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ORIGINAL ARTICLE

Comparison of Prenatal, Perinatal, and Postnatal Knowledge Levels of Pregnant Women and Their Distress Conditions

Gebelerin Gebelik, Doğum ve Sonrasına İlişkin Bilgi Düzeyleri ile Distres Durumlarının Karşılaştırılması

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Abstract

Objective: This research is a descriptive study conducted to investigate and compare the knowledge levels of pregnant women about pregnancy, childbirth and postpartum, and their distress.

Method: The sample of the study consisted of 178 pregnant women who applied to the obstetrics and gynecology polyclinic of a state hospital in Northern Cyprus, and the data were collected between January 1 and April 1, 2019. Data were collected through forms, which included the "Tilburg pregnancy distress scale (TPDS)", the "knowledge questions about pregnancy, birth, and postpartum" and socio-demographic and obstetric information of participants.

Results: The average number of right answers by pregnant women to the "knowledge questions about pregnancy, birth and postpartum" was 18.0±4.0 (3-26) out of a total of 32 items, indicating that pregnant women in Northern Cyprus had medium knowledge level on these issues. In addition, the average score for "TPDS was 13.6±6.7, out of a total of pregnant women participating in the study. The subscale, "TPDS" "partner involvement", "negative effect", and general scale scores are lower than the sub-limits determined for distress definition. Finally, it was observed that there is no relationship between the distress status and the level of knowledge by pregnant women (p>0.05).

Conclusion: The results of this study show that there is no relationship between the knowledge levels of pregnant women and their pregnancy-related distress.

Keywords: Prenatal education, pregnancy, pregnant women, midwifery, Tilburg pregnancy distress scale

Öz

Amaç: Bu çalışma; gebelerin, gebelik doğum ve doğum sonrasına ilişkin bilgi düzeyleri, distres durumlarının incelenmesi ve karşılaştırılması amacı ile yapılmış tanımlayıcı bir araştırmadır.

Yöntem: Araştırmanın örneklemini, Kuzey Kıbrıs'ta bir devlet hastanesinin kadın doğum servisi ve polikliniğine başvuran 178 gebe oluşturmuş, 1 Ocak-1 Nisan 2019 tarihleri arasında veriler toplanmıştır. Veriler; "Tilburg gebelikte distres ölçeği (TPDS), "gebelik, doğum süreci ve doğum sonrası bilgi soruları"nı ve katılımcıların sosyo-demografik, obstetrik bilgilerini içeren formlar ile toplanmıştır.

Bulgular: Gebelerin "hamilelik, doğum ve doğum sonrası bilgi soruları" na verdikleri ortalama doğru yanıt sayısı toplam 32 maddeden 18,0±4,0 (3-26) olup, Kuzey Kıbrıs'taki gebelerin bu konularda orta düzeyde bilgi sahibi olduklarını göstermektedir. Ayrıca çalışmaya katılan gebelerin TPDS puanı ortalaması 13,6±6,7 ve alt ölçeği, "partner katılımı", "olumsuz etki" ve genel ölçek puanları, distres tanımı için belirlenen alt sınırlardan düşüktür. Gebelerin distres durumu ile bilgi düzeyleri arasında ilişki olmadığı saptanmıştır (p>0,05).

Sonuç: Bu çalışmanın sonucları, gebelerin bilgi düzeyleri ile gebelikle ilgili distresleri arasında bir ilişki olmadığını göstermektedir.

Anahtar Kelimeler: Prenatal eğitim, gebelik, gebe kadın, ebelik, Tilburg gebelikte distres ölçeği

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Introduction

Pregnancy represents a new experience for every woman. The physical and hormonal changes that occur in a pregnant woman's body affect her daily life, diet, self-care needs, dressing, sleep and rest routine, work life, and social and family relationships (1). The birth of every child indicates the beginning of both an emotional and considerably challenging change and adaptation period. Expectant mothers experience positive emotions about the birth of their new baby. On the other hand, some women may undergo difficulties and experience normal or abnormal stress reactions as a result of their traumatic experiences (2).

The lack of information about pregnancy and birth period causes a rise the women whose going to be mothers have positive emotions about the birth of their new baby. On the other hand, some women may undergo difficulties and experience normal or abnormal stress reactions as a result of their traumatic experiences in anxiety, especially among nulliparous women, and affects the birth process. The main reason these women do not prefer a vaginal birth is the fear of birth pain and poor information (3,4). However, increasing psychological distress symptoms during pregnancy causes pregnancy-specific anxiety (5,6). In the study of Kaloğlu Binici and Köse Tuncer (7), they found that prenatal stress levels were higher in primiparas compared to multiparas, stress factors differed in both groups, and they recommended spousal-supported informative training on the role of motherhood.

The knowledge level of pregnant women about pregnancy is not affected by the hospitals and physicians they are followed, but by the age and educational status of the pregnant women (8). Therefore, the educational needs of pregnant women in the management of stress for childbirth may be related not only to their obstetric characteristics, but also to their educational status, age, and increased experience. Women benefit from the advice of the internet, familiar relatives and health personnel on many issues related to pregnancy (physical problems, nutrition, exercise, labor and fear) (9,10).

It is necessary to provide enough information and reduce pregnancy-specific distress for a healthy pregnancy and birth process. The pregnant women who are involved in childbirth education programs had a lower maternity anxiety level, higher rate of vaginal birth, and shortening of time of hospital stay of newborn babies (3,4,11).

It is the feeling of self-confidence and optimistic thinking that positively affects the quality of life and coping with stress of pregnant women (12). Improvement of knowledge levels and reduction of anxiety with childbirth programs increase the self-sufficiency and pleasure of pregnant women. In this context, expectant mothers should be supported and trained by health professionals to reduce anxiety and increase their knowledge level (4-6). These studies indicate that the knowledge of pregnant women about the birth process affects the anxiety levels and self-efficacy of expectant mothers and their decision in favour of vaginal delivery. Controlling the ways of obtaining information of pregnant women is important in terms of mother and child health. This study was carried out to reveal the knowledge level of pregnant women and the relationship between pregnancy-specific distress and knowledge level.

Main Points

- Pregnant women may be prone to experiencing pregnancy-specific distress associated with adverse pregnancy, maternal, and child outcomes.
- Encouraging pregnant women to receive adequate training on pregnancy and birth process and educational content should be well structured.
- Getting adequate spousal support during the prenatal period can reduce distress.

Material and Methods

Design

This is a descriptive study and was conducted to examine and compare the knowledge levels and distress status of pregnant women regarding pregnancy, birth, and postpartum.

Sample and Settings

The sample of the study consists of 178 pregnant women who applied to the maternity service of Lefkoşa Dr. Burhan Nalbantoğlu State Hospital in North Cyprus and agreed to participate in the study. The hospital where the study was conducted is the largest in the country and serves pregnant women from all groups. In this context, it represents the whole population. This research was conducted as a master thesis in a limited time (3 months). Therefore, it has a limited sample group.

Data were collected between 1 January and 1 April 2019 from participants who gave their verbal and written consents.

Data Collection

Three forms were used to collect information from pregnant women:

1. Socio-demographic and obstetric data form

2. Form that includes questions covering "knowledge questions about pregnancy, birth and postpartum (KQPBP)" (32 items)

3. The Tilburg pregnancy distress scale (TPDS).

Socio-demographic and Obstetric Data Form

This form consists of 11 questions; age, education level, occupation, number of pregnancies, number of live children, desire for this pregnancy, problems in a previous pregnancy

or childbirth, problems the current pregnancy, and week of pregnancy.

KQPBP: The questionnaire regarding pregnancy, delivery, and postpartum was prepared by a researcher based on the questions frequently asked by the pregnant women who applied to the policlinic and as a result of the literature review (13-18) and the suggestions of 3 experts in the field. The answers are "yes, no, and I don't know".

TPDS

TPDS was developed by Pop et al. (16) in 2011 in the Netherlands to define distress during pregnancy, the scale consists of 16 items and two sub-dimensions: "Negative affect" and "partner involvement". In the original scale, the cut-off point is determined as >17 for a total of the scale, >12 for the negative affect subscale, and >7 for the partner involvement subscale. If the score obtained is above the cut-off points, it indicates that the pregnant woman is at risk in terms of distress. It was stated that Cronbach's alpha coefficient of the original scale was 0.78; every subscale is 0.80 for construct validity, and it is valid and reliable.

In the Turkish form of TPDS, the cut-off point of total scores is 28 or higher, partner involvement subscale is 10 or higher, and negative affect subscale is 22 or higher (19).

In our study, the Cronbach's alpha value was found to be 0.756.

Statistical Analysis

P-value <0.05 was considered statistically significant. The distribution of pregnant women according to their socio-demographic characteristics, pregnancy history, and pregnancy-related characteristics, as well as the distribution of responses to TPDS items and knowledge questions, are shown by frequency analysis. Descriptive statistics, such as average, standard deviation, the median, minimum or maximum value related to total scores of pregnant women in TPDS and knowledge questions are given.

The compliance of the data with the normal distribution was examined with the Kolmogorov-Smirnov test. In the comparisons, the Mann-Whitney U test was applied if the variable consisted of two categories, and the Kruskal-Wallis test was applied if it consisted of three or more categories.

Ethical approach: This study was approved by the institutional review board of Lefkoşa Dr. Burhan Nalbantoğlu State Hospital (no: 039-18). Written informed consent was obtained from all subjects, who were assured that participation was voluntary and that all data collected were confidential.

Results

29% of 178 pregnant women participating in the study from the ages of 18-24, 40.2% from the ages of 25-31, and 30.7% belonged to the age group of 32 and older, 99% of pregnant women are primary school graduates, 29% are secondary school graduates, 27.9% are high school graduates, and 24% have a bachelor's degree. Also, 58.1% of them are housewives, 3.9% are public sector employees, 21.2% are workers, and 16.7% are doing other jobs.

Most of the pregnant women in the 3rd trimester stated that 32.9% of them wanted to have their first pregnancy. Some of them stated that they wanted the current pregnancy (95.5%). 55.8% did not have any problems in their previous pregnancy and 86.5% in their current pregnancy. Most women with problems experienced premature births and miscarriages (Table 1).

It was found that pregnant women, involved in the study, average partner involvement and negative affect, which are subscales of TPDS, and general scale scores are lower than sub-limits determined for distress definition (Table 2).

There is no significant difference in pregnant women's distress status according to the age group, educational level, occupation, or pregnancy time (although the pregnant women in I Trimester have lower general TPDS and subscale points than other pregnant women at other trimesters), pregnancy number, the status of wanting the current pregnancy, the status of having problems during previous pregnancy/birth, the status of having problems during the current pregnancy (p>0.05).

The average number of the right answers the pregnant women to KQPBP is 18.02±4.00 (3-26) and the median value is 18.

When the answers provided to the KQPBP questionnaire by the pregnant women are examined, it is found that:

• 97.7% of the pregnant women said "Yes" to the 23rd question, which was "Does breast milk protect the baby from any diseases?"

• 96.6% said "Yes" to the 2nd question, which was "Is it important for us to know our blood group during laboratory tests performed during pregnancy?"

• 94.9%, the highest percentage to give the right answer, said "No" to the 32nd question, which was "Could there be any sexual intercourse following vaginal bleeding afterbirth?"

• 7.2% of the pregnant women said "No" to the 8th question, which was "Can we start to do exercise from the third month of pregnancy?"

• 13.9% said "Yes" to the 10th question, which was "Is it possible to have dental treatment during pregnancy?"

• 17.3%, the least percentage of correct answers, said "No" to the 29th question, which was "Do you think the baby bath should be done by starting from the body, washing the head, and lastly the bottom?" (Table 3).

There is no correlation between pregnant women's age group and their total number of right answers to the knowledge questions (Table 4) (p>0.05). According to pregnant women's educational level and occupations, there is an important difference between the number of right answers to the knowledge questions (p=0.027). The total scores of secondary school graduate pregnant women in the knowledge questions were found to be significantly lower than those of primary school graduates, high school graduates, and university graduates. Moreover, the total

Table 1.
Pregnancy Stories and Features of Pregnant Women (n=178)

	Number (n)	**Percentage (%)**
Trimester		
I trimester	21	11.73
II trimester	64	35.75
III trimester	94	52.51
Average of pregnancy week	26.92±6.87 (min: 4 max: 41)	
Number of pregnancy		
First pregnancy	59	32.96
Second	60	33.52
Third	40	22.35
Fourth	20	11.17
Number of living children (n=120)		
One	60	50.00
Two	42	35.00
Three	14	11.67
Four	3	2.50
Is this pregnancy wanted?		
Yes	171	95.53
No	8	4.47
Problems during previous pregnancy/birth		
Yes	20	11.17
No	100	55.87
First pregnancy	59	32.96
Problems (n=20)		
Miscarriage	9	45.00
Risk of premature birth	4	20.00
Cardiac arrest in the baby	2	10.00
Breech birth	2	10.00
Other (late cervical dilatation, coagulation problem, syncopal conditions)	3	15.00
Problems during current pregnancy		
Yes	24	13.41
No	155	86.59
Problem (n=24)		
Risk of premature birth	9	37.50
Bleeding	4	16.67
Pain	3	12.50
Risk of miscarriage	2	8.33
Anaemia	2	8.33
Other (late cervical dilatation, embolus, hemorrhoid, asthma)	4	16.67

Table 2.
Total Scores of Pregnant Women in TPDS (n=178)

	n	$\bar{\chi}$	s	M	Min	Max
Parental involvement	178	4.66	3.09	5.00	0	15
Negative affect	178	8.96	5.69	8.00	0	27
Tilburg pregnancy distress scale (TPDS)	178	13.60	6.73	13.00	1	40

M=median, $\bar{\chi}$=mean

Table 3.
Answers of Pregnant Women to the KQPBP (n=178)

	Yes		No		I don't know	
	n	%	n	%	N	%
1. Should we go to the obstetric polyclinic every four weeks during a normal pregnancy until the last month of pregnancy? **(Y)**	**143**	**79.89**	9	5.03	27	15.08
2. Is it important to know our blood type in laboratory tests during pregnancy? **(Y)**	**173**	**96.65**	4	2.23	2	1.12
3. Can we consume pastry and dessert all we want? **(N)**	16	8.94	**146**	**81.56**	17	9.50
4. Can we consume dried fruits like hazelnut, walnut, peanut, and almond every day as a snack even if they are salty? **(N)**	103	57.54	**60**	**33.52**	16	8.94
5. Can we eat fruit before getting out he bed to prevent nausea and vomiting during the first months of pregnancy? **(N)**	59	32.96	**48**	**26.82**	72	40.22
6. Do exercises made during pregnancy make birth easy and comfortable by strengthening the uterus and abdominal muscles? **(Y)**	**131**	**73.18**	7	3.91	41	22.91
7. Do exercises made during pregnancy increase back pain based on posture disorder? **(N)**	52	29.05	**70**	**39.11**	57	31.84
8. Can we start to do exercises dating from the third month of pregnancy? **(N)**	89	49.72	**13**	**7.26**	77	43.02
9. Should we go on pregnancy exercising although there is a vanal bleeding during pregnancy? **(N)**	4	2.23	**131**	**73.18**	44	24.58
10. Is it possible to get dental treatment done while pregnant? **(Y)**	**25**	**13.97**	102	56.98	52	29.05
11. Can we prefer belted skirt or pants during pregnancy? **(N)**	6	3.35	**162**	**90.50**	11	6.15
12. Does sexual intercourse hurt the baby during a normal pregnancy process? **(N)**	21	11.73	**125**	**69.83**	33	18.44
13. Can we reduce the drinking of water so as not to urinate often while pregnant? **(N)**	5	2.79	**167**	**93.30**	7	3.91
14. Should a hospital bag be prepared two weeks before birth? **(N)**	105	58.66	**60**	**33.52**	14	7.82
15. Real contractions are regular. Their frequency, time, and intensity increase and do not go away when at rest. **(Y)**	**119**	**66.48**	17	9.50	43	24.02
16. Is water breaking a sign of the beginning of birth? **(Y)**	**162**	**90.50**	9	5.03	8	4.47
17. Do you think that changing positions frequently relaxes you during birth? **(Y)**	**62**	**34.64**	58	32.40	59	32.96
18. Will taking a warm shower help to relieve uterine contractions more easily? **(Y)**	**108**	**60.34**	11	6.15	60	33.52
19. Is it wrong to massage or make light pressure on the belly during birth contractions? **(N)**	24	13.41	**64**	**35.75**	91	50.84
20. Can we eat snacks or take light drinks during a normal birth process? **(Y)**	**51**	**28.49**	79	44.13	49	27.37

Table 3.
continued

	Yes		No		I don't know	
	n	**%**	**n**	**%**	**N**	**%**
21. Should we feed the baby one hour after the birth? **(N)**	50	27.93	**65**	**36.31**	63	35.20
22. Could sugared water be given to the baby before breastfeeding? **(N)**	11	6.15	**109**	**60.89**	59	32.96
23. Does human breast milk protect our baby from diseases? **(Y)**	**175**	**97.77**	1	0.56	3	1.68
24. Should breasts be washed with soapy water before every breastfeeding? **(N)**	61	34.08	77	**43.02**	41	22.91
25. If our baby sleeps more than 4 hours, should we wake him up to feed? **(Y)**	**136**	**75.98**	22	12.29	21	11.73
26. Should we relieve gas in our baby after every feeding? **(Y)**	**168**	**93.85**	8	4.47	3	1.68
27. Are contractions and stomach aches normally during postnatal breastfeeding? **(Y)**	**81**	**45.25**	20	11.17	78	43.58
28. Could an alcohol-based wet wipe be used while cleaning the baby's bottom? **(N)**	34	18.99	**134**	**74.86**	11	6.15
29. Should a baby's shower be done starting with his/her body, then his/her head, and finally his/her bottom? **(N)**	117	65.36	**31**	**17.32**	31	17.32
30. Can we change the baby's nappy over his/her umbilical cord that has not fallen off? **(N)**	25	13.97	**129**	**72.07**	25	13.97
31. Should we wipe our genital region and bottom from back to front after birth so as not to catch an infection? **(N)**	37	20.67	**101**	**56.42**	41	22.91
32. Could there be sexual intercourse while bleeding postnatal? **(N)**	2	1.12	**170**	**94.97**	7	3.91

Y=yes, N=no

Table 4.
Correlation Between TPDS Scores and KQPBP

		Parental involvement	**Negative affect**	**Tilburg pregnancy distress scale**	**Information**
Parental involvement	r	1.000			
	p	.			
Negative affect	r	0.037	1.000		
	p	0.626	.		
Tilburg pregnancy distress scale (TPDS)	r	0.483	0.872	1.000	
	p	**0.000***	**0.000***	.	
Information	r	-0.113	0.087	0.019	1.000
	p	0.133	0.250	0.804	.

**p<0.001, KQPBP=knowledge questions about pregnancy, birth and postpartum*

scores of pregnant women who graduated from university were found to be statistically significantly higher than those who were primary school and high school graduates (p≤0.01). Pregnant women who are government employees gave more correct answers to the knowledge questions than pregnant women who are housewives and the private sector at a significant level (p<0.05). It can be said that this result because that the employees in the government should be more educated.

Although pregnant women in the third trimester had more right answers to the knowledge questions, there is no significant difference between them and the other pregnant women (p>0.05).

When the total scores from knowledge questions of pregnant women according to the total number of pregnancies were received, those in their first pregnancy gave significantly less accurate answers than those in their second and third pregnancies, and the difference was statistically significant (p=0.012). There was no significant difference between wanting the pregnancy and the total scores of pregnant women from these questions (p>0.05).

While there is no statistically significant difference in the right answers to the questions between those who had problems during their previous pregnancy/birth and those who did not (p>0.05).

There is no significant correlation between the pregnant women's TPDS scores and whether they give the right answers to KQPBP (p>0.05) (Table 4).

Discussion

Approximately half of the 178 pregnant women who participated in the study, mostly between the ages of 25 and 31, are at the level of high school and above, most of them are housewives, most of them are in the first trimester and about 1/3 of them are in their first pregnancy. Most of the pregnant women stated that they want the current pregnancy, 55.8% of them did not have any problems with their previous pregnancy, and most of them do not have any problems with the current pregnancy. In the literature, the data indicates that anxiety specific to the pregnancy process is frequently observed and usually occurs in the third trimester, and causes include the profession of the woman, a history of abortion, the complications experienced in the previous pregnancy, the number of cigarettes consumed daily, the use of drugs, and the condition of the baby (20).

Cultural changes and low distress levels of pregnant women in our study may produce different results. The study carried out by Declava, Lubina, Cirkenis, Sudraba & Miller indicates that women who cannot get support from their partners or families are more likely to experience pregnancy-specific anxiety (21). In the answers given by the pregnant women to the TPDS items, it was observed that the TPDS general scale averages and sub-dimensions of the pregnant women were lower than the lower limit of the distress level obtained from the "partner involvement". According to the age group, educational status, and occupation of the pregnant women, there was no significant difference between TPDS and partner involment and negative affective subscales (p>0.05). In our study, most of the responses of pregnant women to the TPDS items, such as "I feel my partner's support", "Pregnancy made me and my partner become closer", "I and my partner enjoy this pregnancy process", and "I can really share my feelings and thoughts with my partner", were positive. The positive responses of the pregnant women to the items related to the "partner involvement" sub-dimension had a positive effect on the overall scale score.

Pregnant women have, on the average, 18 right answers to the 32 knowledge questions. That average makes us consider that pregnant women have a medium level of knowledge. Increasing knowledge levels is important in reducing the complications of birth and after birth as well as maternal fatality (22). Pre-information and preparation of expectant mothers for birth encourage them to benefit from health services, shorten the decision-making process, and ensure timely and professional care (23).

There is no relationship between the knowledge status of pregnant women about pregnancy, birth and postnatal, and distress status. There is no significant difference between the age group of pregnant women and total right answers to knowledge questions (p>0.05). There is a significant difference between the educational level and professions of pregnant women and the number of their right answers to knowledge questions (p>0.05). The total scores of pregnant women who are secondary school graduates are significantly low, and those of pregnant women with a bachelor's degree is significantly high. The competence of pregnant women plays a crucial role in understanding and deciding their health needs. The study by Akhtar et al. (24) found a relationship between the attitude toward knowledge acquisition and practices. The awareness of educated women is more qualified, and it is reported that 64.7% answered yes to a willingness to learn about prenatal care (24).

Pregnant women who are public sector employees answered the questions more correctly. It could be said that this result is related to the higher educational level of these women. It has also been reported that the self-esteem level of pregnant women has an impact on their ability to cope with stress. It is recommended to teach pregnant women techniques that increase self-esteem to reduce their stress levels (25).

When the status of responding to knowledge questions according to the trimesters of pregnant women is examined; although there are more pregnant women in the III trimester, there is no statistically significant difference (p>0.05). A prospective mother who is about to complete the pregnancy process is expected to have sufficient information on everything.

Those in their first pregnancy gave significantly fewer correct answers (p<0.05). A lack of information about pregnancy and birth care causes anxiety in nulliparous and affects the birth process. In their study, Madhavanprabhakarana et al. (4) showed that birth training is effective in preparing pregnant women for delivery, decreasing their fear and anxiety, and reducing demands for a caesarean section. Particularly, prospective mothers who would have a first birth experience would have a more comfortable pregnancy because their knowledge level and the relaxation techniques they can use at birth would resolve their pregnancy-specific concerns. It was reported that when the knowledge level of pregnant women increased, their anxiety decreased, and

their self-efficacy and satisfaction increased with the birth preparation program (4).

There is no significant difference between the pregnant women's status of wanting the current pregnancy and total scores in knowledge questions ($p>0.05$). This result can be interpreted to mean that willingness does not affect the process of informing after pregnancy occurs. While the difference between the numbers of correct answers given by those who had problems in a previous pregnancy/birth was significant ($p<0.05$), no difference was found among those who had problems in their current pregnancy.

Abdurashid et al. (26) showed in their study that only 24.1% of a total of 502 pregnant women have a good awareness of danger symptoms in pregnancy. In the study of Boekhorst et al. (27) with 1739 pregnant women, women with previous pregnancy-related complications reported more anxiety about pregnancy. In the same study, it was reported that pregnant women who had problems with birth had more concerns about childbirth than women who did not have problems (27). This result, the age of the mother, her educational status and the place where she last gave birth are all related to the problem or causes of death. Accordingly, it has been suggested to develop information, education, and communication among women, families and general society about the signs of danger in pregnancy. Pregnant women who have problems improve their attitudes toward getting more information.

Conclusion

In this study, the data indicate that there is no relationship between the knowledge level and distress of pregnant women. It can be thought that the pregnant women included in the study have moderate knowledge but low pregnancy distress level and do not experience distress about subjects they do not know. Therefore, it is recommended to determine the distress levels of pregnant women before participating in the training planned to increase their knowledge level. On the other hand, it can be said that the high perceptions of these pregnant women who are receiving support from their partners affect their results. Partner support should be encouraged for a comfortable pregnancy and delivery process. In line with the results of the research, it is recommended to encourage pregnant women to receive adequate training regarding pregnancy and delivery, structure the educational contents very well, and conduct studies with a large sample group to determine the characteristics affecting the levels of education and distress. Increasing the level of knowledge would be effective in reducing complications, increasing the quality of life/health of the mother, baby, and family, and decreasing frequent admissions to the hospital. By increasing their awareness about the danger signs in pregnancy, they can be provided with the necessary healthcare on time and the development of complications can be prevented. Educational content should be prepared by health professionals based on evidence-based practices, taking into account the differences in social status and education level. Since the knowledge level of expectant mothers with their first pregnancy is lower, they should be encouraged to attend planned training.

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The TPDS has been translated and used in many languages. However, it was revised due to a critical evaluation of its psychometric properties and feedback from pregnant women. Gigase et al. (2022) revised TPDS-R-PI (4 items) and TPDS-R-NA (10 items: five items pregnancy and five items birth subcomponent) (28).

Ethics Committee Approval:

Informed Consent: All participants provided written informed consent before participation.

Peer-review: Externally peer-reviewed.

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