress, hormones and childbirth. Dokuz Eylul University Faculty of Nursing Electronic Journal, 6(2), 93-98.

4) Stewart, D. E., Gagnon, A., Saucier, J. F., Wahoush, O., & Dougherty, G. (2008). Postpartum depression symptoms in newcomers. The Canadian Journal of Psychiatry, 53(2), 121-124.

5) Selye H. (1950) The Physiology and Pathology of Exposure to Stress. Oxford Publishing, England.

6) Spielberger C.D.(1985). Assessment of state and trait anxiety: Conceptual and methodological ıssues. The Southern Psychologist, 2,6-16.

7) Oner N. & Le Compte A. (1985). State – Trait Anxiety Inventory Handbook. Istanbul: Boğaziçi University Publications

8) İlknur, M. G., & Terzioğlu, F. (2012). The effect of massage and acupressure used in the management of labor pain on the anxiety level of pregnant women. Ankara Journal of Health Sciences, 1(3), 129-144.

9) Dekel S, Ein-Dor T, Berman Z, Barsoumian I, Agarwal S, Pitman R. (2019) Delivery mode is associated with maternal mental health following childbirth. Arch Womens Ment Health 2019;22(6):817–24.

10) Bahammam, M. A. (2016). Validity and reliability of an Arabic version of the state-trait anxiety inventory in a Saudi dental setting. Saudi Medical Journal, 37(6), 668.

11) Karaman, S., Arıcı, S., Dogru, S., Karaman, T., Tapar, H., Kaya, Z., Gurler Balta, M. (2014). Validation of the Turkish version of the Quality of Recovery-40 questionnaire. Health and Quality of Life Outcomes, 12(1), 1-6.

12) Terkawi, A. S., Myles, P. S., Riad, W., Nassar, S. N., Mahmoud, M., AlKahtani, G. J., Terkawi, R. S. (2017). Development and validation of Arabic version of the postoperative quality of recovery-40 questionnaire. Saudi Journal of Anaesthesia, 11(Suppl 1), S40.

13) Sultan, P., Kormendy, F., Nishimura, S., Carvalho, B., Guo, N. and Papageorgiou, C. (2020) 'Comparison of spontaneous versus operative vaginal delivery using Obstetric Quality of Recovery-10 (ObsQoR-10): An observational cohort study', Journal of Clinical Anesthesia, 63, 109781.

14) Brinkler, R., & Edwards, M. (2020). The association between primary language and quality of recovery following caesarean section: a prospective observational study. International Journal of Obstetric Anesthesia, 44, 68-73.

15) Ustun Z., Pasinlioğlu, T., ve Ozkan, H. (2013). Examination of the anxiety levels of pregnant women during labor. Anatolian Journal of Nursing and Health Sciences, 16(2), 110-115.

16) Mete S., Çiçek, O., & Uludağ, E. (2016). Examining the relationship between labor pain and anxiety. Dokuz Eylul University Faculty of Nursing Electronic Journal, 9(3), 101-104.

17) Almualem, J., Darwish, A., & AlFaraj, A. (2021). The relationship between language barrier in non-arabic nurses and anxiety in cardiovascular patients: A cross-sectional descriptive study. Journal of Patient Experience, 8, 2374373521989242.

18) Bahl R, Strachan B, Murphy D. (2004) Outcome of subsequent pregnancy three years after previous operative delivery in the second stage of labour: cohort study. BMJ ;328:311.

19) Donmez, S., Yeniel, O. A., & Kavlak, O. (2014). Comparison of state anxiety levels of pregnant women who had vaginal delivery and cesarean section. Gumushane University Journal of Health Sciences, 3(3), 908-920.

20) Singh, U., & Saxena, M. S. (1991). Anxiety during pregnancy and after child birth. Psychological Studies, 36(2), 108–111.

21) Liu, R., Barry, J. E. S., & Weinman, J. (1994). Effects of background stress and anxiety on postoperative recovery. Anaesthesia Journal, 49(5), 382-386.

22) Pearson, S., Maddern, G. J., & Fitridge, R. (2005). The role of pre -operative state-anxiety in the determination of intra-operative neuroendocrine responses and recovery. British Journal of Health Psychology, 10(2), 299-310.

23) Wallace, L. M. (1986). Pre-operative state anxiety as a mediator of psychological adjustment to and recovery from surgery. British Journal of Medical Psychology, 59(3), 253-261.