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Comparing Psychosocial Health in Women with and without Risky Pregnancies: A Cross-Sectional Study

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ABSTRACT

Objective: This study aims to compare women with risky pregnancy with women with non-risk pregnancies concerning pregnancy-related psychosocial adaptation.

Materials and Methods: This research has a descriptive, comparative and cross-sectional single-centre study. The data were collected from 253 pregnant women who applied to and were followed-up in the gynecology and obstetrics clinic of a university hospital in Izmir, Turkey. The Demographic Information Form and the Pregnancy Psychosocial Health Assessment Scale were used for data collection.

Results: Pregnant with-without risk of Psychosocial Health Assessment Questionnaire (PPHAS) total and subscale mean scores was compared and a statistically significant difference was observed between the two groups. The findings obtained in this study showed that the difference between PPHAS total and subscale mean rank total scores for risky and non-risky subjects was statistically significant ($p<0.001$). A statistically significant difference was found between the PPHAS score and the occupation, the place/region where the participant lived for the longest time, the family type, previous birth method, the frequency of pregnancy follow-up, the chronic disease presence, the pregnancy type ($p<0.05$).

Conclusion: There was a significant difference between psychosocial health between risky pregnancies and non-risky pregnancy who participated in this study. The psychosocial health level of the non-risk group was higher and psychosocial health was lower in risky pregnancies.

Keywords: Risky pregnancy, psychosocial health, non-risky pregnancy, nursing

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INTRODUCTION

Pregnancy and labor are natural parts of the life cycle for many women, and women experience significant physical, mental, and social changes throughout this process (1). During pregnancy, a woman experiences many situations, and some of these lead pregnant women to be considered as being at greater or lesser risk, which may be exacerbated by social and obstetric factors (2). Many medical conditions are included, such as diabetes, hypertension, anemia, lung disease, seizure disorders, lupus, AIDS and tuberculosis in the "risky pregnancy" classification. A high-risk disease outside of pregnancy may lead to the development of additional stress, anxiety, depression for a pregnant woman (3). In the case of this new diagnosis of the woman, she has to deal with the first shock and distress that accompanies such a diagnosis (4). For these women, being hospitalized or confined to home care may not be associated with a particularly high level of crisis, although they may be anxious about the impact of their condition on the fetal outcome (5). Psychosocial risk factors and the role of all these stress factors on pregnancy outcomes are complex and difficult for many reasons, but previous study findings highlight the importance of stress during pregnancy on maternal and fetal health, which increases of pregnancy complications (e.g., preeclampsia) and negative birth outcomes (e.g., preterm birth, low birth weight) (6, 7). Thus, the physical discomfort of pregnancy, accompanied by the anticipation of childbirth and the responsibility of parenthood, often cause anxiety and emotional changes that might lead to complications (8, 9).

Another reason for fatal and non-fatal adverse health is intimate partner violence during pregnancy. Approximately 325,000 pregnant women exposed to intimate partner violence each year. The average reported prevalence during pregnancy is 30% emotional abuse, 15% physical abuse, and 8% sexual abuse (10). Women suffering IPV during pregnancy are more likely to present psycho-social and physical health problems, including stress, anxiety and depression, adverse pregnancy outcomes, inability to be a good parent after childbirth, fetal growth restriction, childhood growth impairment and other negative health consequences for women and child (11, 12).

In pregnancy follow-up, health care staff usually focuses on biological and physiological changes that occur during pregnancy, while the psychological aspect of pregnancy is ignored unless a mental health disorder develops. However, to learn about pregnancy psychology and mental health problems and disorders related to pregnan-

cy improves the awareness of health staff regarding the matter. This awareness would be especially helpful in groups of risky and vulnerable women, like those in low-income, low-education, poor communities where these psychosocial factors and poor pregnancy outcomes are common (13). Moreover, we believe that improved awareness of pregnant women and health staff regarding the process will allow for early diagnosis, intervention, and treatment of numerous problems that might occur during pregnancy. During the last decades, various studies in the literature has widely investigated the importance of mental and psychosocial health in pregnancy, addressing perinatal maternal and fetal health outcomes and concerns (14, 15). However, the number of studies comparing risk and non-risk pregnancies is limited. Therefore, this study aimed to compare women risk pregnant women with non-risk pregnancies concerning pregnancy-related psychosocial adaptation.

MATERIALS and METHODS

Study Design

This research had a descriptive, comparative and cross-sectional single-centre study. The population of the study consisted of pregnant women who applied and were followed-up in the gynecology and obstetrics clinic of a university hospital in İzmir between 25.04.2017-25.04.2018.

Setting and Sample

We recruited 253 pregnant women, who volunteered to participate in this study and satisfied with the inclusion criteria were included in this study. Pregnant women who met the research criteria at the specified dates were included in this study by simple random sampling method (using patient protocol number). The sample size was determined using the G*Power 3.1.3 program, the minimum sample size was calculated to be 128 (sample size for one group: 64) subjects with 80% power at a 95% confidence interval with 2-tailed alpha <0.05 and a large (0.8) effect size (t-tests, difference between two independent means was used regarding PPHAS score, t=9.491 p<0.001). These sample sizes were thus larger than those estimated by the power calculation analysis.

Participants

2nd–3nd trimester pregnant women with risk (those who were diagnosed with risk pregnancy as of the 2nd trimester and clinically followed-up) and non-risk pregnancies that agreed to participate in this study were literate, and had no mental health disorders were included in this study. Those who did not agree to participate in this study, were illiterate, and had mental health disorders were excluded from this study.

Instruments

We used questionnaires to collect the data. The Demographic Information Form was developed by the researcher and the Pregnancy Psychosocial Health Assessment Scale was used for data collection.

Demographic Information Form

The form consisted of 29 questions related to demographic characteristics of the participants, such as age, educational level, marital status, occupation, place of residence, obstetric-gynecological characteristics, health history, and risk factors related to pregnancy.

Pregnancy Psychosocial Health Assessment Scale (PPHAS)

The scale has been developed by Yıldız (2011) (16) to assess psychosocial health in pregnancy and consists of 46 items. The PPHAS is a 5-point Likert scale. The scale has six factors: 13 items under the first factor assess "characteristics related to pregnancy and relationship with spouse", eight items under the second factor assess "characteristics related to anxiety and stress", eight items under the third factor assess "characteristics related to domestic abuse", seven items under the fourth factor assess "characteristics related to need for psychosocial support", four items under the fifth factor assess "familial characteristics", and six items under the sixth factor assess "characteristics related to physical and psychosocial changes during pregnancy". The total score obtained from the scale is divided by the number of items, which yields an average score between 1–5. The closer score to "1" means the presence of more severe psychosocial health problems and a mean score of "1" indicates very poor psychosocial health The same applies to the factors of the scale. The scale does not have a cut-off point. The forms were filled by the researcher using the face-to-face interview (about 15–20 minutes) method.

Ethical Considerations

Necessary permits were obtained from the Ethics Board of the Ege University Hospital and the Gynecology and Obstetrics Department of the Ege University Hospital for the performance of this study (date: 25.04.2017, number: 17-2.1/11). Also, the participants were informed about the purpose of this study, benefits provided by the study, and the time that they need to allocate for the study prior to interviews. Patients were assured that their participation was confidential and would not affect their medical treatment outcomes. A written consent was obtained from the participants who agreed to participate in this study.

Data Analysis

IBM-SPSS 20 software was used to analyze the data. Number, percentage, chi-square, mean, and distribution values were used for descriptive analysis. Numerical measurements were analyzed using the Kolmogorov–Smirnov test and Shapiro-Wilk-W test to determine if the normal distribution assumption was met. In case of the non-parametric Kruskal-Wallis Variance and Mann–Whitney U tests, the chi-square test was used for comparisons between the groups concerning numerical measurements. The accepted level of significance was set below 0.05 (p<0.05).

RESULTS

Of the surveyed pregnancies, 37.1% had a risky situation in pregnancy (n=94 with risk pregnancy diagnosis, n=159 with healthy pregnancy diagnosis), and 37.2% had abortus threat, 17% had placenta previa, and 10.6% had preterm delivery threat as a risk. 50% of the women with risk pregnancy were between the ages of 26–34, 78.7% had a nuclear family and 55.3% lived in the Aegean region (Table 1).

The mean week of pregnancy for risky pregnancies was 31.83±5.34; 43.6% of the women with risk pregnancy were experiencing their first pregnancy, 92.6% received support during the pregnancy period, and 50.6% received this support from their spouses and mothers (Table 2).

Table 1. Comparison of PPHAS score socio-demographic characteristics of risky and non-risky pregnancies

Characteristics	Risk group			Non-risk group			Total			
	n (%)	Mean rank	Median (min–max)	n (%)	Mean rank	Median (min–max)	n (%)	Mean rank	Median (min–max)	p
Age										
17–25	25 (26.6)	44.08	2.13 (1.46–4.61)	60 (37.7)	77.22	3.36 (1.28–4.67)	85 (33.6)	126.81	3.21 (1.28–4.67)	
26–34	47 (50)	46.92	2.04 (1.20–4.63)	62 (39)	69.47	2.43 (1.17–4.80)	109 (43.1)	112.87	2.19 (1.17+4.8)	0.146
35 and upper	22 (23.4)	46.20	2.20 (1.17–4.43)	37 (23.3)	88.68	3.69 (1.17–5.15)	59 (23.3)	133.56	2.86 (1.17–5.15)	
Education										
Illiterate	8 (8.5)	56.25	2.48 (1.85–3.70)	15 (9.4)	73.97	3.15 (1.89–4.13)	23 (9.1)	130.11	2.67 (1.85–4.13)	
Literate-primary	20 (21.5)	55.40	2.64 (1.46–4.43)	36 (22.6)	90.63	3.73 (1.17–5.15)	56 (22.1)	145.10	3.45 (1.17+5.15)	
Secondary school	19 (20.2)	32.84	1.83 (1.33–3.35)	33 (20.8)	64.95	2.67 (1.41–4.48)	52 (20.6)	98.40	2.06 (1.33–4.48)	0.220
High school	18 (19.1)	49.69	2.05 (1.20–4.63)	45 (28.3)	77.51	3.50 (1.17–4.80)	63 (24.9)	130.45	3.32 (1.17–4.80)	
Bachelor and upper	29 (30.9)	43.18	2.02 (1.17–4.61)	30 (18.9)	74.57	2.42 (1.33–4.72)	59 (23.3)	110.75	2.13 (1.17–4.72)	
Marital status										
Married	90 (95.7)	45.52	2.08 (1.17–4.63)	156 (98.1)	76.41	3.32 (1.17–5.15)	246 (97.2)	121.73	2.60 (1.17–5.15)	0.476
Religious marriage	4 (4.3)	56.38	2.36 (1.78–4.39)	3 (1.9)	106.50	4.17 (3.17–4.24)	7 (2.8)	148.50	3.17 (1.78–4.39)	
Year of mariage										
0–9	68 (73.9)	42.20	1.96 (1.17–4.63)	115 (72.3)	71.14	3.17 (1.17–4.80)	183 (72.9)	113.29	2.32 (1.17–4.80)	
10–19	15 (16.3)	44.04	2.13 (1.33–3.54)	25 (15.7)	82.42	3.54 (1.43–4.52)	40 (15.9)	126.35	2.86 (1.33–4.52)	0.870
20 years and upper	9 (9.8)	67.00	2.69 (2.15–4.43)	19 (11.9)	105.31	3.93 (1.59–5.15)	28 (11.2)	168.04	3.73 (1.59–5.15)	
Occupation										
Housewife	69 (73.4)	48.61	2.14 (1.20–4.63)	117 (73.6)	79.58	3.38 (1.17–5.15)	186 (73.5)	127.49	2.86 (1.17–5.15)	
Officer	9 (9.6)	54.14	2.54 (1.33–4.33)	17 (10.7)	58.91	2.52 (1.28–4.67)	26 (10.3)	110.31	2.53 (1.28–4.67)	0.021*
Worker	6 (6.4)	37.75	1.79 (1.46–3.63)	21 (13.2)	88.35	3.89 (1.70–4.63)	27 (10.7)	137.02	3.61 (1.46–4.63)	
Self-employment	10 (10.6)	27.50	1.73 (1.17–2.50)	4 (2.5)	24.75	1.67 (1.43–2.33)	14 (5.5)	52.21	1.73 (1.17–2.50)	
Education status of spouse										
Illiterate	4 (4.3)	47.13	2.10 (1.85–2.65)	9 (5.7)	93.56	3.78 (1.72–4.37)	13 (5.1)	141.50	3.15 (1.72–4.37)	
Literate	4 (4.3)	78.25	4 (2.67–4.43)	18 (11.3)	97.35	3.69 (2.39–5.15)	22 (8.7)	175.38	3.69 (2.39–5.15)	
Primary school	13 (13.8)	45.88	2.06 (1.20–4.59)	19 (10.1)	87.39	3.85 (1.43–4.80)	29 (11.5)	127.35	3.13 (1.20–4.80)	0.407
Secondary school	22 (23.4)	43.30	1.93 (1.46–4.63)	35 (22)	68.51	2.76 (1.17–4.48)	57 (22.5)	110.78	2.35 (1.17–4.63)	
High school	25 (26.6)	48.37	2.19 (1.33–4.26)	45 (28.3)	70.09	3.19 (1.28–4.28)	70 (27.7)	118.59	2.65 (1.28–4.28)	
Bachelor and upper	26 (27.7)	40.92	1.97 (1.17–4.61)	36 (22.6)	75.63	2.54 (1.17–4.72)	62 (24.5)	113.00	2.16 (1.17–4.72)	
Longest living region										
Marmara	4 (4.3)	40.88	1.88 (1.46–4.61)	4 (2.5)	32.13	2.04 (1.17–2.37)	8 (3.2)	80.56	1.88 (1.17–4.61)	

Table 1 (cont.). Comparison of PPHAS score socio-demographic characteristics of risky and non-risky pregnancies

Characteristics	Risk group			Non-risk group			Total			p
	n (%)	Mean rank	Median (min–max)	n (%)	Mean rank	Median (min–max)	n (%)	Mean rank	Median (min–max)	
Aegean	52 (55.3)	31.44	1.85 (1.17–4.15)	51 (32.1)	36.64	1.89 (1.22–5.15)	103 (40.7)	66.81	1.86 (1.17–5.15)	
Eastern Anatolia	32 (34)	69.03	3.32 (1.70–4.63)	92 (57.9)	101.76	3.89 (1.63–4.80)	124 (49)	171.68	3.78 (1.63–4.80)	0.003*
Southeast	2 (2.1)	57.75	2.79 (1.96–3.63)	3 (1.9)	49.25	2.51 (1.85–3.17)	5 (2)	110.25	2.56 (1.85–3.63)	
Black Sea	2 (2.1)	30.50	1.83 (1.72–1.96)	8 (5)	74.21	3.58 (1.17–4.67)	10 (4)	110.11	1.95 (1.17–4.67)	
Mediterranean	2 (2.1)	48.25	2.21 (1.93–2.50)	1 (0.6)	15.50	–	3 (1.2)	72.17	1.93 (1.63–2.50)	
Income status										
Less than income	18 (19.1)	50.79	2.21 (1.17–4.39)	29 (18.2)	67.88	2.65 (1.37–4.48)	47 (18.6)	117.48	2.60 (1.17–4.48)	
Equivalent to in-come	61 (64.9)	41.97	1.98 (1.20–4.59)	109 (68.6)	76.91	3.39 (1.17–5.15)	170 (67.2)	119.02	2.50 (1.17–5.15)	0.795
More than income	15 (16)	56.43	2.55 (1.33–4.63)	21 (13.2)	90.70	3.75 (1.67–4.72)	36 (14.2)	145.30	3.28 (1.33–4.72)	
Family structure										
Nuclear	74 (78.7)	41.19	1.95 (1.17–4.63)	106 (66.7)	71.40	3.10 (1.17–4.80)	180 (71.1)	110.90	2.17 (1.17–4.80)	0.041*
Extended	20 (21.3)	63.08	2.86 (1.50–4.39)	53 (33.3)	87.88	3.60 (1.37–5.15)	73 (28.9)	150.22	3.46 (1.37–5.15)	

Min: Minimum; Max: Maximum

Of the women with non-risk pregnancies, 39% were between the ages of 26–34, 66.7% had a nuclear family, and 57.9% lived in the Aegean region (Table 1). The mean week of pregnancy for non-risky pregnancies was 32.50±3.53. 38.4% of the women with non-risk pregnancies were experiencing their first pregnancy, 69.6% received support during the pregnancy period, and 42.2% received this support from their spouses and mothers (Table 2).

The findings showed that the difference between PPHAS total and subscale mean rank total scores for risky and non-risky subjects was statistically significant ($p<0.001$). The psychosocial health level of the non-risk group was higher (Table 3).

Sociodemographic characteristics and the mean PPHAS scores of the women with risky pregnancy included in this study were compared, and a statistically significant difference was found concerning the marriage duration, the place/region where the participant lived for the longest time, the family type, the number of pregnancies, the type of previous pregnancy, and whether or not the participant's pregnancy was intentional ($p<0.05$). Those who had a marriage of 20 years and above, who lived in the Eastern Anatolia Region and in a village for the longest period, who had an extended family (Table 1), who had three or more pregnancies, whose previous pregnancy resulted in a normal delivery, and whose pregnancy was unintentional had a higher psychosocial health level (Table 2).

Sociodemographic characteristics and the mean PPHAS scores of the women with non-risk pregnancies were compared, and a statistically significant difference was found concerning the marriage duration, the occupation, the place/region where the participant lived for the longest period, the family type, the number of pregnancies, the frequency of pregnancy follow-up, and the chronic disease presence ($p<0.05$). Those who had a marriage of 20 years and above, who were employed as workers, who lived in the Eastern Anatolia Region and in a district for the longest period, who had an extended family (Table 1), who had three or more pregnancies, who went for pregnancy follow-up on a monthly basis, and who did not have a chronic disease were found to have a higher psychosocial health level (Table 2).

The risk group and the non-risk group were compared concerning their mean PPHAS scores, and a statistically significant difference was found in terms of the occupation, the place/region where the participant lived for the longest period, the family type, previous birth method, the frequency of pregnancy follow-up, the chronic disease presence, the pregnancy type ($p<0.05$).

DISCUSSION

Sociodemographics showed a different pattern of relationships depending on psychosocial health. In this study conducted to compare psychosocial health levels of women with non-risk and risk pregnancy, those who had a long marriage, who lived in the Eastern Anatolia Region, who had an extended family, and who had three or more pregnancies had a higher psychosocial health level. This finding was similar in both the non-risk group and the risk group. Although this study yielded surprising results, we believe that having multiple pregnancy experiences, having living children, and having a long marriage influenced psychosocial health positively as factors facilitating pregnancy-related psychosocial adaptation. Similarly,

Table 2. Comparison of PPHAS score socio-demographic and obstetrics characteristics of risky and non-risky pregnancies

Characteristics	Risk group			Non-risk group			Total			
	n (%)	Mean rank	Median (min–max)	n (%)	Mean rank	Median (min–max)	n (%)	Mean rank	Median (min–max)	p
Number of pregnancy										
1	41 (43.6)	44.79	1.76 (1.17–2.50)	61 (38.4)	77.09	1.69 (1.33–3.54)	102 (40.3)	121.13	1.71 (1.17–3.54)	
2	24 (25.5)	42.63	1.93 (1.46–4.28)	43 (27)	66.65	2.60 (1.17–4.63)	67 (26.3)	109.16	2.13 (1.17–4.63)	0.703
3 and upper	29 (30.9)	50.38	2.17 (1.33–4.43)	55 (34.6)	84.56	3.56 (1.22–5.15)	84 (33.2)	134.38	3.13 (1.22–5.15)	
Number of birth										
0	46 (50)	45.13	1.79 (1.17–2.50)	59 (37.3)	78.62	1.69 (1.33–3.28)	105 (42)	120.49	1.73 (1.17–3.28)	
1	18 (19.6)	32.44	1.88 (1.33–4.28)	41 (25.9)	63.70	3.32 (1.17–4.63)	59 (23.6)	100.99	2.17 (1.17–4.63)	0.263
2	12 (13)	40.38	1.93 (1.50–3.85)	27 (17.1)	62.15	2.36 (1.59–4.50)	39 (15.6)	103.89	2.04 (1.50–4.50)	
3 ve üzeri	16 (17.4)	60.66	2.78 (1.33–4.43)	31 (19.6)	100.23	3.78 (2.35–5.15)	47 (18.8)	159.06	3.58 (1.33–5.15)	
Previous birth method										
Normal birth	22 (28.6)	27.00	2.78 (1.50–4.43)	57 (47.5)	50.27	3.50 (1.43–5.15)	79 (40.1)	76.06	3.34 (1.43–5.15)	
Cesarean	19 (24.7)	12.56	1.88 (1.33–2.61)	39 (32.5)	40.89	3.32 (1.17–4.63)	58 (29.4)	53.11	2.04 (1.17–4.63)	<0.001*
Wanted pregnancy										
Unintentionally conceived	13 (14)	61.85	2.69 (1.50–3.85)	24 (15.2)	68.10	3.15 (1.59–4.26)	37 (14.7)	127.35	2.86 (1.50–4.26)	
Willing to conceive	71 (76.3)	41.13	1.86 (1.17–4.43)	117 (74.1)	80.11	2.5 (1.17–5.15)	188 (74.9)	120.68	1.98 (1.17–5.15)	0.921
Unintentionally conceived, but now want	9 (9.7)	54.89	2.33 (1.74–4.30)	17 (10.8)	64.79	2.51 (1.48–4.37)	26 (10.4)	115.81	2.43 (1.48–4.37)	
Number of pregnancy follow-up										
Monthly	28 (31.8)	36.73	1.75 (1.20–4.30)	82 (56.2)	78.33	3.33 (1.33–5.15)	110 (47)	123.74	2.25 (1.20–5.15)	
Semimonthly	35 (39.8)	45.26	1.98 (1.17–4.28)	26 (17.8)	41.39	1.69 (1.17–4.43)	61 (26.1)	88.17	1.91 (1.17–4.43)	<0.001*
More than twice a month	10 (11.4)	35.55	2.04 (1.46–2.67)	2 (1.4)	68.25	2.97 (1.57–4.39)	12 (5.1)	75.00	2.09 (1.46–4.39)	
Irregular	15 (17)	53.70	3 (1.50–4.43)	36 (24.7)	72.04	3.39 (1.41–4.63)	51 (21.8)	127.59	3.32 (1.41–4.63)	
Chronic disease status										
Yes	16 (17)	55.06	2.17 (1.52–4.43)	10 (6.3)	42.50	1.58 (1.22–3.54)	26 (10.3)	97.46	2.13 (1.22–4.43)	
No	78 (83)	44.07	1.89 (1.17–4.30)	148 (93.7)	78.89	3.15 (1.17–5.15)	226 (89.7)	124.94	2.33 (1.17–5.15)	0.007*
Pregnancy formation										
Spontaneous pregnancy	81 (87.1)	46.03	1.97 (1.17–4.43)	155 (98.1)	77.00	3 (1.17–5.15)	236 (94)	123.14	2.34 (1.17–5.15)	0.001*
Assited reproductive technology	12 (12.9)	42.08	1.69 (1.20–2.24)	3 (1.9)	39.25	2.10 (1.85–2.37)	15 (6)	94.71	1.84 (1.20–2.37)	

Min: Minimum; Max: Maximum

Table 3. Comparison of PPHAS score averages of risky and non-risky pregnancies

PPHAS	Groups		p
	Risk group	Non-risk group	
Sub-dimensions			
Characteristics related to pregnancy and spouse relationship	2.23±1.13	2.91±1.25	<0.001
Characteristics of anxiety and stress	2.79±0.81	3.13±0.87	0.002
Characteristics related to domestic abuse	2.15±1.46	3.16±1.67	<0.001
Need for psychosocial support	2.71±1.04	3.22±1.16	0.001
Familial characteristics	2.18±1.03	2.84±1.26	<0.001
Characteristics of physical-psycho-social changes related to pregnancy	2.67±1.15	3.39±1.25	<0.001
Total	2.44±0.97	3.09±1.08	<0.001

PPHAS: Pregnancy Psychosocial Health Assessment Scale

family type is known to influence psychosocial health during pregnancy. Given that those who lived in the Eastern Anatolia Region and had an extended family had higher psychosocial health is believed to be a reflection of the positive effects social support positive effects on psychosocial health. Similarly, Spyridou et al. (2016) (12) found that women did not have higher levels of stress that were not living with their partners, they still were probably receiving sufficient support from their parents. Controversially, one study conducted in Turkey shows that having an extended family may negatively affect psychosocial health; findings of some other studies suggest that they affect psychosocial health positively (17–20). This inconsistency clearly shows that results vary depending on the region where this study was conducted and the quality of social support.

The comparison between the risk group and the non-risk group concerning mean scores obtained from PPHAS and its factors showed significant differences (p<0.001). The psychosocial health level of the non-risk group was higher. In a study assessing psychosocial health during pregnancy, Yılmaz (2015) (17) reported that women with a high-risk pregnancy had poorer psychosocial health compared to women with non-risk pregnancies. The author found a correlation between risky pregnancy and 'anxiety and stress'. Similarly, Şen (2013) (20) reported that pregnant women who were diagnosed with preterm labor had moderate depression scores and high anxiety scores. As demonstrated by the results of these studies, it is inevitable and expected for risk factors and risks during pregnancy to negatively affect psychosocial health and increase anxiety levels of women. We believe that these results should be considered in health staff practices, and psychosocial health levels of women with a high-risk pregnancy should be assessed as a requirement of nursing care.

A significant difference was found between the risk group and the non-risk group concerning "characteristics related to pregnancy and spouse relationship", which is one of the factors of PPHAS (p<0.001). Paternal support and relationship may moderate or alleviate the stress on pregnant women, which in turn may decrease a woman's chance of having a poor birth outcome (21). A supportive partner may be a key factor in reducing the mother's stress during the prenatal period; thus, a weak marital relationship is the most stable predictor of anxiety, physically/emotionally abused and other health issues during pregnancy (15, 22, 23). Kleanthi reported (24) that a strong association was identified between poor marital relationships and depression during pregnancy. Thus, perceived support and marital satisfaction are protective factors against antenatal anxiety and depression (1). A Cochrane review revealed that "additional social support during pregnancy is unlikely to significantly impact the proportion of low birth weight babies or birth before 37 weeks' gestation" (25). However, Surkan et al. (2017) (26) have found a striking result that lack of paternal support and paternal involvement were associated with an increased risk of preterm birth, which especially underline the paternal support impact on pregnancy outcomes. Relationship with a spouse during pregnancy influences the psychosocial health of a woman in many aspects, either positively or negatively and our results emphasize a significant finding that relationship with a spouse negatively affected psychosocial health in case of risk pregnancies.

A significant difference was found between the risk group and the non-risk group in terms of "characteristics related to domestic abuse", which is another factor of PPHAS (p<0.001). During pregnancy, the experience of IPV is associated with many negative consequences on maternal health and neonatal health, including low birth weight, preterm birth, and small for gestational age and maternal and neonatal death. In addition to direct physical and health effects, pregnancy IPV has been associated with many mental health factors (27, 28). Women who are exposed abuse during pregnancy are more likely to experience depression than their non-abused pregnant women (28). In a similar study conducted by Yıldız (2011) (16), the average score obtained from the factor assessing characteristics related to domestic abuse was 4.60±0.54, while Gümüşdaş (2014) (29) found it to be 4.79±0.44 for the risk group and 4.68±0.52 for the non-risk group. The average score in these factors seem to be high in other studies, while it was found to be 2.15±1.46 for the risk group in our study, which is quite a low score and indicates the participants experienced problems related to this factor. While these results suggest that psychosocial health problems may be experienced as a result of domestic abuse in risk pregnancy cases, but they also show that pregnancy risks arising out of domestic abuse may influence psychosocial health.

A significant difference was found between the risk group and the non-risk group in terms of "characteristics related to need for psychosocial support", which is another factor of PPHAS (p<0.001).

The support level was low in the risk group, whereas the non-risk group reported a moderate level of social support. There is considerable evidence highlighting the positive effects of social support on physical and psychological health (20, 25, 26). In pregnancy, women with higher levels of social support demonstrate better mental health outcomes. Poor social support environments, where receive insufficient emotional and instrumental support from the partner, family and/or friends, would preclude to utilize psychosocial resources, social stability and social participation (25, 26, 30). Adequate social support systems during pregnancy allow for emotional and cognitive relief in pregnant women and facilitates coping with anxiety and depression, and the transition to the motherhood role (16). In a study conducted by Şen (2013) (20), pregnant women diagnosed with preterm labor were found to have a moderate level of perceived social support. Hence, while the results mentioned above provide evidence for the significance of social support in all pregnancies, low social support perceived by women with risky pregnancy indicates that social support is even more important in risk pregnancy cases, and they need a more supportive approach during the risky period. Also, the fact that having an extended family led to better psychosocial health for both the risk group and the non-risk group enhances the idea that social support is significant in pregnancy.

Conclusion and Recommendations

All pregnant women who participated in this study had a moderate psychosocial health level. Having a risk pregnancy influenced Pregnancy Psychosocial Health Assessment Scale scores, and the non-risk group had higher scores compared to the risk group.

Pregnancy is considered a stressful period in women's lives due to physical and psychological changes. In addition to the stressors that arise from the pregnancy process itself, health staff should remember that pregnant women are more susceptible to external sources of stress and anxiety. Thus, health staff should consider such risk factors during pregnancy follow-ups, know that anxiety and stress are frequently combined with depression, leading to even more negative results, and approaching pregnant women with this awareness. It is vital to inform women as necessary to facilitate their adaptation to social life during pregnancy and prevent factors that may affect their psychosocial health negatively. As physical health, psychological health should be considered as well and included in routine assessments. Also, we believe that women with risk pregnancy have a higher need for social support systems and support from health staff. As a result of the study, we expect health professionals to have a higher level of awareness regarding domestic abuse, which may possibly show an increase in risk pregnancy cases.

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