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Determination of Prenatal Distress Levels of Pregnant Women with Gestational Hypertension

Abstract

Aim: This study was conducted to determine the prenatal distress levels of pregnant women with gestational hypertension.

Methods: This descriptive study was conducted in 70 pregnant women with gestational hypertension, whose gestational week is at least 20 weeks, at Ankara University Prenatal Outpatient Clinic in Ankara between April 15 and May 24, 2019. A questionnaire form and the Revised Prenatal Distress Questionnaire were used to collect the data. Descriptive statistics, the independent samples *t*-test, ANOVA, the Mann–Whitney *U*-test, and the Kruskal–Wallis test were used for data analysis.

Results: The pregnant women's mean prenatal distress mean scores were 13.80 ± 4.74. As their age and number of living children increased, their prenatal distress mean scores increased. On the other hand, as their husbands' education levels increased, their prenatal distress mean scores decreased ($P > .05$). The prenatal distress mean scores of the women being primigravid, unplanned pregnancies, and smoked were high ($P > .05$). The prenatal distress mean scores of the women whose fetuses had health problems were higher than those of the women whose fetuses were healthy ($P < .001$). Of the women, 84.3% said not to receive information about gestational hypertension from the nurse.

Conclusion: The pregnant women's distress levels were moderate. It is important for the nurses to evaluate for the prenatal distress of pregnant women with gestational hypertension. To reduce pregnant women's prenatal distress levels, they should be informed about gestational hypertension through educational programs.

Keywords: Gestational hypertension, Nursing, Pregnancy, Prenatal distress

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Introduction

Pregnancy and birth are exciting and enjoyable processes, but they also entail psychosocial and physiological changes, important risks, role changes in family and work life, and adaptation to parenthood.[1-4] Stress caused by physiological, psychological, and emotional changes is often associated with psychological distress. Distress is clinically defined as depression, anxiety, and stress.[3,4] Pregnancy-specific distress involves maternal fears and concerns experienced with physical changes due to pregnancy, the health of the fetus, birth and labor, and the health of the infant in the postpartum period.[5]

Although many women experience prenatal distress due to physical and psychosocial changes, pregnancy distress experienced in high-risk pregnancies is more common than healthy pregnancies because of threats to the health of the mother or fetus.[2,4,6] Gestational hypertension (GHT) is a high-risk pregnancy diagnosis that threatens the health of the mother and fetus.[2,7,8] GHT is indicated by at least two blood pressure measurements, taken 6 hours apart after the 20th week of pregnancy, of 140/90 mmHg or higher and no proteinuria. It usually disappears in the 6th to 12th postpartum weeks.[9] It is known that 5-9% of all pregnancies develop hypertension worldwide.[10] The incidence of hypertension during pregnancy in Turkey has been reported to range from 3.9% to 15.1%.[7,8]

Although the prognosis of GHT during pregnancy is generally good, patients are at risk of developing preeclampsia, eclampsia, and HELLP (hemolysis, elevated liver enzymes, low platelet) syndrome.[11] High blood pressure that becomes acute during pregnancy and lasts for at least 15 minutes causes a wide variety of maternal and fetal complications, when not intervened.[8] In cases of uncontrolled hypertension, delivery should be performed as soon as possible to protect maternal and fetal health. Vaginal delivery should be prioritized. However, cesarean sections should be performed in emergency situations.[12]

In GHT, it is important to reduce mothers' stress levels and to protect maternal and fetal health. Women with GHT have high-risk pregnancies and should be monitored. They may feel inadequate as mothers and may blame themselves for their situation.[3,4] Due to high distress, pregnant women may use negative coping methods such as smoking and alcohol or cocaine use.[1,13] Uncontrolled distress during pregnancy not only has negative effects on pregnancy but can also lead to problems such as depression and breastfeeding problems in the postpartum period, which can negatively affect the health of mothers and infants.[1,6,14] Postpartum sadness and depression could develop when prenatal distress is not diagnosed early.[14] Gümüşdaş et al.[2] reported that high-risk pregnant women were more likely to develop anxiety, stress, and depression than healthy pregnant women. They also found that high-risk pregnant women need more social support and that their rate of receiving support from healthcare professionals was higher than that of healthy pregnant women.[2] For a pregnant women with GHT,

changes in blood pressure, the health status of the fetus/infant, and the possibility of a cesarean section could be the sources of distress. In a study conducted with high-risk pregnant women, it was found that having insufficient information about the health status of the fetus, problems that may occur during labor, and worrying about the health of the infant after birth are among the most stressful reasons for pregnant women.[13] Another study reported that pregnant women with preeclampsia were concerned about the negative effects that medications could have on the fetus.[15]

Even with no health problems, pregnancy involves distress due to physical and emotional changes. GHT, which threatens the health of mothers and fetuses and may cause many complications during pregnancy, will increase prenatal distress levels. Both GHT and the risk of increased distress negatively affect pregnancy. Therefore, nurses have important responsibilities in the prenatal period. Nurses should provide holistic nursing care by observing the distress symptoms of pregnant women and the physical symptoms of GHT in the prenatal follow-ups.[3]

The effects of stress, anxiety, and depression on GHT have been studied both in Turkey and in the international literature. However, no studies of prenatal distress in pregnant women with GHT were found. Early detection of the prenatal distress levels of pregnant women with GHT is important and necessary for healthy mothers and newborns. The results of this study will contribute to the planning of evidence-based nursing care for the management of prenatal distress in pregnant women with GHT.

Aim

The current study was conducted to determine the prenatal distress levels of pregnant women with GHT.

Method

Study Type

This study is a descriptive study.

Study Setting

This study was carried out at the Ankara University Prenatal Outpatient Clinic in Ankara between April 15 and May 24, 2019. The pregnant women's vital signs were measured before each examination. Pregnant women with blood pressure of 140/90 mmHg and above were taken to a quiet room after fetal heart rate was measured using a non-stress test. Their blood pressure was measured using a manual sphygmomanometer at 15-minute intervals for 1 hour. If their blood pressure does not lower, the pregnant women are hospitalized and put under observation, with their blood pressure measured every 3 hours. Spot and 24-hour urine samples were taken to check for protein in their urine. As a result of the measurements, GHT is diagnosed in pregnant women being at or above 20th gestational week, whose blood pressure is 140/90 mmHg and above at least twice, and who is not having proteinuria.

A low-salt diet was initiated for the pregnant women with GHT, and if their blood pressure values were not be reduced by diet alone, pharmaceutical therapy was also initiated. The pregnant women whose blood pressure values were lowered below 140/90 mmHg with dietary and/or pharmaceutical therapy were discharged, and their prenatal follow-up was continued at the obstetric outpatient clinic. After discharge, the pregnant women with GHT continued the low-salt diet until delivery, and those who had received medications in addition to the diet continued to use both diet and medication until delivery. The pregnant women with GHT came for follow-up after they recorded their blood pressure in the mornings and evenings for a week after their first diagnosis. The follow-up of pregnant women who do not have a blood pressure measurement above 140/90 mmHg is continued at the obstetric outpatient clinic. After the 32nd gestational week, prenatal follow-ups were performed once a week until delivery.

Study Population and Sample

The population of the study consisted of pregnant women with GHT in at least their 20th gestational week following-up at Ankara University Prenatal Outpatient Clinic in Ankara. G*Power 3.1 was used, and power analysis was made. The minimum sample size was 68 with an alpha (a) value of 0.05, a 5% error level, and an effect size of 0.96. Those having no communication problems, having at least primary school graduation, being at least 18 years of age, being followed-up at an outpatient clinic for diagnosis of GHT, having conceived naturally, and volunteered to participate in the study were included. Four women were excluded because they did not want to participate. The study was carried out with 70 pregnant women to reach the required sample size.

Data Collection Tools

A personal information collection form and the Prenatal Distress Questionnaire-Revised were used to collect data.

The Personal Information Collection Form

This form has 43 questions developed after a review of the literature.[1,4,5,13,15,16] This form consist of question about sociodemographic characteristics of pregnant women such as age, education level, and husband's education level; current and previous obstetric characteristics such as gestational week, total number of pregnancies, whether the current pregnancy is planned or not; information/form of treatment about GHT, current health status of the pregnant woman, relationship with the husband, and social support resources.

The Prenatal Distress Questionnaire-Revised

The Prenatal Distress Questionnaire was developed in 1999 by Yali and Lobel to evaluate women's concerns about social relationships, physical and emotional symptoms, themselves, and their infants during pregnancy.[17] The original 12-item scale was revised by Lobel in 2008, and the 17-item revised version was created. The Cronbach's alpha internal consistency coefficient of the original scale was 0.81. Its Turkish validity and reliability study was conducted by Yüksel et al. in 2011.[6] The content validity index value of the scale was 96%. Explanatory factor analysis determined that the factor loads of all items were between 0.37 and 0.80. Internal consistency analysis (n = 522) found that the Cronbach's alpha internal consistency coefficient was 0.85 and that the item-total score correlation coefficients ranged from 0.20 to 0.78 ($P < .001$). The Prenatal Distress Questionnaire is a 3-point Likert-type scale. Participants are asked to choose the one that is appropriate for them from none (0), a little (1), and very much (2). The lowest possible score is 0 and the highest is 34. Higher scores indicate more prenatal distress. The scale does not have a cut-off point.[6] In this study, the Cronbach's alpha internal consistency coefficient was 0.773.

Data Collection

Before data collection, the personal information collection form was administered to 20 women to evaluate its comprehensibility. The pilot test indicated that the women understood the questions, and no revisions were made.

The data were collected from pregnant women diagnosed with GHT, being in at least their 20th gestational week and being either waiting for their examinations or had already been examined in the obstetrics

outpatient clinic on weekdays at 9:00-15:30. The data collection forms were given by the researcher to the pregnant women who met the inclusion criteria and agreed to participate in the study. The data collection forms were filled out in 20 to 30 minutes.

Data Analysis

Data analyses were performed using SPSS 24 software (IBM SPSS Corp.; Armonk, NY, USA). Descriptive statistics such as numbers, percentages, minimum, maximum, mean, standard deviation, median, and interquartile ranges (IQR) were used. The normality of the data distributions was evaluated using the Shapiro–Wilk test. The independent samples *t*-test was used to compare two groups of normally distributed data, and one-way ANOVA was used to compare three or more groups. The Mann–Whitney *U*-test was used to compare two groups of data that were not normally distributed, and the Kruskal–Wallis *H*-test was used to compare three or more groups. The threshold for statistical significance was $P < .05$.

Ethical Aspects of the Study

Permission to use the Prenatal Distress Scale-Revisedwas obtained from the authors. Permission to conduct the study was obtained from Ankara University Ethical Committee where the study was conducted (February 13, 2019, number 04/70), and institution was obtained (April 12, 2019, number 12.405.952-044-E.20166). Before administering the data collection forms, the pregnant women were informed about the purpose of the study, and their written consent was obtained.

Results

The PDQ mean scores of the participants were 13.80 ± 4.74 (Table 1). Table 2 shows some descriptive characteristics of pregnant women and the distribution of the PDQ mean scores according to these characteristics. Of the participants, 47.1% were at least 35 years old, 44.2% were high school graduates, and 50% had husbands who were also high school graduates. Of the pregnant women, 21.4% were employed and 60% had moderate incomes. Of them, 14.3% were smokers and 68.5% received support from their families. As the women's age increased, their prenatal distress scores also increased ($P > .05$), and as their husbands' educational levels increased, their scores decreased ($P > .05$). The women graduated from primary school (15.13 ± 4.14) had higher PDQ scores than the women graduated from high school (13.16 ± 4.96) or university (13.13 ± 4.97) ($P > .05$). The employed women (14.80 ± 4.18) had higher PDQ scores than the others (13.53 ± 4.87). The women with moderate income levels had higher PDQ scores than the women with low and high income levels ($P > .05$). The women who smoked (15.70 ± 4.24) had higher PDQ scores than the non-smokers (13.48 ± 4.77) ($P > .05$). The women who received family support (14.29 ± 5.18) had higher PDQ scores than the women who did not (12.73 ± 3.45) ($P > .05$).

In Table 3, some obstetric and GHT-related characteristics of pregnant women and the distribution of the PDQ mean scores according to these characteristics are given. Of the women, 74.3% were multigravid, 38.6% were in their 25th to 32nd gestational week, 51.4% had unplanned pregnancies, and 44.2% had other living children. Of them, 15.7% had received information from nurse about GHT and 74.3% knew its danger signs. Although not included in the table, the most common danger signs are elevated blood pressure, headaches, and visual impairment. Of the women, 81.4% received only dietary treatment, 18.6% received both dietary and pharmaceutical treatment, and 17.1% had health problems with their fetuses.

The primigravid women (14.39 ± 4.42) had higher PDQ scores than the multigravid women (13.60 ± 4.87). The women in their 25th to 32nd gestational weeks had higher PDQ scores than the women in their 20th to 24th weeks and the women in their 33rd or later gestational weeks ($P > .05$). The women with unplanned pregnancies (14.64 ± 4.77) had higher PDQ scores than the women with planned pregnancies (12.91 ± 4.65). As the number of living children increases, the PDQ mean scores also increase ($P > .05$). The PDQ mean scores of women who did not receive information about GHT, did not know about the dangers of GHT, and received both dietary and pharmaceutical treatment were high ($P > .05$). The PDQ scores of the women who had problems with their fetuses (17.83 ± 3.38) were significantly higher than the scores of the pregnant women who did not have problems with their fetuses (12.96 ± 4.57) ($P < .05$).

Discussion

In this study, which was conducted to determine the prenatal distress levels of pregnant women with GHT, it was found that the women's prenatal distress levels were moderate. Altınçelep[18] determined that healthy pregnant women had mild distress levels (9.88 ± 4.79). Yali and Lobel[17] identified that high-risk pregnant women who previously had an abortion or were diagnosed with hypertension and diabetes had moderate prenatal distress levels (14.9 ± 7.2). In another study conducted with high-risk pregnant women diagnosed with placenta previa, risk of preterm birth, preeclampsia, gestational diabetes, and epilepsy, it was found that high-risk pregnant women had high prenatal distress levels (18.76 ± 5.04).[19] In studies comparing the distress level of healthy pregnants and high-risk pregnants, it was reported that the high-risk pregnant women had higher distress levels than the others.[2,20–22] In line with this study and other studies, the distress levels of the pregnant women in this study group were moderate.

In our study, it was determined that as age increases, the level of prenatal distress increased. Similarly, there are studies showing that prenatal distress increases with increasing age ($P > .05$).[13,18,23] However, another study found that stress symptoms decreased as the gestational age increased.[24] Dağlar and Nur[20] reported that age has no effect on prenatal distress. It is thought that the increase in the level of distress with increasing age in our study group may arise from both being pregnant at an advanced age and being diagnosed with GHT. Pregnant women over the age of 35 years worry about their health and the health of their fetuses, which can increase their distress levels.

Another result of our study is that the level of distress decreases as the education level of women increases ($P > .05$). Similar studies reported that the prenatal distress level of both healthy and risky pregnant women who were university graduates was lower.[23,24] In the other studies conducted with both healthy and high-risk pregnant,

Table 1. The Pregnant Women's Prenatal Distress Questionnaire Mean Score

Variable (n = 70)	Min. Possible Score	Max. Possible Score	Group Mean	Standard Deviation	Median	Min. Score of Group	Max. Score of Group
Prenatal Distress Questionnaire	0	34	13.80	4.74	14.0	2.0	22.0

Table 2. The Pregnant Women's Prenatal Distress Questionnaire Mean Scores and Their Descriptive Characteristics

Characteristics (n = 70)		Prenatal Distress Questionnaire Scores		Statistical Probability
Age group				
18-26	14 (20.0)	11.93 ± 5.37	12.5 [8.8]	*F* = 1.682
27-34	23 (32.9)	13.70 ± 4.38	13.0 [7.0]	*P* = .940
35 and older	33 (47.1)	14.67 ± 4.60	15.0 [7.0]	
Education level				
Primary school	23 (32.9)	15.13 ± 4.14	15.0 [7.0]	*F* = 1.365
High school	31 (44.2)	13.16 ± 4.96	13.0 [8.0]	*P* = .262
University	16 (22.9)	13.13 ± 4.97	14.0 [6.0]	
Husband's education level				
Primary school	17 (24.3)	15.71 ± 4.28	17.0 [7.0]	*F* = 2.005
High school	35 (50.0)	13.43 ± 5.04	13.0 [8.0]	*P* = .143
University	18 (25.7)	12.72 ± 4.23	13.0 [5.3]	
Employment status				*Z* = – 0.811
Employed	15 (21.4)	14.80 ± 4.18	16.0 [7.0]	*P* = .418
Unemployed	55 (78.6)	13.53 ± 4.87	14.0 [7.0]	
Income level				
Low	10 (14.3)	13.80 ± 6.21	14.5[10.0]	*F* = 0.311
Moderate	42 (60.0)	14.12 ± 4.47	14.5 [7.3]	*P* = .734
High	18 (25.7)	13.06 ± 4.63	13.5 [6.8]	
Smoking status				
Yes	10 (14.3)	15.70 ± 4.24	15.5[12.0]	*Z* = – 1.304
No	60 (85.7)	13.48 ± 4.77	13.5 [7.0]	*P* = .192
Family Support				
Yes	48 (68.5)	14.29 ± 5.18	15.5 [7.0]	*Z* = – 1.630
No	22 (31.5)	12.73 ± 3.45	13.0 [6.3]	*P* = .103

F: One-way ANOVA.
Z: Mann–Whitney *U*-test.
t: independent samples *t*-test.

it was determined that prenatal distress levels of women decreased as education levels increased.[20,25,26] In this study, although there was no significant difference, the decrease in the level of prenatal distress as the level of education increased suggests that education facilitates both access to accurate information and coping with stress.[27]

The employed pregnant women had higher prenatal distress levels than the unemployed women ($P > .05$). Similarly, there are studies showing that prenatal distress levels of employed women with healthy pregnancies are higher than those of unemployed women.[18,25] In our study, the reasons for the higher level of distress in employed women were the possibility of hospitalization, not being able to take leave from the workplace, fears of losing their job or interruption in their work lives, fears of changes in their diet and treatment, and difficulties arising from the management of these situations together with business life. The pregnant women's prenatal distress levels decreased as their husbands' education levels increased ($P > .05$). Other studies have also found that the distress levels of both healthy and high-risk pregnant women fell as their husbands' education levels increased.[23,28,29] In this study, the husbands' higher education levels may have increased the women's social support and reduced their distress levels.

The women who smoked had higher prenatal distress levels than the women who did not ($P > .05$). Goodwin et al.[30] determined that the prevalence of smoking during pregnancy was high in women with psychological stress. The higher prenatal distress levels of the women who smoked may suggest that they use cigarettes to cope with stress. On the other hand, the thought that smoking while pregnant can harm their fetuses may also have increased their distress levels.

The women who received family support had higher prenatal distress levels than the women who did not ($P > .05$). A previous study reported

Table 3. The Pregnant Women's Prenatal Distress Questionnaire Mean Scores and Their Obstetric and Gestational Characteristics

Variable (n = 70)		Prenatal Distress Questionnaire Scores		Statistical Probability
Gravidity				
Primigravid	18 (25.7)	14.39 ± 4.42	15.5 [7.0]	*t* = 0.609
Multigravid	52 (74.3)	13.60 ± 4.87	13.5 [7.8]	*P* = .545
Gestational week				
20-24	23 (32.8)	13.13 ± 4.36	13.0 [8.0]	*F* = 0.445
25-32	27 (38.6)	14.41 ± 3.61	14.0 [5.0]	*P* = .643
33 or more	20 (28.6)	13.75 ± 6.37	15.5 [10.3]	
Planned pregnancy				
Yes	34 (48.6)	12.91 ± 4.65	12.5 [6.3]	*t* = − 1.539
No	36 (51.4)	14.64 ± 4.77	15.5 [6.8]	*P* = .128
Number of living children (n = 52)				
No	8 (15.4)	10.63 ± 4.50	10.5 [5.3]	
1	23 (44.2)	13.92 ± 4.56	14.5 [6.8]	*F* = 1.339
2	16 (30.8)	14.38 ± 5.21	14.0 [8.3]	*P* = .273
3 or more	5 (9.6)	15.00 ± 5.00	16.0 [8.5]	
Having received information from the nurse on GHT				
Yes	11 (15.7)	11.82 ± 4.31	12.0 [9.0]	*t* = − 1.525
No	59 (84.3)	14.17 ± 4.76	15.0 [7.0]	*P* = .132
Knowing the danger signs of GHT				
Yes	52 (74.3)	13.54 ± 4.76	13.0 [7.8]	*t* = − 0.783
No	18 (25.7)	14.56 ± 4.73	15.5 [5.3]	*P* = .437
Type of GHT treatment				
Only diet	57 (81.4)	13.37 ± 4.77	13.0 [7.5]	*Z* = − 1.579
Both diet and medications	13 (18.6)	15.80 ± 4.10	17.0 [3.0]	*P* = .114
Problems with the fetus				
Yes	12 (17.1)	17.83 ± 3.38	18.0 [5.5]	*t* = 3.492
No	58 (82.9)	12.96 ± 4.57	13.0 [7.0]	*P* = .001*

F: ANOVA.
Z: Mann–Whitney *U*-test.
t: independent samples *t*-test.
*$P < .01$.

that the prenatal anxiety scores of women who received support during pregnancy were lower than those of women who did not receive support.[31] However, other studies have found that social support does not significantly affect prenatal distress.[24,25] Koçak[29] found that spousal/husband support reduced the prenatal distress levels of both healthy and high-risk pregnant women. In this study, the higher prenatal distress levels of the women who received family support suggest that families may need information about the needs of pregnant women with hypertension.

The primigravid women had higher prenatal distress levels than the multigravid women ($P > .05$). Smilarly, studies have also reported that primiparous women have higher prenatal distress levels than multigravid women.[28,31–33] The fact that the primigravid women were both experiencing their first pregnancies and had to cope with the risks of GHT may have increased their prenatal distress levels.

The prenatal distress levels of the women in their 25th to 32nd gestational weeks were slightly higher than those of the women in their 20th

to 24th gestational weeks and the women in the 33rd gestational week or later ($P > .05$). Previous studies have reported that as gestational weeks increase, prenatal distress levels decrease.[18,34] Tunçel and Süt[35] found that prenatal distress levels were very similar in all three trimesters. Our study and other studies reveal different results on this issue. In this study, the high distress levels in the 25th to 32nd weeks of gestation may have been due to GHT, as well as the rapid and physically significant changes in this stage of pregnancy.

The women who had unplanned pregnancies had higher distress levels than the women who had planned pregnancies ($P > .05$). Similarly, Dündar et al.[36] reported that the distress levels of women who had unplanned pregnancies were high. The uncertainty experienced by pregnant women with unplanned pregnancies may increase their distress levels because they are not sufficiently ready for pregnancy and complications such as GHT.

Of the pregnant women, 84.3% said that they had not received information about GHT. The prenatal distress levels of the women who had not received information about GHT and its danger signs were higher ($P > .05$). It is important for pregnant women with GHT to get information about their condition, to reduce concerns about their own health and the health of their fetuses, to raise awareness about the process of the disease, and to use effective methods of coping with stress.[4] Considering that the distress level of pregnant women who received both diet and pharmaceutical therapy was high in our study, information needs are better understood ($P > .05$). Similar studies have reported no significant difference between medication use and PDQ scores.[18,27] In this study, the high distress levels of the pregnant women who received both dietary and pharmaceutical therapy may have been due to their concerns about the negative effects of pharmaceutical treatment on the health of their fetuses, concern that their own health had deteriorated enough to require medication, and worries about hypertension after delivery.

According to the results of our study, considering that one out of every four women did not know the danger signs of GHT, it is thought that the importance of providing education on the danger signs of GHT will be better understood. The most recognized sign of GHT in this study was high blood pressure. As it is known, GHT is a disease that can have consequences ranging from mild hypertension to multiple organ damage and maternal and fetal death. The pregnant woman should be informed by the nurse about the course of GHT, what symptoms she should apply to the hospital, and how and how often to take the correct blood pressure measurement at home. Providing information about other signs and symptoms of GHT, such as changes in infants movements and vision impairment, will help to reduce women's prenatal distress and to protect maternal and fetal health. A previous study found that pregnant women who self-monitored their blood pressure at home were more aware about the risks of hypertension and preeclampsia.[37]

This study found that the women who had problems with their fetuses had higher prenatal distress levels than the women who did not ($P < .001$). Similarly, Hediye and Korkmaz[13] reported that concern about fetal health is the most stressful factor for pregnant women. In our study, it is thought that the prenatal distress levels of the women with fetal health problems (such as intrauterine growth retardation, preterm labor, and Down's syndrome) may have been high due to concerns about the well-being of their fetuses.

Limitations of the Study

The inability to make a comparison due to the lack of a control group consisting of healthy pregnant women is a limitation of our study. This study's results are generalizable to its sample but not to the whole society.

Conclusion

This study found that the pregnant women's distress levels were moderate. Although the only statistically significant variable of the study was the presence of problems with the fetus, it was identified that the women's prenatal distress levels increased with age and decreased with higher maternal and husband's education. In addition, the women who smoked, who received family support, who had unplanned pregnancies, who had not received information from nurse about GHT, who did not know the danger signs of GHT, and who received both dietary and pharmaceutical treatment had higher prenatal distress levels.

Therefore, nurses should plan educational programs for pregnant women with GHT about its course, how to measure and monitor blood pressure at home, changes in infant movements, symptoms such as visual impairment, and when to go to the hospital. Husbands should be encouraged to join these educational programs. In addition, nurses should also closely monitor women's maternal and fetal health, identify stressors that may cause women to experience prenatal distress, and support positive ones rather than negative coping methods.

Ethics Committee Approval: Ankara University Ethics Committee approved this study (13.02.2019, No: 04/70).

Informed Consent: Written informed consent was obtained from women who participated in this study.

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