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THE PERCEIVED SOCIAL SUPPORT AND PSYCHOSOCIAL HEALTH STATUS IN WOMEN WITH INTENDED AND UNINTENDED PREGNANCY*

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ABSTRACT

Pregnancy intention can change emotional response, psychological adjustment and care requirements for pregnancy. In a relatively few studies, the effect of pregnancy intention on psychosocial health and perceived social support was examined. This study aims to compare the perceived social support and psychosocial health in pregnant women according to their pregnancy intention. This descriptive study was conducted in the obstetrics and gynecology outpatient clinic of a public hospital in Turkey. In the study, 342 women aged between 18-49 years who were in gestational age of >10 weeks were included. The data were collected using a Personal Information Form, the Pregnancy Psychosocial Health Assessment Scale (PPHAS), and the Multidimensional Scale of Perceived Social Support (MSPSS). It was determined in the study that 31.6% of the women in the antenatal period continued an unintended pregnancy. PPHAS scores (3.69 vs. 3.91) and MSPSS scores (68.41 vs. 72.25) of the unintended pregnant women were lower than intended ones (p < 0.05). There was a positive correlation between MSPSS and PPHAS mean scores of women in both unintended (r=0.271, p=0.004) and intended pregnancies (r=0.181, p=0.006). The unintended pregnant women perceived less friend support, were need psychosocial health counseling more, complained more about anxiety and stress symptoms, experienced the problems of spouse relationships more and were more disadvantaged in domestic violence (p<0.05). Healthcare professionals should consider that the women being in the antenatal period and having the history of unintended pregnancy may have less social support and more psychosocial health care needs while determining their care needs.

Keywords: Maternal health, psychosocial health, social support, unintended pregnancy

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1. INTRODUCTION

Pregnancy and motherhood are mostly pleasing and special life experiences for women. However, a positive pregnancy and childbirth experience is closely associated with an intended and desired pregnancy (Yıldız, 2011; İsiten, 2014; Koyuncu and Yılmaz, 2015). Intended pregnancy occurs in a planned and requested time period by the couples (Santelli et al., 2003; Agida et al., 2016). On the other hand, unintended pregnancy occurs when the couples do not have any intention about having any or more child(ren) or she becomes pregnant before their planned date (Santelli et al., 2003; Karaçam et al., 2011; Agida et al., 2016). A great majority of pregnancies worldwide takes place unintendedly. It has been reported that 40% of 213.4 million pregnancies were unintended in 2012 (Sedgh et al., 2014; Agida et al., 2016). Turkey is one of countries having a high rate for unintended pregnancy. In Turkey, approximately 1.9 million pregnancies occur each year and almost 30% of these pregnancies are unintended (Karaçam et al., 2011; Hacettepe University Institute of Population Studies, 2014; İşiten, 2014). Although it is difficult to explain the causal relationships, many studies have reported that unintended pregnancies and unplanned births lead to fetal and maternal health problems (Santelli et al., 2003; Erol et al., 2010; Karaçam et al., 2011; Capik and Pasinlioğlu, 2014; Goossens et al., 2016; Abajobir et al., 2017; Shahry et al., 2016).

Psychosocial health is a multi-dimensional concept related to the perceptions, emotions, and behaviors of an individual covering mental, emotional, social and spiritual dimensions of health (Maxson et al., 2016). It is stated that psychosocial health includes psychological and social areas such as depression, stress, and self-efficacy (Yıldız, 2011; Maxson et al., 2016). The psychosocial health of a pregnant woman is closely associated with the general health and birth outcomes (Yıldız, 2011; Gümüşdaş, et al., 2014; Maxson et al., 2016; Aksay et al., 2017).

Social support is defined as the presence of people who provide material and moral support to other people experiencing generally stress or difficult situations. (Kroelinger and Oths, 2000; Atasever and Altun, 2017). Pregnant women with high level of social support are less affected by physical and psychological changes experienced during pregnancy, have a more satisfied pregnancy, acquire the motherhood role more rapidly, and have fewer problems after the birth (Mermer et al., 2010; Abdollahpour et al., 2015). The World Health Organization (2016) involves social support in maternal care and emphasizes that antenatal care, psychosocial assessment and emotional support are important for positive pregnancy experiences.

In literature, it is stated that pregnancy intention may be one of important variables influencing psychosocial health (Dibaba et al., 2013; Bahadır-Yılmaz and Küçük, 2015; Abajobir et al., 2016; Barton et al., 2017), and social support can play an important role in maintaining the pregnancy in a healthy manner in unintended pregnant women (Abdollahpour et al., 2015; Goossens et al., 2016). Previous studies have revealed that pregnancy intention is a factor affecting the psychological distress, the prevalence of psychological disorders, especially anxiety and depression increases in unintended pregnancies, and the perinatal depression risk is double in these pregnancies (Dibaba et al., 2013; Bahadır-Yılmaz and Küçük, 2015; Abajobir et al., 2016; Barton et al., 2017). In the study by Abdollahpour et al. (2015), it was found that family and social support were associated with complications and outcomes of pregnancy and social support was lower in high risk and unintended pregnancies. Additionally, it can be asserted that social support in unintended pregnancies can support the mental health of pregnant women by acting as a buffer and decrease possible psychological distress and depressive symptoms during antenatal and postnatal periods when the increasing

importance and effect of social support on promoting the maternal and infant health, preventing many diseases and increasing the life expectancy are taken into account (Dibaba et al., 2013; Abdollahpour et al., 2015; Barton et al., 2017). In some studies, it was found that social support perception and having an intended pregnancy affected mental status of pregnant women positively (Atasever and Altun, 2017; Barton et al., 2017).

The determination of the pregnancy intention, psychosocial health and social support sources in the antenatal period is an important step in identifying the caring strategies for reducing negative effects of unintended pregnancies on maternal and fetal health (Abajobir et al., 2016). There are studies indicating that the pregnancy intention is associated with social support and psychosocial health but the number of these studies is limited. Information about the effects of pregnancy intention on psychosocial health is often based on the studies focusing on mental health problems such as depression and anxiety (Dibaba et al., 2013; Bahadır-Yılmaz and Küçük, 2015; Atasever and Altun, 2017; Barton et al., 2017). This restricts the evaluation of psychosocial health as a whole with its mental, emotional, social and spiritual dimensions and complicates the understanding of the psychosocial reactions and psychosocial care needs developing against unintended pregnancy.

2. MATERIALS AND METHODS

This descriptive study was conducted between September 2015 and July 2016. The aim of this study was to compare the perceived social support and psychosocial health in pregnant women according to their pregnancy intention. The study was conducted in a public hospital providing secondary healthcare service in a city located in the northeastern Turkey. The pregnant women in the age range of 18-49 years, who applied to the study hospital for receiving completed antenatal care and the current legislative Turkey voluntary termination period in for of pregnancy (gestational age of >10 w), were included in the study. It was not possible to determine how many women aged 18-49 years had presented to the outpatient departments for receiving antenatal care from the automation system of the study hospital so we used the sample size from unknown population when selecting the sample. Using the sample size from unknown population formula with a 95% confidence interval (α =0.05) and p-value of 0.28 (Bahadır-Yılmaz and Küçük, 2015), the minimum number of women required in the sample was calculated as 313. The study was completed with 342 pregnant women meeting the aforementioned criteria, since involving a greater number of pregnant women had neither cost nor work load for the study.

The data were collected using personal information form prepared in accordance with the literature as well as Pregnancy Psychosocial Health Assessment Scale (PPHAS) developed by Yıldız (2011) and Multidimensional Scale of Perceived Social Support (MSPSS) adapted into Turkish and then revised by Eker et al (2001).

Personal information form: This form prepared in accordance with the literature includes eight questions for determining socio-demographic characteristics of the women and nine questions for determining current pregnancy-related characteristics of the women.

Pregnancy Psychosocial Health Assessment Scale (PPHAS): It was developed by Yıldız in 2011 to evaluate the psychosocial health status of women during pregnancy period using a holistic approach. PPHAS evaluates the psychosocial health status of women during pregnancy period, their problems for which characteristics, and psychosocial health care needs. The five-point Likert type scale is composed of a total of 46 items and six subscales (Pregnancy and Husband Relationship, Anxiety and Stress, Domestic Violence, Psychosocial Health Counseling Requirements, Family Features, Pregnancy-Related Physical-Psychosocial

Changes). The total and subscale scores of PPHAS are obtained from the calculation of item mean scores of the participants. While the highest score to be obtained from the overall PPHAS and its subscales is 5, the lowest one is 1. While increases in the total and subscale scores of PPHAS indicate the positive characteristics about the psychosocial health during pregnancy, the decreases signify the problems about the determined characteristic. So, total and subscale scores going from 5 to 1 indicate that there are problems about the specified characteristic. For example, 1 point indicates very poor psychosocial health. Cronbach's alpha value reported for the scale is 0.93 (Yıldız, 2011). In this study, Cronbach's alpha value of the scale was determined as 0.88.

Multidimensional Scale of Perceived Social Support (MSPSS): MSPSS is a scale that assesses subjectively the adequacy of social support received from three sources (Family, Friend, and Significant other). MSPSS which was developed by Zimet et al. (1988), was adapted into Turkish by Eker et al. (2001), and revised was used in the present study. The scale consists of totally 12 items and 3 subscales. Each subscale of the scale has 4 items scored between 1-7 points. Total and subscale scores of the scale are obtained by summing the scores of the items. The lowest and highest scores are between 12-84 for the overall scale and 4-28 for the subscales. While high scores obtained from MSPSS and its subscales signify perceived social support is high, low scores indicate perceived social support is low. Cronbach's alpha value reported for the scale is 0.89 (Eker et al., 2001). In this study, Cronbach's alpha value of the scale was determined as 0.90.

The data of the study was collected in a room by the researchers by a face-to-face interview. Each interview lasted 15-20 minutes. The women who declared that their current pregnancies were intended and occurred at the right time or after the desired one were included in the "intended pregnancy" group; on the other hand, the women who stated that their current pregnancy was unintended or occurred in an unplanned time were included in the "unintended pregnancy" group (Santelli et al., 2003). The statistical evaluation for the study was conducted in the SPSS IBM (16.0) program. The normality of the data and homogeneity of variance between groups were tested using Shapiro-Wilk and Levene test, respectively. Descriptive analyses such as means and Standard Deviation (SD) were used for presenting the data. The chi-square (X^2) or Fisher's exact test for categorical variables and Independent samples t test or Mann–Whitney U test for continuous variables were performed. Pearson correlation test was used to evaluate the relationships between the scales. The statistical significance level was identified as p < 0.05.

For this study, Ethics Committee approval was obtained from Artvin Çoruh University (Permission no. 1397. dated January 1, 2015). The participants were informed about the purpose of the study and their verbal consents were obtained.

3. RESULTS

This study was completed with 342 pregnant women having a mean age of 28.54 (SD=5.26; Median: 28; Min-Max: 18-42). Of the women, most of whom were married (98.0%, n=335) and unemployed (72.5%, n=248) 39.5% (n=135) had primary and secondary school education, 29.8% (n=105) had high school education and 30.7% (n=102) had university level education. The mean marriage/relationship duration of women were 66.39 month (SD= 61.34; Median: 48; Min-Max: 1-312) and most of them described their financial situation as "middle-low" (54.1%, n=185). The mean age of husband/partner of women was 32.63 (SD=5.47; Median: 32; Min-Max: 19-50); their education level was mainly in high school (35.1%, n=120). The mean number of living children of women was 1.37 (SD=0.91; Median:

1; Min-Max: 1-5). Gestational weeks at the time of participation of women were 21.11 week (SD=12.0; Median: 21; Min-Max: 10-45) and most of them were multigravida (61.1%, n=209). The rate of husband/partner desiring the current pregnancy of women was 98.2% (n=336). Thirteen percent of women (n=44) reported having health problems related to pregnancy, 7.6% (n=26) reported going to a psychologist or psychiatrist during the current pregnancy, 9.4% (n=32) reported to smoke during the pregnancy and 91.2% (n=312) reported to feel ready for motherhood.

In the study, 68.4% (n=234) of the women became pregnant intentionally and 31.6% (n=108) became pregnant unintentionally. Table 1 shows the comparison of some sociodemographic characteristics of the intended and unintended pregnant women. The mean age (t=-4.117, p=0.000), husband/partner's mean age (t=-3.504, p=0.001), duration of marriage (U=17116.5, p=0.000), number of living children (U=17846.0, p=0.000) and describing financial situation as "middle-low" were higher (X^2 =6.098, p=0.013) in unintended pregnant women than intended pregnant women (p<0.05). Pregnancy intention did not show a significant difference in terms of the other sociodemographic characteristics (p>0.05).

Table 1. The comparison of the intended and unintended pregnant women in terms of some sociodemographic characteristics (n=342)

Mean(SD)Mean(SD)Age (year) $27.76(4.99)$ $30.23(5.45)$ t= -4.117 0.000 Husband/partner's age (year) $31.94(5.08)$ $34.13(5.98)$ t= -3.504 0.001^* Musband/partner's age (year) $31.94(5.08)$ $34.13(5.98)$ t= -3.504 0.001^* Duration of marriage/relationship(months) 152.35 212.99 $U=17116.5$ 0.000^* Number of living children 149.24 219.74 $U=17846.0$ 0.000^* Married $228(97.4)$ $107(99.1)$ NA 0.439 Not living with a partner $6(2.6)$ $1(0.9)$ NA 0.439 Educational level $72(30.8)$ $30(27.7)$ $X^2=5.489$ 0.064 University and higher $79(33.8)$ $26(24.1)$ $X^2=-2.177$ 0.336 Partner's educational level $S1(34.6)$ $33(30.6)$ $X^2=-0.922$ 0.337 Partner's educational level Yes $68(29.1)$ $26(24.1)$ $X^2=-0.922$ 0.337 No $166(70.9)$ $82(75.9)$ $X^2=-6.098$ 0.013^*		Intended Pregnancy (n=234)	Unintended Pregnancy (n=108)	Test value	р
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Primary and secondary education $68(29.0)$ $40(37.0)$ High school $85(36.4)$ $35(32.4)$ $X^2=2.177$ 0.336 University and higher $81(34.6)$ $33(30.6)$ $X^2=0.922$ 0.337 Employment status Yes $68(29.1)$ $26(24.1)$ $X^2=0.922$ 0.337 No $166(70.9)$ $82(75.9)$ $X^2=0.922$ 0.337 Self-reported financial situation High $118(50.4)$ $39(36.1)$ $X^2=6.098$ 0.013^*	Partner's educational level				
High school $85(36.4)$ $35(32.4)$ $X^2=2.177$ 0.336 University and higher $81(34.6)$ $33(30.6)$ $X^2=0.922$ 0.337 Employment status $26(24.1)$ $X^2=0.922$ 0.337 Yes $68(29.1)$ $26(24.1)$ $X^2=0.922$ 0.337 No $166(70.9)$ $82(75.9)$ $X^2=0.922$ 0.337 Self-reported financial situation $118(50.4)$ $39(36.1)$ $X^2=6.098$ 0.013^* Middle-Low $116(49.6)$ $69(63.9)$ $X^2=6.098$ 0.013^*	Primary and secondary education	68(29.0)	40(37.0)		
University and higher $81(34.6)$ $33(30.6)$ Employment statusYes $68(29.1)$ $26(24.1)$ No $166(70.9)$ $82(75.9)$ Self-reported financial situationHigh $118(50.4)$ $39(36.1)$ Middle-Low $116(49.6)$ $69(63.9)$	High school	85(36.4)	35(32.4)	$X^2 = 2.177$	0.336
Employment statusYes $68(29.1)$ $26(24.1)$ $X^2=0.922$ 0.337 No $166(70.9)$ $82(75.9)$ $X^2=0.922$ 0.337 Self-reported financial situation $118(50.4)$ $39(36.1)$ $X^2=6.098$ 0.013^* High $116(49.6)$ $69(63.9)$ $X^2=6.098$ 0.013^*	University and higher	81(34.6)	33(30.6)		
Yes $68(29.1)$ $26(24.1)$ $X^2=0.922$ 0.337 No $166(70.9)$ $82(75.9)$ $X^2=0.922$ 0.337 Self-reported financial situationHigh $118(50.4)$ $39(36.1)$ $X^2=6.098$ 0.013^* Middle-Low $116(49.6)$ $69(63.9)$ $X^2=6.098$ 0.013^*	Employment status				
No $166(70.9)$ $82(75.9)$ $X = 0.922$ 0.537 Self-reported financial situationHigh $118(50.4)$ $39(36.1)$ Middle-Low $116(49.6)$ $69(63.9)$ $X^2 = 6.098$ 0.013^*	Yes	68(29.1)	26(24.1)	V ² 0.022	0.337
Self-reported financial situationHigh $118(50.4)$ $39(36.1)$ Middle-Low $116(49.6)$ $69(63.9)$ $X^2=6.098$ 0.013^*	No	166(70.9)	82(75.9)	A -0.922	
High $118(50.4)$ $39(36.1)$ Middle-Low $116(49.6)$ $69(63.9)$ $X^2 = 6.098$ 0.013^*	Self-reported financial situation	· ·	· ·		
Middle-Low $116(49.6)$ $69(63.9)$ $X = 6.098$ 0.013	High	118(50.4)	39(36.1)	$V^2 - 6.000$	0.013*
	Middle-Low	116(49.6)	69(63.9)	A ⁻⁼ 0.098	

NA: Not appropriate, Fisher's Exact test was used. * p< 0.05

Table 2 shows the comparison of the intended and unintended pregnant women in terms of some characteristics related to current pregnancy. The rates of not desiring the current pregnancy by the husband/partner (Fisher's Exact test, p=0.001), multigravidity (X^2 =22.777, p=0.000), receiving psychological support during pregnancy (X^2 =4.419, p=0.035), smoking during pregnancy (X^2 =15.622, p=0.000), and not feeling ready for motherhood were (X^2 =5.164, p=0.023) statistically higher in those in unintended pregnancy group than those in intended pregnancy group (p<0.05). Pregnancy intention did not show a significant difference in terms of the gestational age (U=14178.0, p=0.069) and presence of health problems related to pregnancy (X^2 =3.126, p=0.084).

	Intended Pregnancy (n=234)	Unintended Pregnancy (n=108)	Test value	р
	Mean Ponk	Mean Bank		
Costational age (week)	164.91	185 78	U=14178.0	0.069
Gestational age (week)	n(%)	n(%)	0 11170.0	0.007
Gravida	n(70)	n(70)		
Primary gravida	111(47.4)	22 (20.4)	2	0.000*
Multigravida	123(52.6)	86 (79.6)	$X^2 = 22.777$	
Status of desiring pregnancy by				
the husband/ partner				
Yes	234(100)	102(94.4)		0.001*
No	-	6(5.6)	NA	
Having health problem related to				
pregnancy				
Yes	25(10.7)	19(17.6)	$V^2 - 2 126$	0.084
No	209(89.3)	89(82.4)	A -3.120	
Going to a psychologist or				
psychiatrist during pregnancy ^a				
Yes	13(5.5)	13(12.0)	$Y^2 = 1 \ 10$	0.035*
No	221(94.5)	95(88.0)	A =1.11)	
Smoking during pregnancy ^b				
Yes	12(5.1)	20(18.5)	$Y^2 = 15.622$	0.000*
No	222(94.9)	88(81.5)	A =13.022	
Feeling ready for motherhood				
Yes	219(93.6)	93(86.1)	$X^2 = 5,164$	0.023*
No	15(6.4)	15(13.9)	21 0.104	

Table 2. The comparison of the women with intended and unintended pregnancies in terms of some characteristics related to their current pregnancies (n=342)

NA: Not appropriate, Fisher's Exact test was used. * p< 0.05

^a In the study, there were no pregnant women who were diagnosed with a psychiatric disease or were treated for a psychiatric disease during pregnancy. ^bThere were no women drinking alcohol in the study.

In the study, PPHAS and MSPSS mean scores of the women were 3.84 ± 0.52 and 71.04 ± 0.52 , respectively. PPHAS total mean scores was 3.69 (SD=0.52) in women with unintended pregnancy and 3.91(SD=0.51) in women with intended pregnancy. MSPSS total mean scores was 68.41(SD=13.46) in women with unintended pregnancy and 72.25 (SD=11.89) in women

with intended pregnancy. In the study, there was a positive correlation between MSPSS and PPHAS mean scores of women in both unintended (r=0.271, p=0.004) and intended pregnancies (r=0.181, p=0.006).

The comparison of PPHAS and MSPSS mean scores of the intended and unintended pregnant women were shown in Table 3. PPHAS (t=3.642, p=0.000) and MSPSS total mean scores (t=2.657, p=0.008) and some subscale mean scores were found to be significantly lower in women with unintended pregnancy (p<0.05). The subscales differences were found at 'Pregnancy and Husband Relationship' (t=3.405, p=0.001), 'Anxiety and Stress' (t=2.250, p=0.025), 'Domestic Violence' (t=2.599, p=0.010), 'Psychosocial Health Counseling Requirements' (t=3.050, p=0.002) of PPHAS, and 'Friends' (t=2.923, p=0.004) of MSPSS (p<0.05). The differences in the other scale subscales examined were not statistically significant (p>0.05).

 Table 3. The Comparison of PPHAS and MSPSS mean scores of the intended and unintended pregnant women.

	Intended Pregnancy (n=234)	Unintended Pregnancy (n=108)	Test value	р
Subscales of PPHAS	Mean (SD)	Mean (SD)		
Pregnancy and Husband Relationship	3.78(1.01)	3.39(0.92)	t=3.405	0.001*
Anxiety and Stress	3.54(0.66)	3.37(0.64)	t=2.250	0.025*
Domestic Violence	4.74(0.38)	4.62(0.43)	t=2.599	0.010*
Psychosocial Health Counseling Requirement	3.86(0.64)	3.63(0.69)	t=3.050	0.002*
Family Features	3.39(1.27)	3.26(1.18)	t=0.873	0.383
Pregnancy-Related Physical-Psychosocial Changes	3.95(0.68)	3.86(0.68)	t=1.158	0.248
PPHAS Total	3.91(0.51)	3.69(0.52)	t=3.642	0.000*
Subscales of MSPSS				
Family	25.57(3.73)	24.87(4.22)	t=1.529	0.127
Friends	23.23(5.43)	21.17(7.19)	t=2.923	0.004*
Significant other	23.44(5.32)	22.36(6.04)	t=1.681	0.094
MSPSS Total	72.25(11.89)	68.41(13.46)	t=2.657	0.008*

PPHAS, Pregnancy Psychosocial Health Assessment Scale; MSPSS, Multidimensional Scale of Perceived Social Support. *p < 0.05

4. DISCUSSION

This study revealing that 31.6% of the women in the antenatal period continued an unintended pregnancy supports the results of local and national studies reporting that unintended pregnancies and births are still common in Turkey (Karaçam et al., 2011; Hacettepe University Institute of Population Studies, 2014; Bahadır-Yılmaz and Küçük, 2015). The studies conducted with women in the antenatal period in different centers in Turkey have reported that the rate of unintended pregnancy varies between 19.3 % and 47.3% (Erol et al., 2010; Bahadır-Yılmaz and Küçük, 2015; Özşahin et al., 2018). According to the report of the Turkey Demographic and Health Survey in 2013, 11.2% of the births of 15-49 year-old married women within the last five years were intended and 12.5% were unintended births. It

was also reported in the same study that total intended fertility rate was 1.9 and this rate was 17% less than actual total fertility rate which was 2.3 children. The rates of unintended pregnancy vary among societies based on economic, sociocultural, legal, and political differences in matters about pregnancy, curettage, and having a child (Santelli et al., 2003; Sedgh et al., 2014; Agida et al., 2016). The rates of unintended pregnancy in women during the antenatal period have been found to be 8.6% in Scotland (Lakha and Glasier 2006), 17% in Iran (Asadi Sarvestani et al., 2017), 54.5% in Nepal (Bastola et al., 2015). It can be recommended to increase the rate of using effective contraceptive methods in the society and extend accessible family planning consultancy services covering all the needers in order to reduce unintended pregnancies and births.

Socioeconomic status is one of the possible determinants of pregnancy intention (Santelli et al., 2003; Sedgh et al., 2014; Hall et al., 2016). Agida et al. (2016), stated that with increasing age, the likelihood of having at least one child and reaching the desired family size generally increases in women, and accordingly the likelihood of wanting a new child decreases. Similarly, in this study, the age, gravida, marriage duration and the number of living children were higher in women who reported unintended pregnancies. In addition, unintended pregnancies were more frequent in women who have stated their financial status as "middlelow". These results are consistent with most of previous studies (Erol et al., 2010; Goossens et al., 2016; Shahry et al., 2016; Asadi Sarvestani et al., 2017). However, differently from some studies (Erol et al., 2010; Goossens et al., 2016; Shahry et al., 2016) no significant correlation was determined between the women in terms of educational level, marital status, employment status, and the intended status of pregnancy in the present study. A small number of women who were employed and did not have civil marriage may have affected these results. In the literature, there are studies reporting that unintended pregnancies are more prevalent in young women and socio-economic status is not associated with unintended pregnancies (Ikamari et al., 2013; Tebekaw et al., 2014). In their study, Hall et al. (2016) reported that it is difficult to identify the major determinants of unintended pregnancies by reporting research inconsistencies in the determinants of unintended pregnancies. Further studies are needed on the sociodemographic determinants of pregnancy intention.

Perceptions surrounding decisions of women about pregnancy intention and unintended pregnancy are mostly affected by male partners (Asadi Sarvestani et al., 2017). Parallelly, the present study showed that the pregnancy intention of the woman may be influenced by the pregnancy intention of the spouse/partner. In addition, the gestational weeks of the women declaring that they had intended and unintended pregnancies were found to be similar in this study. Generally, it is stated that women may have more positive declarations about their pregnancy intention due to the progress of gestational week or seeing a smiling baby after delivery (Santelli et al., 2003). However, there is insufficient evidence to suggest that unintended pregnancy declarations may occur more frequently during early gestational weeks and that an unintended pregnant woman can adapt to pregnancy as pregnancy progresses (Abajobir et al., 2016). In the study by Demirtas and Kadıoğlu (2014), it was determined that the planning of pregnancy affected pregnancy adaptation; however, pregnancy adaptation did not differ according to the gestational trimesters. Unintended pregnancies should be addressed as risky all stages of pregnancy and all couples should be questioned in terms of pregnancy intention in the antenatal period (Erol et al., 2010; Goossens et al., 2016; Abajobir et al., 2017).

In similar with literature, the rate of smoking during pregnancy in this study was higher in unintended pregnancies (Bahadır-Yılmaz and Küçük, 2015; Barton et al., 2017). It is required

to question these women in terms of smoking in every antenatal follow-up and help women to quit smoking. Differently from previous studies (Bahadır-Yılmaz and Küçük, 2015; Goossens et al., 2016; Abajobir et al., 2017), a significant difference could not be found between the intended and unintended women in terms of experiencing health problems related to pregnancy in the present study. This finding may be influenced by cross-sectional questioning of pregnancy-related health problems.

PPHAS total mean score of the women participating in this study was 3.84. This result indicated that these women had a moderate level of psychosocial health, and highness of the mean scores obtained from the PPHAS signifies that the characteristics about the psychosocial health during pregnancy are positive (Yıldız, 2011). In the present study, the PPHAS total mean score was lower (3.13 vs. 3.64) in unintended pregnant women than intended ones. There are studies reporting that PPHAS scores of Turkish women are lower with the score of 3.13 and higher with the score of 4.14 (Gümüşdaş, et al., 2014; Aksay et al., 2017). In a study using the same scale, these scores were determined to be 3.02 in women who had planned pregnancy and 2.91 in those who had unplanned pregnancy (Özşahin et al., 2018). These differences in PPHAS scores may be associated with fact that the methods, regions, and samples of the studies were not similar. However, this study and previous different studies (Bahadır-Yılmaz and Küçük, 2015; Koyuncu and Yılmaz, 2015; Ali, 2016; Özşahin et al., 2018) support that psychosocial health of women with unintended pregnancies may be negatively affected.

The areas in which women have problems related to psychosocial health in unintended pregnancies are not clear in the literature. A systematic review and meta-analysis study revealed that the unintended pregnancies were associated with spouse/partner violence and negative effects on maternal mental and physical health (Abajobir et al., 2017). It was found in a qualitative study that women had more family problems, experienced economic, social and relational problems, and were deprived of emotional support in unintended pregnancies (Akbarzadeh et al., 2016). In a study conducted in Iran, weakness, fatigue, irritability, sadness, not feeling safe, and deterioration in social activities related to family, neighbor and community were found to be widespread in women with unintended pregnancy (Ali, 2016). In a study conducted in Turkey, it was reported that unplanned pregnancy was a determinant of domestic violence and more problems related to marriage and family were observed in this pregnancy (Bahadır-Yılmaz and Küçük, 2015). Some studies have reported that stress and anxiety affect the maternal mental health negatively and women with unintended pregnancy experience more anxiety, stress, and violence (Abajobir et al., 2016; Goossens et al., 2016). In the present study, it was determined that the women with unintended pregnancy went to a psychologist or psychiatrist more frequently during pregnancy and felt themselves less prepared for motherhood. This can be associated with the decrease in coping capacities of women who have less social support and difficulties in accepting pregnancy as well as difficulties they experience during the adaptation to pregnancy and motherhood and therefore the need for more professional support (Mermer et al., 2010; Demirbas and Kadıoğlu., 2014). This opinion is supported by the fact that the positive correlation was determined between the social support scores and psychosocial health scores in this study. In parallel, in some studies, the perceived social support in pregnancy was found associated positively with mental health (Atasever and Altun, 2017; Barton et al., 2017). It is thought that as perceived social support increases in pregnant women, psychosocial health may be positively affected. In addition, some subscale scores of PPHAS (Pregnancy and Husband Relationship, Anxiety and Stress, Domestic Violence and Psychosocial Health Counseling Requirement) were found to be significantly lower in women with unintended pregnancy in the present study. These results revealed that unintended pregnant women are need psychosocial health counseling more,

complained more about anxiety and stress symptoms, experienced the problems of spouse relationships more and were more disadvantaged in domestic violence. The common results of the present study and previous studies (Bahadır-Yılmaz and Küçük, 2015; Abajobir et al., 2016; Ali, 2016; Abajobir et al., 2017) on the psychosocial problems in unintended pregnancies include relationship problems, domestic violence, increased anxiety and stress. In accordance with these findings, interventions can be planned to prevent problems that may occur in unintended pregnancies.

In previous studies, MSPSS total score for pregnant women was reported to be between 60.87 and 66.70 (Mermer et al., 2010; Atasever and Altun, 2017). MSPSS total score of the pregnant women in this study was 71.04. This score was 68.41 in women with unintended pregnancy and 72.25 in women with intended pregnancy. This result may be interpreted as good perceived social support by women in the study (Eker et al., 2001). Demirtas et al. (2014) reported that perceived social support was high in educated women and wanting pregnancy increased the spousal support. The relatively high educational level of the women in the present study may have positively affected their perception of social support. However, the perceived social support level was found lower in unintended pregnant women. In a study conducted on Turkish pregnant women, MSPSS score was found to be 65.77 in the intended pregnancy group and 50.61 in the unintended pregnancy group and the difference was reported to be statistically significant (Atasever and Altun, 2017). Parallelly, the studies conducted in different countries have indicated that social relations of women are impaired in unintended pregnancies and spousal support, social support and contacts reduce in these pregnancies (Kroelinger and Oths, 2000; Dibaba et al., 2013; Goossens et al., 2016; Barton et al., 2017).

Although the social support sources of pregnant women from different cultures may vary, many studies have revealed that husband, mother, father and children of the women are an important social support resource (Mermer et al., 2010; Gümüşdaş et al., 2014; Abdollahpour et al., 2015). Kroelinger et al. (2000) found a significant correlation between spousal support score and unintended pregnancy. In this study, family support did not show a significant difference based on the pregnancy intention, but it was remarkable that the women with unintended pregnancy perceived/received less friend support. The women who reported to have unintended pregnancy may feel more blocked due to the unintended pregnancy. They may be less in touch with their friends or feel more pessimistic about their own social support status. In addition, what happens in the family goes no further in Turkish culture, unintended pregnancy is not welcomed by the society, and there are social expectations about having children might have been be effective in perceiving/receiving friend support less by the women (İşiten, 2014).

A limitation of this study is that there is no standardized measurement tool for the determination of pregnancy intention although valid and reliable measurement tools were used to evaluate psychosocial health and social support in the study. However, there is no valid and reliable scale to be used in the evaluation of unintended pregnancy in Turkey. Other limitations of this study include that the data were based on self-reports and the study was conducted in a single region. Furthermore, the studies examining unintended pregnancies in Turkish pregnant women have not clearly reported mostly how pregnancy intention was assessed; therefore, this caused difficulties in making data comparisons.

5. CONCLUSION

Pregnancy intention, psychosocial health status and social support resources of women are the matters required to be considered in the antenatal period. Unintended pregnant women may feel the lack of social support more or may underestimate existing social support sources. In unintended pregnancies, the signs of psychosocial health of women, especially domestic violence, problems with the spouse, anxiety and stress may increase. These women may need more psychosocial counseling. The negative effects of unintended pregnancy on psychosocial health and social support should guide healthcare professionals to evaluate the mental illness and outcomes. In addition, mothers should be assisted in mobilizing and transforming positively the social support systems.

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Conflicts of interest

The authors declare no competing interest.

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